



Using Complementary Training Methods

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Originally from a civil/structural engineering background, Shaun has more than 19 years of hands-on experience with AutoCAD as a user and a CAD manager and has worked in the Autodesk channel in sales, support and training. He is currently Vice-Chairman of the Autodesk Authorised Training Centre Advisory Board (ATCAB) for the United Kingdom and Ireland and is also an Autodesk® Approved Instructor (AAI) and occasional AUGIworld columnist. He is also Country Coordinator for the Autodesk User Group International (AUGI) UK Chapter and currently provides training and consultancy to the Facilities Management (FM) industry through his own consultancy business, CADFMconsultants.

Training is a vast subject with many methodologies and opinions, mine included. Whilst providing training and consultancy services, I can safely say that after seventeen years of exposure to AutoCAD, I am still learning. Talking of learning, the main subject of this article is alternative and complementary training methods. By this, I mean training that can be used as an alternative to classroom based training and training methods that can complement classroom based training. Trust me; there are a lot of them out there!

The Basic Training Model

First things first, though. You will never replace classroom-based training on AutoCAD. When you take your AutoCAD Essentials course, nothing can beat learning within your own peer group with an experienced trainer. Most AutoCAD trainers come from industry and have spent many years going through the same training process that you are going through sitting in that training room. If they are an accredited Autodesk Approved Instructor (AAI) working for an Authorized Training Centre (ATC), they have also had to attend product update courses and take their Professional Services Examination (PSE) for the latest version of AutoCAD. The PSE for AutoCAD 2008 has a pass-mark of 85%. This should give you a good indication of the quality of the trainers working in ATCs. They also have to renew this exam every year to maintain their AAI status and keep up to date with the developments in new versions of AutoCAD.



Figure 1 – The Authorised Training Centre (ATC) logo

The classroom model is simple but effective. Autodesk provide a syllabus that follows the Autodesk Official Training Courseware (AOTC) manuals. These have dramatically improved over the last few years and the 2008 versions are the best so far (in my humble opinion). Using these manuals, the Autodesk instructor provides training by going through worked examples and training exercises. This is done in a training room that has audio-visual facilities such as an LCD projector or an interactive whiteboard. The Autodesk ATC Partner Program also specifies that each ATC must provide an AutoCAD workstation with Internet access for each trainee. The trainees then receive their AutoCAD training whilst using AutoCAD during their course. Then, they receive their certificate, thus empowering them as a rounded AutoCAD user!



This training model has been in place for as long as I have been exposed to AutoCAD and many years before. The length of time it has been around indicates how successful it actually is. However, there is still the “doubting Thomas” out there who says that they cannot justify three days out of the office on an AutoCAD Essentials course. Three days in that classroom could make them a whole lot more productive in their CAD environment. The long-term productivity gains from those three days would more than cover the time out of the office. They could become the AutoCAD “guru” within their organization. Who knows, they may even become an Autodesk instructor themselves one day! If you want inspiration, look to Lynn Allen, the Autodesk Technical Evangelist. She was an AutoCAD trainer once!

Classroom-based training is fundamental to our overall mental development. Many of us have spent a large part of our lives in a “classroom”, be it school, college or university. As a result, our mental processes respond at their best when we are taught by a “teacher”, in this case, the AutoCAD instructor.

Distance Learning

A solution for the “doubting Thomas” may be the distance learning technique commonly known as the “correspondence course”. This is very different to the classroom model. The basic premise is that you work in your own time, in a “classroom” of your own choosing, normally at home. The training organization provides the training materials that provide the core learning syllabus. You then work through specific modules to deadlines set by your distance-learning tutor/mentor, who is normally at the end of a telephone line or email connection. Some forward thinking distance learning organizations are now also offering web-based tutorials. This can be done in a number of ways, the most common being web-based conferencing. This allows for a large number of students to attend at any one time.

