

# Unit 69: Drawing Concept Art for Computer Games

<b>Unit code:</b>	<b>A/502/5675</b>
<b>QCF Level 3:</b>	<b>BTEC National</b>
<b>Credit value:</b>	<b>10</b>
<b>Guided learning hours:</b>	<b>60</b>

## ● Aim and purpose

The aim of this unit is to develop learners' practical skills in drawing game concept art. Learners will examine how concept art is used within computer games and will use a variety of drawing media to develop skills in observational drawing. Learners will use these skills to visualise imagined characters, objects and locations for a game concept and will reflect on the quality of their work.

## ● Unit introduction

Game design is about daydreams. But such dreams must be visualised and these images must be communicated to team members and managers for further development. We live in a world where images are everywhere. The games industry uses images for many reasons, from convincing us to purchase the game with attention-grabbing posters and eye-catching packaging, to contributing to our suspension of disbelief during gameplay through realistic graphics. The most effective images contain multiple messages which can enhance the meaning of the imagery.

Designers must be able to communicate their vision to artists, programmers, producers, marketing staff and others involved in the development process, and accept feedback on their work. To enable this, each person entering this industry needs to have a basic ability to communicate through drawing. The essence of this unit is to develop drawing skills to permit effective communication of a game developer's dreams – the visualisation of imagined characters, objects and locations within the game concept.

This unit will provide learners with opportunities to explore visual responses to ideas and environments. Learners will have opportunities to develop practical skills and an understanding of the relationship between their work and that of artists and designers in the games industry. Learners will develop awareness of historical, cultural and social contexts and their relevance to the development of ideas and research.

In this unit learners will use a variety of media to develop their skills and ability in observational drawing. The process of observational work includes the ability to analyse, measure, dissect and accurately describe. To achieve this, the learner will have opportunities to explore, understand and communicate what they are observing, while incorporating formal elements into their drawings to show the use of line, shape, form, colour, pattern and texture.

The unit provides an opportunity to develop skills in visual communication through drawing of game concept art to match an intended brief. It will also develop learners' ability to reflect critically on their own work, as they will need this skill in their career.

## ● Learning outcomes

### On completion of this unit a learner should:

- 1 Understand the purpose of concept art for computer games
- 2 Be able to explore the potential of drawing media
- 3 Be able to draw anatomy, environment and object concept art for computer games
- 4 Be able to present concept artwork for computer games.

# Unit content

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## 1 Understand the purpose of concept art for computer games

*Examples:* game publishers' websites; textbooks; journals and magazines

*Purpose:* visualisation of concepts; visual communication of ideas, eg visual elements, style, mood, look, feel, colour schemes; storyboards

## 2 Be able to explore the potential of drawing media

*Explore:* experimental drawings; annotation (characteristics, effects, limitations, creative potential)

*Drawing media:* pencils; charcoal; pastel; wax crayon; pen and ink; marker pens; other mark-making implements

*Drawings:* life drawing (physical characteristics); natural form (pattern, texture, form); architectural drawing (exterior and interior perspectives, plans and elevations)

## 3 Be able to draw anatomy, environment and object concept art for computer games

*Intended purpose:* for reference visualisation; for visual communication of ideas

*Constraints:* client brief, target audience; legal issues, eg original intellectual property (IP), franchised IP; ethical issues, eg decency; representation, eg race, gender, religion, sexuality

*Sources of ideas:* eg direct observation, narrative, photographic, cinematic, explorative research

*Drawing styles:* direct observation; stylised form, eg cartoon, manga

*Anatomy concept art:* anatomy, eg characters, creatures; development study drawings; final piece

*Environment concept art:* environment, eg plants, buildings, terrain; development study drawings; final piece

*Object concept art:* objects, eg machines, vehicles, weapons; development study drawings; final piece

## 4 Be able to present concept artwork for computer games

*Layout:* poster size, eg to suit purpose; layout, eg symmetry, format

*Annotation to drawings:* purpose; idea sources; reflective comment (compared with original intentions, fitness for purpose, aesthetic qualities)

