

Open Educational Resource Policy Development in a Caribbean University Campus

Background and Introduction

Against the rising cost of traditional textbooks and learning materials, Higher Education (HE) institutions worldwide are actively discussing and pursuing the increased use of Open Educational Resources (OER) as a crucial step towards making education more accessible and affordable. The use of OERs in HE is gaining momentum for several reasons. First, OERs have the potential to enhance teaching and learning by providing instructors with a wider range of materials to tailor to their specific courses. Second, students benefit from significant cost reductions compared to traditional textbooks. This financial relief is particularly crucial for students from diverse backgrounds and socioeconomic statuses, creating a more level playing field. Interestingly, the importance of OERs is further emphasized by their alignment with the UNESCO Strategic Development Goals (SDGs), particularly SDG 4: Education for All. Organizations like UNESCO and the Commonwealth of Learning (COL) recognize OERs as a powerful tool to achieve this goal (UNESCO, 2019).

The University of the West Indies (UWI) is a leading institution committed to delivering high-quality education across the Caribbean. The St. Augustine Campus in Trinidad, established in 1960, was originally the Imperial College of Tropical Agriculture. It is the only campus within the UWI system that boasts a Faculty of Food and Agriculture, reflecting the region's rich agricultural heritage (UWI, 2021). Despite the potential benefits of OER, the adoption and integration of these resources at UWI, St. Augustine Campus, (UWISTA) has been inconsistent. An OER policy was lacking, hindering the widespread utilization of OER and impeding the realization of their full potential. Recognizing the need to enhance teaching quality for all students, Hill (2023) through efforts of the Centre for Excellence in Teaching and Learning (CETL) emphasized the importance of faculty affirming teaching excellence as a fundamental right through the creation and utilization of OERs. The CETL plays a pivotal role in driving educational innovation and excellence at UWI and is at the forefront of UWI's OER initiatives, providing faculty and staff with the necessary resources and support to adopt, adapt and develop OER. Thus, recognising the transformative potential of OER, CETL in partnership with the Commonwealth of Learning (COL) embarked on an initiative to draft an OER policy. The development of OER policies and guidelines is an important aspect of building capacity and the work on developing a policy would only add value in meeting the outcome of strengthening the capacity of the institution to sustain and encourage OER use. This initiative was aimed to align with UWI's mission, and the general principles of accessibility, affordability, and innovation that underpin the OER movement.

This paper outlines the approach adopted by The University of the West Indies, St. Augustine (UWISTA) in developing its OER policy. It highlights key observations from the initiative, emphasizing the importance of a collaborative approach, the use of existing models, transparency in policy development, continuous support, and addressing copyright issues. Additionally, the paper discusses the role of Generative Artificial Intelligence, which was actively employed by workshop participants for comparing policy and process items under consideration. UWISTA's OER policy development, supported by COL, serves as a model for other institutions aiming to embrace open education principles. The draft policy, emerging from this inclusive and transparent process, aligns with UWI's mission and broader OER goals, offering valuable insights for the academic community and policymakers globally.

Exercise Objectives

This initiative was created to draft a comprehensive OER policy for UWISTAs. Specifically, the project was designed to:

- Identify the current state of OER adoption and utilization at UWISTA;
- Explore the perceptions and attitudes of faculty, students, and administrators towards OER;

- Identify key factors influencing OER adoption and implementation; and
- Develop a draft OER policy that aligns with UWI's mission and values.

Literature Review

Several studies have highlighted the benefits of OER. For instance, research by Hilton et al. (2015) demonstrated that the use of OER can lead to significant cost savings for students while maintaining or improving educational outcomes. Similarly, Hilton (2016) found that OER adoption can enhance student engagement and learning by providing educators with the flexibility to adapt and customize materials to meet the specific needs of their students. Faculty members can benefit from OER by saving time and resources on course material development, fostering collaboration with other educators, and promoting innovative teaching practices (Kılıçkaya & Kic-Drgas, 2021). At the institutional level, OER can contribute to organizational cost savings, improve student retention and success, and enhance the institution's reputation as a leader in open education (Weller, et. al., 2015).

