



Getting started with Ally

Blackboard

Agenda

Introduction to Ally

Alternative Formats

Instructor Feedback & Course Accessibility
Report

Demo

Resources

Introducing Ally



- Identify barriers in your content (*Instructor Feedback & Course Accessibility Report*)
- Provide step-by-step guidance as to how to improve that content (*Instructor Feedback*)
- Help you prioritize what content to remove barriers from first (*Course Accessibility Report*)
- Provide alternate formats of files for greater usability (*Alternative Formats*)

Coming soon to BHSU!

Why does *Ally* deserve our attention
now?

Two Main Approaches to Address Barriers

Focus is supporting the one

- Compliance
- Accessibility
- 1:1 accommodations

Focus is supporting all

- Access
- Inclusive Course Design
- Universal Design for Learning (UDL)

Diverse 21st Century Learners



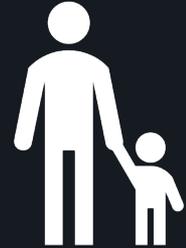
Visible disability



Non-traditional students



International students



Parents



Temporary disability



Mobile



First-generation students



Lifestyle

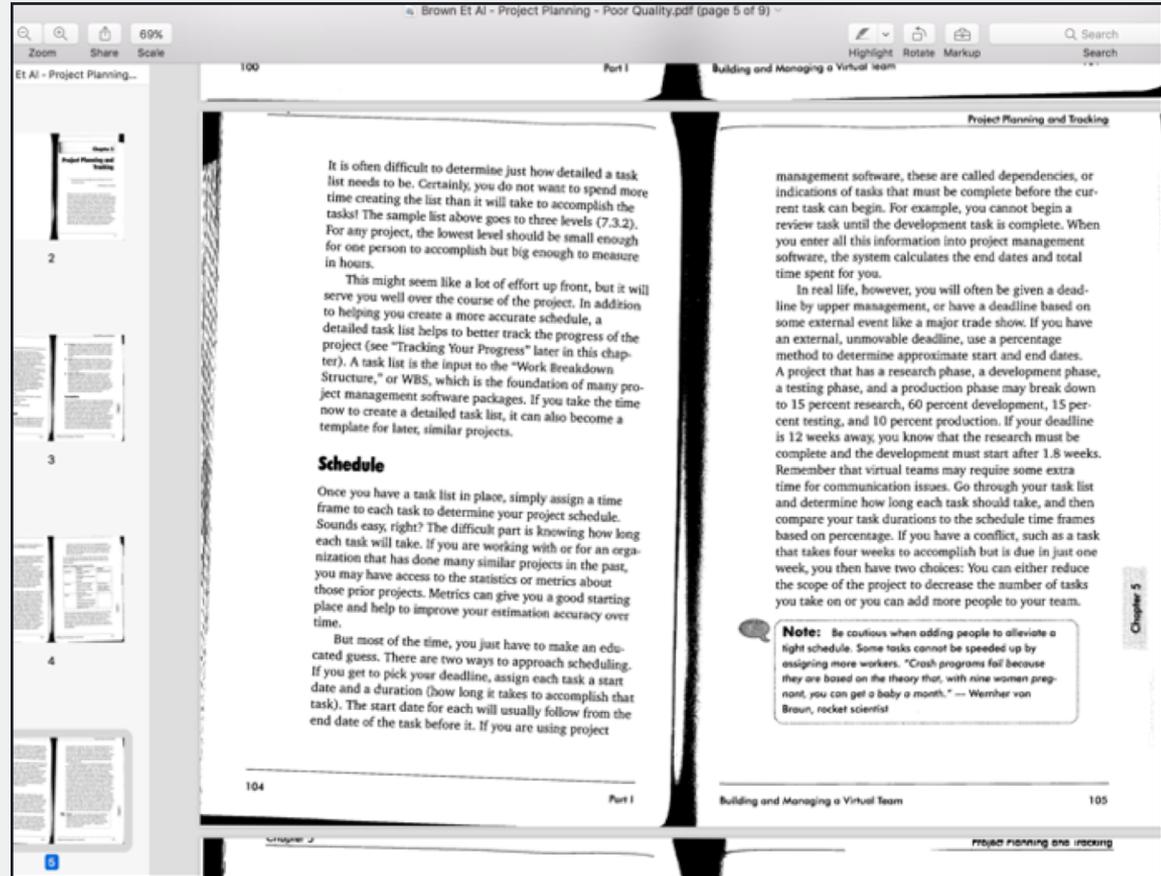


Invisible disability

Accessibility Issues Affect Everyone

Schmutz et al (2017)

