

Snapshot Survey

Websites of Organisations complying with statutory language schemes

This report was prepared for the Welsh Language Board in March 2001. Some aspects of the sites analysed may have changed since that date.

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1. Introduction

The aim of this report is to analyse the balance of the Welsh and English languages on the websites of organisations possessing a statutory language scheme under the Welsh Language Act 1993. It was commissioned in order to discover to what degree these organisations treat both languages on a basis of equality. The research contract was awarded to Linguacambria Cyf. in January 2001, after a process of tendering carried out in December 2000.

2. Background

The Internet is an extremely important, quickly growing medium of communication. It touches every aspect of life, and public and private organisations alike use it to offer services, and to communicate with the public. In all probability, it will continue its rapid growth in the future, and will touch hitherto unconnected equipment in the home and at work (as is already the case with satellite and cable television and some mobile phones). Home refrigerators are already available with an Internet connection, and it is probable that, in several years, they will be able to automatically order food for the home. In the case of public organisations, the Internet is used to advertise services, to create discussion fora, and to make citizens aware of their rights. All this is set to increase in the future. It is for this reason that the Internet is increasingly available in libraries and schools. In the case of Wales, it is important that the public can access such services in their chosen language. Therefore, this report's aim, as noted above, is to ascertain to what degree this is possible at present.

3. Methodology

The Board wished to be supplied with information regarding several aspects of websites, and data was collected regarding:

- The linguistic nature of the site's home page
- Linguistic navigation inside the site - i.e. ease of transferring between the Welsh and English versions and *vice versa*.
- Progression in the Welsh language provision in comparison with the English, e.g. the number of levels to which the Welsh language penetrated
- Whether equal prominence was given to the both languages, i.e. clarity, size and form
- The correctness of the Welsh used, compared to the corresponding English version
- The design of the Welsh version, compared to the corresponding English version
- The linguistic nature of the institutions own documents, maps and forms
- Material regarding the Welsh language itself on the site, e.g. Language Scheme, policy declaration on the use of the Welsh language on the site
- A concise list of which parts of the site are in English only
- The date the Welsh version was last updated, compared to the corresponding English version

- If a search engine was present on the site, a search was carried out for the following: 'Cymraeg', 'Welsh', 'Welsh Language', 'Dwyieithrwydd', 'Bilingualism', 'Cynllun iaith', 'Language Scheme'.

It should be noted that the institutions' own language schemes were not studied for the purposes of this report. All detailed results of this snapshot survey are presented in the appendices of this report, and are also summarised below. The following elements were also considered:

- general patterns, e.g. do sectoral/geographical patterns exist from a point of bilingual website provision?
- what are an organisation's bilingual priorities? E.g. are technical documents made available before important policy statements?
- has the Welsh language been included in the design stage, or is it a *bolt on* or afterthought?
- are there any lessons to be learned for the planning of other bilingual sites?

4. Results

Overall, this snapshot survey paints a rather disappointing picture of the sites surveyed, with several splendid exceptions. Certain organisations tend to deal with the Welsh language as if it were an afterthought, sometimes inferior, and occasionally, as a troublesome factor. Welsh language provision is uneven, late, and tokenistic; it has not been sufficiently thought through or prioritised and, on times, is incomprehensible. The snapshot survey's findings are analysed theme-by-theme below. Recommendations will be offered at the end of the report, together with guidelines for equal bilingualism on websites.

5. Home pages

More often than not, the home page is the first page visited on a web site. Several forms of bilingualism were found on homepages analysed for the research presented below. These varied from pages which existed solely to offer a language choice (e.g. the Welsh College of Music and Drama [www.wcmd.ac.uk], to those which were monolingually English with a button or flag to choose the Welsh version (e.g. British Transport Police [www.btp.police.uk], and those which were thoroughly bilingual with no need for a language choice (e.g. Coleg Meirion Dwyfor [www.meirion-dwyfor.ac.uk]). In addition to this, a small minority of institutions had registered domain names in both languages, which led to a homepage in the chosen language (e.g. the National Assembly for Wales [www.cymru.gov.uk] and www.wales.gov.uk], the Welsh Joint Education Committee [www.wjec.co.uk] and www.cbac.co.uk]).