Distance learning is ideal for the busy person as it allows them to work at their discretion but it does have some disadvantages. You do not get that one-to-one relationship provided by the instructor in the classroom and you will have to rely on your own resolve to stick at the course and finish it. You also have to finish the course in an optimum amount of time. Autodesk are now releasing a new version of AutoCAD every year. If it takes you three years to complete your course because you have really taken your time, you could be three versions of AutoCAD behind everyone else! By this time, you may know the core AutoCAD functions but you will not be able to take advantage of all of the new features made available in the versions you missed. For example, AutoCAD 2008 was one of the most feature-rich releases I have seen for some time and even I am still finding new features I never knew existed!

The distance learning model in the United Kingdom (where I am based) can provide a means to an end. A prime example of this would be using an AutoCAD distance learning course to study for an accredited qualification such as the City & Guilds AutoCAD examination. This is highly regarded by employers in the United Kingdom as it demonstrates a sound knowledge of AutoCAD.

A number of companies based in the United Kingdom have grasped the distance learning “nettle” and provide comprehensive distance learning material for AutoCAD. Primarily, it is the City & guilds syllabus that is on offer but there are others appearing. The European Computer Driving Licence (ECDL) now has a CAD module, for example.



In conclusion, distance learning provides an ideal medium for a focused individual who requires training outside of their working environment. That individual may be a busy professional or a person who is retraining for a change in career direction.

Web-based Learning

Broadband and cable are now allowing for learning over the Internet. This is sometimes known as collaborative learning. Autodesk provide a range of online resources on the AutoCAD 2008 Help menu.

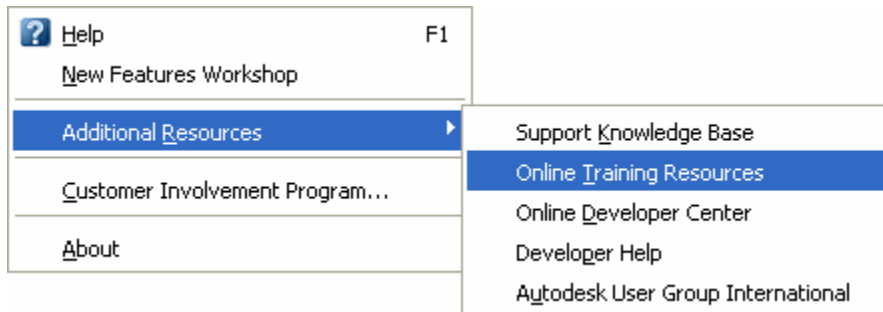


Figure 2 – The AutoCAD 2008 Help pulldown menu

AutoCAD 2008 provides Online Training Resources in the Additional Resources menu on the Help pulldown. This links you to training material on the Autodesk website. Typical contributors include Lynn Allen, Lee Ambrosius and Robert Green.

Another excellent example of web-based learning is the AUGI Training Program (known as the ATP). This is free to AUGI members so there is now no excuse not to join!

Computer Based Training (CBT)

As the sub-title states this is training on a computer (doh!). You may think that this is the same as the classroom based model. It is not. It tends to be a few Windows-based video files thrown on to a CD-ROM with an audio voiceover to listen to as well. I have developed a couple of these for customers of mine and they are extremely effective providing you get the marketing right and, more importantly, you get the right type of trainee using it. The sort of trainee you want is similar to the one that would take up distance learning. I have seen CAD managers purchase CBT for their AutoCAD users thinking it will save them money and replace classroom based training. Wrong! On most of these occasions, the material has become "shelfware" because the CAD users just do not have the time or the inclination to utilise the CBT material effectively.

AutoCAD offers computer based training in the New Features Workshop. This allows you to investigate the new features of AutoCAD from AutoCAD 2004 onwards based around the Autodesk ethic of Create, Manage, Produce and Share. It is found on the Help pulldown in AutoCAD.

