# Accessible Open Educational Resources Adoption Considerations

# ACCESSIBLE OPEN EDUCATIONAL RESOURCES ADOPTION CONSIDERATIONS

Accessibility, Pedagogy, Practice

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This resource was created based on discussions and engagement with faculty, instructors, graduate students, and research assistants at Brock University in Fall/Winter term of 2024. It is meant to provide guidance to support instructors who may be thinking of using open educational resources (OER) in their classrooms, but want to support inclusive adoption of these resources and in turn inclusive and open pedagogy in OER use. Each chapter will provide context from discussions as well as embedded links to examples of these accessibility considerations in practice in open resources. Each chapter can be used as a stand-alone resource on a topic connected to accessible OER adoption, and the concluding chapter provides prompts in the form of questions to expand one's open practices to include accessibility in educational choices. The resource topics and subtopics as they appear are listed below.

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# INTRODUCTION

Accessibility considerations in open education adoption have focused on the accessibility of Pressbooks and the embedded media found in Pressbooks. Built through consultation with instructors, teaching assistants, and staff at Brock University who have worked to create and adopt open educational resources (OER) in different disciplinary areas, this resource highlights some considerations in OER that go beyond the accessibility of the Pressbook.

Each chapter focuses on aspects of accessibility such as social justice, sustainability, language, embedded tools, and more significant institutional priorities to support reflective practices and guidance on areas of accessibility that may be forgotten in OER adoption. This resource can help support advocacy for change around accessibility by providing tangible examples and next steps towards more inclusive sharing and creation of resources.

Open educational resources can be an impactful addition to any educator's toolbox. However, their immense potential coincides with a responsibility to prioritize considerations such as accessibility and disability justice, positionality and reflexivity, funding and sustainability, pedagogical research, and the normalization of accessibility in higher education. This resource offers an exploration of applied OERs and accessibility practices, concerns surrounding OERs and accessibility in the educational environment, and the planning and development of OERs with a focus on accessibility and inclusion.

#### PART I

# **ACCESSIBILITY AND JUSTICE**

## **Chapter Objectives**

- Explain accessibility within the general context of Open Educational Resources (OER).
- Evaluate the role of identity and positionality when addressing accessibility during the OER development and adoption process.
- Examine representational justice and the importance of different modalities for engaging with, learning about, and integrating knowledge from OERs.
- Explain the role of disability justice as a paramount feature of equity, diversity, and inclusion (EDI) initiatives and an integral part of institutional accessibility and inclusion.
- Reflect on the importance of citational justice as a central component for achieving success in OERs.

# **EMBEDDING JUSTICE IN THE WORK**

## What is Accessibility?

Our discussions and review of Open Educational Resources (OERs) adoption practices for this project have led to some important conversations about what accessibility means to faculty, instructors, teaching assistants, and staff in relation to open education. For the most part, conversations and definitions of accessibility centered on the belief that accessibility is about having access to information and education. It is premised on the belief that it is essential that everyone has access to OERs and other educational materials, regardless of their financial situation. At the same time some discussants suggested that accessibility is about designing an approachable course in relation to the subject matter and emphasized the need to meet students where they are in comprehension, experience, and reading levels. This would include an awareness of barriers from paywalls or passwords that could make an OER less accessible.

Rarely would accessibility in terms of being accessible to users with disabilities come into this conversations without prompting. This project has not only allowed for more conversations about the multifaceted and intersectional lens of accessibility, but has allowed for the review and editing of OERs that have been adopted to include more accessible elements and flag accessible additions for future versions of the resources adopted.

## **Identity and Positionality**

Many aspects and types of justice appeared in conversations during the creation of this resource. One that appeared many times is the importance of considering identity and positionality when selecting and adopting an OER. Identity impacts how the learners relate to the material and how they can relate to other learners in the educational space and beyond.

Identity and positionality are foundational to addressing accessibility during the OER development and adoption process. To ensure sustainability, OERs engaging with experimental content require extensive human resources, ongoing interventionist practices, and funding, which we will expand on in another section. They may offer a platform to share perspectives on equity, diversity, and inclusion (EDI), but they do not inherently accomplish the full range of challenges associated with accessibility if those identities are not taken into account. Through appropriate resources and proactive engagement, OERs can foster unity, inclusivity, equity, and social justice, contributing to meaningful impact and change.

