



Blackboard



Accessible content is better content.



Las implicaciones de no tener una experiencia inclusiva



Riesgo legal y la responsabilidad



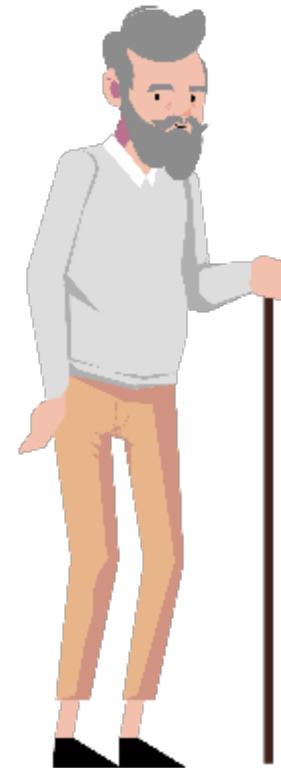
Barreras al Éxito estudiantil



Entorno de aprendizaje desigual

¿El Objetivo?: Crear una cultura de inclusión

Quiero opciones en mis materiales de aprendizaje



Prefiero los subtítulos



Necesito recursos en línea y acceso al campus en cualquier momento



Quiero hacer un seguimiento de mi progreso



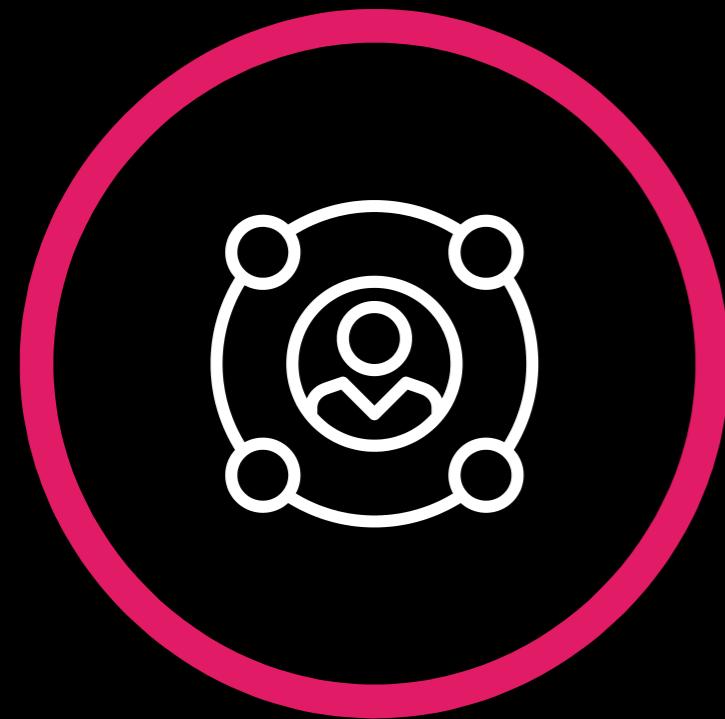
Necesito acceder al contenido del curso desde cualquier lugar



Mi aula virtual debe ser fácil de seguir



Podemos ayudar en el camino hacia la inclusión



Personalizando la
experiencia del
estudiante



Ampliando el acceso a
la educación



Desarrollando
contenido accesible a
escala

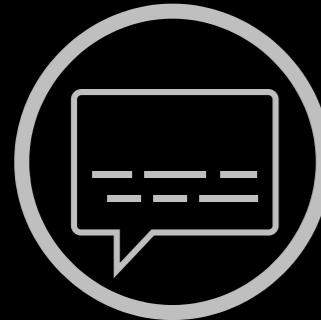
Apoyando a los estudiantes y creando una cultura de inclusión con Ally



Formatos alternativos



Diseño Responsive



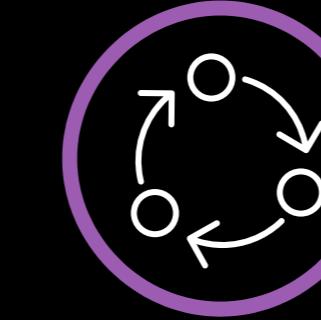
Servicios de subtítulos
en vivo



Soporte personalizado



Informes Institucionales



Comentarios y orientación



Servicios de Consultoría de
Accesibilidad



Ally es un motor de cambio para generar conciencia, empatía y educación a los docentes y toda la comunidad educativa en materia de Accesibilidad. Desde la educación y la orientación al cambio.

University of Derby

"Vemos a Ally ayudando a crear conciencia para los profesores sobre el valor de los formatos accesibles y alternativos para el éxito de los estudiantes. También estamos descubriendo que Ally nos está ayudando a comparar con mayor precisión nuestro progreso de accesibilidad de contenido e informar nuestra estrategia de accesibilidad en toda la Universidad".