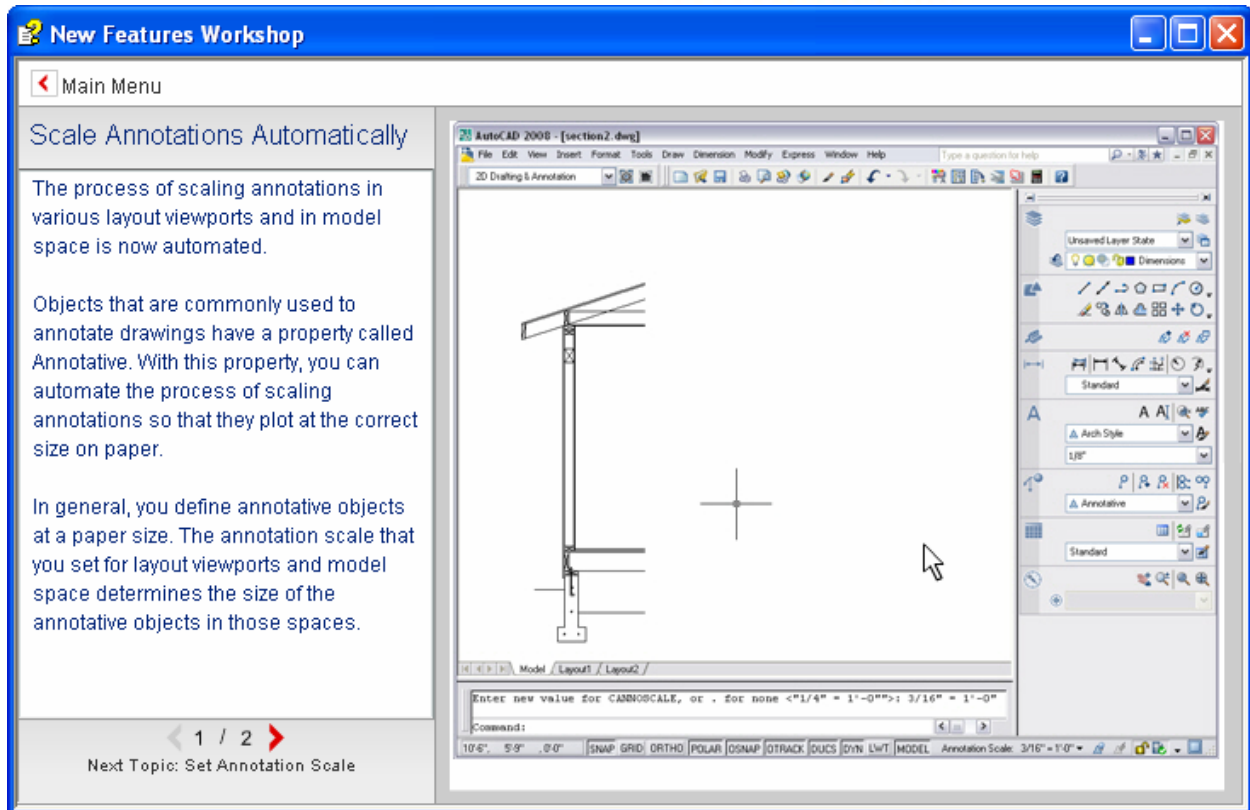


Figure 3 – The New Features Workshop showing some of the command enhancements available in AutoCAD 2008

Computer Based Training is an excellent complement to a software product (AutoCAD 2008 being a prime example) but should not be used as a replacement for the classroom based model.

In Conclusion

Looking at the training methods mentioned, we can clearly see that the most established is the classroom based model. This is probably why it is the most effective. It has been on the block the longest and during that time it has been developed to a level where the quality of training is always high. However, this does not mean that the quality of the other methods are poor, it all depends on how much the trainee puts in to them, the distance learning model being a prime example.

All of the methods discussed complement each other. You could run a classroom based course for a group who would then attend a web-based seminar (webinar) months later at their own offices. This could easily be organized using Webex or LiveMeeting. All the trainees could attend without even leaving their desks. With broadband the way it is, this is becoming more and more commonplace.

As a training consultant, I cannot stress enough how important it is to continue your training throughout your working career. As an Autodesk Approved Instructor, I have to attend at least one AutoCAD update course per year to keep up with AutoCAD for my



Professional Services Examination! On a more serious note, though, I always scan the Internet and the CAD press to see what is available, just in case I see courses that could help me work smarter.

There is a whole plethora of courses out there. Choose the one you want and the best method of learning that suits you. Then get your business justification in place and who knows, you might just get your boss to pay for it! Regardless of whether you are an AutoCAD guru or a complete beginner, there are always opportunities to learn more.

Look at me; I'm still learning after all these years!