Nevertheless, however bilingual the homepage, we shall see below that good practice on this level does not necessarily permeate to all levels on the site. The wide variety of bilingualism on the homepages of sites reviewed was neither affected by sectoral nor geographical patterns (e.g. the Department of Social Security [www.ba.gov.uk] has its headquarters in England, but is amongst those organisations which have taken a great deal of care to integrate multilingualism into its site). On the other hand, the site of some statutory institutions with all their offices in Wales are in English only (e.g. Ceredigion NHS Health Trust [www.ceredigion-tr.wales.nhs.uk], Newport County Borough Council [www.newport.gov.uk]). After detailed examination of all the sites requested for the compiling of this report, we feel strongly that a language choice should be available in a

prominent place, and in the light of our research, we **recommend** that institutions adopt one of the following two forms of homepage. 1) a dedicated language choice (e.g. the Welsh Language Board itself [www.bwrdd-yr-iaith.org.uk] or Mid and West Wales Fire Brigade [www.maww.fire.gov.uk]) or 2) a completely bilingual homepage, without the need for a language choice (Ceredigion County Council [www.ceredigion.gov.uk]). Institutions serving Wales which are not specifically 'Welsh' organisations, e.g. Government agencies in Whitehall may note that these options are not practical for them, as not all of their functions are relevant to Wales. In the case of such agencies, **we recommend** the use of a prominent Welsh language choice on the home page.



Picture 1: Mid and West Wales Fire Brigade Website. Reproduced with kind permission.



Picture 2 Ceredigion County Council website Reproduced with kind permission.

6. New Technology and Organisational 'Brand'

We consider websites and e-mail to be integral parts of the corporate image and identity or 'brand' of an institution. Consequently, we **recommend** that the Welsh Language Board insist that institutions with a statutory language scheme register, use, and publicise the Welsh language versions of their website/e-mail addresses (where there is a difference between the Welsh and English versions). For example, www.sirgar.gov.uk as well as www.carmarthenshire.gov.uk function on website and e-mail addresses, as do www.cymru.ac.uk and www.wales.ac.uk. www.caerdydd.gov.uk and www.cardiff.gov.uk work in website addresses, but the Welsh language version does not work in e-mail. www.cynulliad.cymru.gov.uk and www.assembly.wales.gov.uk are available, but it is not possible to write an e-mail message to someone@cymru.gsi.gov.uk. Similarly, e-mail addresses, signatures, auto replies, or disclaimers are no different to headed paper, which would, in the organisations surveyed, almost without exception, be available in bilingual form. Bearing in mind the emphasis currently being placed on the paperless office, and the probable future growth in e-mail, it must be insured that the Welsh language is completely integrated into such systems as a matter of urgency. As a result, we **recommend** that the Board contact the Microsoft, Pegasus and Eudora companies, to ensure that it is possible to include bilingual headers in e-mail messages, as these are also an integral part of corporate image.¹ This has already been done in Catalonia. We suggest to enable this to happen, a 'patch' be made available on the websites of both Microsoft and the Board (bearing in mind the wish of the Board to 'become a principal server for the delivery of, and links to, Welsh Language internet material' by March 2002, target 9, *The Welsh Language: Vision and Mission for 2000-2005*.) It would also be

¹ I.e. messages such as 'To', 'From', 'On behalf of', 'Forwarded by'

beneficial for the Board to discuss the possibility of *Hotmail* services [www.hotmail.com] (which are already available in 9 languages) being offered in Welsh, and utilizing the proofing software being developed currently in Canolfan Bedwyr, University of Wales, Bangor.

