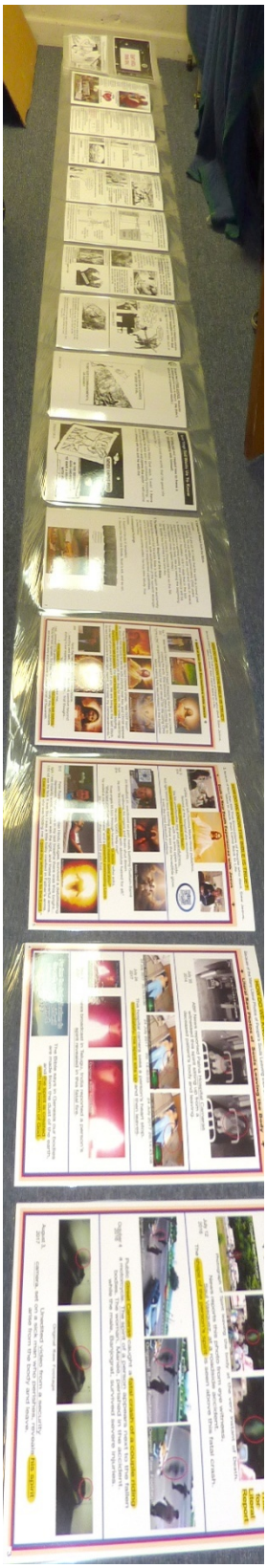
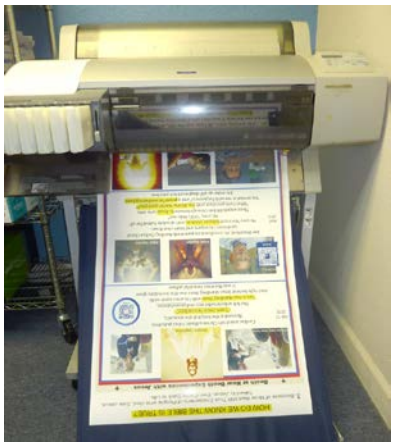
Booklets to Medium and Large Poster Display Sets

In 2009 we had converted the Seven Things God Wants Us to Know booklet used by Hope for Homeless Youth to computer medium and improved it over the years. Now it contains hospital security camera photos of people's human spirits leaving their bodies at the moment of physical death. 4,000 generation Z young people have come to Jesus through this booklet.



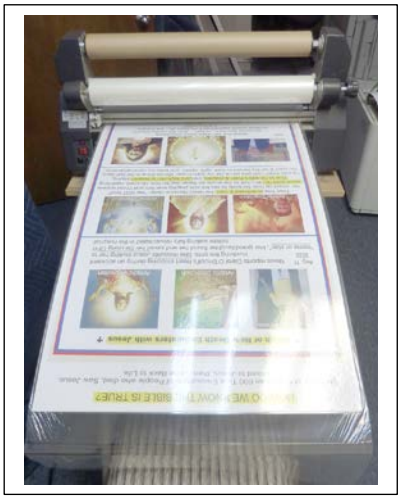
About two months ago, Pastor Clayton Golliher, the director, called and asked me to make a table size poster set of the pages of this booklet and the small Chick Publications booklet This Was Your Life. He also wanted a large Seven things set for easel presentations. This would challenge my decades of graphic arts training, but I accepted. We had the necessary machinery to do the job, namely, a scanner, computer with a designated graphics video card, and Adobe Photoshop, Acrobat Professional, and Adobe Indesign page layout program. We had a factory refurbished GBC two sided 25" laminator, and an older photo quality Epson inkjet photo printer capable of 24" wide by 59" photo quality prints from a roll of glossy photo paper.



Significant challenges would be maintaining a quality enlargement, because, when digital photos are enlarged, the quality deteriorates, and the text and images become fuzzy looking. Also, on larger paper sizes, the paper is no longer stiff and won't stand up on an easel I would have to spray glue a 22 point thickness chipboard to the 8 point thin photo paper, then laminate the thicker poster at a higher temperature, slower speed, with a wider gap laminator setting. The excess laminate would have to be trimmed off, but ¼" margin left to maintain a moisture seal. I had never tried doing photo quality, or printing from the roll of paper. The medium size posters would have to calculated to the largest image size I could fit on the color laser printers maximum paper size of 19" x 13" which would involve cutting down the width and entering a custom paper size into the printer's touch screen display. When laminating multiple posters at once, one has to carefully guess when to start feeding the next page so there is trim space. If the settings are not right, the laminate might not adhere to the paper in all places, and the poster might not lay flat. The spray glue for attaching the backer board would have to be "repositionable", if the photo paper was not aligned properly; and, there could be no wrinkles.

