

Reimagining Leadership in Open Education

Networking to Promote Social Justice and Systemic Change

Karen R. Cangialosi¹

Carlos C. Goller²

Kim Grewe³

Tiffany Tang⁴

Robin T. Taylor⁵

Deidre Tyler⁶

Rebecca Vásquez Ortiz⁷

Esperanza M. Zenon⁸

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Abstract

Challenging traditional notions of leadership and leveraging non-hierarchical learning structures, the Regional Leaders of Open Education Network (RLOE) was created to bring together leaders from a broad diversity of institutions in the U.S. and Canada to build strategic plans for open education (OE) that especially support underserved and underrepresented students including (but not limited to) BIPOC students, students with disabilities, food-insecure students, remote rural students, foster-care students, students impacted by incarceration, LGBTQIA students, student parents, and first-generation college students. All members of the network, including an advisory team, collaborators, student mentors and cohort participants were engaged in a multi-directional learning program over two years (2021-2022) that included a variety of synchronous and asynchronous online engagement opportunities, as well as the

¹ Program Director, RLOE, Open Education Global, Florence, MA, USA, ²Associate Teaching Professor, North Carolina State University, Raleigh, NC, USA, ³Professor of Physical Science, Northern Virginia Community College, Weed, CA, USA, ⁴RLOE Administrative Assistant, Open Education Global, Newton, MA, USA, ⁵Principal & Senior Evaluator, RTRES Consulting, Knoxville, TN 37934, ⁶Professor of Sociology, Salt Lake Community College, Taylorville, UT, USA, ⁷Associate Professor of Psychology, Santa Ana College, Santa Ana, CA, USA, ⁸Professor of Physical Sciences, River Parishes Community College, Gonzalez, LA USA.

opportunity to attend an in-person summit. Analyses of surveys and reports completed by network participants indicated that RLOE was successful in building community and providing vital networking opportunities that supported them to design and implement open education strategic plans that included initiatives in professional development, forming partnerships, integrating DEI principles as well as other goals and accomplishments. Cohort participants indicated significant gains in 1) developing and leveraging their leadership skills to serve marginalized and underrepresented students, 2) understanding how OE practices can empower all students, especially marginalized students, and 3) how Open Educational Resources (OER) can be used to specifically support underrepresented and underserved groups. In addition, 90% of cohort participants indicated that the RLOE Network helped them to center principles of DEI into their open educational work.

Introduction

While there is a substantial degree of work being accomplished in open education (OE), for the most part, this work is disconnected, under-resourced, and under-recognized. The lack of connection and communication among open education practitioners, often working in complete isolation with little to no institutional support, has led to challenges in capacity building, long-term sustainability and the broader reach of Open Education (Morgan et al., 2021; Rolfe, 2012; Watters, 2018). It has also resulted in a highly uneven distribution of the creation, development, and integration of Open Educational Resources (OER) and Open Educational Practices (OEP) across the large number of higher education institutions in North America and throughout the rest of the world. Furthermore, the dearth of diversity amongst open education leaders has resulted in huge limitations, not only on the development and distribution of OEP and OER, but on the evolution of ideas and the progress towards the promises of Open Education (Robertson, 2020).

To work towards addressing these challenges, we transformed the Regional Leaders of Open Education (RLOE), a project of Open Education Global (OE Global) and the Community College Consortium for OER (CCCOER), into a network during its second phase from 2021-2022. We designed the RLOE network to bring together Open Education leaders from across broad institutional and regional boundaries to assist leaders and incipient leaders in building strategic plans for open education that especially support underserved and underrepresented students. As an extremely important part of RLOE's intentional design, we began with a confrontation of the very notion of "leadership." Our reimagination of leadership began with the simple but profound words of Dolores Huerta, "A leader is a person that does the work," from Huerta et al. (2016). But who has the opportunity to do the work? Essential to our reimagination of leadership, we relied heavily on the idea of 'leading from the middle.' "Unlike top-down leadership, Leadership from the Middle is not a function of the position someone holds. It is instead a function of showing someone his or her best self, and creating a favorable environment in which they can be that self" (Gottlieb, 2012).

By framing our work with social justice and equity at the forefront, we sought to break down hierarchical learning models and broaden the impact of open education to leverage it to address the enormous systemic problems that inequity and racism bring to our students. As systemic problems need

an immense variety of actors in every corner to combat them, we felt that our leaders should come from a wide variety of higher education institutions (from two-year community and technical colleges to Research Intensive (R1) Universities in a variety of institutional roles and with a variety of areas of influence – from academic vice presidents to adjunct faculty). So that many of our incipient leaders, like the students we wished to serve, were also people with lived experiences of being underserved and underrepresented, we worked to recruit participants especially from Hispanic-Serving Institutions (HSI), Minority Serving Institutions (MSI), Historically Black Colleges and Universities (HBCU) and from institutions with lesser economic resources. We also built our advisory team with an intentional focus on diversity and inclusivity.