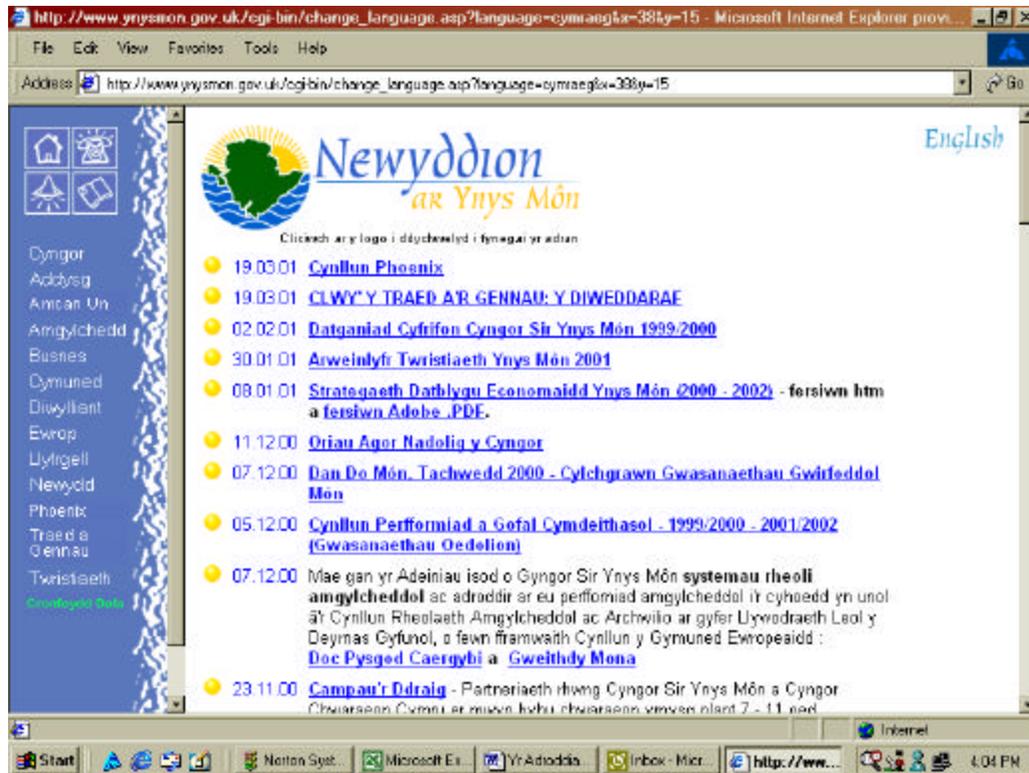
The next section analyses a related component of bilingual websites, language navigation.

7. Navigation

It is of the utmost importance that it is possible to navigate between languages easily and without fuss. The use of Welsh *officialese*/Welsh as a language of government on a wide scale is a comparatively recent development, which has brought in its wake new terminology and registers (*viz* the publishing of special dictionaries for the National Assembly for Wales). It should be remembered, at this point, that a lack of confidence in Welsh still poses problems for Welsh speakers. This is why it is so important for bilingual websites to give clear language choices. It is for this reason also that it is important to be able to transfer between one language and another on coming across an unfamiliar word, or when meaning or translation is unclear. *It should also be remembered that the majority of Welsh speakers now have bilingual lives, especially in the world of work, and could need to quote from both language versions, or to read the Welsh version, and quote the English.* As a result, we **recommend** that the Board formulate detailed guidelines on bilingualism for web designers, and contact all institutions that will be preparing a statutory language scheme in the future, to explain the importance of bilingual web design. These guidelines should also be sent to institutions which have already prepared a website.

Several forms of language navigation were discovered during the research for this snapshot survey, some more satisfactory than others. (It should be remembered, however, that pages must be available in English and Welsh for any sort of language choice to be available — and many sites were in English only).

The best form of language navigation we would recommend is a language choice on every page of which a parallel language version exists. That choice should lead directly to the page in the other language. The Welsh Language Board website itself ensures such a language choice by using a 'cgi' script, which easily changes from page-c.html (Cymraeg/Welsh) to page-e.html (English). Several sites had adopted such satisfactory practice, including Carmarthenshire and Ynys Môn County Councils (see below).



Picture 3 Satisfactory language choice on a page on the website of Ynys Môn County Council. Reproduced with kind permission.