# Representational Justice

An aspect of identity that was emphasized in relation to the Mandela Global Human Rights Project, one of the OERs that was revisited for this project, is the importance of the use of visuals to guide users in a compassionate way, guiding them through critical thinking processes that could happen in equity and inclusion conversations. Using visuals, such as circle graphs, and infographics is also a way of acknowledging the different modalities that are possible for engaging, learning, and integrating knowledges from the OER. Recognizing multimodal engagement (textually, embodied, visually, auditorily) paves the way toward a more holistic understanding of learning. Learners will take away from OERs what is the most meaningful to them, and sometimes that meaning-making is done outside of a Pressbook environment or an H5P interactive element.

## Sociopolitical Awareness

Access to information is limited in some sociopolitical environments worldwide. While OERs have the potential to transcend some of these limitations and share knowledge beyond them, they necessitate the contextualization of knowledge and ideas presented within an OER. The unpredictability of the sociopolitical landscape in which resources are utilized, read, and contemplated underscores the importance of language usage and awareness of one's positionality. As discussed earlier, access to OERs brings a considerable responsibility for equity, inclusivity, and social responsibility.

# **Disability Justice**

One of the more essential aspects of OER development involves comprehending disability justice, a paramount feature of EDI initiatives and an integral part of institutional accessibility and inclusion mandates. The ten disability justice principles outlined by Sins Invalid (2015) provide foundational aspects to consider when developing and adopting resources. Faculty and instructors should possess a nuanced understanding of their positionality and ongoing reflexivity. Without these qualities, OERs risk being subsumed and incorporated by ableist dominant frameworks, impacting the very issues they seek to address. Like many other academic initiatives, one of the solutions to a lack of, and reinforcement of, positionality emerges from collaboration with expert stakeholders and community members. This includes the awareness of intersectionality, understanding stratification, and being mindful of misinformation surrounding disability, disability rights, and accessibility resources.

Some faculty members have suggested guidelines for enhancing OER accessibility, such as integrating segments dedicated to accessibility within existing course content. In this particular instance, a faculty's book centered around sports—an area ripe for highlighting the intersectionality of disability, parasport, the faculty was eager to work with parasport specialists to expand their resources and make them more equitable.

Viewing disciplines and subjects through the lens of accessibility requires deliberate intentionality. Regardless of the discipline—humanities, arts, science, or any other field—disability intersects with academic and societal discourse. Integrating accessibility considerations into OERs ensures that a broader range of perspectives are represented, thus promoting inclusivity and equity in education and beyond.

### Citational Justice

Open educational resources allow for more citational justice, fostering inclusivity. For instance, in healthcare, traditional publishing often entails lengthy processes, resulting in information that may become outdated upon publication. OERs can facilitate real-time updates to content and allow for the sharing of several updated versions of the information. Furthermore, OERs present information in an interactive way, which increases engagement and offers multiple ways of interfacing with the content. Through OER publishing, citational justice can also help those newer to research, first-generation students, or those without a lot of institutional support to publish their research and be part of larger research conversations in their field. For example, citational justice and the practice around citing images is directly part of an OER introduction to visual culture adopted for first-year students.

#### Reference

Sins Invalid. (2015). 10 Principles of Disability Justice. SinsInvalid.org. https://www.sinsinvalid.org/blog/10-principles-of-disability-justice

#### PART II

# **FUNDING AND SUSTAINABILITY**

# **Chapter Objectives**

- Explain the importance of funding and other logistical barriers in developing OERs.
- Examine the long-term development and sustainability needs of OERs.
- Consider language diversity in fostering inclusivity and accessibility.

# SUPPORTING THE FUTURE OF OPEN **EDUCATIONAL RESOURCES**

# **Funding**

Other logistical barriers, including funding, threaten accessibility, as funding was foundational to all discussions related to OER adoptions as part of this project. There was unanimity that funding was required for successful adoption, training, sustainability, and commitment to ongoing support of adopted resources. From the lack of funding to implement a comprehensive adoption practice, to the lack of funds to develop new OERs or embed more OER practices in the pedagogy, financial resources were considered imperative.