*Poster montage:* development studies; final piece; annotations

## Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<b>P1</b> describe the purpose of concept art for games with some appropriate use of subject terminology	<b>M1</b> explain the purpose of concept art for games with reference to detailed illustrative examples and with generally correct use of subject terminology	<b>D1</b> critically evaluate the purpose of concept art for games with supporting arguments and elucidated examples and consistently using subject terminology correctly
<b>P2</b> apply different drawing media and techniques to produce alternative representations, working within appropriate conventions and with some assistance [CT; SM]	<b>M2</b> apply different drawing media and techniques competently to produce alternative representations, showing some imagination and with only occasional assistance	<b>D2</b> apply different drawing media and techniques to near-professional standards to produce alternative representations, showing creativity and flair and working independently to professional expectations
<b>P3</b> draw anatomy, environment and object concept artwork for computer games showing a basic standard of drawing skill, working within appropriate conventions and with some assistance [CT; SM; RL]	<b>M3</b> draw anatomy, environment and object concept artwork for computer games to a good standard, showing some imagination and with only occasional assistance	<b>D3</b> draw anatomy, environment and object concept artwork for computer games to near-professional standards, showing creativity and flair and working independently to professional expectations
<b>P4</b> lay out concept artwork for computer games to a basic standard with some assistance. [CT; SM]	<b>M3</b> lay out concept artwork for computer games to a good standard with only occasional assistance.	<b>D3</b> lay out concept artwork for computer games to near-professional standards working independently to professional expectations.

**PLTS:** This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

## Essential guidance for tutors

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### Delivery

This unit provides opportunities to experiment with a range of drawing techniques using a variety of equipment, materials, technologies and methods. Although the majority of learners' work will be carried out in a studio or workshop environment, it would be helpful to include discussions, study of graphic novels and visits to game development studios. The unit presents opportunities for practical drawing activity both in the studio and outdoors. Research using the internet and library resources will form an essential part of the learning programme. Teaching should stimulate, motivate, educate and inspire the learner. It should be planned to help learners develop knowledge and understanding of working with a variety of mark-making media and materials and their associated techniques and processes.

It is suggested that teaching follows the order of the learning outcomes, starting with study of purpose and following that with development of learners' skills in using drawing media, which can be demonstrated in the production of concept art.

Study of the purpose of game concept art is likely to be taught through demonstration and studio discussion. Centres are strongly encouraged to seek a close relationship with at least one organisation in the game industry (publisher, design studio, distributor etc) which could be approached to provide exemplar concept art from past game titles.

Learners should undertake observational studies and work directly from primary sources in order to develop their drawing skills. Primary sources should include the natural world and the constructed world, both of which offer a huge range of subjects. These might include, from the natural world, the human form, animals, insects, plant forms and structures, landscapes and seascapes, and from the constructed world, built environments, architecture, townscapes, machinery, engineering, products, artefacts or objects. In developing drawing skills through observational work, learners will need to develop their use of visual language including line, tone, colour, texture, shape, form, scale, proportion, structure and perspective. Direct observational work may be undertaken in 2D, 3D or 4D formats.

Mark-making and drawing development should not be restricted to pencil and paper work. Learners should experience a variety of different approaches to explore ways in which mark-making skills can be used to express ideas and feelings, especially for character concept art. Learners should be challenged to take risks, push ideas beyond preconceived notions and develop their understanding of drawing beyond a narrow and superficial definition. Learners must be encouraged to break away from orthodox thinking to produce original concept images which match client brief or IP and are commercially viable. Learners will need to practise how to evaluate, refine, adapt and modify their results to meet their creative intentions. They will also need to plan and produce preliminary results for evaluation and keep records of their thinking and conclusions.

Learners will need to develop the ability to critically analyse the examples using appropriate technical language in terms of aesthetic qualities and fitness for purpose.

## Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the teaching and assessment of this unit.

