

Accessibilityof University Websites in Spain

1. Introduction

The Discapnet InfoAccessibility Observatory has been carrying out, since 2004, sector-specific surveys of website accessibility in Spain. With these surveys, the Observatory serves to "raise awareness and highlight not only the degree of compliance with current guidelines, but also good practices and the main barriers on the web."

In 2004 and 2006 the Observatory published surveys of the accessibility of university websites, thus fulfilling one of its objectives: monitoring changes in accessibility over time.

Firstly, in August 2004, the Discapnet InfoAccessibility Observatory carried out a survey of the accessibility of university web sites in Spain. More than a year and a half after that survey was carried out, and after the passing of the statutory deadline, laid down in the Fifth Additional Provision of Law on Information Society and Electronic Commerce Services for adaptation of publicly provided Web content to "generally recognized" accessibility criteria, the Observatory working group undertook a new review of the websites analysed in the previous survey. The aim was to check for any improvements made during that time, to make the contents of the universities' websites more accessible to people with functional impairments.

As a result of this survey we published the report *Accessibility of University Websites* (*Accesibilidad en los Portales Web Universitarios*), in February 2006, which showed that there had been **no change** in the accessibility of university websites in Spain.

In 2010 we carried out another analysis of compliance with accessibility criteria, specifically a set of twelve checkpoints we consider indicative of overall compliance with the levels A and AA of W3C/WAI's Web Content Accessibility Guidelines (WCAG 1.0). This analysis **shows some improvement in the accessibility of university web sites**, probably due to redesign which now incorporates accessibility criteria in the implementation and development of templates and content.

Web pages included in the survey sample, as in 2006, are from the following university sites:²

- 1. Seville University: http://www.us.es/
- 2. Madrid Complutense University: http://www.ucm.es/
- 3. National Distance Education University (UNED) http://www.uned.es

http://www.discapnet.es/Discapnet/Castellano/Observatorio_infoaccesibilidad/observatorio04.htm

¹ The survey is available on the Web:

² The University of Santiago de Compostela website was included in the sample at its own request.

4. University of Granada: http://www.ugr.es

5. University of Barcelona: http://www.ub.es/

6. University of the Basque Country http://www.ehu.es/

7. University of Valencia: http://www.uv.es/

8. University of Las Palmas de Gran Canaria: http://www.ulpgc.es/

9. University of Alcalá de Henares: http://www.uah.es/

10. Universitat Oberta de Catalunya: http://www.uoc.edu

11. University of Deusto: http://www.deusto.es

12. Valladolid University: http://www.uva.es/

13. University of Navarra: http://www.unav.es/

14. University of Santiago de Compostela: http://www.usc.es

15. Ministry of Education, Culture and Sport, University inquiries website: http://www.educacion.es/educacion/universidades.html

16. Conference of Spanish University Rectors: http://www.crue.org/

To evaluate the degree of accessibility of university websites we applied a methodology developed by Technosite. This methodology is based on W3C/WAI document *Evaluating Web Sites for Accessibility*,³ which includes evaluation of compliance with twelve aspects or accessibility criteria to cover most of the W3C/WAI Web Content Accessibility Guidelines 1.0 (WCAG 1.0), at levels A and AA.

The Technosite experts who designed the survey believe that these criteria provide an overall view that reliably reflects the accessibility of a website or a web-based online service. They mostly include priority 1 aspects, and in some cases, priority 2.⁴

It is to be both expected and desired that by the time this report is published, some of the websites analysed have been upgraded and have improved their accessibility level. Whatever has happened since would not diminish the validity of the results presented in this report which relate to the date the data was collected (May 2010).

³ http://www.w3.org/WAI/eval/

⁴ For further information, see Appendix II.

2. Summary of Results

This survey examines the main accessibility barriers identified in an analysis of a sample of Spanish university websites in relation to the currently applicable W3C/WAI **Web Content Accessibility Guidelines 1.0** (WCAG 1.0). The technical accessibility analysis takes into account a set of accessibility criteria based on the above guidelines. The result of this analysis should be taken as a reference for understanding compliance with current accessibility legislation.

The results indicate that, compared with the 2004 and 2006 surveys, average compliance with the criteria has improved, though few sites in the sample score over 50%, and only two obtain significantly positive results: the Ministry of Education's Universities website and that of the Madrid Complutense University.

The **success rate** of the websites surveyed is 39.39%, which is the best so far in any of the Observatory's surveys. Of all the websites evaluated, the one that obtained the best result was the Ministry of Education's Universities information site, with **81.43%** compliance with the criteria. Figure 1 shows the site's start page.

Figure 1 Start page of the Ministry of Education's Universities site



Below are the **results** of the **technical evaluation of the accessibility** of each web site. The tables in which the results are presented are ordered by degree of compliance with the accessibility criteria set out in current legislation:

1. Websites with a level of compliance with accessibility criteria between 100% and 70%: compliance with current legislation.

They are characterized by having achieved a high level of success in technical analysis of accessibility, compliance with almost all of the criteria based on WCAG 1.0.

Table 1
Sites with greater accessibility

Website	% pass (accessibility)
Ministry of Education, Universities information page	81.43%
Madrid Complutense University	72.38%

2. Websites with a level of compliance with the evaluated accessibility criteria between 70% and 50%: moderate compliance with current legislation.

The level of compliance is not as notable as with the websites listed in the table above, but can be considered moderate.

Table 2 Moderately accessible websites

Website	% pass (accessibility)
University of the Basque Country	54.91%
University of Barcelona	54.29%

3. Websites with a level of compliance with the evaluated accessibility criteria below 50%: non-compliant with current legislation.

These sites are characterized by a low accessibility level, with many difficulties and barriers to accessing content for people with disabilities.