We drew inspiration from natural ecosystems, where complexity, high biodiversity, and interconnectedness are required for a sustainable and resilient ecological system. We worked to co-create an environment where RLOE could become a diverse human network centering the perspectives of and shifting power to marginalized communities. To do this, it was important for us to clearly articulate, promote, and most importantly embody these values in all areas of the work of the RLOE network: Access and Equity; Student Agency and the Rights of Learners; Community and Collaboration; Care and Generosity; and, Social Justice, Diversity, Inclusion, Anti-Racism. Our aspiration was for RLOE participant leaders to not only create strategic plans, but to shape a new, resilient, vibrant, sustainable vision for the future of open education.

We believe that, while there are still several areas for growth and improvement, the many successes and positive outcomes of the Regional Leaders of Open Education (RLOE) network over the past years means that it could serve as a model that could be modified and customized for the development of other open education networks globally.

Literature Review

It is critical to emphasize that RLOE is a network as opposed to an organization. Whereas organizations are typically more top-down, providing information, training, conferences, and other opportunities to members, networks are more relational. A network's priority is connecting and distilling the collective experience and shared expertise of the network members (Tener, 2013). Instead of the organization providing all the services, network members themselves identify and contribute/participate in creating activities and/or sharing information, with the organization, in this case Open Education Global, providing the support and infrastructure to enable this. Members help create the benefits/value with the support of the organization so there is a focus on give and receive (Tener, 2013). In these ways, networking can strongly support the creation and ongoing implementation of open education initiatives through building the leadership and relationships that are necessary for the long-term sustainability of OER and Open Educational Practices (OEP).

The effectiveness of networks in promoting leadership development and amplifying the voices of non-traditional leaders in various fields, such as open education and social justice movements, has been demonstrated (Harris, Azorín, & Jones, 2021). Non-traditional leadership is a form of leadership that challenges the dominant norms and practices of leadership in a given context. It is a leadership that

recognizes and values the diversity and potential of all people, especially those who have been historically marginalized or underrepresented. It is a leadership that fosters collaboration, inclusion, and empowerment among various stakeholders, rather than competition, hierarchy, and control. It is a leadership that adapts to the changing needs and demands of the environment, rather than adhering to rigid and outdated models. It is a leadership that seeks to create positive and lasting change in the world, rather than maintaining the status quo. For optimal utilization of networks in non-traditional leadership development, Brown and Flood (2020) recommended that school leaders prioritize relationship-building and seek diverse perspectives and experiences. Concurrently, Nicholson et al. (2016) contended that teacher leadership should be independent of formal authority and hierarchies, which allows for recognizing and amplifying non-traditional leaders' voices.

Networks can help bridge the gap between the open education movement and social justice aspects of access to and representation in higher education by providing a platform for collaboration and resource sharing, offering a space for marginalized voices to be heard, and advocating for policies that promote educational equity. Research indicates that networks can support the implementation of OEP as an equitable approach, which is essential for fostering social justice in education (Bali, Cronin & Jhangiani, 2020; Lambert, 2018; Corral, 2015). Open Educational Practices (OEP) include the replacement of commercial textbooks with OER as well as the use of Open Pedagogy. While OER can provide access, open pedagogy entails teaching practices that engage students in knowledge creation and sharing, often through the incorporation of open licences on student-created materials. This approach has the potential to advance social justice by empowering students to partake in knowledge creation and dissemination, challenging dominant narratives and power structures. See for example this excerpt from Matthew Moore, a student in an open pedagogy class:

The autonomy and authority fostered in the students, and the fact that this project actively sought and utilized student perspectives, was empowering. Engaged with this digital pedagogy, given backstage passes to the world of academic anthologies, we curated works that seemed urgent for a new generation of students. In this way, it was our own critique of the traditional and reiterated canon that has been burnt into the retinas of undergrad English majors anywhere. Within that space we included untold histories, suppressed narratives, and stories that didn't make the cut. In a small yet surprisingly diverse university with students from all different cultural and ethnic backgrounds and who encounter literature in their own nuanced ways, the inclusion of these pieces was vital (Moore 2020, p. 67).

Nonetheless, Lambert (2018) noted that social justice principles can occasionally be obscured within textual details or technological debates, and the potential benefits of open approaches may not always be realized due to insufficient holistic thinking and collaboration among communities pursuing open practices (Corral, 2015). Bali, Cronin, and Jhangiani (2020) discovered that while some forms of OEP can support social justice, others do not. Katz and Van Allen (2022) determined that educators often lack awareness of how to implement OER and OEP equitably. However, the similarities between the open movement and social justice movements imply potential for closer collaboration between these movements.