- Improved information retention
- Faster speed of task completion



Blackboard®



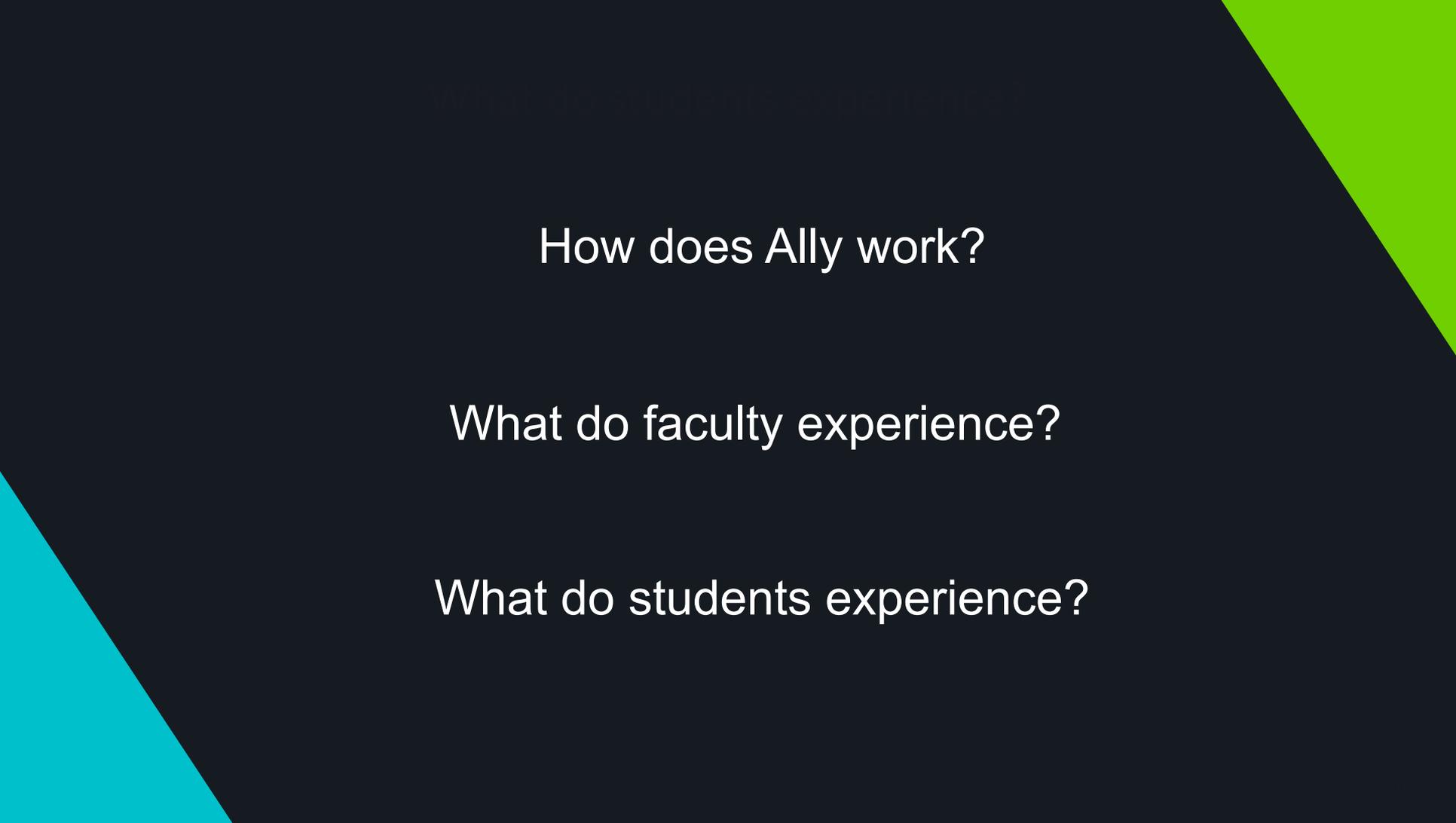
Making course content accessible

Let's start with you

What do you know about Ally? (Poll)

1. I have only just heard of Ally and know very little about it
2. I've heard of Ally and know it is used to create more accessible learning for all learners
3. I've seen a demo of Ally on video
4. I have pretty good idea of what Ally can do
5. I am an Ally 'superuser'





How does Ally work?

What do faculty experience?

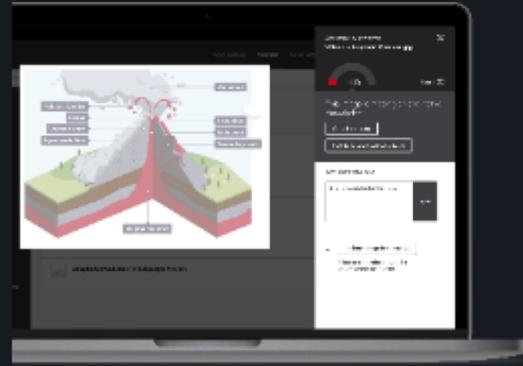
What do students experience?

3 Pillars of Ally



Alternative Formats

Automatically checks for accessibility issues and generates a range of alternative formats.



Instructor Feedback

Guides faculty and content creators on how to improve the accessibility of their content and alters future behavior.



Institutional Report

Provides detailed data and insights to help further improve course content accessibility at the institution.

Workflow

Instructor adds course content to their course

Machine learning algorithms perform a full structural and visual analysis

Instructor feedback is provided



Content passes through accessibility checklist and is scored

Alternative formats automatically generated



Machine Learning Algorithms

WCAG 2.1 AA

Full Ally Accessibility Checklist available at help.blackboard.com

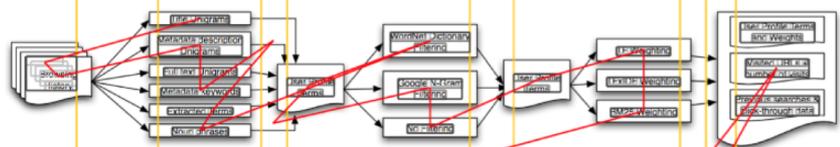


Figure 1: User Profile Generation Steps and Workflow

Table 1: Captured Data Statistics

Metric	Total	Min	Max	Mean
Page Visits	530,334	51	53,459	10,607
Unique Page Visits	218,228	36	26,756	4,365
Google Searches	99,838	0	4,203	797
Bing Searches	186	0	53	4
Yahoo Searches	87	0	29	2
Wikipedia Pages	1,728	0	235	35

Table 2: Extracted terms from the AlterEgo website and the Wikipedia page about Mallorca

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

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. The server then attempts to fetch the source HTML of this page. 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

Title Unigrams
The words inside any <title> tag on the html pages.

Metadata Description Unigrams
The content inside any <meta name="description" > tag.

Metadata Keywords Unigrams
The content inside any <meta name="keywords" > tag.



Alternative Formats



Alternative Formats Overview

- Provides students options to engage with their course content
- Offers options for offline use
- Allows for unlimited downloads of the different alternative formats
- Supports different learner needs, preferences, abilities, and devices

Alternative Formats for Files

Semantic HTML
High quality semantic
html version of the
content

**Other Alternative
Formats**
ePub, audio, electronic
braille, etc.

OCR
Automatically OCR all
scanned documents

Download alternative formats ✕

-  **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](#)

Alternative Formats for LMS Course Content (WYSIWYG)

- Tagged PDF and HTML are not options
- Support for LMS is high priority but dependent upon their APIs

Download alternative formats ▾ ✕

Selected item:

 Welcome to Ancient Greek Philosophy

 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](#)

Options for LMS Course Content vs Files

Download alternative formats ▾



Selected item:



Welcome to Ancient Greek Philosophy

-  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
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Enhanced version for easier and faster on-screen reading
-  Translated version
A machine translated version of the original document



Help

LMS Course Content
(WYSIWYG)

Download alternative formats ▾



Selected file:



Ancient Greek Philosophy Syllabus (Revised).docx

-  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

Files

Alt Format Options in D2L

Intro to Chemistry



Add dates and restrictions... 

Welcome to Chemistry 230

In this course, we will explore how scientists study migration patterns of various insects and animals. Why migrate? The simple fact is resources on Earth fluctuates over time and animals seek food, more hospitable climate, or places to breed. There is incredible diversity in the animal kingdom, and while scientists have discovered certain reasons, much about migration is a mystery.