Funding is one of the biggest challenges facing the development of long-lasting OER projects. Funding cannot be limited simply to developing pedagogical practices. Research must also be considered in OER adoption and creation. Limiting research hinders the longevity of projects and restricts the sharing of perspectives learned with others. Moreover, limiting what adopters can do with funding impedes accessibility in OER development. Ensuring that initiatives are open access and remain paywall-free is also pertinent to lasting success.

Long-term evolution and ongoing development of resources are essential to the success and reach of OERs. Collaborating with community members and paying them for their time also means that OERs can continue to evolve as accessibility resources change. Respecting expertise and human capital and paying people for their work based on their experience, knowledge, and know-how is part of, and paramount to, the success of any OER initiative. Paying stakeholders and training developers, safeguards individual rights and promotes active engagement that reflects positionality. Working with experts allows for compliance with basic tenets of accessibility and inclusion. It also allows developers to go above and beyond designing new innovative and unconventional resources without relying on outdated and overused processes.

# Language Diversity

Funding for support of OER adoption and creation in Canada's other official language, French, was also mentioned in discussions. To help support inclusion alongside accessibility, the possibility of adopting a resource in another language, especially for courses where there is social outreach and client support as part of their skills and outcomes, like health care, would help provide a more holistic and well-rounded educational experience for learners. When funding is limited, sometimes only abridged versions of a resource are available in another language.

#### PART III

# **ACCESSIBLE PEDAGOGY AND** RESEARCH

# **Chapter Objectives**

- Outline the Universal Design for Learning (UDL) Guidelines.
- Consider the relationship between UDL and OERs.
- Facilitate wayfinding to simplify OER practices.
- Model visibility of accessibility and disability in OER adoption.
- Explain the role of accessibility considerations on pedagogical decisions.
- Analyze multiple methods in adopting OERs.
- Plan for equity audits for OERs.
- Examine the role of accessibility of open assignments.

# BEYOND UNIVERSAL DESIGN FOR LEARNING

Many discussions in preparing this resource focused on applying Universal Design for Learning (UDL) principles in the OER selection and adoption process. However, it became apparent that contrasting definitions and understandings of UDL are applied distinctively in different disciplines, impacting what adopters consider when curating resources.

#### What is UDL?

Universal Design for Learning guidelines are centred on three principles: Multiple Means of Engagement, Multiple Means of Representation, and Multiple Means of Action and Expression. These principles make up Version 2.2 of UDL. CAST has launched consultations with community members and plan to release an updated Version (3.0) of the framework in the summer of 2024.

#### How does UDL connect to OER?

For some faculty and instructors, discussions demonstrated that simply choosing to use OERs in their classrooms or supporting their use with their learners is an indication of applying UDL frameworks in their pedagogy. Broader aspects of how learners would or could engage with these materials were not often a consideration in adoption choices. In some instances, faculty encouraged learners to create and share their own open educational resources as part of classroom activities or assignments.

On the one hand, engaging learners in the process of creating OERs can align with the Multiple Means of Action and Expression principle of UDL, and on the other hand, having OERs adopted in courses can support Multiple Means of Engagement and Multiple Means of Representation principles.

# **Building in Wayfinding**

Building wayfinding into OER materials also enhances their accessibility. Wayfinding helps navigate new course resources effectively and models inclusive usage and citation of content. Some applied examples include suggestions on how to use this work in the front matter of a Pressbook. Learners are directed towards

opportunities for direct use and application, which can support their learning and scope of research they are exposed to and engage with in educational spaces.

## Making Accessibility Visible

Some of the resources consulted for this project provided guidance emphasizing OER accessibility and expectations for those using assistive technology or tools. This contributes to enhancing accessibility and promoting the visibility of accessible choices in OER adoption. This also helps inform and impact learners' experience and other instructors' pedagogical decisions in their educational spaces. One of the OERs adopted by faculty included a section on visual culture and accessibility—only one of two direct references to accessibility found as part of the pedagogy and content of resources reviewed for this project. Insufficient focus on accessibility in OERs demonstrates a need for this project and ongoing awareness of implementing accessibility in resource content and OER adoption considerations.

Considering accessibility throughout the OER content development process can influence pedagogical decisions. Faculty members have emphasized the critical significance of accessibility awareness in OER development and curation. They underscored that accessibility considerations enhance the effectiveness of OERs, the sharability of information in their Pressbooks, and the reach of resources in ways that can engage learners.