Lastly, networks can be employed to build capacity and establish sustainability in the open education movement in various ways. For instance, a study by Hodgkinson-Williams and Trotter (2018)

analyzed the effectiveness of the Open Educational Resources Africa Network (OER Africa) in promoting the use of OER in African higher education institutions. The study reported that OER Africa effectively increased awareness and adoption of OER and supported capacity building through training and mentoring activities. Another study by Beaven and Hauck (2014) evaluated the efficacy of the Language Open Resources Online (LORO) network, which facilitates sharing and collaboration on language teaching resources. The study demonstrated that LORO effectively promoted collaboration and resource sharing among language teachers, leading to the development of new resources and innovative teaching approaches. In his examination of various open models, de Langen (2018) found that regardless of the organization's primary focus—be it material sharing, collaboration, or training—community building is a crucial element for success. Jhangiani and Coolidge (2018) have also found that inter-institutional collaboration is key to the sustainability of Open Education including the adoption of both OER and OEP. Further, Diaz Eaton et al. (2022) extensively articulate the ways that collaboration hubs, networking and community building are essential to the sustainability and incorporation of both OER and OEP in STEM, as well as provide important opportunities to address and promote social justice. Thus, networks play a significant role in fostering capacity building and ensuring the sustainability of the open education movement.

Methods

Participants

The RLOE Network was composed of a diverse (56% non-white) leadership team (n = 15: 1 Director, 1 Coordinator, 4 Advisory Board members and 9 Collaborators), cohort participants across three workshops and an in-person summer summit (n = 112), and student mentors (n = 10). Network participants were affiliated with 83 institutions/organizations across the United States and Canada, where cohort members represented 69 of the 83 institutions with representation in the network. Institutions included 2-year and 4-year institutions, MSIs, HSIs, HBCUs, Tribal Colleges and Indigenous Institutions, and ranging from small to large enrollment sizes. These participants represented a large variety of roles in higher education (e.g., librarians, instructional technologists, instructional designers, high and mid-level academic administrators, full-time, tenure track and adjunct faculty, and other support staff).

Program Description

The construction of the RLOE network was intended to center the perspectives of and shift power to the marginalized. As such, we worked to create conditions to support the voices of those not usually considered leaders to shape a new vision for open. Our approach, which utilized networking, non-hierarchical learning models, consensus building, and shared problem solving, differed from other approaches that usually rely more on one-way content delivery and individual professional development and training.

During a two-year period, we facilitated three 3-week interactive online workshops and an in-person summer summit. The workshops took place in Fall 2021 (cohort 1), Winter 2022 (cohort 2) and Spring 2022 (cohort 3). Each three-week workshop consisted of 12 hours of synchronous sessions on Zoom and an expectation of 12 hours of asynchronous discussion participation (via OEG Connect) and web annotation of readings (via Hypothes.is) that centered around 7 key learning areas. The seven learning areas were:

1. Orientation to the RLOE Framework and Strategic Plan Goals
2. Using Open to Cultivate Leadership
3. Increasing Student Access and Success Using OER
4. Beyond Access: Using Open Educational Practices (OEP) to Empower Students
5. The Spirit of Open: OER Stewardship and the CARE Framework
6. Sustaining Open
7. Implementing Your Plan: After This Workshop

The workshops were facilitated by the advisory team and collaborators, but a multi-directional exchange of information and opportunity for voices to be heard was nurtured by the team. Cohort participant leaders, the advisory team, the collaborators, and the student mentors all had ample opportunity to contribute their ideas, experiences, resources, expertise, and suggestions. Importantly, student mentor voices were intentionally included to inform RLOE members about student needs and include their ideas and voices as drivers for change. During the workshops, cohort participants were supported to draft open education strategic plans for their institutions that aligned with their campus missions to support underserved and underrepresented students. All plans were shared in a Google folder that was open to all leaders, advisors, students, and participants so that anyone in the RLOE network at any time could read, learn from, make suggestions, and comment on the work of others.

After workshops were completed, cohort participants were supported throughout the rest of the two-year program to continue to refine their OE strategic plans and to begin to implement OE initiatives. We provided this ongoing support through 1) individual matching of cohort participants with a collaborator/advisor who checked in once or twice a month and scheduled meetings to provide advice or answer questions; 2) monthly interactive Zoom help sessions (which we called “un-webinars”); and 3) continuing asynchronous discussions with RLOE Network members through the OEG Connect online platform. All materials were shared openly on the RLOE.org website.