We recommend that a language choice should be offered by using the words 'Cymraeg', 'English', or 'Y dudalen hon yn Gymraeg', 'This page in English', without using country flags, because of possible confusion these could cause. For example, should the Union Jack or the Cross of St George be chosen (or, depending on how international the site, the Stars and Stripes of the United States) in order to represent the English version? We feel strongly that a practice of using such powerful symbols could cause offence to visitors of all kinds, and that it should be avoided as a result. One type of unsatisfactory language navigation was adopted by the National Assembly for Wales on its old website, and also, to a great degree, on its revamped site. This involves a language choice on every page, but on selecting the relevant button, the visitor is returned to the very start of the site in the alternative language. We do not recommend using such a navigation system because of the extra work and the inconvenience it causes to visitors. It prevents them from making a language choice and, more appropriately, cuts into the working day more because of the extra time taken to load new pages. This can also incur extra financial charge.

8. Progression in Welsh language provision in comparison with English

This is an all-important element in the context of bilingual websites. How is one to know whether the Welsh language side of a site is a fair reflection of the English? In an ideal world, some official documents would be composed in Welsh, and translated into English, and *vice versa*. However, it would be foolish not to recognise that that is not the situation and, to all intents and purposes, the majority of Welsh language pages on the websites analysed are translations. Translation adds another element to the design

timetable, and creates an excuse for sluggish institutions not to make their site completely bilingual—blaming the translators for ‘delay’.

On researching for this report, messages such as ‘this page is being translated’ were frequently seen. Sometimes, the date such a page was updated was many months before the research period, February 2001, and beyond any delay for which translators could be reasonably be blamed. On malefactor in this respect is the National Assembly for Wales, which updates its press releases in English far more regularly than it does in Welsh, and at the time of carrying out the research for this project, important information regarding Foot and Mouth Disease was only available in English.²

Very many other institutions could also be named as malefactors in this respect. However, our main message is that doing ‘half a job’ is worse than doing no job at all. It is only natural for readers not to fully trust the content of the Welsh language side of websites if this is not updated as regularly as the English version, or if it is not clear what is available in Welsh (or what is *not* available in Welsh, on browsing a page which is in Welsh only). We **recommend** the use of a simple message ‘Yn Saesneg/In English’ in the wake of a policy decision not to mount a Welsh language version of a page on a website. We also **recommend** that it should be a matter of good practice to mount the two language versions on the website at exactly the same time, after having built translation into the design timetable.

In the light of the above findings, we **recommend** that the Welsh Language Board contact all those institutions preparing a language scheme, either statutory or voluntary, in order to remind them of the importance of releasing Welsh and English language versions of pages which are to be bilingual at exactly the same time, within a dedicated language policy for websites. This should be at the heart of each new language scheme produced, and it should be absorbed into present schemes as soon as possible.

9. Equal prominence for both languages?

In Wales, bilingualism is far too often unequal, with Welsh in a less visible position than the corresponding English version, in a smaller pitch, of in a font or colour which is more difficult to see (or occasionally in a Celtic font which conveys an antiquated impression of the Welsh language). As a result, we attempted to ascertain whether this was also true in the case of websites of institutions with a statutory language scheme. We are glad to note that this is not the case in the vast majority of sites analysed for this project, with only a few exceptions. A more serious problem was described above, namely the lack of Welsh versions of English pages and difficulty in navigation between both languages. Despite this, one site that merits a special mention at this juncture is the City and County of Swansea [www.swansea.gov.uk], which has a policy for the use of Welsh on the web which is piecemeal to say the least. When provision *is* bilingual, the Welsh is often underneath the English, in dark green, in comparison with the English, which is in white. All visitors to the site wishing to read the Welsh version must scroll past the English version to access the Welsh (the presence of which is not marked by navigation tools). In addition to this, the little Welsh used on the website of the City and

² Bridgend County Borough Council’s website notes (in English only) ‘The Council is committed to ensuring that no member of the public, elected Member, job applicant, employee, agent, contractor or third party is discriminated against, either directly by the Council or indirectly because of their gender, ethnic origin, nationality, preferred language, disability, age, religious or political beliefs, marital status or sexual orientation.’ We concur with each of these elements, but believe that the fact that the council’s website is in English only contravenes the linguistic aspect of this praiseworthy policy statement!

County of Swansea is frequently incorrect, possibly as a result of a lack of proofreading. This shall be analysed in the next section of the report.