Table 3
Inaccessible Web sites

Website	% pass (accessibility)		
University of Las Palmas de Gran Canaria	45.71%		
University of Santiago de Compostela	44.52%		
Conference of Spanish University Rectors	36.35%		
University of Alcalá de Henares	35.08%		
University of Valladolid	32.5%		
University of Granada	31.90%		
University of Deusto	26.79%		
The University of Seville	26.22%		
University of Navarra	25.833%		
University of Valencia	24.40%		
Universitat Oberta de Catalunya	24.12%		
National Distance Education University (UNED)	13.84%		

The following table summarizes the percentage results obtained in the technical evaluation of the sample of sixteen university websites in terms of criteria met, not met, not applicable and success rate, from highest to lowest.⁵

The table shows that four exceeded the required minimum of 50%, with particularly high compliance with accessibility criteria by the Ministry of Education's Universities website and Madrid Complutense University.

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⁵ The complete results table is in Appendix IV.

Table 4
Criteria met, not met, or not applicable, and percentage success for each site (2010)

Website	Good	Bad	N/A	% pass
Ministry of Education, Universities information page	26	6	28	81.43%
Madrid Complutense University	24	9	27	72.38%
University of the Basque Country	21	15	24	54.91%
University of Barcelona	19	16	25	54.29%
University of Las Palmas de Gran Canaria	16	19	25	45.71%
University of Santiago de Compostela	16	21	23	44.52%
Conference of Spanish University Rectors	12	22	26	36.35%
University of Alcalá de Henares	13	25	22	35.08%
University of Valladolid	13	27	20	32.50%
University of Granada	11	23	26	31.90%
University of Deusto	10	28	22	26.79%
The University of Seville	12	34	14	26.22%
University of Navarra	11	30	19	25.83%
University of Valencia	8	26	26	24.40%
Universitat Oberta de Catalunya	7	27	26	24.12%
National University of Distance Education	5	34	21	13.84%
AVERAGE	224	362	374	39.39%

Graph 1
Percentage of compliance with web accessibility criteria by university websites in Spain (May 2010)

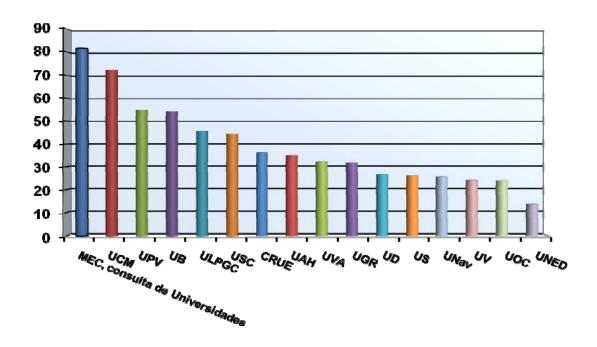


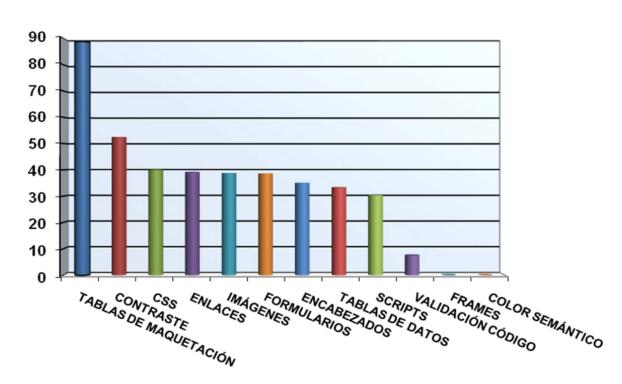
Table 5 and Graph 2 show the results obtained for each of the criteria considered. The criterion for which compliance was highest was that for layout tables; the success rate indicates cases in which the content is laid out with tables and these linearize correctly, which is necessary for screen reader users.

In general, since the results obtained in the evaluation of almost all websites are better, compliance with the criteria has also improved since the 2006 survey.

Table 5
Number of times applicable, met, not met, and percentage success for criteria evaluated.

Criterion	Applies	Good	Bad	% pass
LAYOUT TABLES	44	39	5	88.6%
CONTRAST	40	21	19	52.5%
CSS	80	32	48	40%
LINKS	79	31	48	39.2%
IMAGES	80	31	49	38.7%
FORMS	57	22	35	38.6%
HEADINGS	80	28	52	35%
DATA TABLES	15	5	10	33.3%
SCRIPTS	33	10	23	30.3%
MARKUP VALIDATION	80	6	74	7.5%
FRAMES	2	0	2	0%
SEMANTIC USE OF COLOR	0	0	0	0%

Graph 2
Percentage pass rate for technical evaluation criteria.



3. Discapnet InfoAccessibility Observatory

In 2004 Discapnet launched its InfoAccessibility Observatory in order to generate and publish information on the levels of web accessibility, both by analysing specific sectors as well as comparing across sectors and monitoring change in accessibility over time.

The purpose of the Discapnet InfoAccessibility Observatory reports is to show the degree of compliance with current guidelines on web content accessibility, and highlight good practice and the major barriers and impediments on the web, including in its assessments the user perspective. A better understanding of the strengths and weaknesses recognized by experts and users in the websites of different sectors and give website managers, designers and developers a better understanding of accessible web design, tools and services and provide suggestions for improvement, as its importance is growing every day.

The Observatory employs an innovative methodology developed by Technosite. In line with W3C/WAI recommendations,⁶ this methodology combines technical analysis of accessibility with an assessment of usability and accessibility based on user experience.

⁶ W3C/WAI: Web Accessibility Initiative, the World Web Consortium (World Wide Web Consortium.)For more information, see http://www.w3.org/WAI