Despite the potential benefits, the widespread adoption of OER faces several challenges and barriers. These include lack of awareness, faculty resistance to change, concerns about quality and copyright, technical infrastructure limitations, and institutional culture (Ramsingh, 2021; Smith, 2013). Addressing these challenges calls for a comprehensive strategy that considers the needs and concerns of various stakeholders. Notwithstanding the comprehensive approach, the implementation of policy can play an important role in advancing the culture of adoption and use of OER within the instructional setting (Farrell, Aceto, Brown, Brunton, & Tlili, 2022). A growing number of higher education institutions have developed OER policies to support the integration of these resources into their teaching and learning environments. Comparative studies have highlighted the diversity of OER policies in terms of scope, objectives, and implementation strategies (Otto Schroeder, Diekmann, & Sander, et al., 2021).

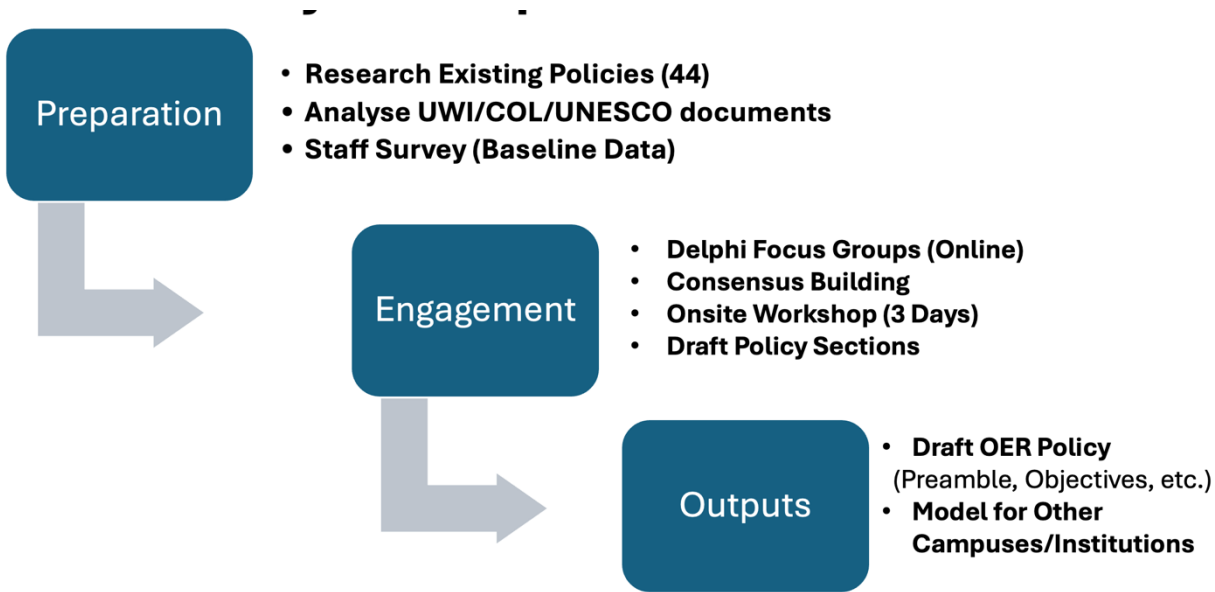
Some institutions have adopted comprehensive policies that cover various aspects of OER, while others have provided a minimalist framework to give greater flexibility in adoption. Yet others focused on specific areas, such as copyright, licensing, or funding. To establish OER as a sustainable practice, it is important to develop robust institutional policies (UNESCO & Commonwealth of Learning, 2019). Effective policy creation involves broad stakeholder engagement, transparent processes, and alignment with institutional goals. For example, the University of Edinburgh's OER policy served as a model, emphasizing openness, collaboration, and continuous improvement in OER development and utilization (University of Edinburgh, 2021). The literature also highlights the importance of addressing copyright issues in OER policy development. Copyright considerations are paramount in the development of effective OER policies. Restrictions on the use, adaptation, and distribution of educational materials can impede OER adoption. To mitigate these challenges, comprehensive OER policies should incorporate strategies for managing copyright, such as the adoption of Creative Commons licenses. This study examined the policies of several institutions including the University of Edinburgh, the University of the South Pacific and the Open University in the UK (Swettenham, 2023), which also provided a comprehensive list of OER policies from post-secondary institutions in several countries (Austria, Canada, Germany, Fiji, India, Malaysia and the UK). The UNESCO