### Transparency

Transparency was another aspect of the wayfinding piece that emerged in discussions about essential accessibility considerations in adopting OERs. Involving learners in the discussion about why an OER was adopted over a textbook boosts transparency regarding the instructors' pedagogical values and their application in activities, assignments, and learning objectives in the educational space.

### Different Ways to Adopt Resources

Faculty and staff have proposed different ways to adopt OERs. Some chose to curate resources within the confines of an organized Pressbook. In contrast, others elected to provide an overview of available resources in their discipline and incorporated them into their learning management systems. Accessibility proved influential in either method of sharing information, and the importance of wayfinding in either approach was reinforced so long as learners knew where to find the material and how that material would be employed at different times of the semester, assisting with engagement and use of material.

However, from an instructor's point of view, especially if one was in a team-teaching situation, OERs were often considered as more reactive and flexible to pedagogical needs. Therefore, sharing and curating resources

in an easily accessible space, such as a shared folder on an institutional shared space, where resources could then be placed into modules in the learning management system as necessary could allow for pedagogical adaptability, student interaction, and feedback. This is especially true if one teaches in a discipline where information changes quickly, like health care or popular culture.

# **Conducting Equity Audits of Resources**

One strategy employed in a Health Science course was having a research assistant conduct an equity audit of OERs available for adoption. These included Pressbooks and downloadable modules that could be embedded in learning management systems. This equity audit examined the content of the resources to ensure inclusivity, modeling the topic of the course: "Diversity and Health." The audit covered topics on resources, including Indigenous health, homelessness, trauma-informed practices, 2SLGBTQ health, racism and health care, and ageism.

One identifiable gap in health resources emerged during conversations with faculty members addressing disability and ableism in health care. This interesting and well-predicted discovery underlines the importance of a project and resource like this one. As the discourse on gaps in accessibility resources and lack of disability representation in adopted resources within higher education becomes more intricate, advocating for more inclusive resources becomes more pronounced.

A similar gap is evident in social justice picture books learners use as part of the open pedagogy model in Junior Intermediary Language Arts. This project uses the justice principles mentioned previously in this resource. However, faculty have acknowledged that even with updated lesson plans to address new curriculum expectations, accessibility and disability awareness require additional attention; a gap is evident in the literature.

"Bullying based on facial differences" serves as an example of discussions of disability in this resource. Each lesson provides Individualized Education Plans (IEPs), demonstrating the centrality of accessibility in current conversations on curriculum. However, the pivotal importance of accessibility and inadequate considerations are still evident in decisions made regarding OER adoptions. Moreover, the adoption of OERs plays an indispensable role in initiating discussions about accessibility in the academy. Learners engaging in OER content begin to recognize the value and significance of these conversations.

# **Content Warnings**

Content warnings are essential in OERs since some resources can include content that may prove activating for learners. Employing content warnings is an inclusive and trauma-informed pedagogical practice that acknowledges that the material in the resource needs to be addressed in a supportive manner so as not to perpetuate potential harm. This is a meaningful conversation to have with learners engaging with adopted

material. Course activities can include an overview of areas where curated resources may need additional context or subsequent support to ensure accessibility for learners with different lived experiences. The need for inclusive language is addressed later in this resource as a foundational part of accessible language choices.

# Accessibility of Open Assignments

Open pedagogy views students as active content creators. It is an approach to learning through content creation. Open assignments, or renewable assignments, reinforce this philosophy. Open assignments include tasks where students generate content that is made accessible online. Multimodal digital content offers students various choice models in assignments. Like OERs, the content can be retained, reused, revised, remixed, and redistributed for educational purposes. Nevertheless, there are also accessibility considerations for employing open assignments.

While open assignments can inspire some learners to create more meaningful content for their assignments, they may be worrisome for others. The public presentation or publication of student-created content should remain voluntary. Considerations and deliberations on publishing student work should be openly discussed within the class to ensure students feel comfortable and safe in their learning process. Conversations should also consider published work that will be publicly viewable and connected to their name.