Topic and suggested assignments and activities
Introduction to unit and unit assessment.
Introduction to purpose of concept art in games: learners receive lectures and demonstrations on purposes and drawing styles.
<b>Assignment 1 – Concept Art for Games: What you Need to Know</b> Learners write an illustrated article on purposes of concept art in computer games for an online computer games ezine. Learners will: <ul style="list-style-type: none"><li>• research use of concept art in games</li><li>• research illustrations for article</li><li>• write article, commenting on styles and purpose of illustrations</li><li>• lay out article with illustrations.</li></ul>
<b>Assignment 2 – My Mark-making Development Portfolio</b> Development of skills using the specified range of drawing media. Learners will cover all specified media and all specified drawing techniques to build an annotated portfolio: <ul style="list-style-type: none"><li>• introductory lecture followed by skills-building practice sessions in charcoal for life drawing; repeated for natural form; repeated for architectural drawing</li><li>• introductory lecture followed by skills-building practice sessions in pencil for life drawing; repeated for natural form; repeated for architectural drawing</li><li>• introductory lecture followed by skills-building practice sessions in pastel for life drawing; repeated for natural form; repeated for architectural drawing</li><li>• introductory lecture followed by skills-building practice sessions in wax crayon for life drawing; repeated for natural form; repeated for architectural drawing</li><li>• introductory lecture followed by skills-building practice sessions in pen and ink for life drawing; repeated for natural form; repeated for architectural drawing</li><li>• introductory lecture followed by skills-building practice sessions in marker pen for life drawing; repeated for natural form; repeated for architectural drawing</li><li>• introductory lecture followed by skills-building practice sessions in other mark-making implements for life drawing; repeated for natural form; repeated for architectural drawing.</li></ul>

## Topic and suggested assignments and activities

### Assignment 3 – Concept Art for the Game

Task 1: anatomy.

Learners will draw anatomy concept art poster montage showing annotated development drawings and final piece.

Task 2: environments.

Learners will draw environment concept art poster montage showing annotated development drawings and final piece.

Task 3: objects.

Learners will draw object concept art poster montage showing annotated development drawings and final piece.

Unit learning and assessment review.

## Assessment

### Evidence for assessment

Assessment evidence for this unit will come from practical drawing activities associated with work in the context of game development and is likely to comprise a combination of presentations, written reports, a portfolio or sketchbook showing development of drawing media skills plus annotated poster montages in response to given briefs.

Evidence for the achievement of learning outcome 1 could be an oral or electronic presentation, written report, research notes or evidence from case studies. Presentations must be recorded for the purposes of internal and external verification.

As evidence for the achievement of learning outcome 2, learners should produce a portfolio of mark-making studies demonstrating alternative representations covering the full range of materials and techniques as specified in the unit content. Each technique should be prepared with each of the materials studied. Learners should annotate each study with comments identifying the material and technique and commenting on the suitability, or otherwise, of the effect.

Evidence for the achievement of learning outcomes 3 and 4 should consist of poster montages of game concept art drawn in response to given briefs (these may be any of original IP, franchised IP, or client brief). Concept art must cover each of the categories specified in the unit content: that is, there must be concept work for each of anatomy, environment and objects. Each poster montage must include development evidence and research studies leading to drawing of the final work. For learning outcome 4, sketchpad work should be extracted and combined to form the poster montages revealing development towards the final piece. The drawings should be annotated to comment on the purpose of final piece, idea sources and constraints. There should also be some reflective comment discussing fitness for purpose of the art piece and personal technical competence.

For some elements of this unit, and for some learners, a formal viva voce assessment might be appropriate. When more than one learner in a cohort is assessed in this way, care must be taken to ensure that all learners are asked equivalent questions, and that all are given equal opportunities to expand or clarify their answers. Interviewers must also ensure that questions are not phrased in such a way as to provide or suggest an answer. Formal vivas should be recorded for the purposes of internal and external verification and at least 50 per cent of such assessments must be internally verified.

## Application of grading criteria

When applying the grading criteria tutors should follow the advice given below. Please note that any examples of evidence given here are indicative only. This advice is not inclusive and the examples need not be included in a learner's work in order for that learner to achieve the exemplified grade.