Upload / Create 

Existing Activities 

 Bulk Edit

Expand All | Collapse All

 **Chem Handout** 
 Word Document



 **Course_Syllabus_BIOL 230_Inaccessible** 
 Word Document



OCRed PDF

- Optical Character Recognition for scanned PDFs
- Student benefits:
 - Extracts text from pages to create searchable document
 - More accessible for students using assistive devices

Available for **Files** (scanned PDF documents only).



Tagged PDF

- PDF with semantic information included
- Student benefits:
 - Helpful for devices without MS Office
 - More accessible for students using assistive devices
 - Frequently used on mobile devices as these can natively render PDFs



Available for **Files** (Word documents and PowerPoint presentations)

HTML

- Responsive and mobile-friendly HTML version
- Student benefits:
 - Easier use of content on mobile devices
 - Works best with existing assistive technology

Available for **Files** (PDF documents, Word documents and PowerPoint presentations).



ePub



- For use with an E-book reader.
- Student benefits:
 - Offers customizability:
 - Font and size
 - Text and background colors
 - Annotation and highlighting
 - Other built-in features
 - Mobile friendly

Available for **Files** (PDF documents, Word documents, PowerPoint presentations and HTML files) and **WYSIWYG** content.

Audio

- Utilizes text-to-speech technology.
 - Includes semantic information into speech
 - Current 100,000 character limitation (~ 2.5 hours) per document.
- Student benefits:
 - Easy listening on mobile devices
 - Bimodal presentation
 - Makes it easier to consume content on the go (student athletes, students taking care of families, commuters)

Available for **Files** (PDF documents, Word documents, PowerPoint presentations and HTML files) and **WYSIWYG** content.



Electronic Braille

- BRF (Braille Ready File) format.
 - Used with electronic braille display or [refreshable braille display](#).
 - Grade 2 Unified English Braille (contracted) for English document.
- Student Benefits
 - Some campuses have lessened the need to emboss (print) or ship hardcopy Braille
 - Provides students who are blind or low-vision more options for engaging with content

Available for **Files** (PDF documents, Word documents, PowerPoint presentations and HTML files) and **WYSIWYG** content.



Example of a Refreshable Braille Display



BeeLine Reader

- Mobile friendly version of content that uses color gradients to guide eye through text.
- Student benefits:
 - Aimed at improving on-screen reading experience
 - Originally designed for speedreading
 - May be helpful for dyslexia, ADHD, vision impairments, screen fatigue, etc.

Available for **Files** (PDF documents, Word documents, PowerPoint presentations and HTML files) and **WYSIWYG** content.



Alternative Formats Benefits

- Provides students options to engage with their course content
- Supports different learner needs, preferences, abilities, and devices
- Offers options for offline use
- Doesn't change or interrupt existing workflows

Your study needs	Electronic braille	Audio	PDF, OCR	PDF, Tagged	HTML, Semantic	ePub	Translated Version	BeeLine Reader
Adjust text, font, and background color					●	●		
Adjust audio playback speed		●						
Commuting		●	●	●		●	●	●
Commuting, driving		●						
Copy, paste, and search			●	●	●	●	●	
Format adapts to device, responsive					●	●		●



Instructor Feedback

Instructor Feedback Overview

- Provides feedback to faculty about accessibility of their course content
- Provides guidance on how to fix accessibility issues
- Goal: change in behavior over time

Accessibility Indicators

D2L

Welcome to Chemistry 230

In this course, we will explore how scientists study migration patterns of various insects and animals. Why migrate? The simple fact is resources on Earth fluctuates over time and animals seek food, more hospitable climate, or places to breed. There is incredible diversity in the animal kingdom, and while scientists have discovered certain reasons, much about migration is a mystery.

Upload / Create ▾

Existing Activities ▾

 Bulk Edit

Expand All | Collapse All

 Chem Handout ▾  Word Document			
 Course_Syllabus_BIOL 230_Inaccessible ▾  Word Document			
 Course_Syllabus_BIOL 230_Accessible English ▾  Word Document			
 List animals that migrate ▾  PowerPoint Presentation			
 Hibernation & Migration ▾  PowerPoint Presentation			

What do the indicators mean?

- Accessibility indicator is shown next to content



– **Low (0 - 33%)**

Needs help! There are severe accessibility issues.



– **Medium (34 - 66%)**

A little better. The file is somewhat accessible and needs improvement.



– **High (67 - 99%)**

Almost there. The file is accessible but more improvements are possible.



– **Perfect (100%)**

Ally didn't identify any accessibility issues but further improvements may still be possible.

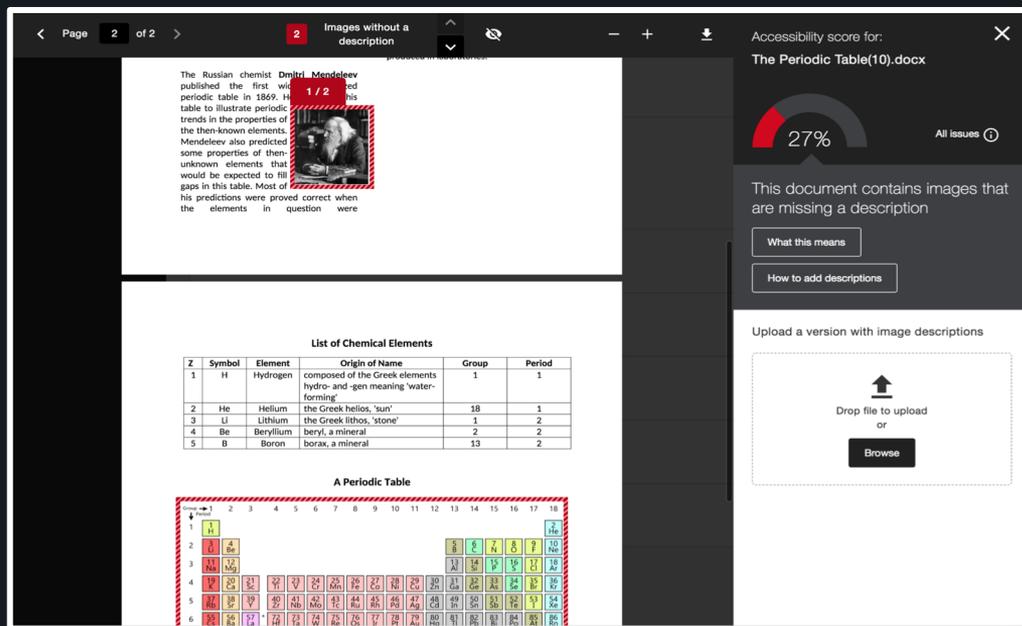
- Accessibility indicator is never visible to students
- Weighted average of results, based on W3C research

