Desktop publishing: A case study

 Alan Jolliffe
 Box Hill College of TAFE

There is much talk about desktop publishing and no one that has an understanding of graphics and publishing can doubt its usefulness. Obviously desktop publishing has great potential in the field of education, particularly where the production of educational resources is concerned. But how do you change from the traditional methods of production to those of desktop publishing? There are problems especially when no one has had previous experience with computers.

Over the last year, I implemented desktop publishing methods in the Instructional Design Department, at Box Hill College of TAFE. The Department has 20 staff of whom about 10 have some involvement in the graphics area.

Before you start in desktop publishing

Before you become involved in desktop publishing you should ask yourself a few questions:

- What is it?
- Who can use it/can I use it?
- What are the advantages of desktop publishing?
- What equipment do I need?
- How do you implement it?
- What are the problems of implementation?
- What is the future of desktop publishing?
What is it?

Desktop publishing involves using a computer and a printer, usually a laser printer to produce camera ready artwork. There is no intermediate step - what you get out of the laser printer is the finished artwork. The computer choice in our case was a Macintosh computer and a laserwriter printer.

Desktop publishing lets you create your document, typeset it, design it and layout and paste it electronically. Yet desktop publishing can still be used in conjunction with existing graphic techniques.

Who can use it/can I use it?

Desktop publishing can be utilised by anyone who uses print, produces letters, newsletters, booklets, brochures, leaflets, books and needs near typeset quality for graphic work. It has great applications in education where the cost of typesetting documents can rarely be justified and the only alternative until now was typewritten copy.

What are the advantages of desktop publishing?

Desktop publishing is cost effective but it takes time, to be used to the fullest extent. The major cost saving measure is that when you use the laserwriter you can obtain bear typeset quality for a fraction of the price. There is a big difference between laser printing and photo typesetting but
usually there is no choice. It's laser printing or the normal typing -
certainly laser printing is far superior to the typewritten copy. In addition
the copy from a laserwriter can be improved by reducing the copy down
with a graphics camera and then pasting it manually.

Desktop publishing gives the author or graphic artist complete control
over the production. It makes editing easy, gives you additional tools to
use, versatility and the advantage of seeing the page layout as it appears
for artwork. Desktop publishing can make these changes quickly and
painslessly and gives the author a close to actual copy which means he
ultimately gets a perfect copy. Many programs like Pagemaker can be
used in conjunction with existing graphics techniques. For example you
can set your copy electronically and leave spaces for your screened
photographs or graphics which can be pasted in to the hard copy.

Figure 2: The Pagemaker Screen

What equipment do I need?

To set yourself up in desktop publishing you need a computer system in
our case the choice was a Macintosh computer, hard disk, a laser printer
and software of course. The programs used include MacWrite, Word,
spelling checkers, MacDraw, MacDraft and Pagemaker.

The system cost about $20,000, it could be cheaper using other equipment
but in my opinion Macintosh is the best available for the price. The
advantages of the Macintosh system are that it's easy to use and "What
you see is what you get" or WYSIWYG. ie. what you see on the screen is
what you receive from the printer - this is certainly an advantage of the
Macintosh system is the laserwriter, which produces copy at 300 dots per inch which has much better resolution than other printers.

**Figure 3: The MacDraft Screen**

**How do you implement it?**

If your graphics department or in our case the instructional design department has no previous computer experience desktop publishing must be phased in gradually. The cost of training should never be underestimated in implementing any computer system. If a training course is available then it is more cost efficient if you and your staff attend. You will pay for the course by saving time at work doing the training yourself. Remember, time is money, and the faster you become proficient in Desktop publishing the more cost efficient the system becomes.

To implement desktop publishing you must teach those involved in small groups, individually if possible. Before you teach you must be able to use the computer and programs yourself. This make you the resource person for others to ask questions when problems are encountered.

**Problems of implementation?**

Initial opposition to computers can be overcome when your staff see how quickly their work can be completed and edited. It allows them time to do more satisfying and creative work. Initial staff training is the key to the success of your desktop publishing system.
Floppy disks soon become full when used in a desktop publishing system. This can be overcome by using a hard disk. Networking all computer terminals together so that they can access the one hard disk can also be a big help in making your system more efficient. Networking programs like MacServe, gives many Macs access to a single host hard disk.

**What is the future of desktop publishing?**

Integrated packages, like Microsoft Works, are of great use in desktop publishing, they contain work processing programs with page layout functions. The advantages of having a database, spread sheet and a communication package have great appeal to those without a hard disk. Although databases and spread sheets are not really involved in desktop publishing they are a great help in office management and accounting.

Scanners, which integrate diagrams and photographs into the computer, are not of high enough standard to match a graphics camera. But they do have the advantage of being able to integrate existing typewritten copy into a word processor document.

Typesetting programs, like “Just Text”, are more difficult to use than other Mac programs, but give much better control over the placement of text. Programs like Clip-art and Draw-art which are pre-drawn artwork can be customised in one of the graphic programs, so you don't actually have to draw yourself.

Programs such as Maclink and Macterminal, when used with a main frame, can let you transfer IBM files to the Macintosh so they can be reformatted and printed on the laserwriter. This will keep the IBM user happy.

**Conclusion**

Desktop publishing is a main instrument of change in publishing, things can't always remain the same in the graphics room as they have also changed in many other fields that have become computerised. It must be realised today if you are not moving forward you are moving backwards. It is said that for a child born today of the knowledge he will need by the time he is 45 years of age only 2% is available today. If you are not using desktop publishing then your falling behind. The value of desktop publishing is only just being realised in the educational field. On a cautionary note integrate your system slowly and spend your money wisely by doing some research before you buy.
Figure 4: The MacLightning Screen - interactive spelling and grammar checking

Author: Alan Jolliffe, B.App.Sc., Dip.Ed., Dip.Ed.Tech., M.Ed.St. works at Box Hill College of TAFE, Elgar Road, Box Hill. He is an Instructional Designer in the Instructional Design Department. The Instructional Design Department produces educational resources for the college. Many of the programs are in the print media. His 18 months with the Macintoshs started originally with one and a laser printer. Now the system consists of 3 Macs, hard disk and laser printer. He also operates a small publishing business using desktop publishing methods, specialising in scuba diving publications.