Claire Gardener
Senior Learning Technology Advisor

Blackboard Ally en la Actualidad: Volumetría



Clientes Ally en España



UNIVERSIDAD
DE BURGOS



EOI Escuela de
organización
industrial



universidad
de león



Universitat
Pompeu Fabra
Barcelona



UNIVERSIDAD
DE ALMERÍA



UNIVERSITAT DE
BARCELONA

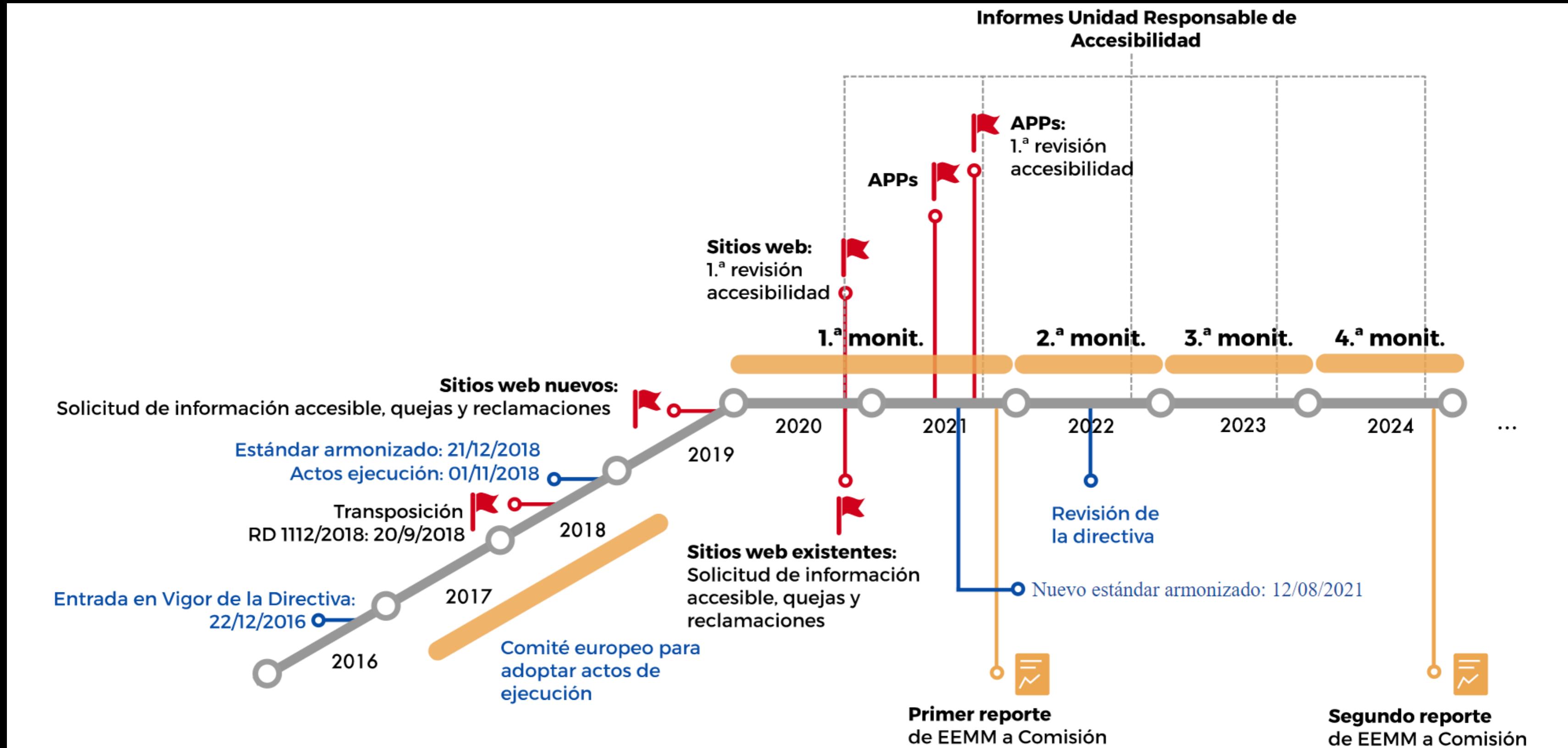


IMF
Smart Education

Evolución legal



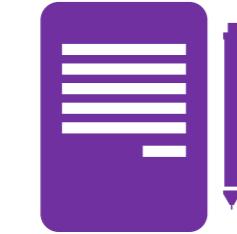
Hacia donde vamos...



Desafíos de construir un entorno inclusivo



Problemas con los estudiantes



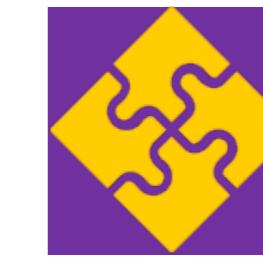
Solicitudes explícitas de formatos alternativos



Largas retrasos para recibir el formato solicitado



Exclusión de muchos estudiantes



Estrechamente relacionado con la calidad y el uso



Contenido del curso

Contenido web

El flujo de trabajo del contenido del curso



Proceso de trabajo

- El profesor **agrega** contenido a un curso

The screenshot shows a course management system interface for 'Biology 101'. The left sidebar has a dark theme with white text. It includes sections for 'Course Info', 'Announcements', 'Notifications', 'My Grades', 'Chapter 1', 'Chapter 2', 'Chapter 3', 'Resources' (which is currently selected), and 'Videos'. Below these are sections for 'Student Blogs', 'Course Wiki', 'My Groups', and 'Course Tools'. The main content area is titled 'Resources' and contains five items:

- Cellulolytic Bacteria and Fungi paper.pdf
- Transcriptional Regulation structures
- 1AL biofuels f15.jpg
- Recombinant Cellulases: detailed
- Algae organisms 15.jpg

At the top right, there are links for 'My Institution', 'Build Content', 'Assessments', 'Tools', and 'Partner Content'.

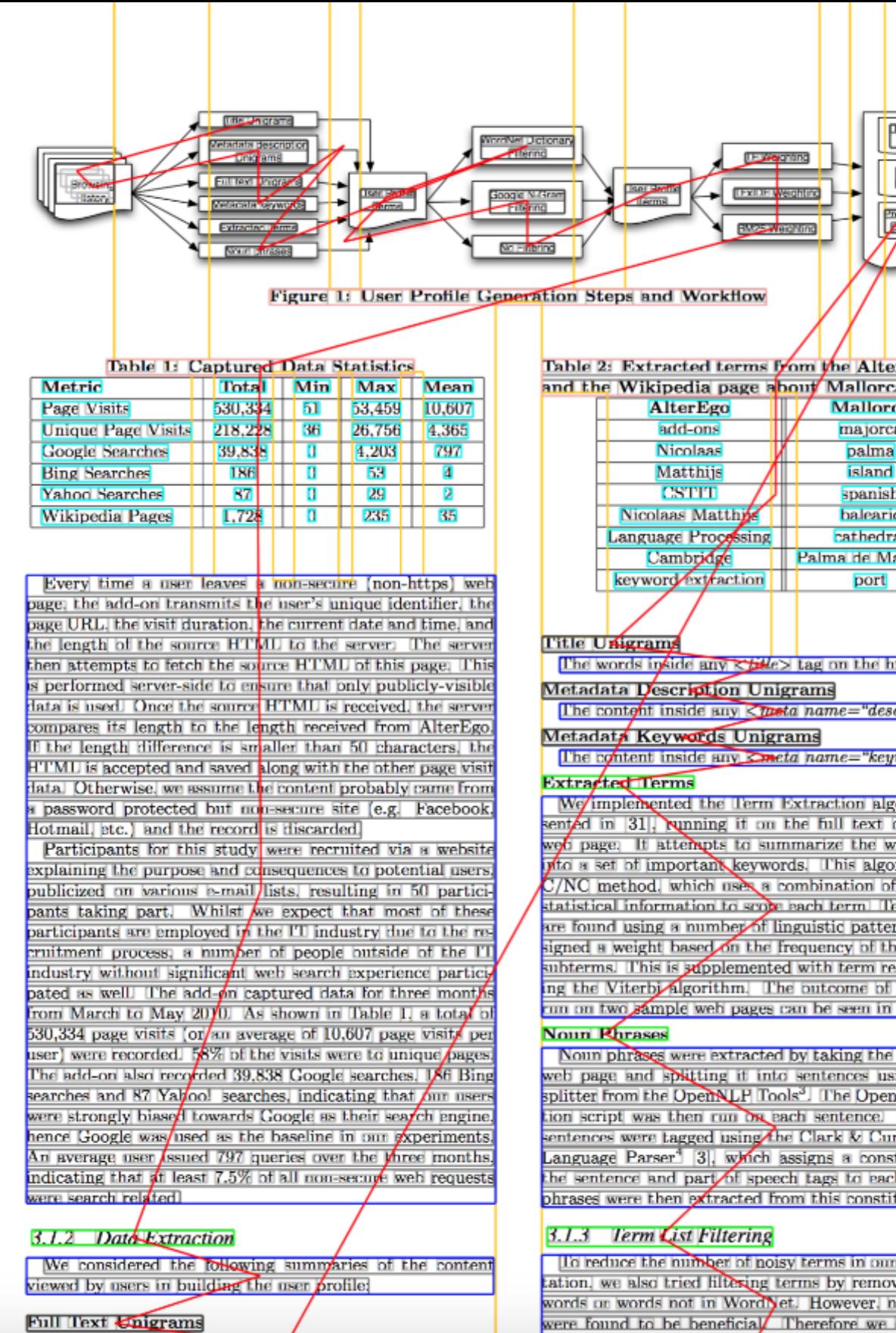
Lista de verificación de accesibilidad automatizada

- Verifica automáticamente el contenido del curso con las reglas **WCAG 2.1 AA** identifica problemas de y brinda orientación correctiva al instructor/diseñador del curso.
 - ✓ Identifica problemas de **accesibilidad y usabilidad**.
 - ✓ Lo puntúa con un **Score**.
 - ✓ Brinda **orientación correctiva** al instructor/diseñador del curso.