The publication of an open assignment can be rewarding. However, the inability to reach the stage of publication is disheartening. Some faculty members who incorporate open assignments in their courses expressed concern about having supportive conversations on the quality of assignments submitted by students for potential inclusion in an open resource. Ongoing support for learners by instructor(s), TA(s), and marker grader(s) is likely to address this concern.

An effective strategy to enhance open assignments emerges by implementing peer-review assignments within the course framework. Students are then presented with an opportunity to further enhance the quality of the content and revise their work multiple times based on the feedback they receive. Peer reviews and revisions reinforce principles of ungrading practices that augment and optimize the learning experience. Nevertheless, this requires time dedicated to support and to give feedback to individual students. Open assignments can take on many digital forms, from written essays to podcasts, videos, or games. Incorporating the development of accessible content in any approach as an explicit learning outcome within open assignments is crucial. By doing so, students not only contribute to the pool of accessible resources, but also acquire essential skills in digital accessibility. The trickle-down effect of passing knowledge about accessibility to future professionals is invaluable in advocacy for accessibility.

Open assignments can offer students various choice models, allowing them to create content in written word, video, podcast, visuals, online games, or as activities. When incorporated in an OER framework, this can contribute to, and enrich, the multimodal learning approach and Universal Design for Learning. Ensuring accessibility for each content format demands thorough research and effort. By integrating accessibility

discussions into teaching methodologies, rubrics, and evaluations, students can learn to develop their content in their preferred format while ensuring accessibility standards are met.

Open pedagogy approaches are diverse, and creating accessible rubrics is an excellent addition to open assignments. A conversation and clear communication about the criteria on which assignment will be evaluated and selected to appear in an open resource is necessary. One facultymember utilizing renewable assignments in their course contends that reusing students' content for multiple years is framed as a sustainable approach to assessment design, meaning that students will reapply, engage in, build on, and reuse content created by previous students. The reusability of open assignments allows instructors to employ previous assignments as examples and demonstrates the changes in theory and practice in a discipline. They are also resources to build on, make changes, and continuously update with new information.

#### PART IV

# **ACCESSIBLE LANGUAGE**

# **Chapter Objectives**

- Analyze the role of language as a barrier to accessing OERs.
- Explain the barriers and impact specialized academic terminologies can have in OER adoption.
- Examine the importance of safe language as an accessibility consideration.
- Plan for alt-texts and accessible video descriptions in OER content.

# GENERAL ACCESSIBLE LANGUAGE CONSIDERATIONS

# Accessible Language Use

Access to Open Educational Resources (OERs) extends beyond traditional higher education and academic institutions and into various sectors, including industry and beyond. OERs serve not only as tools for learners and educators, but also as bridges to connect academic knowledge to practical applications in other settings, such as industry, vocational training, and professional development. The financial and institutional barriers inherent in accessing academic papers and resources impede knowledge mobilization. Therefore, fostering free access to resources is crucial for extending their reach into industry and a broader audience.

# Specialized Academic Language As Barrier

One barrier to accessing OERs lies in language and the utilization of specialized academic terminologies in resources developed by higher education institutions. The use of certain terminologies specific to a certain discipline can further impede the utilization of OERs, limiting their access to broader audiences.

Some instructors use OERs as a learning tool for their classes, and specific terminologies and language in OERs adoption and use might be a part of the learning outcome for students; however, considerations for accessible language can enhance the inclusivity of OERs both for learners and non-academics. Initiatives like creating plain language summaries and including explanations of specialized concepts and terminologies can improve the understanding and uptake of OERs among non-academics.

Many non-specialist language users, such as instructional designers or educational developers, can support accessible language use as part of the adoption and creation process. Faculty members also mentioned an instance where they hired first-year students, who, while not yet experts in the subject matter, provided valuable perspectives on the clarity and accessibility of the content.

The idea of "safe language" is also an accessibility consideration. Safe language, or more specifically inclusive language, was referred to by faculty as non-threatening and conducive to understanding, a language that fosters a comfortable engagement for the readers. Faculty members shared their approach to addressing potentially intimidating content within their OER through this chapter on legal considerations in a safe sports pressbook. Non-comprehensible language and poorly defined concepts can intimidate readers and make them feel unsafe. In their OER, faculty have embedded linked definitions and offered detailed explanations of legal terms within

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the text as accessibility considerations. This deliberate effort enhances comprehension and cultivates a sense of safety and inclusivity within the OER.