Data Collection

Three key areas of the RLOE network’s ability for leadership development were assessed:

- Serving marginalized students
- Promoting the centering of social justice in Open Education
- Networking, community and capacity building

To assess these three areas, we collected and analyzed three types of data:

1. Feedback provided by cohort participants from surveys
2. A review of 45 final reports that were submitted by the participating institutions, each summarizing their OE efforts from 2021-2022
3. Selected quotes from participants in a variety of RLOE activities and events

Surveys

Feedback data was collected from Cohort members throughout the implementation of RLOE Network activities. Surveys were used at the conclusion of the RLOE workshops and the in-person summit to understand participants' experiences, inform future programming, and understand the focus for open education plans and OE implementation (see Appendices A and B). Finally, at the conclusion of the grant funding cycle, a follow-up survey was sent to all RLOE members (Cohort participants, students, and RLOE leadership team members) to understand attitudes toward the program as well as outcomes and impacts of participating in the program. Paired t-tests (a method used to test whether the mean differences between measurement observations is different from zero) were used to examine statistical significance in reported learning gains, and Cohen's D, a standardized effect size for measuring the difference between group means, was used to estimate the strength of magnitude for learning gains. Cohen's D expresses the differences between two means in standard deviation units, where larger values for Cohen's D indicate stronger differences. Additionally, the frequency and percentage of respondents reporting benefits or impacts as a result of participating in the RLOE Network are also used to understand cohort members' experiences. The appendix also includes a treemap figure of participants' comments to "What was the most useful aspect of the RLOE program?" (see Appendix C).

Qualitative Report Review

Cohort members were asked to report on their open education efforts. From a review of reports submitted by 45 RLOE institutions, Open Education initiative themes were identified, coded and used to determine the extent of accomplishment within each area. Thematic coding was used to categorize focal intentions of institutional OE plans across information provided for goals, activities and accomplishments. The percentage of institutions that included information related to coded themes across reported goals, activities, and plans was calculated to illustrate the range and types of accomplishments and implementation efforts that participants reported for their institutions within the first year of participating in and completing the RLOE workshops.

Participant Quotes

Selective quotes were harvested from RLOE un-webinars, conference presentations, and evaluation surveys. Quotes are utilized throughout the paper to support quantitative findings using the words of our RLOE Network participants.

Results

Our analysis of the features and accomplishments of the RLOE network are organized into the three key network assessment areas:

- Serving marginalized students
- Promoting the centering of social justice in Open Education
- Networking, community and capacity building

Leadership Development: Serving Marginalized Students

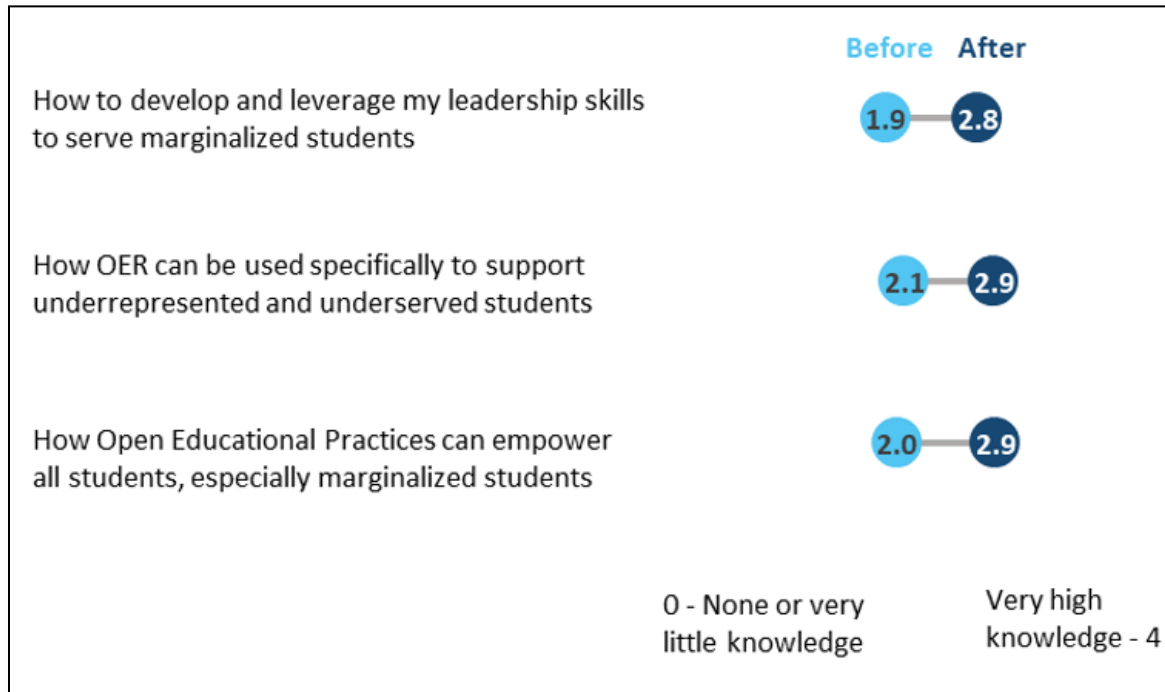
A major focus of the RLOE Network for 2021-2022, was to encourage participants to identify their spheres of influence and support them to create impactful open education initiatives in their institutions that particularly addressed the needs of underserved students. After participating in the RLOE workshops, cohort participants indicated significant gains in developing and leveraging their leadership skills to serve marginalized and underrepresented students ($MT1 = 1.88$ ($SDT1 = 0.85$) to $MT2 = 2.77$ ($SDT2 = 0.76$); $t_{64} = 9.47$, $p < .001$, Cohen's $D = 1.36$) (see Figure 1). Additionally, 59% of cohort members reported on the follow-up survey that the "RLOE Network encouraged them and/or built their confidence to 'lead from the middle.'" i.e., to use their agency to advance open education initiatives at their institution. The following quotes from RLOE cohort members are provided to illustrate the impact that the RLOE Network had for building agency and for supporting cohort participants to "lead from the middle:"