In the context of UWISTA, the development of an OER policy was driven by the need to align with the university's mission and the broader goals of the OER movement. More on this is described in the methodology section which follows.

Process and Methods

The policy development process at UWISTA involved a comprehensive review of existing OER policies from other institutions, which provided valuable insights and best practices that informed the drafting of the policy. A qualitative research approach was employed to explore the complexities of OER implementation and inform the development of an OER policy. This methodology was selected to provide in-depth insights into stakeholder perspectives and experiences (Creswell & Poth, 2016). For an outline of the process, see Figure 1.

Figure 1 OER policy development process at UWISTA



Data Collection Methods

Online research and document Review: A systematic review of peer-reviewed articles, government reports, and institutional documents was conducted to explore the concept of OER, its benefits, challenges, and policy frameworks in higher education. A total of 44 existing OER policies from HE institutions in several countries. This effort was assisted by consulting a recently completed doctoral thesis on OER policies at Athabasca University (Swettenham, 2023). This policy review provided valuable insights into the different approaches and strategies adopted by other institutions in developing their OER policies. A review of existing related UWI and UWISTA policies and other documents was also included in this review process. This provided valuable information on existing OER policies in higher education, which served as benchmarks and models for the formulation of a specific UWISTA OER policy.

Then, a Google search was conducted using the following keywords “OER Policy” and “Open Educational Resources Policy”. No other higher education OER policies were discovered. A search for relevant articles and reports was then conducted using both Google Scholar and the [OER Knowledge Cloud](#). Relevant papers on OER were examined. Documents from UWISTA, UNESCO and COL that were related to, or helpful in understanding the development of an HE OER policy were also consulted. These resources were very helpful in providing direction for developing the OER process at UWISTA. They also contributed to the formulation of questions, which were used in the surveys.

The Survey

An emailed letter with a link to an online survey was sent to more than 40 representative faculty, students and administrative staff members. This structured questionnaire was intended to gain an understanding of the interest of these staff members, and their knowledge of OER as well as their attitudes, perceptions, and experience with OER. The survey showed that more than 90% of participants had more than ten years of experience in education and that they were familiar with OER. Although few had received any training some noted that they had experience in using or integrating OER in their teaching or administrative activities. 87% agreed that OER could enhance the quality of the curricula, while believing that the quality and relevance of the OER available was satisfactory. Most also felt that UWI was supportive of OER.

The participants expressed a need for clarity on OER-related terms and how OER aligned with broader institutional goals. The questionnaire included questions on the benefits and challenges of OER and gauged the baseline

knowledge and expectations of staff generally. However, it was observed that there was a varied understanding of OER among staff, highlighting the necessity for more OER awareness activities. Concerns regarding copyright issues and potential resistance to change were frequently mentioned, indicating areas that needed special attention during policy development. The responses from the survey provided a foundation for the subsequent stages of the policy development process.

Delphi Focus Groups

In the next stage, UWISTA organized two online Delphi focus groups. The Delphi focus groups were conducted to gather in-depth insights and feedback from the university staff. The Delphi method is a structured communication technique that involves a panel of experts who participate in multiple rounds of discussion and feedback. Inclusive online participation was facilitated using ZOOM, allowing diverse staff to contribute without geographical constraints. An agenda, along with questions for consideration, was circulated at the meetings. There were 10 participants in the first group and 12 in the second (In all 15 women and 7 men).