### Pass

To achieve a pass grade, learners must achieve all the criteria at pass level. For each of the criteria learners must present evidence that addresses each italicised sub-heading of the content for the learning outcome.

*P1*: learners at this level will give accurate and reasonably substantial descriptions of the purpose of game concept art in general terms, though these descriptions will be basic and conventional and might lack formal terminology. When describing concept art, a pass grade learner might note, 'Concept art is a kind of drawing used to give designers an idea of what the character or object should look like.' Evidence will show a basic understanding of technical terminology but learners will generally be unsure about this vocabulary and will make fairly frequent mistakes when they do use it.

*P2*: learners will demonstrate basic drawing skills, though they will have made repetitive use of the same materials and drawings will lack physical characteristics. For example, a basic line drawing will have no form or texture. Annotations will be brief and lack appreciation of limitation or best use. A learner might note, 'This is a pencil drawing of my house.'

*P3*: learners will typically produce a series of unrelated studies which show limited progression of drawing skill and little appreciation of physical properties. Learners will achieve something which will not fully realise what was intended, but the activity that led to it will have been purposeful and the outcome will have some shape, some sense of design, or the deliberate application of some technique behind it.

*P2* and *P3*: in terms of the aesthetic or imaginative qualities of their work, learners will not move beyond the conventional, but the conventions applied will be appropriate to the form or genre within which they are working.

*P4*: presentation layout will be unimaginative and lack significant developmental evidence. Sketchpad work should be extracted and combined to form the poster montages. Each poster should include annotated development and research studies leading to drawing of the final work. Learners will make brief self-reflective comments on their own drawing work discussing fitness for purpose (considering client brief or target audience) and will write about their choices in selecting materials and techniques, commenting briefly on how they have developed their initial ideas to create concept art that satisfies the brief. For this grade some suitable correct terminology must be evidenced. The learner might note, 'I drew my character using pencil line drawing technique. I think my drawing could be used for a storyboard. I got my initial idea from internet research.'

*P2*, *P3* and *P4*: when engaged in practical activities, learners will need frequent assistance and support, though they will take note of and make use of this help when it is given. If they are in frequent need of such help but fail to make positive use of it, they should not be considered for a pass grade for this unit.

### Merit

To achieve a merit grade, learners must achieve all the pass and all the merit grade criteria. For each of the criteria learners must present evidence that addresses each italicised sub-heading of the content for the learning outcome.

*M1*: learners will give accurate explanations of the purpose of game concept art, illustrated with appropriate examples. These explanations will reveal good understanding and will use some formal terminology. When explaining concept art, a merit grade learner might note, 'Concept drawings allow a developer to visualise the intended character, environment or object. They are a rough approximation of the intended element as an initial step in the development process. They allow a developer to present their idea to the development team for discussion. Figure 1 shows concept art from the popular game Title X. This example shows the



original character concept art and figure 2 shows the final character figure as used in the game.’ Learners will use technical vocabulary for the most part correctly, but may make mistakes or be unsure about usage at times.

M2: learners will demonstrate competent drawing skills, using physical characteristics effectively – for example, a line-drawing study demonstrating variation in line showing form and texture. This would be a conventional study without evidence of creativity. The merit grade learner will be able to demonstrate effective use of the range of materials and will evidence progression in drawing ability within the portfolio of studies. Annotations will reveal some understanding of limitation and best use. A learner might note, ‘I used pastel to create a detailed elevation of my house. This medium was not suitable because it smudged too easily and I could not get a straight edge.’

M3: learners will typically produce a series of related studies which show progress in their drawing skills and an appreciation of physical properties.

M2 and M3: learners will show some facility and some confidence in relation to skills and the handling of materials. Work will be approached methodically and with adequate preparation, ideas being worked out and presented neatly. Learners at this grade will still be working within recognisable generic conventions, but there will be some imaginative thought behind the work so that technical skills and codes and conventions will be employed with some inventiveness.

M4: for this grade presentation layout will be conventional and will include developmental evidence done with some care but lacking in finished detail. Sketchpad work will be extracted and combined to form the poster montages. Each poster will include annotated development and research studies leading to drawing of the final work.