The first step was to scan the Chick booklet to convert it to a digital computer medium. I removed the staple so the individual signatures lay flat. I used 300 ppi (600 dpi). The front and back covers are two color so are scanned in color mode and the insides as grayscale. I saved the digital documents in .tiff file format. I used the tools in Photoshop CS5 to get rid of unwanted see through from image print on the backside of the sheet. The text in the images also have to be darkened slightly. The Filter → Sharpen Edges tool helped get rid of the 3D effect picked up by the fibers in the paper. I used the algebra proportions formula to figure out the biggest enlargement I could make on the largest sheet (19w x 13h) the color laser printer will take, allowing for the minimum margins (no print area) of 3/16". I cut the sides of the smooth card stock paper to 9.9". This required entering a custom paper size in the printer's touch screen display. The .008" thick paper required a stiffener back board of .015" which is the standard 22" x 28" poster board sold at Hobby Lobby or Dollar Tree store for 37 cents. This size enables me to get to stiffener backer sheets 19" by 9.9". the printed sheet is attached to the stiffener with a light coating of Locktite brand "repositionable" fine mist spray. The sheets are laminated two portrait posters side by side at the 1/32" gap setting at a speed of 2 and a temperature of 260°F, with the fan on. The posters are then trimmed down to a 1/8" border on all sides.

The $10 table display easel at Hobby Lobby works fine for this landscape poster set as well as the slightly wider portrait layout Seven Things God Wants Us to Know poster set. The quality of this poster enlargement from the small booklet pages (2 ¼" tall by 5" wide) is very good.



On the Seven things letter half booklet pages enlargement, I experimented and found an image enlargement method that resulted in greater quality for the text. In the Adobe Indesign booklet layout, I grouped the text and images on each page, then copied them to the computer clipboard and pasted them into picture boxes in a new read order 12.294" by 19" Indesign document. To my surprise. When I double clicked the picture boxes, holding down the shift key and dragging at an angle with the computer mouse, the program changed the text into a larger point size, which retained the sharpness of the smaller size. Four of the pages consisted of high-quality full color pictures with text made by an associate in the latest version of Adobe Photoshop. The file individual file sizes of those images is about 75 megabytes. Thus, when the image was proportional stretched even to the 24"w by 28.55" large poster size, the quality (sharpness) was amazing!

The large poster set of the Seven Things booklet was printed on an older Epson Stylus Pro seven color inkjet with pigmented ink capable of 24" wide by 59" tall. I had to go back into Photoshop and sharpen the edges of some of the line art images taken from Chick Publication tract booklets; and darken the "Gama" setting from 1.8 to 2.2. Because I was using glossy photo weight paper, I was able to use the next to the highest quality resolution of 1440 dpi, using "super microweave", and "finest detail" for sharpening lower quality line art drawings. The built-in cutter cut each page at the 38.55" page bottom setting in the page layout program, and an angled cloth sheet on the output kept the .008" thick paper flat as it came out of the printer. The specialty paper caused the ink to dry instantly after it was applied to the roll paper. After cutting off a page, the machine repositioned the paper for printing the next page. Note that, before using a printer like this, if it has not been used for a while, one should first print a nozzle test pattern. Because of it's larger size, this poster needs a stiffer backing to it sits flat on the large $23 easel I bought at Hobby Lobby. At first, I was taping two poster boards together to get the big size, then staggering three layers glued together to avoid weakness at the seam. Because the poster boards did not appear to be cut square when I bought them, I laid the cut large poster page in the center, drew cut marks all around and cut the backer board to exactly match, before attaching the print. The easier way is to buy 32" x 40" 22 point thick (.050") chip board at Hobby Lobby for $5.99 a sheet. In hindsight, the backing board should have been the thicker, stiffer, 3/16" plastic corrugated or foam center material, which is more expensive in the larger size. The laminator had a 3/16" setting, but when I tried it in the past, the board jammed and began to melt / crush. In the past I laminated low quality signs on cheap poster board, then tried to glue the plastic lamination to the corrugated plastic stiffener backing. Only the 3M brand formula 77 spray adhesive worked.

Large Photo Paper needs heavy weight chipboard glued to the back before laminating to stiffen it to stand on a display easel.

Time and expense — I had no real experience in doing a job like this and tried to do a perfect job. I reprinted some large poster pages. Each page took 30+ minutes to print. I was interrupted by other on demand printing orders coming in. The job took two about months. The finished job was so large and heavy we delivered it to a TV studio in another city, where I set up the easel and poster for a potential show presentation. I also converted the Indesign Table Display size poster document to a high quality read order PDF which the studio technician nicely displayed on three large flat screen TVs. The roll of photo paper cost about $100, and a new set of seven pigmented ink cartridges cost $288. Two rolls of 5 mil thick by 25" wide matte finish (non-glare) laminating film is over $200. A 250 sheet package of smooth digital 19"w x 13"h card stock was over $40. Five cans of spray glue at $13.99 each totaled $69.95. The total for heavy wight chip board stiffener for the big 16 page poster set is $98.84. Using poster board for the rest of the project was $63.64. Total cost of materials, no tax, is $860.43 for 17 table display poster sets and 1 large poster set. A single medium poster easel is $10 and the large easel $23 on sale at half price.

This job was not without problems. A large poster page started by printing about a foot of gray instead of black text, before I saw it. It had been printing fine on previous pages. When I went to set the 260°F temperature setting on the laminator, when it had been working fine previously, the digital readout would only go to 150°F. After consulting another printing company, and prayer, it started working properly again.

“I have strength for all things in Christ Who empowers me [I am ready for anything and equal to anything through Him Who infuses inner strength into me; I am self-sufficient in Christ’s sufficiency].” — Philippians 4:19 Amplified Bible

“Yet amid all these things we are more than conquerors *and* gain a surpassing victory through Him Who loved us.”

— Romans 8:37 Amplified Bible