How to Open the Instructor Feedback

1) Select the Indicator



2) View the Instructor Feedback



The screenshot shows a document viewer interface. At the top, it indicates "Page 2 of 2" and "Images without a description". A red circular icon with a white arrow pointing upwards is visible, indicating a click action. The document content includes a paragraph about Dmitri Mendeleev and a table titled "List of Chemical Elements". Below the table is a periodic table. On the right side, there is an accessibility score of 27% and a message: "This document contains images that are missing a description". Below this message are buttons for "What this means" and "How to add descriptions". At the bottom right, there is a section for "Upload a version with image descriptions" with a "Browse" button.

Page 2 of 2

Images without a description

Accessibility score for: The Periodic Table(10).docx

27%

All issues

This document contains images that are missing a description

What this means

How to add descriptions

Upload a version with image descriptions

Drop file to upload or

Browse

The Russian chemist Dmitri Mendeleev published the first periodic table in 1869. He used his table to illustrate periodic trends in the properties of the then-known elements. Mendeleev also predicted some properties of then-unknown elements that would be expected to fill gaps in this table. Most of his predictions were proved correct when the elements in question were

1 / 2

Z	Symbol	Element	Origin of Name	Group	Period
1	H	Hydrogen	composed of the Greek elements hydro- and -gen meaning 'water-forming'	1	1
2	He	Helium	the Greek helios, 'sun'	18	1
3	Li	Lithium	the Greek lithos, 'stone'	1	2
4	Be	Beryllium	beryl, a mineral	2	2
5	B	Boron	borax, a mineral	13	2

A Periodic Table

Issue highlight

1 / 1



Course Objectives:

At the end of this course, students will have learned:

- Major themes and arguments in early Greek philosophy
- Describe the historical development of Greek thought, as well as its global antecedents in Africa and Asia
- Participate in a Socratic Dialogue
- Demonstrate understanding of the Allegory of the Cave in various contexts/media
- Identify Greek philosophers and their particular schools/associations of thought
- Consider fundamental questions in Greek thought in contemporary contexts

Grade Breakdown + Assignments:

- [Discussions and Participation \(20%\)](#)

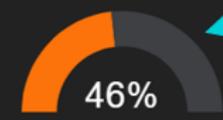
Students will contribute to weekly discussions (click [here for DISCUSSIONS](#)). Students are encouraged to start their own discussion threads, and use multimedia in their responses and

In-browser preview

1 Image without a description

Accessibility score for:

Ancient Greek Philosophy Syllabus (Revised).docx



All issues ⓘ

This document contains images that are missing a description

What this means

How to add descriptions

Upload a version with image descriptions



Drop file to upload or

Browse

File accessibility score

View all identified issues

Identifying 1 issue

Answers "What does this mean?" and "Why should I care?"

Step-by-step guidance

Upload improved version

Notes about Preview and Highlights

- Previews are available for
 - Images
 - PDF
 - Word Document
 - PowerPoint Document
- Highlights are available for documents containing
 - Images without a description
 - Text with contrast issues
 - Tables without table headers

Instructor Feedback

Summary & Benefits

- Doesn't change or interrupt any existing workflows
- Clicking on indicator opens the feedback
- Provides in-context information about their own content
- Fixes are dependent on content type and identified issues
- Raise awareness to many faculty who have not considered content accessibility before
- Meant to help enforce the need to create accessible content
- Fixing content will help Ally to produce better alternative formats for students



Course Accessibility Report



Course Accessibility Report

Overview

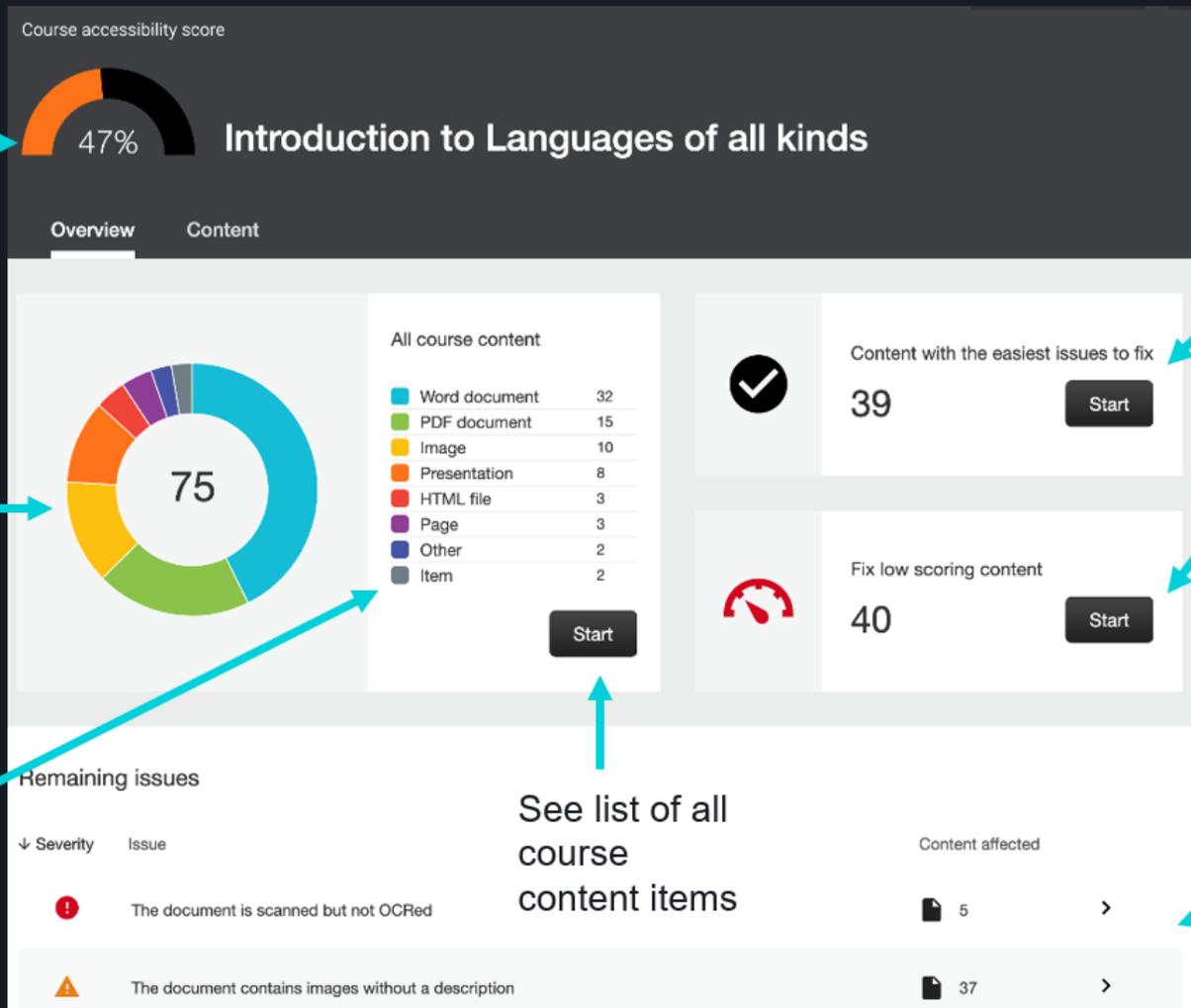
- Faculty-facing course accessibility report
- Accessibility summary at the course level
 - Complements the in-context accessibility indicators
- Helps with prioritization
- Helps faculty work through remediation more quickly
- Instructor Feedback can be triggered from the course accessibility report
- Course accessibility report is never visible to students