Learners at this grade will make brief self-reflective comments on their own drawing work discussing fitness for purpose (considering the client brief or target audience, or both) and will write about their choices in selecting materials and techniques, commenting on how they have developed their initial ideas to create concept art that satisfies the brief. Learners will explain what they have tried to accomplish and how they have worked to try to achieve what they have set out to do. A learner at this grade might note, ‘I drew my character using pencils, drawing inks and pastels to produce a variety of techniques including the texture of her costume and the tonal quality of her skin. I have developed my character to be used in a scene for my storyboard. By using a variety of research sources to help in the development, I was able to create more imaginative ideas to be used in the design of my character’s costume.’

M2, M3 and M4: when engaged in practical activities, learners will need occasional support, particularly when dealing with more complex technology or trying to apply more sophisticated techniques. Like the pass grade learner, they will benefit from such support.

## **Distinction**

To achieve a distinction grade, learners must achieve all the pass, all the merit and all the distinction grade criteria. For each of the criteria learners must present evidence that addresses each italicised sub-heading of the content for the learning outcome.

D1: learners will demonstrate a sophisticated knowledge of the purpose of game concept art, fluently justifying their explanations through their use of extended examples which are fully clarified. These explanations will reveal a deep understanding of the purpose and use of concept art and a confident and appropriate use of formal terminology. When explaining concept art, a distinction grade learner might note, ‘Concept art is a form of illustration where the primary object is to communicate a visualisation of an idea or mood for use in developing a video game before it is finally realised in the released version. Before characters, worlds, weapons, buildings, vehicles, objects etc are created through the investment of many development hours by skilled graphic artists, quick images and sketches are created to indicate what these should or could look like. Figure 1 shows concept art from the popular game Title X. This example shows the original character concept art and figure 2 shows the final character figure as used in the game. It can be seen that

whilst the game character resembles the original concept art sketch, many features have been developed and changed. One to note in particular is the scale of the character's upper limbs. In the final image these have been lengthened and broadened, giving an impression of super-strength appropriate to this hero-character. Significantly, the original armour, which suggests that of a mediaeval knight, has been developed into scale-like overlapping plates adding to the player's perception of character invulnerability.' Technical vocabulary will be secure and used correctly and confidently at all times.

D2: learners will demonstrate a standard of drawing skills which bears comparison with professional work, using physical characteristics effectively – for example, a detailed line-drawing demonstrating variation in line showing form and texture. The distinction grade learner will be able to demonstrate near-professional use of the range of media and techniques and will evidence considerable progression in drawing ability within the portfolio of studies. Annotations will evidence a deep appreciation of the limitations of materials and their best use. A learner might note, 'I used pastel to create a detailed elevation of my house. This medium was difficult to work with for this technique. However, I used the straight edge of a page and ran the pastel along it and smudged it with my finger. When the page was removed I had achieved a straight edge. I can see that use of pastel combined with pencil or pen would create a more aesthetically pleasing effect.'

D3: learners will produce a series of well-related detailed studies which show progress in their exercise of drawing skills and appropriate use of media. Distinction grade learners will demonstrate a sophisticated appreciation of physical properties in their artwork.

D2 and D3: learners will demonstrate a standard of drawing skills which bears comparison with professional work. They will apply their technical skills not just with imagination but with ingenuity and even elegance, and codes and conventions will be used with occasionally surprising results.

D4: presentation layout will show creative flair and will include highly structured developmental evidence. Sketchpad work will be extracted and combined to form the poster montages with annotations. Each poster will include annotated development and research studies leading to drawing of the final work. Learners at this grade will make accurate and critically objective reflection on their own achievement. They will make critical comparisons of their own work with current or past practice (possibly commercial) in a relevant area (that is, the same genre or format as they have worked in). The learner will address fitness for purpose (considering both client brief and target audience) and their choices in selecting materials and techniques, commenting in detail on how they have developed their initial ideas to create concept art that satisfies the brief. A learner at this grade might note, 'I selected pencils, drawing inks and pastels because I wanted to incorporate colour, texture and variation in my final art work. These media gave me the ability to create an atmospheric quality to my final piece. The variety of techniques I used enabled me to develop a more realistic texture for my character's costume and the tonal quality of her skin. I have developed my character to be used in a scene for my game. By using a variety of research sources to help in the development, I was able to create more imaginative ideas to be used in the design of my character's costume. I used historical context to develop the costume and physical characteristics following the artistic style seen in Lara Croft.'