Meeting and discussing theoretical and practical ideas with like-minded colleagues helped me conceptualize how I could be a leader in OER. Hearing the students discuss their experiences and ideas motivated me to make it happen. (Cohort Member A).

RLOE will definitely have an impact on my future work. I am continually thinking about what being a servant leader in open education means, and I think that the ideas of social justice that I developed as part of my RLOE work feeds that internal conversation. (Cohort Member B).

Figure 1

Mean gains in knowledge level across all cohort participants prior to participating in the RLOE workshops compared to after participating in the workshops



Centering Social Justice in Open Education

Across workshop post surveys, 98% of cohort members agreed OE practices are a mechanism for positive change in inclusive education. Figure 1 also indicates reported gains in participants understanding for 1) how OE practices can empower all students, especially marginalized students (MT1 = 1.98 (SDT1 = 0.89) to MT2 = 2.94 (SDT2 = 0.72); $t_{64} = 9.78$, $p < .001$, Cohen's $D = 1.44$), and 2) how OER can be used to specifically support underrepresented and underserved groups (MT1 = 2.06 (SDT1 = 0.94) to MT2 = 2.92 (SDT2 = 0.71); $t_{64} = 8.18$ $p < .001$, Cohen's $D = 1.20$).

In addition, 93% of cohort participants indicated on the follow-up survey that RLOE provided opportunities to engage in dialogue about the advancement of social justice in their OE work, and 90% indicated the RLOE Network helped them to center principles of diversity, equity, and inclusion into their open educational work. The following excerpts from cohort participants demonstrate the stronger favorable attitude of cohort participants to include discussions of social justice, equity, diversity, and inclusion across all RLOE Network activities.

Several RLOE participants mentioned coming into the RLOE network in order to learn more about how to promote OER as a way to save money for students, but that they ended up learning so much more about the social justice implications leading to higher student success as a result of remixing OER to be more representative. This is highlighted in the following quote from a cohort participant:

... the motivation for OER as a cost saving measure was why I ended up attending RLOE, but what I took also from RLOE was thinking about the representation aspect of OER. And so I really appreciated [the realization] that students could finally see incorporated into their courses things like authors who come from different racial, ethnic minority, immigration, sexuality status; lots of different representation for their social identities in the course to reflect the material that they're reading and say, "hey, I'm even a little bit more engaged in this because I see representation of myself in these authors that I chose." (Cohort Member C)

Networking, Community and Capacity Building

Our survey results showed that the RLOE program was successful in building community and providing vital networking opportunities for capacity building. Follow-up data showed that 85% of cohort members indicated that RLOE helped generate new ideas for OE at their institutions and 76% indicated that RLOE provided easy-to-find resources/tools for OE. In addition, thematic coding of open-ended feedback provided on post-workshop surveys where participants were asked to indicate the most useful aspects of RLOE demonstrates the strong value of the RLOE Network across major networking themes. Prevalent themes across cohort members' open-ended responses included idea sharing (23%), including student perspectives (20%), providing resources (17%), support for OE plan development (12%), and ongoing support of network members (10%), as well as connecting them to larger networks outside of RLOE (6%). The following quotes are provided to demonstrate the impact of networking for cohort members:

...For me, it was more than just building relationships. It was humanizing the work. It was getting to listen and exploring strategies. I would say that [the RLOE network] is an ongoing connection. When you make connections with people and resources, it's a little different than being at a conference, 'cause in the conference, you get a few minutes at the end to ask questions and stuff, but because [RLOE] is already humanized, you already feel comfortable. I have no problem reaching out to anybody in this community and saying, "Hey, I got a question," or posing a question or saying, "Do you have a few minutes? I wanna go over this with you." I think that is tremendously important. And it's given me so much confidence to keep going because this is slow work sometimes, having change in big or small organizations. (Cohort Member D).