10. Correctness of the Welsh language used on websites surveyed

Far too often, signs in Welsh are misspelt, or mistranslated (see Thomas (1998) for further details). Also, complaints are frequently aired in the press regarding the standard of Welsh used in official documents and on the media. It was therefore sensible that the correctness of the Welsh language used on the websites of institutions with a statutory language scheme be analysed. In general, the Welsh that was used was as correct as the corresponding English version, with the occasional rare exception, for example, the passage from the City and County of Swansea's website quoted below.

A oes cwyn genneych chi?
Mae Dinas a Sir Abertawe yn ceisio darparu sfon uchel o wasanaeth bob amser ond rydym yn cyfaddef nad ydym yn cael pathau'n iawn tro! Os ydych o'r farn bod cyngor:
Wedi methau â gwneud rhywbeth y dylai fod wedi'i wneud

We are glad to say, however, that this low standard was not representative of the remainder of the sites analysed. Consequently, there is not much to report that directly concerns correctness of language in this section. However, connected to correctness is how *comprehensible* is the language used, from a point of vocabulary, and style. We therefore **recommend** that the Board send a copy of *Cymraeg Clir* (Plain Welsh) produced by Canolfan Bedwyr (a language centre based at the University of Wales, Bangor) to every institution that has a statutory language scheme, for the attention of the relevant translator. Similarly, we recommend that the English used be subjected to the 'Crystal Mark' of the Plain English Campaign.

11. The design of Welsh versions, in comparison with the corresponding English versions

When websites are designed, templates (i.e. an empty file containing the 'house style' of the relevant institution to be filled with information as needed) are often produced. The same templates can of course be used for different language versions of the site, and this is what was done in that case of many of the sites reviewed for this report. Amongst the several exceptions to this practice is the site of the Television Licensing Agency, which contains eleven languages, ten of which are substandard in design in comparison to the English version. Also, the website of South Wales Police contains only one page in Welsh on its site, and that page is poorer in appearance than the site's many English pages.

12. Languages of institutions' own documentation

This part of the research concerned forms, reports, maps, and documents that could be downloaded from the sites surveyed. When such documentation was available, it was not consistently bilingual, like the sites themselves. One strange practice noted was the inclusion of a Welsh language document (most frequently an annual report) in the centre of a monolingually English site, such as Monmouth County Council. Examining this

³ A translation of this into English would read similarly to this, 'The City and County of Swansea endeavours to provide a high standard of service but we admit we do not get things right time! If you think that council has failed to do something it should have done.'

practice from a cost-benefit standpoint, it is easy to see how a better return would be gained from prioritising and investing resources into the translation of those parts of the site with the greatest readership. We therefore **recommend** that institutions complying with language schemes note priorities of bilingualism for their websites, as part of those language schemes. Regarding bilingualism and maps, many institutions' websites contained bilingual maps or Welsh and English versions of maps. Other institutions tended to link their sites to the Internet mapping site Multimap [www.multimap.co.uk]. This site displays Ordnance Survey maps, which do not always treat Welsh and English on the basis of equality. We therefore recommend that the Board contact these two institutions to ensure fair treatment of both languages as soon as possible. (The Ordnance Survey is preparing a Language Scheme at present).

13. Material *about* the Welsh language on the sites surveyed

Besides passing references to Welsh medium education available within the boundaries of a county council or an information page regarding Welsh classes for adults, the Welsh language was infrequently referred to directly. Many institutions included a copy of their language scheme on the site, and the City and County of Swansea note that Welsh and English are official languages—although this is not reflected in their website. Caerffili County Borough council includes several useful phrases in Welsh for those unfamiliar with the language, although the remainder of its site does not reflect the principle of linguistic equality well. The site of the Department of Social Security was slightly more adventurous on this point, containing a standardised list of terminology in Welsh and English for the use of translators. The only reference made to the Welsh language on the site of the DfEE was in the context of simplified language, where reference was made to Cymraeg Clir (Plain Welsh) and Plain English. Apart from this one reference, the site was in English only. An element missing from almost all sites was a policy statement regarding bilingualism.