Also, a jargon-free, plain-language approach is needed to help learners understand that adopting OERs means making strategic language choices for the particular learner demographic or target audience.

# ACCESSIBLE DESCRIPTION WITHOUT BIAS

## Alt-texts and Using OERs

When developing digital content, certain accessibility features are essential to ensure inclusivity for all users. These include providing alternative text (alt-text) for images, incorporating captions in videos, and offering detailed video descriptions. These are crucial for individuals with visual or hearing accessibility needs, as they enable them to access and engage with digital content. Optimizing OER content for accessibility promotes inclusivity, enhances usability for a wider audience, and reinforces the importance of integrating these elements into content development practices.

Accessible description refers to objective written explanations of visual or auditory content that are meaningful and aid in comprehension and learning. Accessible description without bias uses wording that avoids reinforcing personal biases and perpetuating cultural, political, and social hegemonies.

The use of images, various visuals and multimedia is common in OERs. They contribute to the multimodality of resources or sometimes give readers brief breaks from reading. Images are great additions to OERs. To serve their purpose in the resource, alt-texting images must be intentional and without bias. For instance, if a picture or visual is only decorative, one may mark the image as decorative in the platform or software used. Using images also involves being aware that embedding references to other resources, such as scholarly articles with images, means that those images will also need to be alt-texted and described in detail, especially if they are complex, like in the scholarly article example provided.

During a conversation with a faculty member regarding the accessibility of their resource on the decolonization of theatre criticism, deliberation ensued regarding whether specific images should be described or labeled as "decorative." The faculty selected certain images that showcased diverse identities within their resource. While these images may appear decorative at first glance, they play a role in visually representing inclusivity; representation mattered greatly in that context. In adding descriptions as alt-text in an OER, careful wording and precision in descriptions of identities from diverse ethnicities, races, and genders is of high importance.

Some of the challenges that occur in visual art, in particular in relation to alt-text, is making sure that the alt-text does not give away the answer and that students are still challenged to be able to assess and reflect on the meanings of the images. This can also be true in some science, technology, engineering, and mathematics (STEM) fields that use many graphs, charts, and tables to explain or show data in assessment situations. Care must be given to what the alt-text says and how much bias is already placed in the description; the same applies to video descriptions.

# **Describing Video Accessibly**

Clear and accurate captions are crucial components of videos, yet they alone do not suffice for accessibility purposes. It is important to provide meaningful visual descriptions according to the context of an OER. For instance, in a video of a play within a resource focused on theatre, details such as the set design, lighting, actors' movements, facial expressions, and costumes might be important in the viewers' understanding of the topic and depending on the learning outcomes of the resource. To avoid bias, descriptions should be descriptive rather than prescriptive. For instance, when describing a dance scene, it is best to describe what is objectively happening in the scene rather than the personalized feeling that dance provokes since the interpretation of dance is subjective to personal experience, whereas describing specific movements is not.

While ensuring accessibility features like alt-text, captions, and detailed descriptions are crucial for fostering inclusivity, it is essential to approach these elements with a commitment to accessible descriptions without bias. By prioritizing objective descriptions that accurately represent visual and auditory content, accessibility enhancement is possible, contributing to a more equitable and inclusive learning environment. Reaffirming commitment to diversity, equity, and inclusion in OER development practices is possible through conscious efforts to provide accessible descriptions without bias.

#### PART V

# ACCESSIBLE INTERACTIVE TOOL SELECTION

# **Chapter Objectives**

- Explain the importance of H5P interactions in resources, lessons, and workbooks.
- Examine the relationship between accessibility and interactive tools.
- Reflect on collaborative approaches to accessible adoption.

# MOVING BEYOND THE PAGE OR SCREEN

#### Interactive elements

For the most part, the engagement seen in OER adoptions that were part of this project centred on using H5P interactions. In some instances, resources, lessons, and workbooks were created to support learners and users. There were also discussions about funding and time that would have allowed for more interactive elements as part of the adoption process.