You can hear the information from different viewpoints, from a student point of view, from a collaborator point of view, and you get live feedback immediately from the community itself. (Cohort Member E).

The strategic plan developed through these three weeks will provide a baseline for taking the next steps. Short and long-term goals will not only help me in enhancing my institute's OER practices but also next steps for me at the individual level. (Cohort Member F).

After RLOE, there is no turning back or turning a blind eye to the future of open education. I will continue to use the resources I learned about, continue to call on the network of professionals I was able to meet and continue to champion open education. (Cohort Member G).

An example of networking and capacity building is also evidenced through a collaboration that developed across several of the participating Hispanic Serving Institutions (HSI). This collaboration of HSIs led to the development of an initiative to secure national funds for the implementation and development of OER for use in multiple states. The RLOE HSI collaborative also examined best practices for finding commonalities as well as institution-specific goals centering cost-effective ways to develop culturally relevant materials.

A major accomplishment of the RLOE Network was the energized focus and commitment to creating OE plans across institutions. Of the sixty-one institutions with participants who fully participated in the RLOE Network program workshops, 43 (70.5%) provided updates to their OE implementation efforts, and an additional 2 institutions with participants who participated in an in-person summer summit provided information about their OE implementation efforts. RLOE participants reported many goals, activities and accomplishments as a result of their open education strategic planning and beginning stages of implementation (see Appendix D).

Most cohort participants (93%) indicated that participating in the RLOE Network will influence their future work. Feedback data emphasized the strengths of the program in supporting individuals to lead from the middle, integrating DEI as a core value within the planning and implementation efforts of OE, and sustaining a network that builds capacity and allows for sharing of ideas for numerous OE initiatives.

Discussion

The RLOE Network was formed to leverage Open Education as a means to achieve social justice in higher education. As Diaz Eaton et al. (2022) assert, content alone is not sufficient to move education forward towards equity, but it is necessary to create diverse communities that center accessibility, equity, pedagogy, and inclusivity.

Most open education development work (OER adoption, OER creation, open pedagogy) across the U.S. and Canada, is at the individual professional development level (see for example the SPARC Open Education Leadership Program and the Open Education in Practice Hub). Also, while these programs may include aspects of social justice, this is usually not a primary focus. This disjointed approach often results in short term, unsustainable gains where individuals working in isolation and with little support can easily give up their attempts to transform their teaching or their departmental practices such as textbook adoption. From an analysis of four key open education organizations, de Langen (2018) found that community building and collaboration is essential for the sustainability of open education. RLOE was successful in using a non-hierarchical networking approach to empower incipient leaders, and support capacity building and sustainability of open education initiatives at the institutional level. By building a community network that humanizes practices, RLOE laid the foundation for transforming systems in a sustainable way. (See Figure 1 and quotes in the results). Maintaining contact and connections across various constituents of RLOE through the stages of development and implementation allowed for ongoing collaboration. In addition to the intra-RLOE methods of collaboration and network

building, sustainability was enhanced through ongoing external partnerships with organizations that promote open practices and provide further networking (i.e. OE Global, MI Virtual, CCCOER).

Our emphasis on leading from the middle and valuing the exchange of ideas across all members of the network resulted in positive outcomes towards supporting Open Education initiatives addressing underserved and underrepresented student populations. The necessity of using a distributive model of expertise as opposed to using one (or a few) star experts was emphasized by FemTechNet in their development of a Distributed Open Online Course (DOOC) (FemTechNet, 2013). A networked approach is important not only for increasing the circulation of ideas and resources, but for addressing inequities in the ability to contribute ideas and resources – to have a voice that counts. Recognizing that faculty and staff with their own lived experiences as marginalized individuals have especially potent vantage points for understanding the needs of marginalized students, the RLOE network leveraged this expertise and wisdom to support participants to create open education strategic plans with the principles of diversity, equity, and inclusion at the center. The unplanned emergence of the RLOE HSI collaborative further illustrates the power of networking to amplify voices that are not always heard.

Critical to the RLOE leadership development model was the incorporation of student voices throughout the program by using a ‘students as mentors to faculty/staff’ approach. Many organizations attempt to include student voices (for example, via student panels), but these often fall short, especially with marginalized communities. Our deep integration and amplification of the perspective of marginalized students inspired and assisted RLOE participants to create and implement open education plans that focused on social justice and more precisely targeted the needs of underrepresented and underserved students. These diverse student leaders/mentors were utilized consistently to inform the work of RLOE at various program implementation stages and to talk about their personal lived experiences. At the RLOE Summit, our student mentors served as keynote speakers and discussion facilitators. RLOE student mentors provided their perspectives throughout every stage of the program. For example, when one of the students expressed his disdain for materials where he could not see himself reflected, this impacted participants and helped inspire them to keep the student perspective centered as they forged their institutional open education plans.

