A user-friendly dictionary:

☐ is easy to navigate
☐ has easy-to-find, clear, consistently presented information
☐ looks pleasing and attractive

Unfortunately, there is no one formula for a user-friendly dictionary design. Every dictionary is different, and there is no 'DESIGN' button to press. You have to be prepared for lots of trial and error.

I have tried to answer a number of questions that you may be asking yourself when trying to design a user-friendly dictionary.

1. Where do I begin?
☐ Before designing anything, decide what your end product is going to be:

- Is it 20 copies of your dictionary output on a laser printer and bound with a plastic comb for use in a classroom?
- Is it 100 copies which will be printed digitally by a photocopy centre and heat perfect (spine) bound?
- Is it a pdf copy for use on your website?
- Is it a 1000 copies professionally printed and bound with a hard case?

☐ Try and get hold of a publication with the same or similar production qualities as you have planned. Have a good look at it, and flip through the pages to see how much space you will need above the text block, below the text, on the outside edge of the text block, and the inside edge of the text block — also called the gutter. Different binding methods require different margins, that is, the white space surrounding the text block.

☐ Your first goal will be to design and typeset a 'typical' page spread for your dictionary, that is, the type of page that will appear most often in your dictionary. When you are happy with that, you then have a guide for the layout of the rest of your dictionary, for things such as preliminary pages, finder lists etc.
2. What needs to go on each page?

- page number
- running heads or feet (e.g. name of publication, or section of the publication)
- text blocks/dictionary entries (the bulk of the material on the page)
- finder words
- illustrations
- dictionary’s alphabet
- special instructions (how to use the dictionary)
- white space/margins

All these elements should appear consistently in the same place on each page that they appear in the dictionary, and in the same font and size.

3. How do I design a layout for each page?

- Think in double-page spreads, rather than single pages.

You will then need to make a design grid, that is, decide your page size and margins which will give you your text block size (depending on what software you use, you may be able to see the design grid on your page):

- **Page size:** Unless your job is going to be professionally printed (offset) it is most likely going to be A4 (210 x 297mm).

- **Margins around each page:** If you have found a sample of a book with the same production method and size that you are going to use, get a ruler and measure its margins — above, below and either side of the text block. Do they look good? Is there enough white space? The top and bottom margins will need enough room for running headers, finder words, page numbers, etc. The outside margins (the cut, rather than bound, edge of the page) will need room for fingers to handle and turn each page, without the fingers covering over the text. The inside margin (also known as the gutter) will need to allow enough room for the binding to take place without ‘swallowing’ any of the text. Margins should be consistent throughout the publication.
- **Your text block or layout:** With an A4-sized page, a two-column layout probably works best. If you use a single column you will end up with about 20 words per line. The rule of thumb for easy reading is no more than about 12 words per line.

This document is probably a good example of a line length that is too long. It’s quite hard work following this all the way to the end of the line. Phew! Now let’s look at how much easier it is in a shorter line length.

Now, isn’t this easier. This is why magazines and newspapers have very narrow column widths. They are much easier to read, so you can read more quickly and your eyes don’t have to work so hard.

If you use a 2-column layout the margin between the columns should probably be between 4 mm and 10 mm.

- **Colour:** Most likely your layout will be reproduced in black only. And, in fact, unless you are working with a professional designer, avoid a second or spot colour — your job could end up looking like it has a case of the measles.

- **Decorative elements:** Keep it simple. Unless there is a good reason for a decorative border or line don’t use it. The only good reason to use a line or border is to help separate or define information, or to help draw the eye to a certain element.
Now is the time to place all the elements that will sit in your margins, that is, different running headers, page numbers, finder words, etc. on each page. How you do this will depend on what program you are working in, but these are the elements which really should be placed on your master page, or as a background, that is, so that they automatically appear on each page. That way they will always appear the same and in the same place, and if you need to change them you can do this just once on the master page and it will automatically correct on all the pages it appears on. Running headers, etc. should mostly be unobtrusive (except finder words) so, for the moment, set them small, say about 8 or 9 point, and you can adjust them later if you’re not happy with how they look.

Next import or place some sample entries from your dictionary into your main text block, enough text to work up one or two sample spreads to a final design.

At this stage you should be able to see roughly whether you have allowed enough room for your running header and footer information. You may want to adjust your margins at this stage.

You’re now ready to start styling, or typesetting, your text.

4. How do I choose a font that looks good and is readable?

Before deciding what fonts, or typefaces, to use, a little bit of information about fonts. Basically, there are two types of fonts:

a. serif fonts: these are the fonts with the little lines, or serifs, running at the top and bottom of the letter.

Times, Palatino, Courier and Bookman are all serif fonts.

b. sans serif fonts: these are the fonts without the little lines.

