

A LESSON PLAN
Secondary level

ENGINEERING: Building and Designing your Dream House

Objectives	<p>Students will :</p> <ul style="list-style-type: none">❖ Introduce students to engineering a simple house❖ Allow students to learn about building material names and tools❖ Create an appreciation for engineering work❖ Show a presentation for Students to see what the architectural types of buildings (houses) are actually like❖ Develop student appreciation toward architectural style diversity❖ Each Student will individually create a picture of his Dream House by using Pixenate program.
Learning Environment	<ul style="list-style-type: none">❖ Engineering class
Students	<ul style="list-style-type: none">❖ Engineering students
ISTE/NETS Standards	<p>1. Facilitate and Inspire Student Learning and Creativity Teachers use their knowledge of subject matter, teaching, and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:</p> <ul style="list-style-type: none">❖ promote, support, and model creative and innovative thinking and inventiveness❖ engage students in exploring real-world issues and solving authentic problems using digital tools and resources❖ promote student reflection using collaborative tools to reveal and clarify Students' conceptual understanding

	<p>and thinking, planning and creative processes</p> <ul style="list-style-type: none"> ❖ model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments
Materials	<ul style="list-style-type: none"> ❖ Computers in computer lab with Internet access ❖ Pixenate program
Procedure	<p>Anticipatory Set (10 Minutes)</p> <ul style="list-style-type: none"> ❖ Explain where first ideas of house building came from and ask students to find more information ❖ Ask the students what they know about engineering tools. Where have they used them.
Application	<p>(25 Minutes)</p> <ol style="list-style-type: none"> 1. The Students will learn how to use Pixenate program with the help of their teacher and instructions. 2. Then each Student will create a picture of his Dream House 3. Upload a file – Picture of a simple house 4. Edit using 18 tools (8 of which are initially hidden under the link Show fun effects) 5. Draw floors, rooms, windows, doors 6. Color them 7. Use fun effects: draw furniture 8. Save your picture to disk or to your flickr account or get a URL for it via Webshots for use your blog or MySpace page
Evaluation	<ul style="list-style-type: none"> ❖ After each Student has created his own picture, all Pixenate pictures will be evaluated by 50 points.