14. Terminology

When a new medium or machine is invented, there will frequently be confusion regarding the translation of that word into other languages, e.g. the use of the word 'walkman' in French despite the existence of 'baladère', the wide use made of the word 'burger' in Welsh, despite the existence of 'eidionyn'. In Wales, the standardisation of terminology is problematic as there is no one body to co-ordinate all the necessary work in the field of corpus planning (see Welsh Language Board 1995). Consequently, and as a result of rapid developments in information technology, the sites surveyed contain a mixture of Welsh terms for the same one English concept; for example: 'safle gwe', 'gwefan' and 'safwe' for 'website'; 'linciau', 'cysylltiadau' and 'dolenni' for 'links'. This could cause confusion for a readers unsure of their written Welsh; we therefore **recommend** that one form is decided upon for these concepts and that they be contained in a 'flash' update of the *Termiadur Ysgol* dictionary and on updating other dictionaries.

15. The 'musts' of a good bilingual website

Despite our frequent criticism above, we would like to note several elements that would be essential to bilingual websites of quality. We emphasise that all these elements were

found during the research carried out on the websites for this survey, but no one site contained them all.

Firstly, it should be noted that bilingualism should be a central concern in the process of designing websites serving the public in Wales. It is evident, after reading many sites for this snapshot survey, that this is not the case at present. On the **homepage** a language choice should be offered in a totally clear fashion, either by making this the main purpose of the page, or by a thoroughly bilingual page (our two preferred options), or a monolingual page offering a language choice via a button. Illustrated below is a site that offers a choice of 5 languages in a completely obvious way.



Picture 4: Convenient multilingual choices on a website (www.habe.org)

Secondly, a policy for bilingualism on the web should be formulated. It would be pleasing if this were done as a subsection of an institution's language scheme. Which pages will be available in Welsh and English? Will pages be thoroughly bilingual throughout the site or will separate language versions be offered? In this second case, how will the site be structured? In parallel directories for both languages? E.g. www.somewhere.gov.uk/cymraeg/index.html and www.somewhere.gov.uk/english/index.html or by using a suffix after individual file names, e.g. www.somewhere.gov.uk/index-c.html or www.somewhere.gov.uk/index-e.html.

How will it be ensured that the reader will be able to navigate from one version to the other? We **recommend** that this be done by placing a button on every page that has a translation (and that it use either a script or direct connection). All monolingual pages should note that no translation is available.

What steps are to be taken that Welsh accent marks will be displayed (e.g. circumflexes on ' ' and ' ')? What steps are to be taken to ensure that the Welsh and English used have passed the Cymraeg Clir and Plain English Guidelines, and that there are no mistakes on either version? How will search engines be programmed to accept

searches in either language? (If sites are arranged according to the above guidelines, searches can be limited to directories in the language of the search page, or to file names bearing a suffix in the desired language.)

16. Conclusions

It may be that the flaws mentioned in this report are results of a lack of awareness of the steps necessary to design bilingual websites. This comes as no surprise, on considering how rapidly the Internet and World Wide Web have developed during the past few years. We hope that this report, and its appendices, will cast some light on the weaknesses in the present provision. We offer our recommendations with the objective of improvement, ensuring that the websites of institutions with a language scheme are just as accessible to those wishing to read them in Welsh as they are to those who wish to read them in English. Generally, this is not the case at present, but by adopting our recommendations, we hope that sites currently available will fulfil their statutory duties and in the future will be designed bilingually from the outset.

Jeremy Evas, Cardiff, March 2001.