In the first round, participants were asked to provide their input on key elements of the OER policy, focusing on the potential benefits and challenges. Suggestions were made on staff involvement, integration of OER and their effect on pedagogy and research. The role of OER in increasing student enrolments and equitable access was also an important consideration raised focusing on the limited internet connectivity and the needs of students with disabilities.

In the second round, the feedback from the first round was summarized and presented to the participants for further discussion and refinement. There emerged strong support for ensuring that any OER policy must align well with the UWI strategic plan. The importance of understanding copyright law and open licensing was highlighted. While the focus was on implementing an OER policy in the university environment, participants expressed the importance of exploring partnerships with secondary schools to further increase post-secondary access. The role of AI in creating OER and how this might impact copyright laws was also considered. These further discussions helped to build a consensus among the participants and ensure that diverse perspectives were considered.

Thematic analysis was employed to analyse the qualitative data. This method allowed for the identification of recurring themes and patterns related to OER implementation and policy development. However, a challenge was observed in achieving a consensus on certain nuanced aspects, pointing to a need for careful facilitation and clarification of policy language. The iterative nature of the Delphi method proved beneficial in refining policy priorities and identifying potential conflicts early in the process.

In-person Workshop

A three-day, on-site participatory workshop was convened to collaboratively develop a draft OER policy. Key stakeholders, including librarians, faculty, instructional designers, IT staff, students and administrators were brought together to actively engage in the policy development process. There were 18 participants, all of whom were knowledgeable about OER, (Most had attended a COL OER workshop earlier. The workshop incorporated a mix of presentations, group discussions, and hands-on activities. Participants were divided into small groups to draft specific policy sections.

OER policy items from a range of other post-secondary institutions were compiled and categorized. On Day 1 of the workshop, participants worked together to understand the nature of OER policies and how they might align with the policy environment of UWI. This included agreement on definitions and the purpose of an OER policy for the UWI, St. Augustine campus. The focus on Day 2 was on the development of an appropriate OER policy framework, looking at the policy objectives and agreement on the statements. Copyright and licensing statements were discussed and included in the recommendations along with statements on liability and risk. On Day 3, the participants developed the procedures to accompany the policy including identifying the responsibilities and accountabilities for policy implementation. Finally, each clause of the draft OER policy was reviewed before acceptance. The meeting concluded with the development of an implementation plan and guidelines.

The first two days were concluded with a quick daily reflections survey in which participants noted their feelings and provided comments, which were universally positive ranging from reflexive and confident to inspired. On the first day, they were overwhelmingly curious and somewhat excited. On Day 2 this reversed, and the participants expressed more excitement over curiosity while showing more confidence and reflection, followed by many positive comments on what they had learnt in the process of developing the policy framework. The final survey showed that

participants were mainly very satisfied with the process. None were dissatisfied or neutral. They expressed confidence that the draft policy aligns well with the Campus' institutional goals and educational strategies. All agreed that the scope and purpose of the draft OER policy was adequately addressed in the workshop and final draft policy. They majority felt that the guidelines, the technical considerations, accessibility, as well as integration of OER into existing institutional systems were all adequately addressed.

This face-to-face workshop fostered a collaborative environment that encouraged active engagement and open discussions. Staff appreciated the opportunity to work collectively on drafting policy sections, promoting a sense of ownership and shared responsibility. Participant insights during the workshop addressed concerns related to OER, copyright and intellectual property. Through this collaborative process, a draft OER policy emerged that reflected a consensus among participants and incorporated best practices derived from an analysis of other post-secondary institutional policies.

Use of Generative Artificial Intelligence

Artificial intelligence (AI), specifically ChatGPT 4.0, was harnessed to enhance the OER policy framework development process. AI was used to improve the quality of the writing by identifying and correcting errors, increasing readability, and ensuring that the draft policy and procedures were well-structured. To make effective use of AI in the OER policy document, areas were identified where AI could play a role in enriching the content or optimizing the processes.