Algoritmos de Aprendizaje de Máquina

- ✓ Análisis estructural y visual para aprender la semántica del documento.
 - Identificará los **títulos, estructura de títulos, párrafos, notas al pie, cuadros, listas, fórmulas matemáticas**, etc.
- ✓ Ejecuta el contenido a través de un conjunto de Algoritmos de Aprendizaje de Máquina.



Metric	Total	Min	Max	Mean
Page Visits	530,334	1	53,459	10,607
Unique Page Visits	218,228	1	26,756	4,365
Google Searches	39,838	1	4,203	797
Bing Searches	186	1	53	4
Yahoo! Searches	87	1	29	2
Wikipedia Pages	1,728	1	235	35

Every time a user leaves a non-secure (non-https) web page, the add-on transmits the user's unique identifier, the page URL, the visit duration, the current date and time, and the length of the source HTML to the server. This is performed server-side to ensure that only publicly-visible data is used. Once the source HTML is received, the server compares its length to the length received from AlterEgo. If the length difference is smaller than 50 characters, the HTML is accepted and saved along with the other page visit data. Otherwise, we assume the content probably came from a password protected but non-secure site (e.g. Facebook, Hotmail, etc.) and the record is discarded.

Participants for this study were recruited via a website explaining the purpose and consequences to potential users, publicized on various e-mail lists, resulting in 50 participants taking part. Whilst we expect that most of these participants are employed in the IT industry due to the recruitment process, a number of people outside of the IT industry without significant web search experience participated as well. The add-on captured data for three months from March to May 2010. As shown in Table 1, a total of 530,334 page visits (or an average of 10,607 page visits per user) were recorded. 58% of the visits were to unique pages. The add-on also recorded 39,838 Google searches, 186 Bing searches and 87 Yahoo! searches, indicating that our users were strongly biased towards Google as their search engine, hence Google was used as the baseline in our experiments. An average user issued 797 queries over the three months, indicating that at least 7.5% of all non-secure web requests were search related.

3.1.2 Data Extraction

We considered the following summaries of the content viewed by users in building the user profile:

Full Text Unigrams

AlterEgo	Mallorca
add-ons	majorca
Nicolaas	palma
Matthijs	island
CSTII	spanish
Nicolaas Matthijs	balearic
Language Processing	cathedral
Cambridge	Palma de Ma
keyword extraction	port

Title Unigrams

The words inside any <title> tag on the h

Metadata Description Unigrams

The content inside any <meta name="des

Metadata Keywords Unigrams

The content inside any <meta name="keyw

Extracted Terms

We implemented the Term Extraction alg

mented in [31], running it on the full text o

web page. It attempts to summarize the w

into a set of important keywords. This alg

C/NC method, which uses a combination of

statistical information to score each term. Te

are found using a number of linguistic patte

signed a weight based on the frequency of th

subterms. This is supplemented with term re

using the Viterbi algorithm. The outcome of

run on two sample web pages can be seen in

Noun Phrases

Noun phrases were extracted by taking the

web page and splitting it into sentences us

splitter from the OpenNLP Tools³. The Open

script was then run on each sentence.

sentences were tagged using the Clark & Cun

Language Parser⁴ [3], which assigns a const

the sentence and part of speech tags to each

phrases were then extracted from this consti

3.1.3 Term List Filtering

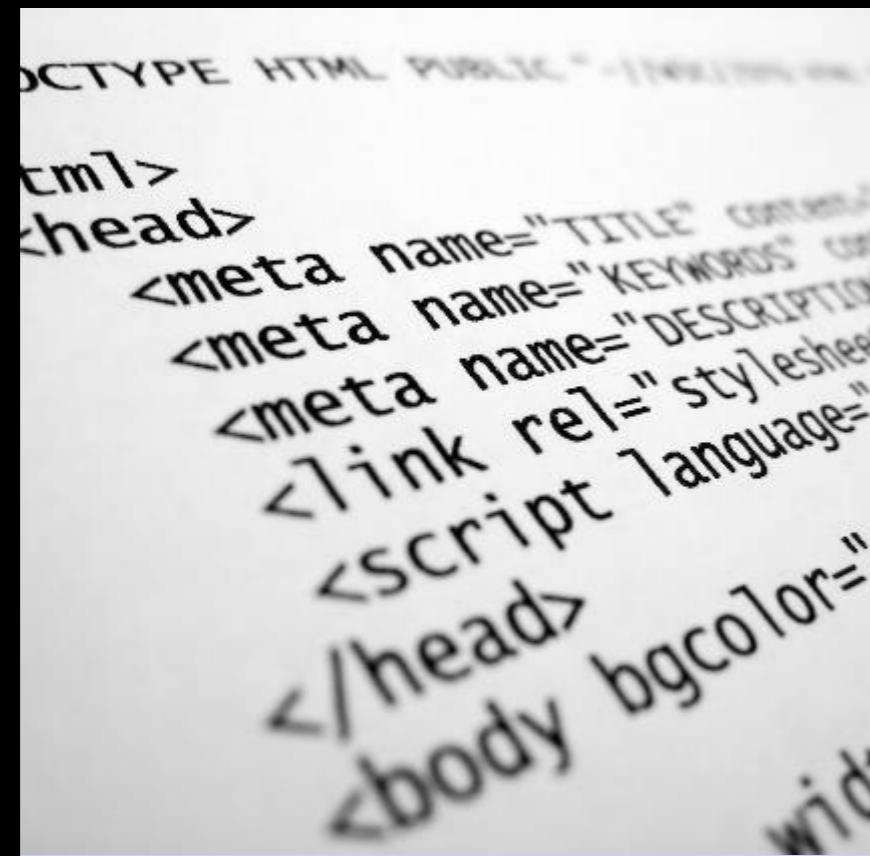
To reduce the number of noisy terms in our

list, we also tried filtering terms by remov

words or words not in WordNet. However, n

were found to be beneficial. Therefore we

Formatos accesibles alternativos



HTML

Versión HTML del contenido de **alta calidad semántica**

Original mejorado

Introduce arreglos automáticamente al documento original

3.1.4 Term Weighting

After the list of terms has been obtained, we compute weights for each term in three ways.