Examples of other accessible interactive possibilities include:

- Use of drama-based pedagogy in tandem with an adopted resource to increase application.
- Using creative elements such as art-based practices to relate information to other learners and build communities.
- Allowing learners to demonstrate how knowledge acquired from the adopted OERs can be represented in different multimodal ways (audio, video, images, infographics).

Some H5P elements are not accessible to screen readers or cannot be tabbed through using a keyboard. For instance, the use of interactive timelines may be considered. Recognizing that content featuring sequential dates and important events may benefit from a timeline format, this is likely the most accessible way to organize the information. More support, work, and conversations are needed to make all H5P interactive elements accessible since many OER adoption and creation teams do not have members who have undergone training to know if an interaction is accessible. This resource will revisit the training gap at the end of the Pressbook by highlighting some prompts and providing a checklist of considerations for this work.

Accordion menus are something to consider in relation to accessibility. Employing too many accordion menus can result in an overwhelming approach to interactions with content on a single page. However, some pages with an overabundance of content can be excessively long and difficult to navigate if no accordion menus are employed. Therefore, this is a contextual consideration when a lot of content is placed on a page, especially if the content is text-only.

## Accessibility of the Tools Themselves

Most of the discussions from the project centred around using Pressbooks as a container to curate open educational resources that were adopted or created. The conversations about accessible adoption also necessarily meant that discussing the accessibility of Pressbooks is a requirement. Many wished for more

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embedded accessibility features in Pressbooks. For example, issues around colour contrast errors, flagging lack of alt-texts when the images are not decorative, flagging errors in heading settings, and more diversity in how users navigate content using assistive technologies. Having many accessibility considerations, as noted in this resource so far, is essential; however, equally important to this endeavour is recognizing that accessibility falls in tandem with how the information is searched for and shared. This includes deliberations on the tendency to use website overlays, which are often framed as tools that support accessibility, but in fact can create additional barriers to assistive technology users, instead of reviewing the accessibility of websites and tools from the backend to support accessible navigation and search.

Discussions highlighted the need for a more collaborative approach to accessible adoption between instructors, teaching and learning centres, educational technologists, instructional designers, and those who administer both the tools used, and the library of open resources where material is housed.

#### PART VI

# NORMALIZING ACCESSIBILITY IN HIGHER EDUCATION

# **Chapter Objectives**

- Examine the importance of institutionalizing accessibility in Higher Education.
- Outline the importance of training and its relationship with the longevity of projects.
- Evaluate the role of building a community for OER adoption and creation.
- Use prompts for adopting, developing, and using OERs.

# **CONCLUSION AND NEXT STEPS**

Change only comes with the institutionalization of better practices, recognizing the need for the longevity of OER projects, respect for their evolving nature, and awareness of the changing nature of culture and technology. Incorporating accessibility as a standard practice in the OER adoption and development process repositions accessibility from a secondary educational procedure to a prioritized applied practice among educators.

#### Training

This project also recognized, as a top priority, the need to train and support those who want to adopt OERs but do not know where to start. To encourage educators to consider OERs as alternatives to textbooks, it might be helpful to engage with them early and train them accordingly in relation to content accessibility, among other considerations mentioned in this resource. For mid-career educators, incentives could help demonstrate the possibilities of adopting OERs or making their courses more accessible and inclusive to learners. These incentives could include external support to make the adoption process easier and showcasing how OERs can be combined with other learning materials, such as PowerPoint slideshows or exam questions in the context of their course. Ultimately, breaking the existing culture around what makes for valuable and timely resources in educational contexts is crucial. While many people may be open to adopting OERs, they may not want to commit to what could be seen as more work in adopting or creating an OER. It is important to reinforce the processes and support available on campus for faculty and teaching teams regarding the values of OER adoption.

Educators can develop training sessions incorporating active physical and virtual discussions. Sessions may examine accessibility and the diverse ways in which OERs are created and ultimately adopted for class use. Training also needs to emphasize disciplinary-specific relationships with OERs, information sharing across platforms and geographical space, and OERs as community-building opportunities.

The ability to train and the time available for training also depend on department size, teaching load, and administrative responsibilities. Smaller departments with fewer faculty will have less capacity to participate in training related to accessible OER adoption.

## **Building Community of OER Adoption and Creation**

It is imperative that training also integrates on-campus or virtual support to help adopters engage in accessible OER adoption and creation. Many institutional service areas can help support the development of OERs.