Accessing the Course Accessibility Report in D2L

The screenshot shows the D2L course interface for 'Intro to Chemistry'. The top navigation bar includes 'Course Home', 'Content', 'Grades', 'Class Progress', 'Course Tools', 'Help', and 'Ally Course Report'. The 'Ally Course Report' link is highlighted with a red box. A red arrow points from the 'Ally Course Report' link in the top navigation bar to the 'Ally Course Report' link in the main content area. The main content area displays the course title 'Intro to Chemistry', a search bar, and a table of contents. The table of contents includes 'Intro to Chemistry' (19 items), 'Test' (1 item), 'Discussions' (2 items), 'Reading Materials' (5 items), 'Intro to Chemistry (Andion, DO NOT DELETE)' (5 items), 'Module' (7 items), and 'Van Gogh: Part 1' (1 item). The main content area also displays a list of activities with accessibility icons.

Activity Name	File Type	Accessibility Icon 1	Accessibility Icon 2	Checkmark
Chem Handout	Word Document	A+	Green	✓
Course_Syllabus_BIOL 230_Inaccessible	Word Document	A+	Red	✓
Course_Syllabus_BIOL 230_Accessible English	Word Document	A+	Green	✓
List animals that migrate	PowerPoint Presentation	A+	Orange	✓

- Available in top navigation
- Students do not see this



Overall Course Score

Total number of content items in course

Breakdown of content items by type

See list of all course content items

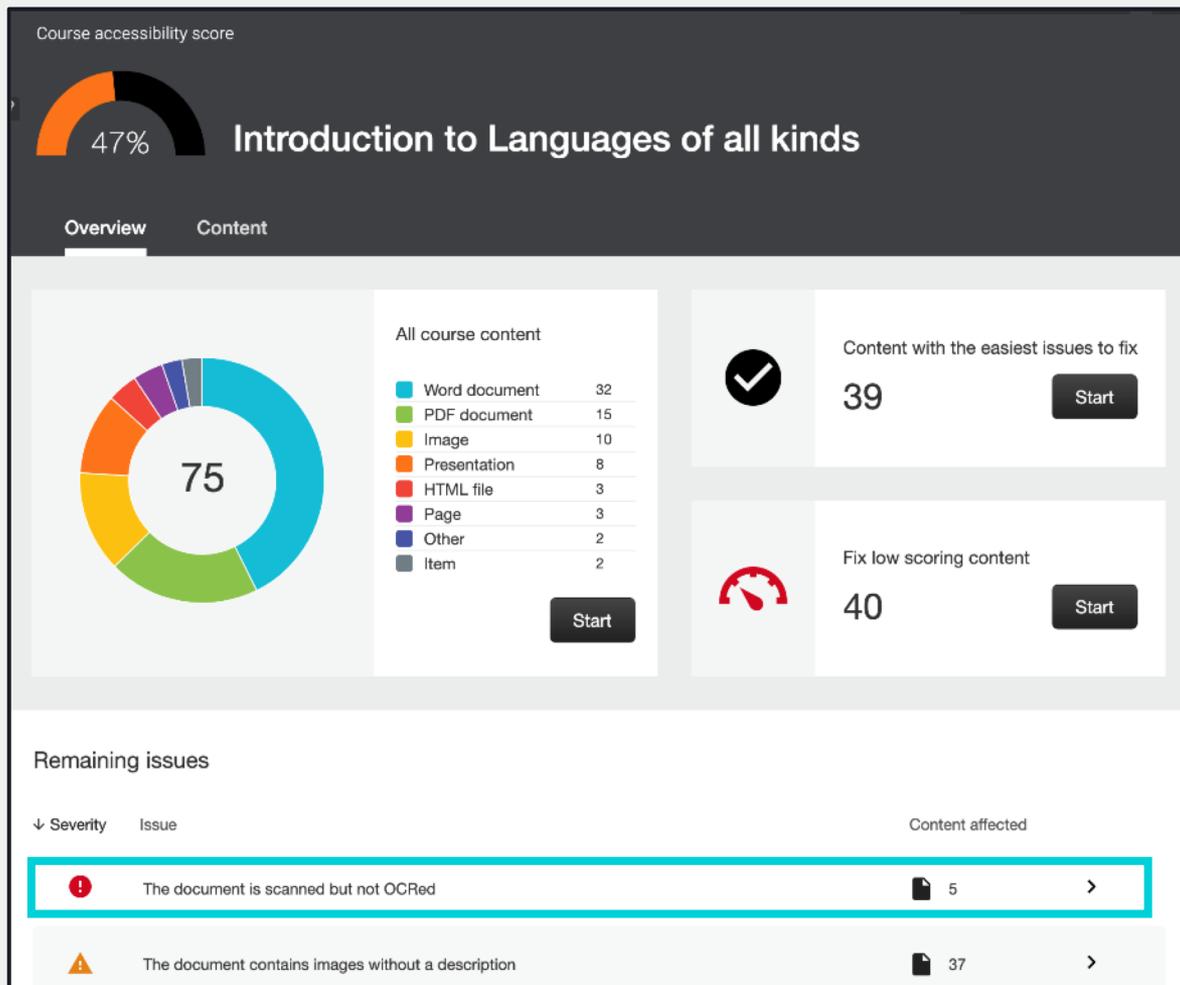
“Easy” button

“Make the most impact on the score quickly” button

Issues by severity

Remediation

Option 1 (Specific Issue)