Arial, Helvetica, Avant Garde and Verdana are all sans serif fonts.

Serif fonts are generally considered more readable for longer books as the serifs, or the little lines, actually help the eye to run along the line of text and read the text more easily.
Use as few different fonts as possible — two different fonts should be enough. Don’t use a different font for every different field or type of information on the page. A simple choice is one sans serif for headwords, subwords, etc., and one serif font for the main entries of the dictionary.

Even though you only have two fonts, there are lots of different things you can do with them: roman (or plain), bold, italic, small capitals (used sparingly), different size, indenting, and solid or tint (that is, a solid black font and a grey font). Try and find font families that have at least three ‘weights’, that is, regular, bold and extra bold; or light, regular and bold. The following example from the Ngaanyatjarra & Ngaatjatjarra to English Dictionary (IAD Press 2003) uses only two fonts (apart from the bullets), but they are used in different ways:

kailintalpa noun
1 black-tailed native-hen: Gallinula ventralis (bird with turned-up tail) • Kailintalpa tjjarlapa tjitirn-tjitirnpa. The black-tailed native-hen has red legs.
2 dusky moorhen: Gallinula tenebrosa (bird with a turned-up tail)
See also kapingkatja, yirralangkatja

karliny-karliny(pa) noun
honey grevillea: Grevillea aff. eriostachya (a spreading shrub growing in sandy areas. Its yellow flowers grow on the ends of the branches. It is highly prized for the nectar which is either sucked from the flowers, or the flowers are soaked in water to make a sweet drink.) • Karliny-karlinypa yirltjankupayi. You always suck nectar from the honey grevillea flowers.

kamu2 northern particle
too, also, and • Katurriku mangurrilku wampartalpi-yanyu kulturpalpi nyurti kamu kultparitjarra parrapitjaku. They would get up and search and after spotting game, they would spear it and come back with a rolled-up kangaroo and cooked pieces.
Means the same as -kamu, -lurrtju, -lja-lja
See also -tarrartu

When choosing a font to use, don’t forget to look at the whole alphabet in both lower and upper case. You don’t want to discover when you get to the end of your dictionary that your chosen font has a really ugly or unrecognisable ‘Z’! When doing the Pitjantjatjara Dictionary we thought Futura would be nice until we noticed that the ‘j’ didn’t have a curl on the tail but was just a straight line.

Also don’t forget your digraphs or letter combinations. These can look more or less readable in different fonts. The Alyawarr Dictionary’s ‘rn’ combination had to be kerned, or letterspaced, to prevent it from looking like an ‘m’. Some programs will allow you to space specific pairs of letters. Otherwise you might have to search for the right font.
5. Should I justify the text or have it with a ragged edge?

- Justifying text spreads words out along a line so that the text block has a lovely straight edge on both the left and right side. This can look neat but there are problems. Depending on your typeface and size you will end up with things called worms. These are the odd spaces that look like white worms that appear in your block of text, caused by the uneven spacing between words that justifying causes. If you half-close your eyes when you look at the block of text you can see them more easily.

- Hyphenating your text can help ease the worms, but hyphenation can cause problems in dictionaries — your program may not recognise your language words and will make bad hyphenation breaks, although you can set up hyphenation exceptions in some programs.

- I tend to use ragged right with hyphenation turned off. If you get some really long words that cause awkward line lengths you can always add a manual word break to adjust your line length. Although make sure you record...
all these, because if you reformat the text you will have a 'hard' hyphen in the middle of that word.
6. How can I make all the separate information fields clear and separate?

☐ This is the trial and error bit of designing your dictionary. Using your sample spread experiment with a few different fonts, at different sizes, with different line spacing. Expect to spend some time trying different things, and expect to print out lots of hard copy proofs to check and compare. I can run out up to 20, 30 or more different proofs before getting the right ‘look’. **Do not make your design decisions by just looking at your design onscreen.** If you are designing for a hard copy end product, you will need to check hard copy proofs.

☐ **Bigger does not mean more readable.** Do not just make your text bigger thinking it will make it more readable. A bigger line space will often give your text the extra white space it needs to make it stand out a bit more. Or try the font at a different weight, that is, bolder, or even lighter. Depending on the font, you will probably not want the main part of your dictionary entries to be bigger than about 10 pt. A good open line spacing for a 10 pt font would be about 13–14 points. But don’t forget, if you style your headwords a bit bigger, you may need to allow a bit of extra room for those words.

☐ Decisions about font size and line spacing (and margin sizes) will affect how many pages your dictionary will run to. So if money is a consideration, a smaller font size or narrower line spacing can make a difference of quite a few pages over a publication of around 200 pages.