TF Weighting

The most straightforward implementation we consider is Term Frequency (TF) weighting. We define a frequency vector \vec{F} that contains the frequency counts of a given term t_i for all of the input data sources, as shown in Equation (1). For example, f_{title_i} is the number of times a given term t_i occurs in all of the titles in the user's browsing history. We calculate a term weight based on the dot product of these frequencies with a weight vector $\vec{\alpha}$:

$$\vec{F}_{t_i} = \begin{bmatrix} f_{title_{t_i}} \\ f_{keywords_{t_i}} \\ f_{text_{t_i}} \\ f_{abstract_{t_i}} \\ f_{terms_{t_i}} \\ f_{subwords_{t_i}} \end{bmatrix} \quad (1)$$

$$w_{TF}(t_i) = \vec{F}_{t_i} \cdot \vec{\alpha} \quad (2)$$

For simplicity, we limit ourselves to three possible values for each weight α_i : 0, ignoring the particular field, 1, including the particular field, and $\frac{1}{N_1}$, where N_1 is the total number of terms in field i . This gives more weight to terms in shorter fields (such as the meta keywords or title fields). We call the last relative weighting.

TF-IDF Weighting

The second option we consider is TF-IDF (or Term Frequency, Inverse Document Frequency) weighting. Here, words appearing in many documents are down-weighted by the inverse document frequency of the term:

$$w_{TFIDF}(t_i) = \frac{1}{\log(DF_{t_i})} \times w_{TF}(t_i) \quad (3)$$

To obtain IDF estimates for each term, we use the inverse document frequency of the term on all web pages using the Google N-Gram corpus².

Personalized BM25 Weighting

The final weight method we consider was proposed by Tsochantaridis et al. [2002], which is a modification to BM25 to use

3.2 Re-ranking Strategies

Like previous work, we use the user profile to re-rank the top results returned by a search engine to bring up results that are more relevant to the user. This allows us to take advantage of the data search engines use to obtain their initial ranking, by starting with a small set of results that can then be personalized. In particular, [28] noted that chances are high that even for an ambiguous query the search engine will be quite successful in returning pages for the different meanings of the query. We opt to retrieve and re-rank the first 50 results retrieved for each query.

3.2.1 Scoring Methods

When re-ranking, each candidate document can either be scored, or just the snippets shown on the search engine result page can be scored. We focus on assigning scores to the search snippets as it was found to be more effective for re-ranking search results by Teevan et al. [28]. Also, using search snippets allows a straightforward client-side implementation of search personalization. We implemented the following four different scoring methods:

Matching

For each word in the search snippet's title and summary that is also in the user's profile, the weight associated with that term will be added to the snippet's score:

$$score_M(s_i) = \sum_{x=1}^{N_{s_i}} f_{t_x} \times w(t_x) \quad (5)$$

where N_{s_i} represents the total number of unique words within the snippet's title and summary, and f_{t_x} represents the number of occurrences of t_x within the snippet. Words in the snippet title or summary but not in the user's profile do not contribute towards the final score. This method is equivalent to taking the dot product between the user profile vector and the snippet vector.

Unique Matching

A second search snippet scoring option we consider involves counting each unique word just once:

$$score_{UM}(s_i) = \sum_{x=1}^{N_{s_i}} w(t_x) \quad (6)$$

CHAPTER I

Down the Rabbit-Hole

Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, and what is the use of a book, thought Alice without pictures or conversation?

So she was considering in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White

Rabbit with pink eye

There was nothing s
that; nor did Alice th

much out of the way
to itself, Oh dear! Oh

(when she thought
occurred to her tha
wondered at this, b
seemed quite natura
bit actually TOOK A
WAISTCOAT-POCK
and then hurried or
feet, for it flashed ac
had never before see
waistcoat-pocket, or
it, and burning wi
across the field after
just in time to see it

Otros formatos alternativos

ePub, audio, braille
electrónico, etc.

Formatos accesibles alternativos

Ancient Greek Philosophy

Home Page

Content

Discussions

Groups

Tools

Help

Microsoft

Calendar

Syllabus A▼

aristo-politics A▼

Remembrance of things past A▼

Aristotle Ethics A▼

Outlines of Pyrrhonism A▼

The Allegory of the Cave A▼

Two Conceptions A▼

test A▼

Old syllabus A▼

Download alternative formats X

- PDF Tagged PDF
Structured PDF for improved use with assistive technology
- HTML
For viewing in the browser and on mobile devices
- ePub
For reading as an e-book on an iPad and other e-book readers
- Electronic braille
BRF version for consumption on electronic braille displays
- Audio
MP3 version for listening
- BeeLine Reader
Enhanced version for easier and faster on-screen reading
- Translated version
A machine translated version of the original document

? Help

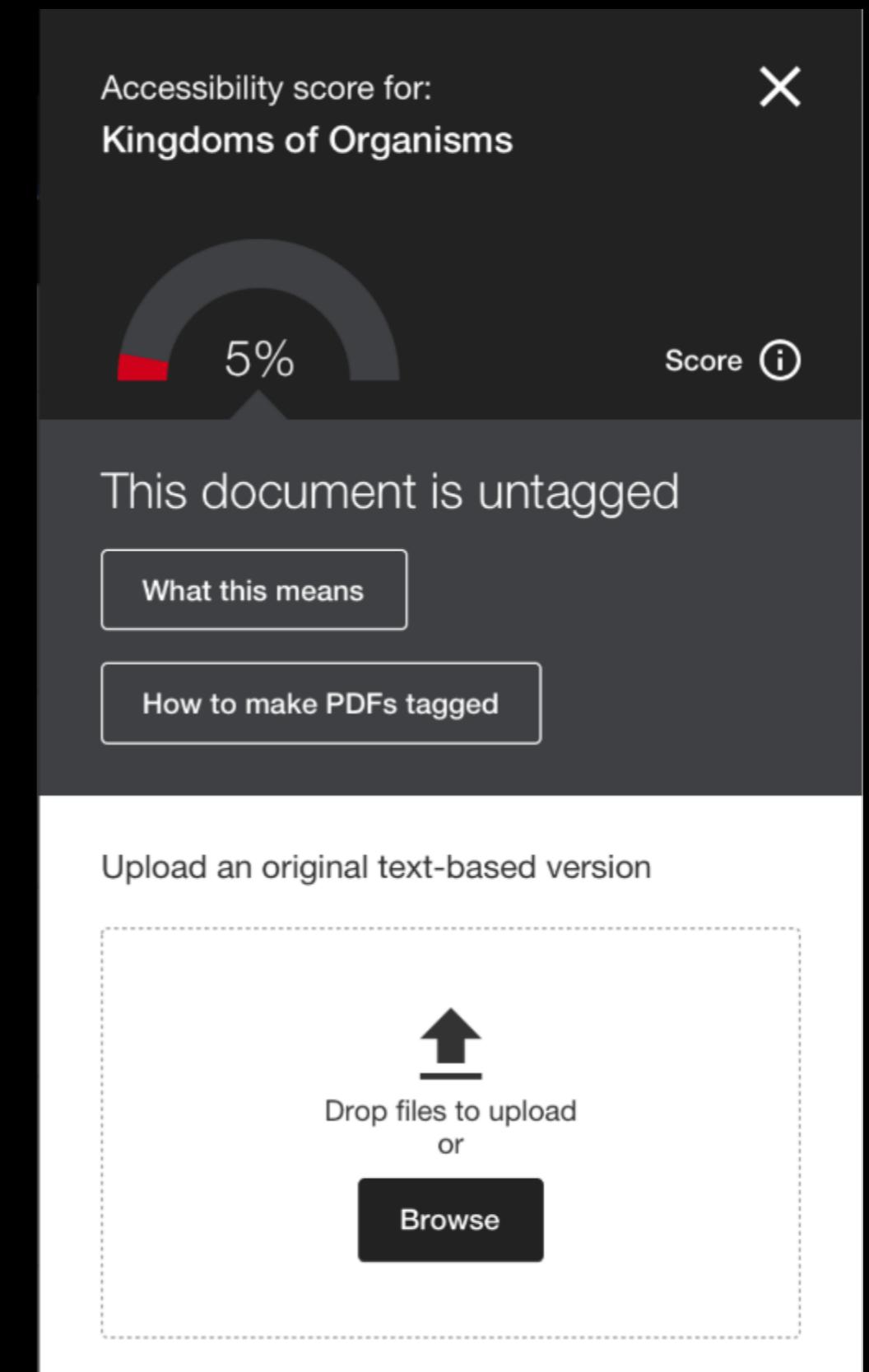
By downloading an alternative format, you agree with the [Terms of Use](#)