List of files with a specific accessibility issue

Course accessibility score



Introduction to Languages of all kinds

[← Back to overview](#)

Name	Issues	↑ Score
 elements_compounds_mixtures(1).ppt Presentation	2	 7%
 elements_compounds_mixtures.ppt Presentation	2	 7%
 elements_compounds_mixtures.ppt Presentation	2	 7%
 1 - Vincent Van Gogh(1)(1).docx Word document	5	 22%
 1 - Vincent Van Gogh(1)(2).docx Word document	5	 22%
 1 - Vincent Van Gogh(1)(3).docx Word document	5	 22%
 1 - Vincent Van Gogh(1)(4).docx Word document	5	 22%

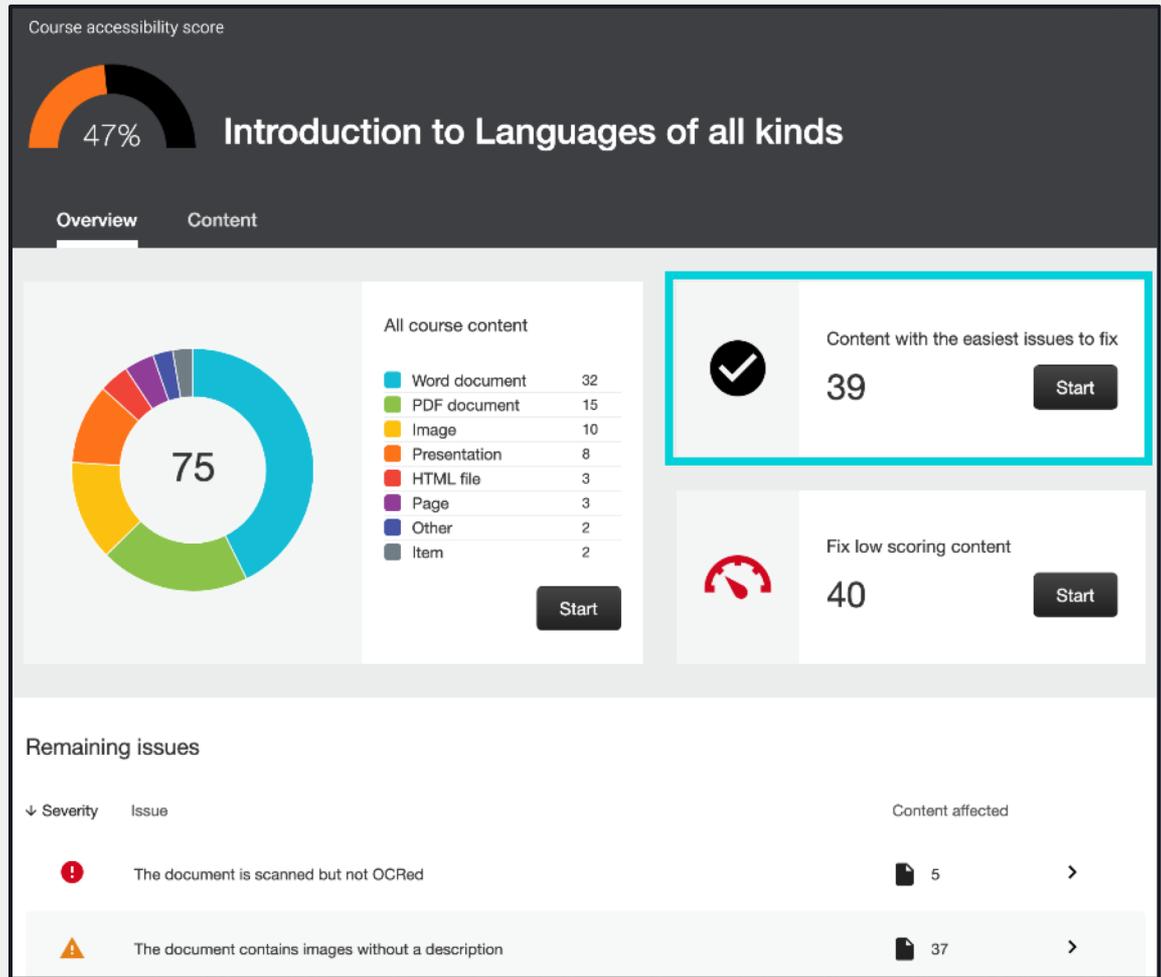


The document contains images without a description

37 out of 73

Remediation

Option 2 (Content with easiest issues to fix)