D2, D3 and D4: in all practical activity learners will be capable of working autonomously and effectively. The term 'working independently' means that they are able to work on their own initiative, do not need constant support or supervision, give the work their full commitment, work positively, and meet deadlines. In other words, they have the kind of self-management skills that would be expected of them in a professional context.

## Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, M1, D1	Assignment 1 – Concept Art for Games: What You Need to Know	The learner is commissioned to write an illustrated article for an computer games ezine on the purpose of concept art for computer games.	All preparatory notes. Illustrations. Report document as word-processed or electronic presentation.
P2, M2, D2	Assignment 2 – My Mark-making Development Portfolio	Development of a portfolio for job interviews.	Development portfolio of mark-making studies.
P3, M3, D3 P4, M4, D4	Assignment 3 – Concept Art for the Game	Working as a creative within the industry, the learner is briefed by supervisor to create concept art for a specified game.	Concept art posters individually covering anatomy, environment and object, each containing montage of: <ul style="list-style-type: none"> <li>• development drawings</li> <li>• final piece</li> <li>• annotation including personal reflective comment.</li> </ul>

## Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Creative Media Production suite. This unit has particular links with the following units in the BTEC Creative Media Production suite:

Level 2	Level 3
Digital Graphics for Interactive and Print-Based Media	Digital Graphics for Interactive Media
	Digital Graphics for Print
	Graphic Narrative Production

There are opportunities to relate the work done for this unit to Skillset National Occupational Standards in Interactive Media and Computer Games as follows:

- IM5 Design user interfaces for interactive media products
- IM9 Provide creative and strategic direction for interactive media projects
- IM17 Architect interactive media products

## Essential resources

Learners will need to have access to a range of mark-making materials. Centres are strongly encouraged to seek a close relationship with at least one organisation in the game industry (publisher, design studio, distributor etc) that could be approached to provide exemplar concept art from past game titles.

## Employer engagement and vocational contexts

Centres should develop links with local or national game development studios that could be approached to provide visiting speakers, study visits or samples of typical concept art from past game titles.

Skillset, the Sector Skills Council for the creative media sector, has a substantial section of its website dedicated to careers, including job descriptions – [www.skillset.org/careers/](http://www.skillset.org/careers/).

Further general information on work-related learning can be found at the following websites:

- [www.aimhighersw.ac.uk/wbl.htm](http://www.aimhighersw.ac.uk/wbl.htm) – work-based learning guidance
- [www.businesslink.gov.uk](http://www.businesslink.gov.uk) – local, regional business links
- [www.nebpn.org](http://www.nebpn.org) – National Education and Business Partnership Network
- [www.vocationallearning.org.uk](http://www.vocationallearning.org.uk) – Learning and Skills Network
- [www.warwick.ac.uk/wie/cei](http://www.warwick.ac.uk/wie/cei) – Centre for Education and Industry, University of Warwick – work experience and workplace learning frameworks.

## Indicative reading for learners

### Textbooks

Baylis P, Freedman A, Procter N et al – *BTEC Level 3 National Creative Media Production, Student Book* (Pearson, 2010) ISBN 978-1846906725

Baylis P, Freedman A, Procter N et al – *BTEC Level 3 National Creative Media Production, Teaching Resource Pack* (Pearson, 2010) ISBN 978-1846907371

Ames L J – *Draw 50 Flowers, Trees and Other Plants* (Kingfisher Books, 2004) ISBN 978-1856974691

Barber B – *The Fundamentals of Drawing: A Complete Professional Course* (Arcturus foulsham, 2003) ISBN 978-0572028794