A key aspect of the RLOE program was the emphasis on increasing cultural representation in OER, and on open pedagogical strategies that can bring greater social justice into higher education. While lowering costs for students by increasing the rates of adoption of OER is important for addressing economic injustices, cost savings alone are not sufficient to tackle the more deeply entrenched disparities experienced by marginalized students (Tillinghast, 2020; Cannell, Macintyre, & Hewitt, 2015). On a pathway towards systemic change, RLOE cohort participants created institutional initiatives (see Table 1) to introduce and support pedagogical approaches which provide agency for marginalized students to speak for themselves, and/or to use or develop OER which reflects the cultural diversity of their students. For example, the majority of the participating institutions created professional development events or programs for faculty/staff that specifically address the incorporation of student voice and social justice in open pedagogy.

Our recommendations for others seeking to form similar networks are:

1. Recruit, empower, and incorporate diverse faculty and staff leaders into every stage of the development of an Open Education network. Sometimes this means stepping aside to let others drive the work. Along with leaders that have open education expertise, include leaders with lived experiences of marginalization and with expertise in the scholarship of social justice, diversity, equity, and inclusion regardless of their open education experience and knowledge.
2. Empower and incorporate underrepresented and marginalized students as leaders and mentors to faculty, staff, and administrators in higher education. Provide them with the ability to be heard and included in policy decisions.
3. Provide abundant synchronous and asynchronous opportunities for participants to have ongoing mutual support and collaboration for a sustained period of time (one year or more) as they develop plans and projects at their institutions.
4. Use an open pedagogical approach in the running of the network which underscores a student/trainee/participant's agency in the processes of learning. Teach open pedagogy by modeling it, and cultivate a nurturing environment as the primary focus.

Conclusion

The RLOE network embraced human-centered ways of being, learning, and knowing. Centering students and breaking down traditional hierarchical models of leadership allowed all network members, including marginalized members, to see themselves as leaders and enabled the majority of them to create and implement a variety of open education strategies aimed to improve learning outcomes for the underserved and underrepresented students on their campuses. The RLOE network serves as a powerful model for the potential replication, expansion, and democratization of the benefits and leadership of Open Education worldwide.

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Conflict of Interest Statement

Co-author, R. T. Taylor, served as the external evaluator for the RLOE Network program and continues to protect the confidentiality of survey responses by only sharing aggregated, de-identified data with the leadership team. By maintaining the anonymity and confidentiality of responses, the authors are not aware of any conflict of interest to report.

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Appendix

Appendix A: RLOE Leadership Program Cohort Post-Survey

Thank you for taking a moment to complete this survey. Your responses will be used to understand the RLOE Leadership Program and will be used to guide the implementation for future workshops and ongoing support for developing open education strategic plans. Information supplied on the survey will be confidential and only available to Dr. Robin Taylor, external evaluator for the ECMC Foundation funded grant. All results will be reported in the aggregate and no names will be identified in public-facing reports.

*Consider your knowledge level for each item below. Using a scale of 0 (None or Very little knowledge) to 4 (Very high amount of knowledge), indicate your level of knowledge for each learning area **BEFORE** or **PRIOR** to participating in the RLOE Leadership Program.

	0 - None or Very Little	1 - Little	2 - Some	3 - High	4 - Very High
How to develop and leverage my leadership skills to serve marginalized students					
How OER can be used specifically to support underrepresented and underserved students How Open Educational Practices can empower all students, especially marginalized students					
The issues involved with student data privacy rights and risks					
How to make an open education initiative sustainable					

*Consider your knowledge level for each item below. Using a scale of 0 (None or very little knowledge) to 4 (Very high amount of knowledge), indicate your level of knowledge for each learning area **NOW** or **AFTER** participating in the RLOE Leadership Program.

	0 - None or Very Little	1 - Little	2 - Some	3 - High	4 - Very High
How to develop and leverage my leadership skills to serve marginalized students					
How OER can be used specifically to support underrepresented and underserved students How Open Educational Practices can empower all students, especially marginalized students					
The issues involved with student data privacy rights and risks					
How to make an open education initiative sustainable					

* Indicate your level of agreement with each of the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The program enhanced my content knowledge of open education.					
The program advanced my understanding of how to include open education practices within a strategic plan for my institution.					
The program provided the necessary resources to create an open education plan for my institution.					
The program empowered me to engage others at my institution to collaborate in the development of our institution's open education plan.					