Cancel Download

Retroalimentación del profesor/a

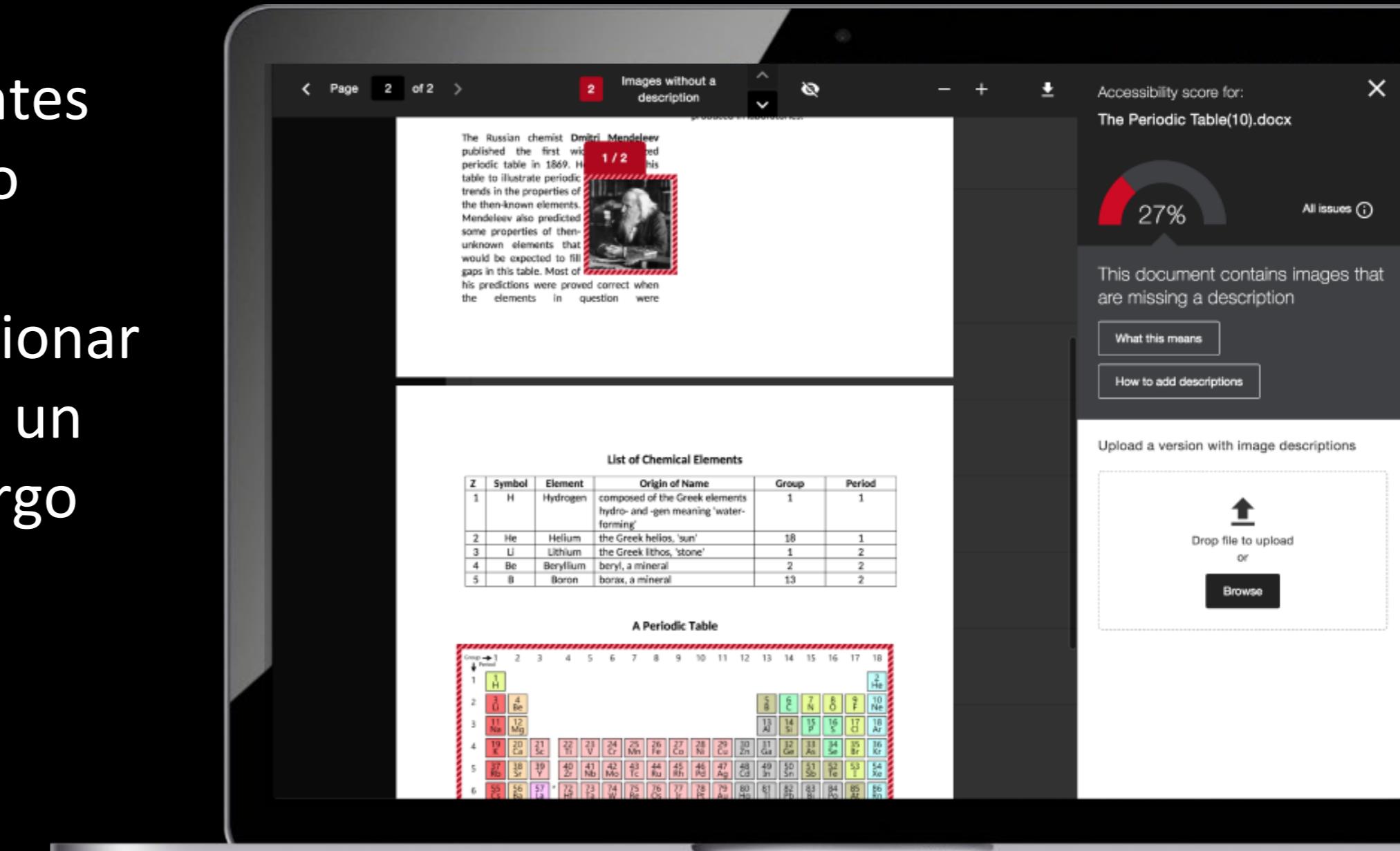
- Ofrece un **Score** con puntuación del estado actual del documento en cuanto accesibilidad.
- Brinda **retroalimentación** a profesores sobre la accesibilidad del contenido de sus cursos.
- Ofrece **guías** sobre cómo solucionar los problemas de accesibilidad.

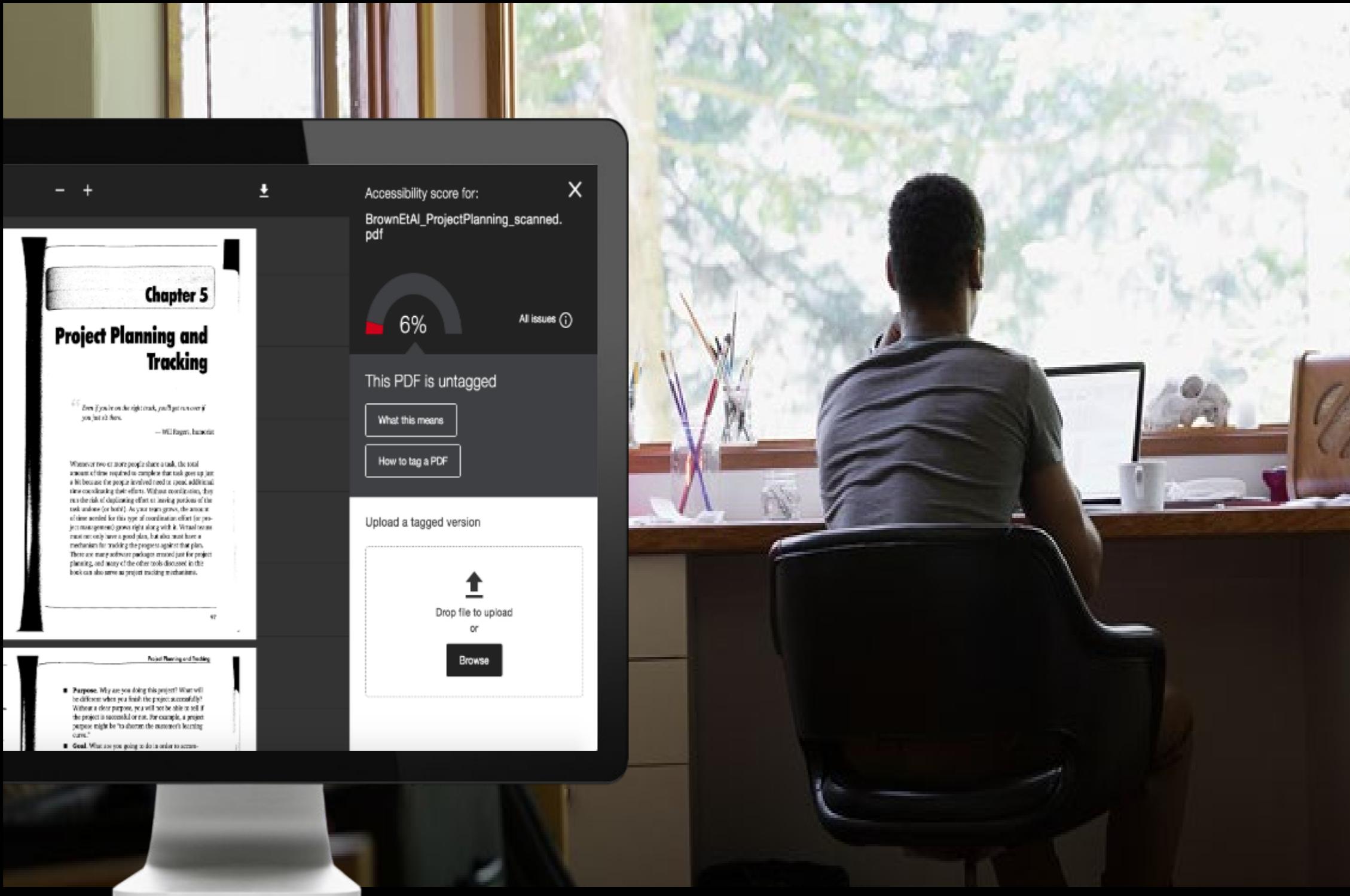
Destinado a generar un **cambio de comportamiento** en el tiempo