☐ **Don’t type anything in ‘all capitals’.** This drives typesetters mad. It’s very easy to style something as ‘all caps’ if required, but you have to retype to get all caps to lower case. All capitals should only be used in circumstances where the text is for decorative or symbolic purposes. Readers actually recognise words by their shape:

```
Alyawarr
```

In all capitals ‘Alyawarr’ becomes an oblong and is harder to recognise than the version on the left. You might use all capitals in running headers, or in circumstances where something is used over and over again, e.g., ‘SEE ALSO’, and then probably small capitals would look more elegant than larger capitals.

☐ I would suggest avoid using symbols to stand for something else (e.g. ‘➔’ to stand for ‘see also’). Readers will not remember a whole lot of different symbols. Much better to just write out what you mean. However, if you really want to use them, keep them to a minimum and have a key to the symbols on every page — as part of the running head or foot.

☐ Bullets can help to break up an entry, for example, to introduce example sentences, but try to use only one or two bullets only, and very simple ones, e.g. ■, ●

☐ Start each new letter for the dictionary on a new column or page, unless your dictionary is very short and you really need to save room.
7. I’ve worked out how I want the page to look, but how do I easily style the whole dictionary in that way?

- How you style, or typeset, your whole dictionary to match your sample page will depend on what software you are using, and what software your dictionary database, or files, are in. This is the bit that is never the same with any two dictionaries, and will take all sorts of trial and error. You may need to rethink your design if your dictionary is long and you can’t find a way to (mostly) automatically, or globally, style the text.

- Once you’ve styled up your sample spread you will probably discover that although you may have perhaps 12 different fields or types of information in your database, you only have six or seven different type styles in your final design. Your headword and subword may be the exact same font and size, just indented differently, your definition may be styled exactly the same as your ‘see also’ and your ‘additional grammatical information’.

- Basically, what you want to be able to do is to ‘grab’ the separate fields of information and apply the individual type styles that you have designed in your sample pages to those separate fields. How you go about this will depend on what software you are using, but there are a number of ways I’ve gone about it.

- You can replace your field codes (if you use them) with ‘tags’ which are then read by the page layout program as your dictionary is imported into the page layout program — the program magically applies the type style connected to that tag and removes the actual tag. To replace your field codes with tags in the database, you may need a boffin to write and run the macros for you.

- You can import into page layout programs from Word files that have separate styles correctly applied to each field. Page layout programs usually can import the styles, which you can then use to adjust and make global changes to the text. There can be hiccoughs with Word styles though.

- I have also applied the correct font and size to dictionary entries while they were still in Word, so once it was in the page layout program most of the work had been done.

- My most recent dictionary was done from a Filemaker Pro file database. Once I had worked out my final type styles (which usually works out to be less than the number of fields of information), Tim Scott, the boffin involved, made sure that the information fields (corresponding to my final styles) were all in separate fonts. Once imported into Quark, I then ‘grabbed’ all the separate fonts and styled them as required.

- You may find it helpful to have individual entries set up as individual paragraphs. That is, if you need to start a new line within an entry, do a soft return (or a new line return), ‘↵’, rather than a hard paragraph return, ‘¶’. 

- Because dictionaries are often long, designers and typesetters are always looking for ways to automatically style the various elements of the text — using find and replace, macros, and import filters, style sheets — but sometimes the only way to get what you want is to work through and style manually. (This can happen especially with indentations.) Sometimes it doesn’t take as long as you think, and often it is quicker to just manually style than to try all sorts of different tricky ways to get out of doing it! But sometimes you will need to rethink your type styles.
8. What if I want to use illustrations?

☐ These are best drawn after you have worked out your page layout and text design, and you know where illustrations might actually be useful, how many will be the right number, and what size the illustrations need to be.

☐ Have them drawn 25-50% bigger than the finished size.

☐ Use ‘positional’ or ‘dummy’ illustrations until you have your final illustration. That way you’ll have an idea of how much room they will take. Just scan an illustration of something similar to what you hope to use and put that illustration everywhere you want a picture (you can just use the one picture over and over as a positional).

9. I think I’ve done everything, but how can I be sure I haven’t forgotten something before it gets printed?

☐ Remember that ‘finder words’ will need to be entered at the very end of the job.

☐ Make sure you have checked off every page as a hard copy — don’t just check on screen. If you find an error on your hard copy, mark it on the hard copy, make the correction onscreen, and then print out a new hard copy to make sure that you actually made the change correctly, and that page run-ons or text around illustrations haven’t been affected.

☐ Make sure someone else looks at it. In fact, if it’s going to be printed and distributed, have it professionally proofread. Each state’s society of editors can make recommendations. Don’t forget to ask anyone who proofreads it to make the changes on a hard copy in a coloured pen so that there is a record of those changes and they can be entered into any database files.