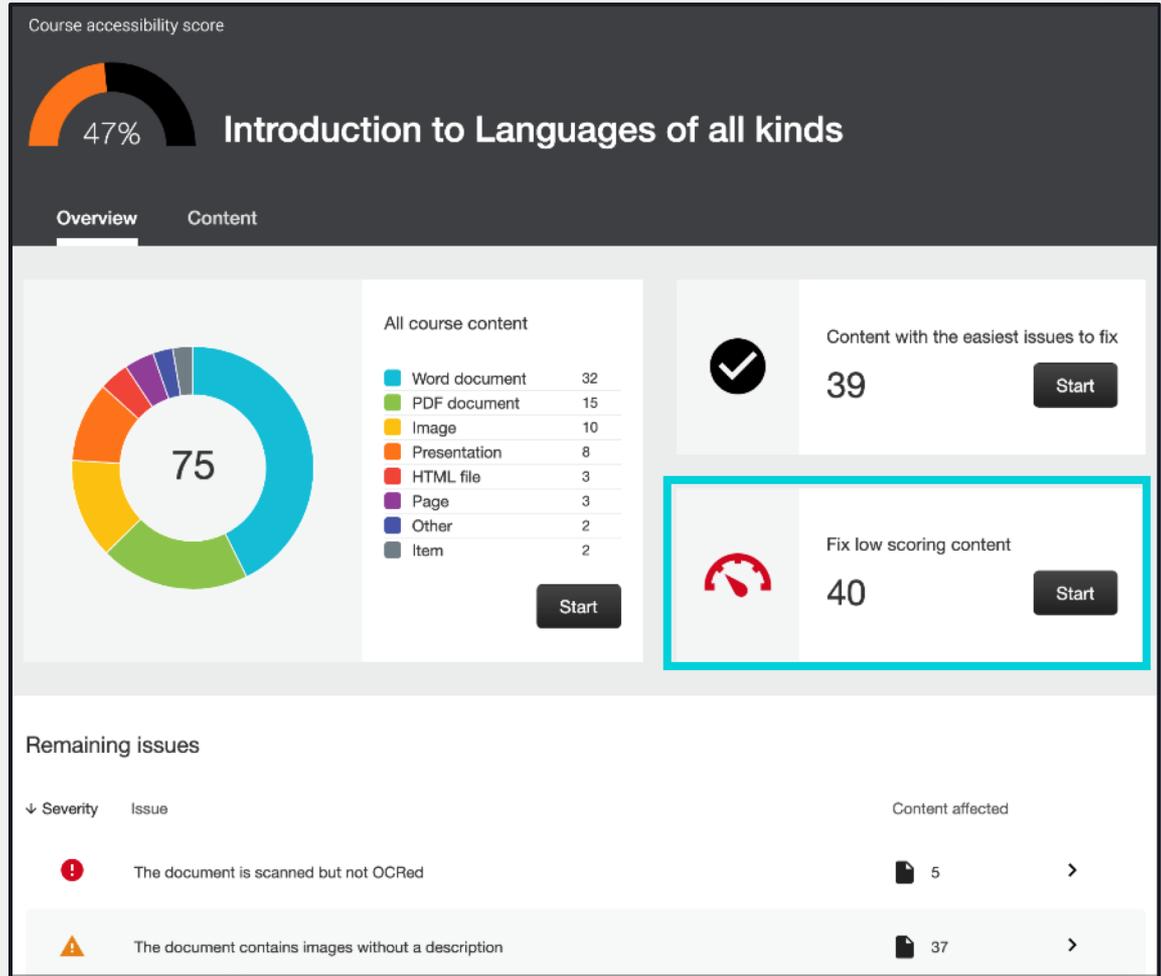


Prioritization: Easiest Issues

- **Images**
 - that can cause seizures
 - without a description
- **Word documents**
 - without headings
 - with images without a description
 - that contain text with insufficient contrast
 - that contain tables without headings
- **PowerPoint documents**
 - without headings
 - with images without a description
 - that contain text with insufficient contrast
 - that contain tables without heading

Remediation

Option 3 (Fix low scoring content)



Prioritization: Most severe issues

1. Content with a low accessibility score (0 – 33%)
2. Content with severe issues
3. Content with a medium accessibility score (34 - 66%)
4. Content with major issues
5. Content with a high accessibility score (67 – 99%)
6. Content with minor issues

Course Accessibility Report

Summary & Benefits

- See the overall accessibility of the course, with the option to drill down to specific issues/content items
- Provide information to help them decide how to prioritize remediation fixes
- Track their progress after fixing content
- Easier for training purposes
 - Have a concentrated training on fixing alt text, then faculty can easily identify their specific alt text issues
- Bring awareness as to how much and what type of content is in their course
 - May encourage removal of outdated content
 - Can help with better course design

Demo

Accessibility score for:
BrownEtAl_ProjectPlanning_scanned.pdf

6% All Issues ⓘ

This PDF is untagged

[What this means](#)

[How to tag a PDF](#)

Upload a tagged version

Drop file to upload
or
[Browse](#)

Chapter 5
Project Planning and Tracking

“Even if you’re on the right track, you’ll get run over if you just sit there.”
— Will Rogers, humorist

Whenever two or more people share a task, the total amount of time required to complete that task goes up just a bit because the people involved need to spend additional time coordinating their efforts. Without coordination, they run the risk of duplicating effort or leaving portions of the task undone (or both). As your team grows, the amount of time needed for this type of coordination effort (or project management) grows right along with it. Virtual teams must not only have a good plan, but also must have a mechanism for tracking the progress against the plan. There are many software packages created just for project planning, and many of the other tasks discussed in this book can also serve as project tracking mechanisms.

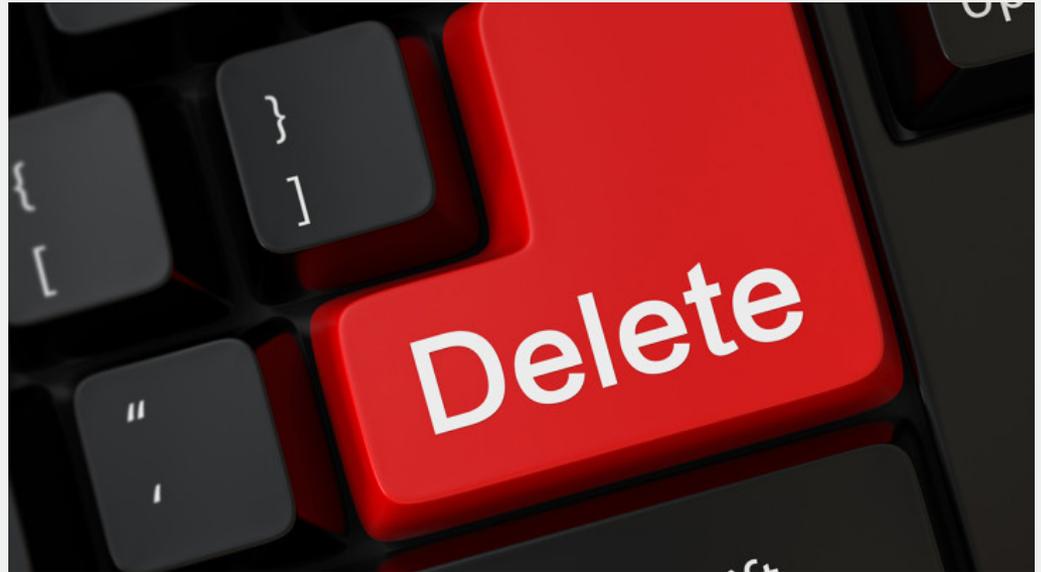
Purpose. Why are you doing this project? What will be different when you finish the project successfully? Without a clear purpose, you will not be able to tell if the project is successful or not. For example, a project purpose might be “to achieve the customer’s buying goals.”