Feed-back al profesor/a

- Proporciona **comentarios** a los docentes sobre la accesibilidad de su contenido
- Ofrece **orientación** sobre cómo solucionar problemas de accesibilidad y generar un cambio en el comportamiento a lo largo del tiempo
- **Integrado** en el contexto de su curso

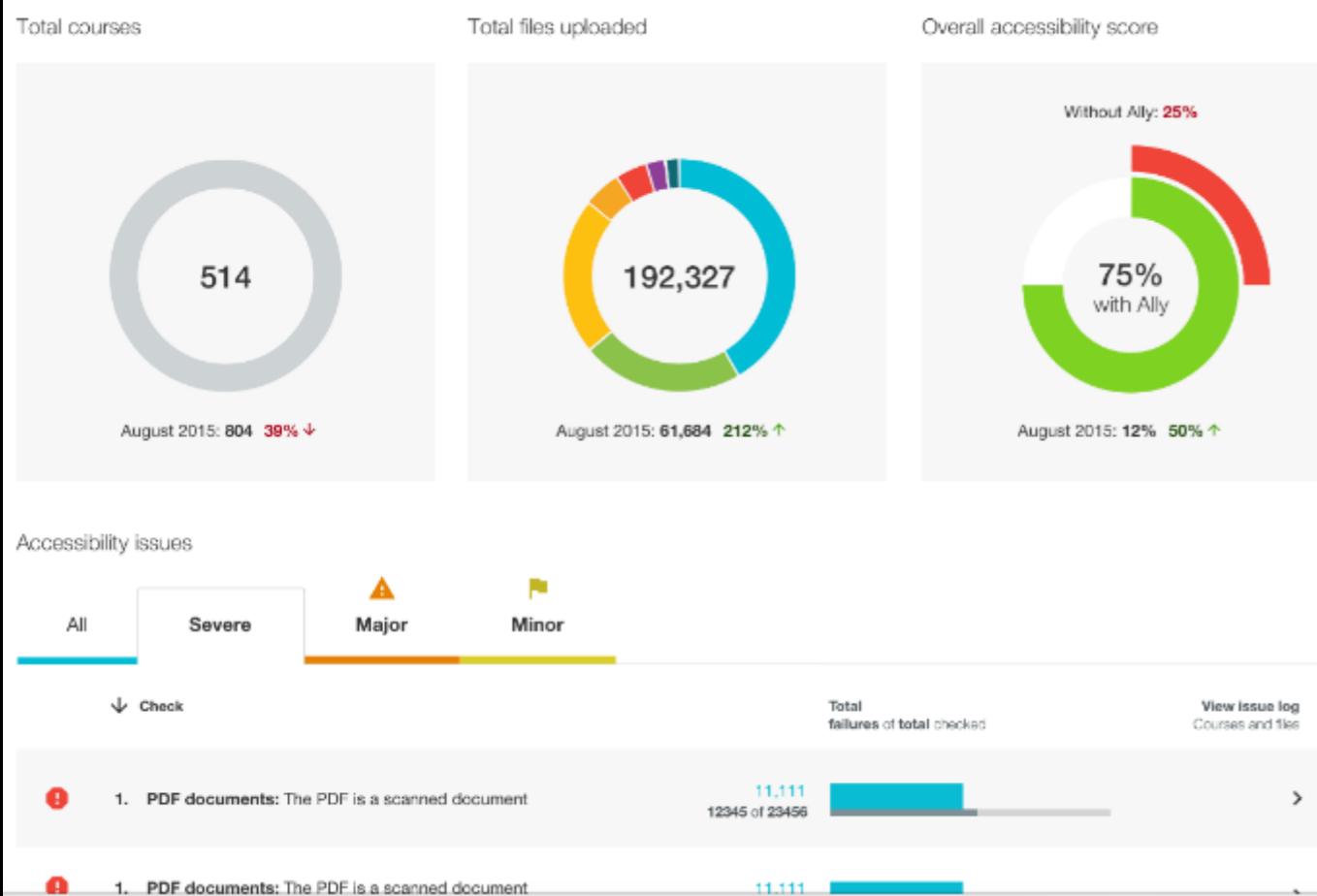
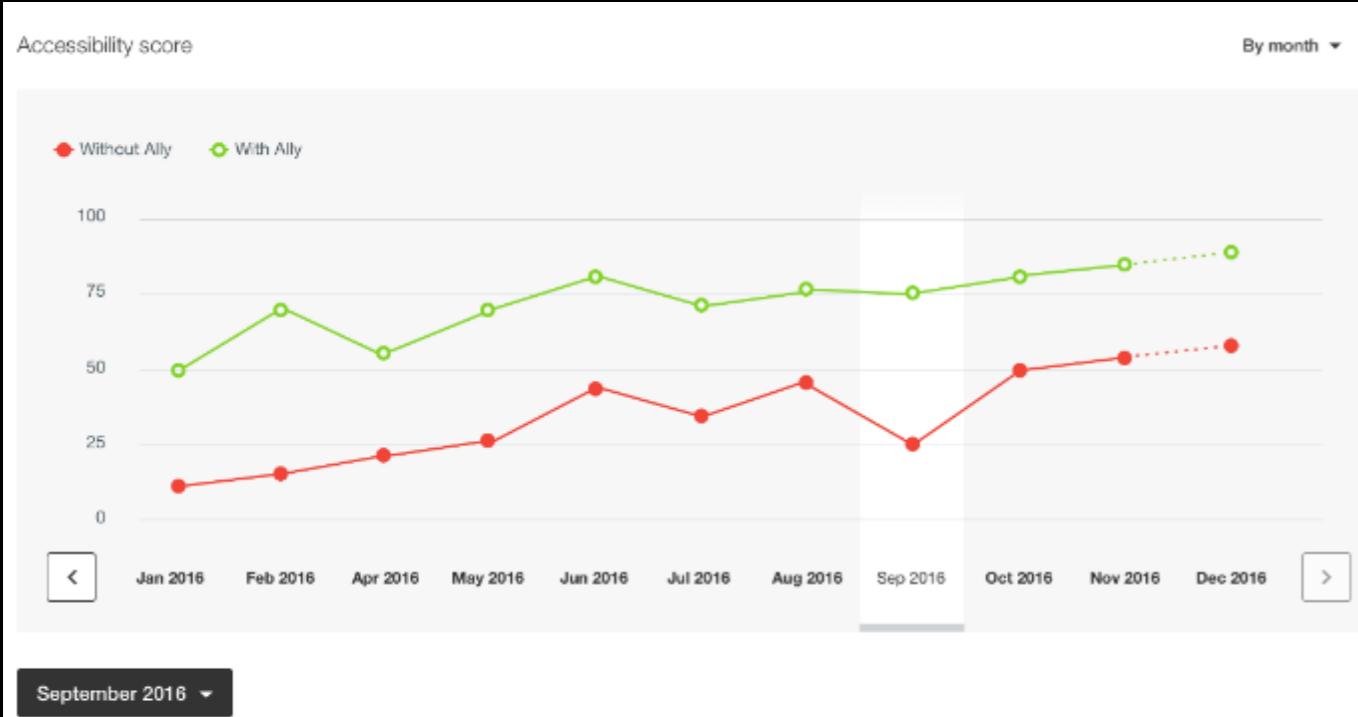