Edwards B – *The New Drawing on the Right Side of the Brain* (HarperCollins Publishers, 2001) ISBN 978-0007116454

Gray P – *The Complete Guide to Drawing and Illustration* (Arcturus foulsham, 2006) ISBN 978-0572032319

Hamm J – *Drawing Scenery: Landscapes and Seascapes* (G P Putnam's Sons (Reissue), 2001) ISBN 978-0399508066

Mattesi M – *Force: Character Design from Life Drawing* (Focal Press 2008) ISBN 978-0240809939

Rines FM – *How to Draw Trees* (Dover Publications, 2007) ISBN 978-0486454573

Thompson K – *50 Fantasy Vehicles to Draw and Paint: Create Awe-Inspiring Crafts for Comic Books, Computer Games and Graphic Novels* (David & Charles PLC, 2007) ISBN 978-0715326831

Thompson K – *50 Robots to Draw and Paint: Create Fantastic Robot Characters for Comics, Computer Games and Graphic Novels* (David & Charles PLC, 2006) ISBN 978-0715324066

Woods J – *Draw and Sketch Buildings: Sketch with Confidence in 6 Steps or Less* (North Light Books, 2002) ISBN 978-1581803105

## Websites

[conceptart.org](http://conceptart.org) – community site with forums and showcasing concept art

[conceptartworld.com](http://conceptartworld.com) – community site offering concept art directory and blog

[www.cgsociety.org](http://www.cgsociety.org) – Computer Games Society website for digital artists: articles, workshops (short online courses), portfolios, gallery

[www.drawingboard.org](http://www.drawingboard.org) – forum and blogs of concept art

[www.eatpoo.com](http://www.eatpoo.com) – concept art gallery and forum

[www.igda.org](http://www.igda.org) – home site of the International Game Developers' Association – all things game

[www.skillset.org/games](http://www.skillset.org/games) – Skillset is the Sector Skills Council for the creative media sector; website contains descriptions of concept artist job role and computer games developer art department

## Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
<b>Creative thinkers</b>	generating ideas for their finished pieces trying out different ways of making marks using different media, following ideas through to complete their finished concept art pieces adapting their ideas as circumstances change
<b>Reflective learners</b>	reviewing and reflecting on their concept art work and acting on the outcomes to modify and improve their work setting goals with success criteria for their concept art drawing work inviting feedback on their own work and dealing positively with praise, setbacks and criticism evaluating their learning and experience to inform future progress
<b>Self-managers</b>	organising time and resources and prioritising actions whilst generating ideas, and when creating their finished concept art pieces seeking out challenges or new responsibilities and showing flexibility when circumstances change dealing with competing pressures, including personal and work-related demands responding positively to change, seeking advice and support when needed.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
<b>Independent enquirers</b>	carrying out research into purpose of concept art for games carrying out research to develop ideas for their own concept art pieces
<b>Team workers</b>	if working in a group to produce a set of complementary concept art pieces, taking responsibility for their own role managing their personal contribution to and assimilating information from others in discussions to reach agreements and achieve results.

## ● Functional Skills – Level 2

Skill	When learners are ...
<b>ICT – Find and select information</b>	
Select and use a variety of sources of information independently for a complex task	conducting background reading to prepare concept art pieces
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	conducting research on purpose of concept art and gathering examples of drawing styles
<b>ICT – Develop, present and communicate information</b>	
Select and use ICT to communicate and exchange information safely, responsibly and effectively including storage of messages and contact lists	gathering feedback on their drawing work as part of their self-reflective practice
<b>Mathematics</b>	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	using estimation and calculation to plan proportions for their drawing work
Identify the situation or problem and the mathematical methods needed to tackle it	using estimation and calculation to work out layouts combining development exercises and final concept art
Select and apply a range of skills to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Interpret and communicate solutions to practical problems in familiar and unfamiliar routine contexts and situations	
Draw conclusions and provide mathematical justifications	
<b>English</b>	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	taking part in brainstorming sessions to generate ideas as a response to a creative brief
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	conducting background reading to prepare concept art pieces
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	creating their reflective comments on their concept art pieces.