17. Recommendations

- i. We recommend that the Welsh Language Board contact Microsoft to discuss the possibility of using the new proofing software currently being developed by Canolfan Bedwyr on the Hotmail website, and of making that site available in Welsh.
- ii. We recommend that the Board formulate detailed guidelines on bilingualism for web designers.
- iii. We recommend that the Board contact all institutions that will be preparing a language scheme in the future in order to explain the importance of designing websites bilingually. We also recommend that a copy of these guidelines be sent to these institutions, and to those that have already prepared a language scheme.
- iv. Following the above recommendation, we recommend that the Board hold a competition for bilingual websites similar to the Bilingual Menu of the Month already offered.
- v. We recommend that language choice on websites be offered through words (e.g. 'Cymraeg' 'English')
- vi. We recommend that that choice should take the reader directly to the desired page in the other language, rather than back to the very beginning of the site.
- vii. We recommend that graphical country flags are not used to offer a language choice on websites.
- viii. We recommend the use of a simple message, e.g. 'Yn Saesneg yn unig' (In English only) or 'In Welsh only' reflecting policy decisions made not to translate pages.
- ix. We recommend that it should be a matter of good practice to mount the two language versions on the website at exactly the same time, after having built translation into the design process.
- x. We recommend that the Board send a copy of *Cymraeg Clir* (Plain Welsh) produced by Canolfan Bedwyr to every institution that has a statutory language scheme, for the attention of the relevant translator.
- xi. Similarly, we recommend that the English used on websites be subjected to the 'Crystal Mark' of the Plain English Campaign.

- xii. We recommend that institutions complying with language schemes note priorities of bilingualism for their websites, as part of those language schemes.
- xiii. We recommend standardising of web terminology in Welsh, and that the resultant forms be included in a flash update of the *Termiadur Ysgol* and on updating other dictionaries.
- xiv. We recommend that language schemes contain a clause declaring that any means or medium of communication devised in the future used by a particular institution should incorporate bilingualism.
- xv. We recommend that the Welsh Language Board insist that institutions with a statutory language scheme register, use, and publicise the Welsh language versions of their website/e-mail addresses (where there is a difference between the Welsh and English versions).
- xvi. We recommend that the Board contact the Microsoft, Pegasus and Eudora companies, to ensure that it is possible to include bilingual headers in e-mail message, as these are also an integral part of corporate image.
- xvii. We recommend that the Welsh Language Board contact all those institutions preparing a language scheme, either on a statutory or voluntary basis, in order to remind them of the importance of releasing Welsh and English version of those pages that are to be bilingual *at exactly the same time*.
- xviii. We recommend that the Welsh Language Board, on reviewing Language Schemes, insist that a dedicated website policy is included in the Scheme.

18. Bibliography

- Bourhis, R. (1984) (ed.), *Conflict and Language Planning in Québec*, Multilingual Matters, Clevedon.
- Welsh Language Board (1999) *The National Assembly for Wales: A Dictionary of Procedural Terms*, Second Edition, Welsh Language Board, Cardiff, <http://www.bwrdd-yr-iaith.org.uk/pdf/cyfrol1.pdf>
- Welsh Language Board (2000), *The Welsh Language: A Vision and Mission for 2000-2005*, Welsh Language Board, Cardiff.
- Welsh Language Board (1995) *The Panel for Official Welsh: Report*, Welsh Language Board, Cardiff.
- Evas, J.C. (1999) *Rhwystrau Ar Lwybr Dwyieithrwydd*, unpublished PhD dissertation, Cardiff University.
- Fishman, J.A. (1991) *Reversing Language Shift: theoretical and empirical foundations of assistance to threatened languages*, Multilingual Matters, Clevedon.
- Fishman, J.A. (2001) (ed.) *Can threatened languages be saved? Reversing language shift, revisited, a 21st Century Perspective*, Multilingual Matters, Clevedon.
- Kaplan, R.; Baldauf, R. (1997) *Language Planning from Practice to Theory*, Multilingual Matters, Clevedon.
- Nelde, P.H.; Strubell i Trueta, M.; and Williams, G. (1996) *Euromosaic: The Production and Reproduction of The Minority Language Groups of the European Union*, European Commission, Brussels.
- Thomas, P.W. (1998) 'Cymraeg Swnllyd', *Taliesin*, 102, Summer 1998, tt. 39-65
- Williams, C.H. (2000) (ed.) *Language Revitalization: Policy and Planning in Wales*, University of Wales Press, Cardiff.
- Williams, G.; Morris D. (2000) *Language Planning and Language Use: Welsh in a Global Age*, University of Wales Press, Cardiff.⁴

⁴ Declaration of interests: Linguacambria Cyf was also responsible for maintenance of the Welsh Language Board's website between January and March 2001. The author of this report was appointed to the Board's staff in March 2001.