AI was used to reinforce the consensus arrived at by the participants. Once policy items had been agreed upon, AI was asked to separately and autonomously make recommendations for items that should be included in an OER policy for a university. These AI recommendations were then compared with those produced by the workshop participants. There was a very convincing agreement between them, which helped convince them of the relevance of their draft policy recommendations. Only minor adjustments were made, using the AI recommendations to improve the clarity of the policy items. AI was used in this way to support the recommendations for both the policy and the procedures, supporting the alignment of both within the policy framework of UWI.

AI was also used to help generate the questionnaire for the survey and provide suggestions for the group meetings and the workshop. It was also helpful in summarizing the data.

Findings & Discussion

The findings from the OER policy development process at UWISTA illuminate a complex landscape of opportunities and challenges. A collaborative approach involving faculty, staff, and administrators proved instrumental in garnering diverse perspectives and aligning the policy with the university's needs. The engagement of stakeholders through surveys, focus groups, and workshops fostered a shared understanding of OER's potential and identified key concerns and priorities.

A comprehensive review of existing OER policies provided valuable benchmarks for policy development. While the literature underscored OER's capacity to enhance teaching, learning, and equity, it also highlighted implementation hurdles such as awareness, faculty resistance, and infrastructure limitations. These insights informed the policy development process and underscored the need for targeted interventions. The implementation of the draft OER policy holds the potential to significantly impact students, faculty, and the institution. For students, the availability of free and openly licensed course materials can reduce financial burdens and improve access to learning resources. Faculty members can benefit from opportunities for professional development, collaboration, and the creation of innovative teaching materials. At the institutional level, the adoption of OER can contribute to cost savings, enhanced student success, and a stronger reputation as a leader in open education.

Outcomes

- Survey results indicated a growing OER awareness but varying levels of knowledge and experience.
- Positive attitudes towards OER were prevalent, tempered by concerns about quality, accessibility, and sustainability.
- Focus group discussions deepened this understanding, revealing faculty interest in OER as a pedagogical tool balanced against workload pressures.
- The culmination of this process was the development of a draft OER policy outlining the university's commitment, defining key terms, and establishing guidelines for OER creation, sharing, and use.

- The policy also addresses critical issues such as copyright, licensing, quality assurance, and faculty support.

Conclusion & Recommendations

The underutilization of OER at the UWISTA presents a significant opportunity to enhance student learning, reduce costs, and promote equity. This study has illuminated the potential of OER while identifying key challenges and opportunities for its adoption. Through a collaborative process involving faculty, staff, and students, a draft OER policy has been developed to address these issues and guide the university towards a more open educational ecosystem. Successful implementation of this policy has the potential to transform teaching and learning, empowering students and faculty while solidifying the university's reputation as a leader in higher education.

To fully realize the benefits of OER, the university must prioritize the following recommendations:

- **Invest in Faculty Development:** CETL should continue to provide comprehensive training and support to equip faculty with the necessary skills and knowledge to create and effectively utilize OER. This includes developing comprehensive OER guidelines, workshops, online resources, and mentorship programmes. Additionally, CETL should be resourced to provide technical assistance, copyright guidance, and quality assurance support.
- **Build a Sustainable OER Ecosystem:** Foster collaboration among faculty, librarians, and IT departments to create a supportive environment for OER development and sharing. This includes establishing OER repositories, promoting open licensing, and recognizing faculty contributions to OER.
- **Evaluate and Refine:** Implement a continuous evaluation process to assess the impact of the OER policy and make necessary adjustments. This involves collecting data on OER usage, student outcomes, and cost savings to inform future initiatives. By acting on these recommendations, the University of the West Indies, St. Augustine Campus can position itself as a pioneer in open education, benefiting students, faculty, and the wider community. As OER continues to gain prominence as a catalyst for democratizing education, this report can highlight UWISTA's commitment to the cause of OER and could also serve as a resource for the wider academic community and policymakers interested in implementing a similar policy supporting open access to educational content. The description of the process conducted, and the draft Policy that emerged from the consultations can offer insights into the strategies employed and lessons learned.

This paper is based on a report to the Commonwealth of Learning and has benefited from the use of ChatGPT v. 3.5, a large language model developed by OpenAI and Perplexity AI.

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