Campus libraries and teaching and learning centres are places where faculty, instructors, and teaching assistants can receive help with questions about OERs, including accessibility. In particular, educational technology teams can help address any technological questions about accessibility in the curation of OERs.

## Reviewing Accessibility for OER Content

OER content should be reviewed for accessibility to ensure that fostering inclusive environments remains a top priority. When adopting or creating an OER, professional development in accessibility and EDI initiatives can support the role of inclusivity. OERs must also undergo a comprehensive accessibility review before the material is published. Developers reviewing content should adopt reflexive practices, ensuring that the content meets the highest accessibility standards and guidelines while respecting Universal Design for Learning practices. Reflexivity in the review process promotes fair access to education, inclusive pedagogical practices, and provides educators with the tools necessary to meet the needs of each student. This accessibility review also needs to consider learners that may only be able to engage with material and content off screen, so having content readily accessible to be printed or created as a Braille book is also important.

# Prompts for Developing and Using OERs

Below, readers are presented with a comprehensive set of prompts designed to foster a well-rounded understanding of developing and adopting open educational practices. These prompts were established based on an examination of open educational practices through consultation with instructors, teaching assistants, and staff at Brock University who have previously employed or developed OERs. Moreover, the prompts are structured to assist in reflexivity practices and strategic planning in developing OERs. Educators and developers are encouraged to investigate avenues that can help improve and foster accessibility in their pedagogical practices. Additionally, the prompts provide ways developers can critically examine their practices while promoting UDL initiatives. Educators and developers are encouraged to proactively endorse and adopt methods of accessibility and champion equity and inclusivity.

- Were principles of justice and equity employed in the content creation process?
- What approaches have been adopted to safeguard the OER's long-term sustainability and longevity, as well as open educational and accessibility initiatives?
- Were pedagogical approaches beyond Universal Design for Learning adopted to improve accessibility for diverse learners?
- Was accessible language providing bias-free description employed in the OER content?
- What objectives have been incorporated when considering accessibility in interactive tools?
- What objectives have been adopted to assist in standardizing accessibility in higher education?

# OER ACCESSIBILITY CHECKLIST

We have developed the following OER accessibility checklist that you may consider when adopting OERs based on the conversations and resources reviewed for this project:

#### **Formatting**

- Has the content of your OER been structured with semantic and properly ordered parts, chapters, and h
- Are headings, paragraphs, and lists appropriately formatted for readability and navigation?
- Do titles and subtitles reflect the content in a precise, clear way?

#### Links

- Are destinations hyperlinked in the text?
- Do hyperlink texts provide clear and descriptive information about their destination?
- Does your OER provide the context for all the links so that users can understand where each link will lead context?

#### Visuals & **Image Descriptions**

- Is alternative text (alt-text) provided for all images?
- Are alt-texts accurately describing the content and purpose of the image without bias?
- Are detailed visual descriptions included for all visuals, graphs, and charts?
- Do visual descriptions provide relevant context and information necessary for understanding the content
- Are descriptions without bias?
- Is the colour contrast of elements taken into account and tested?

#### Multimedia

- Are transcripts and captions provided for all videos to accommodate users?
- Do descriptions in your transcripts connect with ideas discussed in the context of your OER and are they
- Are multimedia controls accessible and usable for all users?

#### **Interactive Elements**

- Can all interactive elements in your OER be accessed and operated using a keyboard alone?
- Is the tab order logical for keyboard navigation?
- Are H5P interactions embedded and accessible to screen readers and through keyboard navigation?

#### Screen Reader Compatibility

- Has the content of your OER been tested with screen reader software to ensure compatibility and usabili
- Are all elements properly labeled and structured for screen reader users?

#### **Accessibility Feedback**

- Have users with disabilities been involved in testing and providing feedback on accessibility?
- Has the language been tested on readers in your OER's target audience?
- Is there contact information in your OER or a mechanism for users to report accessibility issues and prov

# **FEEDBACK**

Thank you for engaging with this resource. This is a project with elements that will continue and we are always open to feedback and suggestions of areas to consider. We are committed to a community approach to this work. If you have any questions or feedback please feel free to reach to, Dr. Ann Gagne via email: agagne3 AT BrockU DOT ca .