

Using computer applications – basics

Extension material for Level 2 Design and Visual Communication Study Guide (page 45)

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Using computer applications – basics

This weblet will provide you with some basic outlines and information about using computer applications in your work. It is not an all-encompassing resource or a definitive guide, but rather a set of best practice ideals. This weblet will provide you with an understanding of:

- computer applications
- how and where to use computer applications
- using the Internet
- set up
- ensuring you get the work assessed appropriately
- what you can use the information for.

Best practices in using computer applications

Graphics submissions allow the use of computer applications in the presentation of work for assessments. The use of these applications can certainly improve the quality of the presentation of the work submitted for assessment. This weblet is not about how to use computer applications but rather gives a series of pointers that you can use to provide a level of authenticity to your work.

Computer applications

In general terms, computer applications include but are not restricted to computer programs, such as the following:

Drawing application	Image applications	Publication applications
AutoCAD	Photoshop/CS5.5	Word
VectorWorks	Corel Draw	Publisher
Pro/DESKTOP/Creo		PageMaker
SolidWorks	Resources	FrontPage
AutoSketch	Internet	Quark
SketchUp	Encarta	Dreamweaver
Claris CAD	Britannica	InDesign
Chief Architect	Blogs/wikis	Illustrator

Fig. 1: Graphics computer programs

How and where to use computer applications

How and where you use computer applications is dependent on the requirements of the brief, the resources you have in your school and your technical capability.

The brief may require the use of a computer application, which may be specified or left for you to choose. If specified, ensure that you have sufficient time to:

- learn how to use the application if you need to
- access the application
- complete the task required
- print the work from your application to a high quality.

If you are left to select a program, you should consider:

- what is available
- whether it is appropriate and whether it will complete the task in a suitable manner
- the time you have to complete the task
- how well you know the program
- what access you will have to the program.

School resources are limited at times and you need to know:

- what programs are available and where
- where can you get help from on the application
- whether you can access the program out of class hours.

Technical capability is an area that only you can determine and assess. You need to ask yourself how much support you need and how much time you can put into a computer application at the expense of other things. Remember, graphics is not just a final outcome but an ongoing process of design to solution.

It can be very tempting to complete all of the work at home on a computer application you have on your own PC. Be aware that, although you have the ability and resources, you will need to convince your classroom teacher that the work has been completed by you. The portfolio that you submit at the end of the year requires both you and your teacher to verify and authenticate that the work is yours and yours alone. This can place your home-generated work in doubt.

Using the Internet

The Internet can be a powerful tool in the researching of information. But it is still only that – a tool. The information available is covered by copyright laws, as are computer applications. Any information that you download needs to be referenced to the URL that it came from. The web has the potential to supply a large amount of information for AS91340 DVC 2.33 ‘Use the characteristics of a design movement or era to inform own design ideas’.

Be a discerning user: plagiarism could cost you more than just the credits. Now that AS91340 is an Internal, it will be up to your teachers to assess and make calls on plagiarism, and these calls are likely to be a lot harsher on you than the external assessing process was - be warned!

Set up

The specification for the achievement standards requires that any computer application that is submitted for assessment shows construction details, which are part of the process of using computer software to generate drawings. As most use of computer applications is in response to a design brief, your representation in the computer application should be supported by sketching and design work. Where you make major changes to the design on the computer, you should document this with either screen dumps (shots) or by making notes about your major changes in your design work.

The biggest problem for your teacher or an assessor at the end of the year is when your final design looks nothing like your concepts or concept development. It is always feasible while using the computer application to refine the design and this is to be expected. But problems occur when you move too far away from your original design and don't record this information.

If completing a 2-D formal drawing, include a title block and associated information. Drawings, whether 2-D or 3-D, need to comply with the same codes of practice that hand-drawn information does. If presenting a perspective or a scaled isometric, include all of the associated construction. The ability of applications like VectorWorks, SolidWorks and AutoCAD to transform a 2-D drawing into a 3-D one does not provide the evidence that you can draw in 3-D.

