

PROGRAM DEVELOPMENT REPORT FORM

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Date: 7-28-09

1. Overview

a. Program title: Introduction to Autodesk Inventor

b. Grade or age level(s): This program is developed for working age product designers, however, it could be adapted to high school level.

c. Major goal: To teach product designers how to use a three dimensional CAD program to effectively communicate their ideas to colleagues.

By completing this objective, the learners will be able to complete the following tasks involved in 3D design.

- Students will become familiar with the Autodesk Inventor user interface.
- Students will be able to effectively use sketch tools to create 2D sketches that will be used to create 3D models
- Students will be able to effectively use feature tools to create 3D models and 3D model features from 2D sketches.
- Using Autodesk Inventor, students will be able to create nine of the eleven objects shown.
- Students will be able to effectively communicate the process of creating a 3D model to a classmate

2. Program Description

a. Instructional objective:

Given Autodesk Inventor, the sketch tools, and the feature tools available, students will design a three-dimensional computer model of a block from the demonstration sheet.

b. Materials:

Instructor Guide Includes information on instructional lessons, procedures and time allotments, reference materials and links to powerpoints.

Student Manual Instructional text, practice sheets, CD-ROM containing instructional presentations for reference.

3. Try Out Assessment:

The students will be evaluated on their ability to describe the process of creating a three dimensional shape from the student manual. I will be evaluating the effectiveness of my instructional program by assessing the quality of the process descriptions. The students will have multiple opportunities to look over their classmate's process descriptions, and re-evaluate their own.

Since this is a voluntary program, I have decided not to have a pre or post test. I will check for understanding during each lesson by assessing the student's sketches and models. Students will have opportunities to re-evaluate their drawings and re-draw any necessary files. There will not be a scoring system since it is not a pass/fail course.

I will use the included survey to gather information from participants on their confidence in using the software.

Please check the box that fits your opinion best.					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I know how to find the necessary areas of the user interface to create a new sketch.					
I know how to find the correct tools to create different shapes necessary in sketching.					
I know how to use various modeling features to create a 3D shape.					
I can accurately create a 3D model of an object chosen by my instructor.					
I can describe the difference between additive and subtractive modeling.					
I can use the additive or subtractive methods to create a complex 3D object.					
I feel comfortable describing the process used to create a 3D object to a co-worker.					
What is the highest degree that you hold?	Highschool	Bachelors	Masters	Doctorate	
How many years have you been a designer?	1-3 years	4-8 years	9-14 years	15+ years	
How long have you been with this firm?	0-1 year	2-3 years	4-8 years	9+ years	
How likely are you to continue using your previous 2D CAD system?					