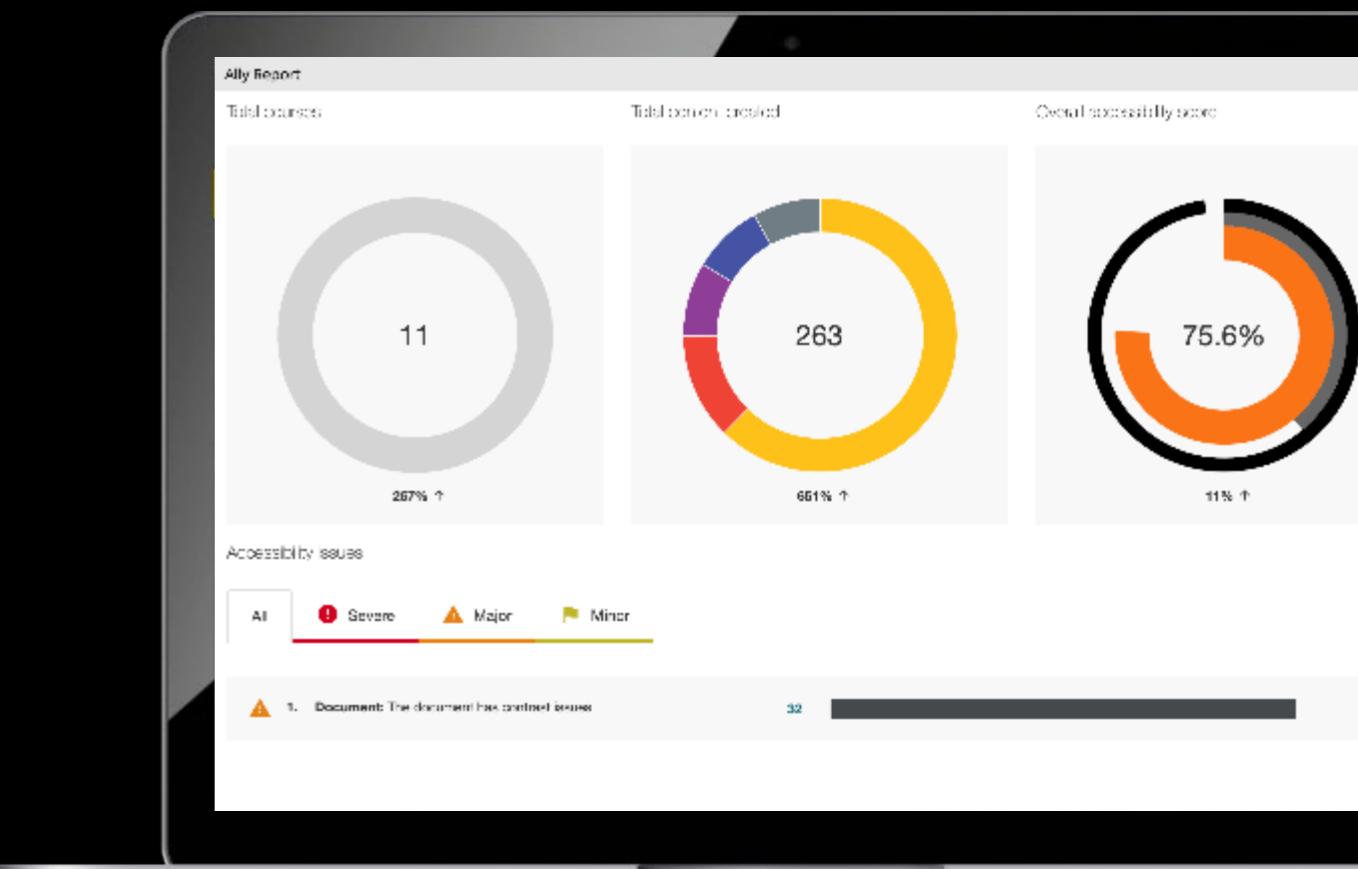
The screenshot shows a Microsoft Word document with the following content:

- Title:** BRUCE SPRINGSTEEN wrong
- Awards and nominations:** A list of awards and nominations from 1985 to 2016.
- Table:** A table listing awards and nominees. The table has four columns: Year, Nominee/work, Award, and Result. It includes rows for "Himself" (1985), "Dancing in the Dark" (1985), "Himself" (1986), "Born in the USA" (1986), and "The River Tour 2016" (2016).
- Text:** A paragraph about Bruce Springsteen's military service, mentioning he failed the physical examination due to a motorcycle accident and was given a 4F classification.
- Image:** A photo of Bruce Springsteen smiling.
- Annotations:** Handwritten-style text in Spanish: "No es un titulo" (It is not a title) above the table, "Tabla sin cabecera" (Table without header) next to the table, "Sin descripción en la imagen" (No description in the image) next to the photo, and "Focus" at the bottom right.