Ensuring you get the work assessed appropriately

The following are some of the things you can do to ensure that you get the work assessed appropriately.

- Print screen shots at regular intervals. You could do this every time you are asked to save, if you can set up this default.
- Complete work at school where your teacher can see what you are doing. Show your teacher your work and discuss what you are doing.
- Don't use pre-defined sheets that the teacher has set up. Complete the set up yourself. This may take longer but it shows your competency with the application.
- Things that you may need to set up, depending on the program, could be:

Page size	Resolution
Page orientation	Image type
Print selection	Dots per inch (DPI)
Drawing scale	Title block
Measurement type	Background frames
Grids	Margins
Snaps	Output resolution

What can you use the information for?

At the end of the process of drawing in an ICT environment you need to look closely at what you can use the information for. The idea that an ICT production can be used automatically for an internal or external assessment needs to be considered carefully.

Example

Take the follow drawings, all ICT generated, within the context of the internal assessment. They all have a part to play but when it comes to the externals, are you able to use them?



Fig. 2: Tap design drawing

This first drawing has been produced very skilfully in PhotoShop. The tap designs and drawings are of a high quality. The student has shown that they are able to manipulate the program with great dexterity. For the internal this made an ideal mode and represented the tap design very well.

Can it be used in an external? The question you need to ask is, is it a recognised 3-D instrumental drawing? If the answer is no, it can't be used.

These drawings of a cell phone are very well drawn in VectorWorks. This could be used for the external 3-D instrumental drawing standard as we can see that it is clearly an isometric drawing. Remember that you need to leave the assessor in no doubt about the intention of the work.



Fig. 3: Cell phone design drawing

The orthographic projection follows standard drawing convention and from that point of view could well be used in the 2-D instrumental drawing submission.

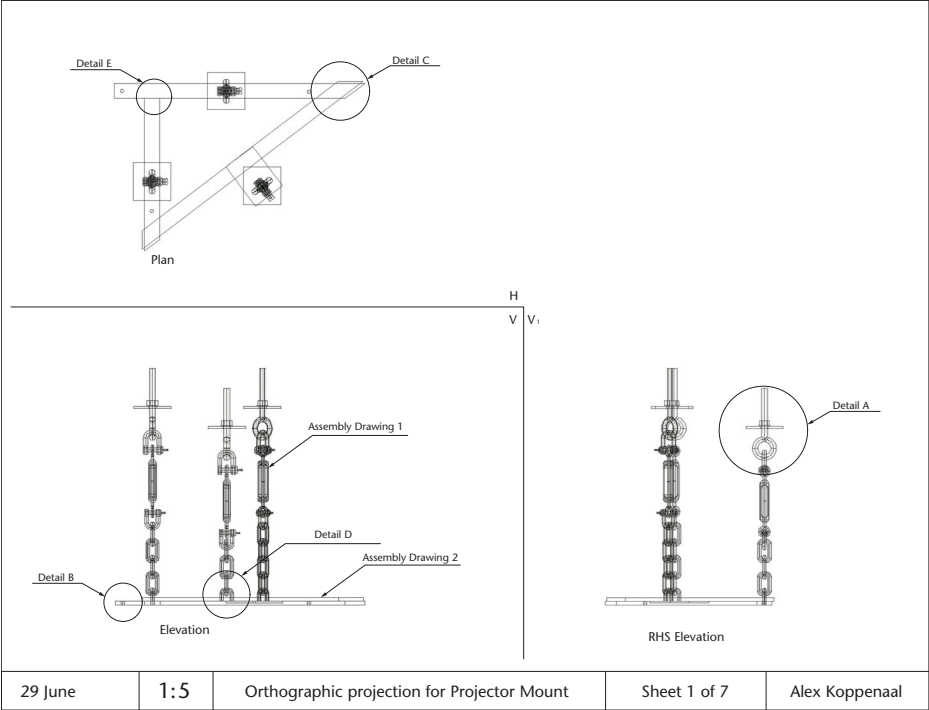


Fig. 4: Orthographic projection