Check. What are you going to do in order to succeed?



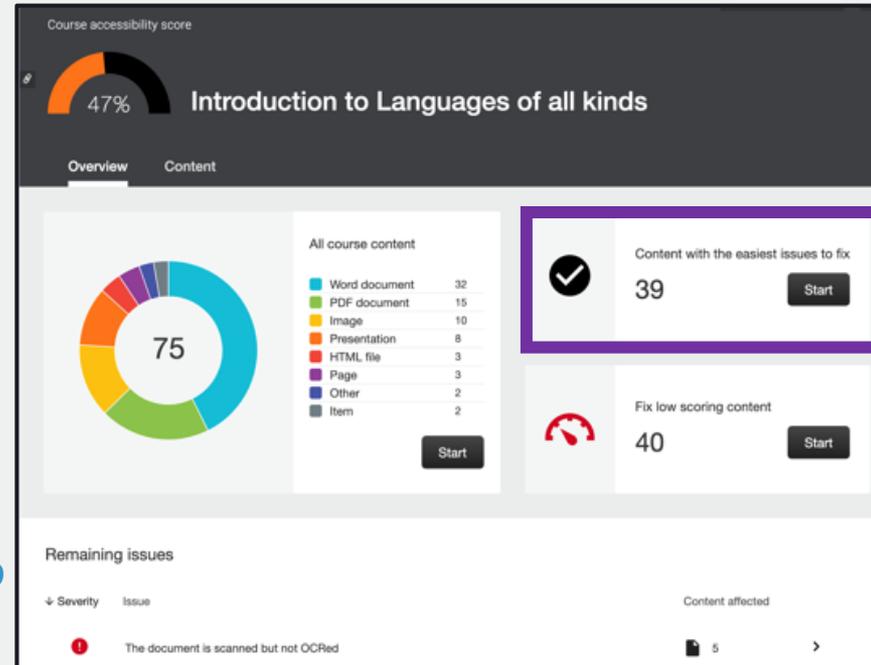
Where to start: Recommendation 01

- Delete old, unused content from:
 - current / upcoming courses
 - master courses
 - courses that will be re-taught



Where to start: Recommendation 02

- Start with easy fixes.
- Here are a few easy fixes to begin with:
 - Images missing a description
 - Word and PowerPoint files containing text with insufficient color contrast
 - Word documents missing headings
 - Files with yellow or green gauges next to them
- Helpful tip: Use the “Easiest issues to fix” pathway in the Course Accessibility Report to find these issues in your course content





Useful Resources



Communication and Adoption Toolkit

New to Ally: Overview documents

Become familiar with Ally's mission, key features, and getting started.

- [Ally basics](#)
- [Ally Instructor Feedback](#)
- [Ally Instructor Feedback Preview](#)
- [Accessibility checklist](#)
- [Download an alternative format in Blackboard Learn](#)
- [Download an alternative format in Blackboard Open LMS](#)
- [Download an alternative format in Instructure Canvas](#)
- [Download an alternative format in D2L BrightSpace](#)
- [Course accessibility report in Blackboard Learn](#)
- [Course accessibility report in Blackboard Open LMS and M](#)
- [Course accessibility report in Instructure Canvas](#)
- [Course accessibility report in D2L Brightspace](#)

- Available at

<http://bit.ly/AllyCAT>

- 1-pagers for communication and training

Ally micro learning documents

Learn about Ally one fix at a time. Walk through accessibility scenarios, and see how Ally feedback helps you improve inclusive learning in your course.

- [Ally accessibility indicators](#)
- [Add alternative descriptions to image files](#)
- [Remove potentially harmful content](#)
- [Scanned PDFs: An enemy to accessibility](#)
- [Add a library reference](#)
- [View all file accessibility issues](#)
- [Add alternative descriptions to PowerPoint images](#)
- [Add headings to a Word document](#)
- [Add headers to your data tables in Word](#)
- [Export a Word document as a tagged PDF](#)

Ally Research

Research Papers

Throughout 2020, we've been publishing the Inclusive Learning Research Series whitepapers on the Ally User Group. These exploratory papers follow an academic research format, which includes study context, research questions, analysis, and implications sections.



Choose your Format: Usage of Alternative Formats of Course Content



Accessibility Trends and Ally Usage: Associate's and Technical Colleges



Accessibility Trends and Ally Usage: Doctoral Universities

- Research from quantitative usage and accessibility data
- Sheds light on global trends in digital content accessibility
- Find more at <https://ally.ac/research/>

Ally User Group

The screenshot displays the Ally User Group dashboard. The left sidebar contains navigation options: Dashboard, Directory, Filter, ALLY USER GROUP (General, Release Notes), RESEARCH & TESTING, and Survey: Support & docs. The main content area features a search bar, a 'Survey: Support & docs' header with 'Stream', 'About the survey', and 'Files' tabs, and an '+ Invite' button. A post by Anne-Sophie De Baets (May 16, 2017) is pinned and public, titled "'Accessibility support and documentation' survey results available!". The post text includes: "In attachment, you can find the results for our 'Accessibility support and documentation' survey. This survey focused on how accessibility is organized at institutions and how Ally can best allow instructors and students to reach out for help. Some interesting highlights include: 8.3% have no-one officially responsible for accessibility at the institution. 80% have multiple people or teams responsible, but these are often scattered. 80% of institutions organize events and training around accessibility. But attendance is usually sparse. Many instructors only seek help when prompted by students. 83% expressed excitement about increased awareness around accessibility from students and students. Even if this would generate additional requests and workload." A PDF attachment 'DocumentationSupportSurvey_FullReport.pdf' (949.9 KB) is shown. Below the post, it indicates 'Like (4) · Comment (3)' and a 'Show all 3 comments' link. A comment by Christopher Philips (May 18, 2017) reads: "Thanks for sharing the results - It was really helpful to learn a little more about". The right sidebar shows 'Latest activities' with three entries: Sam Peck likes a comment, Sherri Restauri wrote a comment, and Amy Becker, Maureen Larsen, and Naat Jairam joined the space. A 'Space members' section shows 12 user avatars and a 'Show all' link.

- Community of global Ally users
- Receive updates about Blackboard Ally
- Participate in UX research, usability testing, early access, etc.
- Sign up at: <https://usergroup.ally.ac>

Blackboard®



Making course content accessible