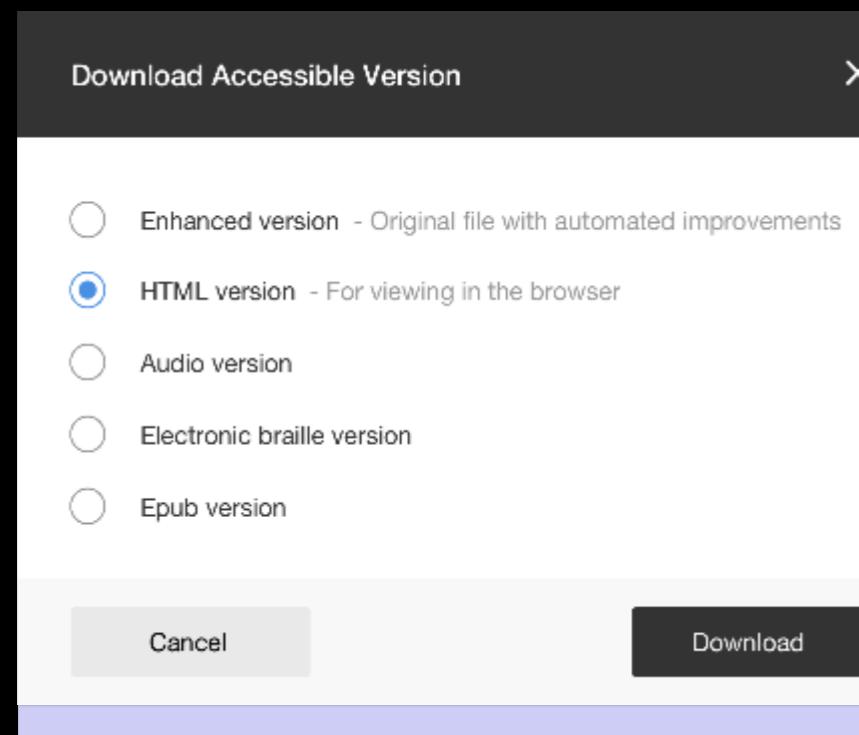
Informe Institucional



- Proporciona **comprensión detallada** sobre cómo lo está haciendo la institución.
- Ayuda a identificar dónde se encuentran las **áreas problema**, sobre qué enfocarse, a quién dirigirse, etc.

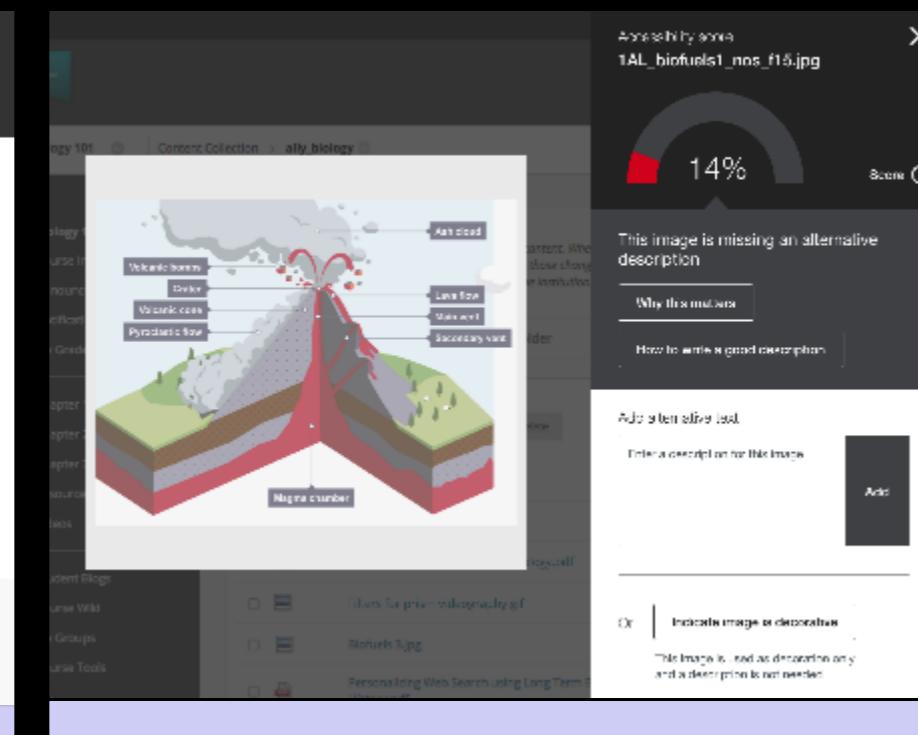


Formatos accesibles alternativos



Versiones accesibles alternativas

Verifica automáticamente los problemas de accesibilidad y genera formatos accesibles alternativos



Retroalimentación del instructor

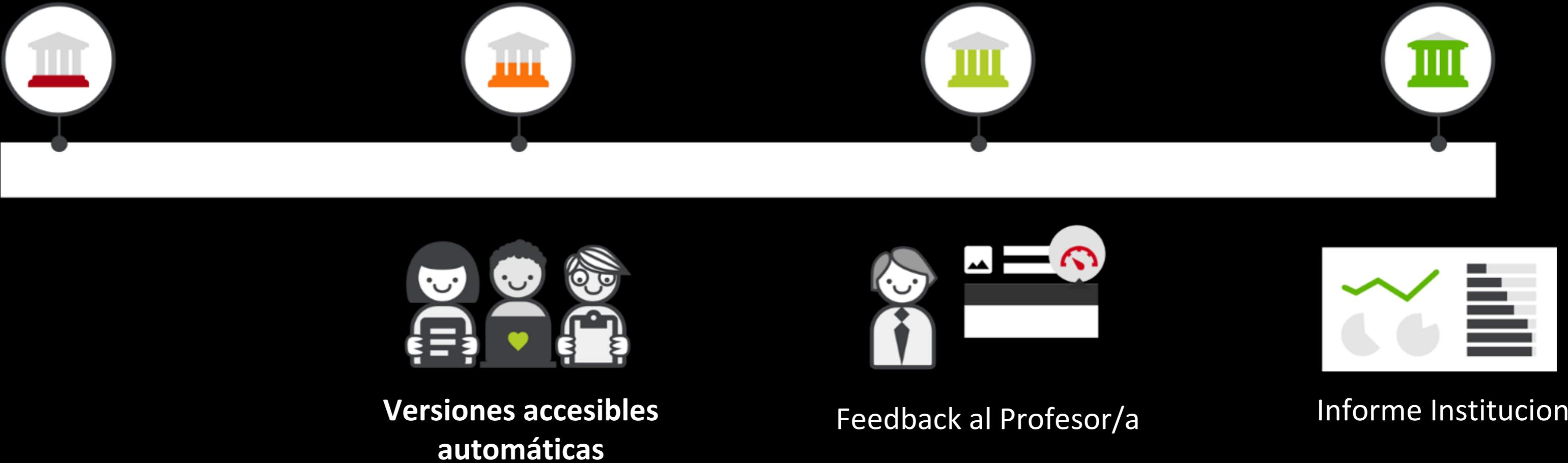
Guía a los instructores sobre cómo mejorar la accesibilidad del contenido de sus cursos y altera su comportamiento futuro



Informe institucional

Suministra datos e información detallados para ayudar a mejorar aún más la accesibilidad del contenido de cursos en la institución

Espectro de la Accesibilidad...



Objetivo: Superar los tres pasos para movernos hacia arriba en el espectro de accesibilidad



Blackboard®