The program offered ample opportunities to network with other participants.					
The program introduced me to peers who have provided mentorship and support to understanding open education.					

Comments related to your level of agreement with components of the event?

* Indicate your level of agreement with each of the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Engaging faculty with open educational resources can promote teaching and scholarship.					
Open educational practices are a mechanism for positive change in inclusive education.					
I am confident I can develop an open education strategic plan that meets the needs of my institution.					
I have administration support for developing and implementing an open education strategic plan.					

Comments related to your level of agreement with components of the event?

* Indicate your level of agreement with each of the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The readings and materials were adequate and useful to the aims of the RLOE Leadership Program.					

The asynchronous learning opportunities were relevant and supportive for creating an open education plan.					
The synchronous learning opportunities were relevant and supportive for creating an open education plan.					
The organization of the learning environment (facilities, tools, materials, participant groupings, etc.) supported learning.					
The exchange of ideas that took place during the program will influence my work.					
I would encourage others to attend the RLOE Leadership Program.					
The program was useful and practical.					

Comments related to your level of agreement with components of the event?

* Rate your level of satisfaction with the following components of the RLOE Leadership Program

	Very dissatisfied	Dissatisfied	Neither	Satisfied	Very satisfied
The format of the event.					
Timing of the event over a three-week time period.					
The information provided.					
The organization of the program					
The timing of synchronous learning opportunities.					

Comments related to your level of agreement with components of the event.

Please take a few moments to respond to the following open-ended questions. Your answers will greatly assist the leadership team in how to serve you in future virtual meetings and improve future program offerings.

What new ideas have you gained from participating in the RLOE Leadership Program?

How do you plan to incorporate these ideas into your work going forward?

What do you feel was (were) the most useful aspect(s) of the RLOE Leadership Program? (Please use 2 sentences or more.)

What specific suggestions do you have to improve this RLOE Leadership program?

Additional comments about your experience.

Appendix B: RLOE Cohort Follow-Up Survey

Thank you for taking a moment to complete this survey. Your responses will be used to understand different ways the RLOE Leadership Program may have impacted cohort participants and will be used to highlight the program for the ECMC Foundation. Findings will be used to help the leadership team modify aspects of the program as well as to use findings to seek additional funding which can support ongoing RLOE activities.

Information supplied on the survey will be confidential and only available to Dr. Robin Taylor, external evaluator for RLOE. All results will be reported in the aggregate and no names will be identified in public-facing reports. Hence, individuals responses will not be shared with the leadership team or others.

* Indicate each of the ways participating in the RLOE Network has benefited or supported your work.

Check all that apply:

_____ No benefits or support.

_____ RLOE encouraged me and/or built my confidence to ‘lead from the middle’, i.e., to use my agency to advance open education initiatives at my institution.

_____ RLOE provided easy to find resources/tools for open education (OE), including resources related to OE sustainability, stewardship, policies, and professional development.

_____ RLOE helped me generate new ideas for open education initiatives at my institution.

_____ RLOE helped me center principles of diversity, equity and inclusion into my open education work.

RLOE encouraged me to involve students across open education initiatives at my institution.

RLOE provided opportunities to engage in dialogue about the advancement of social justice in my open education work.

Other (Please specify):

Comments related to how RLOE supported or benefited your work?

* Indicate which of the following statements are true based on your experience participating in the RLOE Network. If a statement is not applicable to you, please leave it blank. **As a result of participating in RLOE:**

Not applicable.

My institution has made progress towards shifting structures and paradigms to support open education.

I have strengthened my commitment to open education.

I have made additional connections within my institution with others who support open education initiatives.

I have made additional connections with other RLOE members outside of my institution.

I have increased my connections to the broader open education community.

Other (Please specify):

Comments related to how RLOE supported or benefited your work?

* Do you feel participating in the RLOE Network will have an impact on your future work?

Yes

Not sure

No

Please explain.

Do you have suggestions for what might make the RLOE Network more effective?

What factor(s) or challenges do you face for implementing open education initiatives at your institution?

What factor(s) at your institution are most supportive for implementing open education initiatives of your open education plan?

Additional comments?

Appendix C: Treemap of coded responses for “What do you feel was the (were) the most useful aspect(s) of the RLOE Leadership program?”



Examples of open-ended comments in participants own words:

- ■ Being able to review and borrow from other strategic plans. Also the huge emphasis on the potential for open to instil greater equity and accessibility in classrooms - powerful reminder.
- ■ ■ ■ Engagement with RLOE team members and community as well as a direct talk from students was really helpful. All the wonderful presentations and discussions helped me realize there are a number of aspects to consider for sustainable OER strategy development.
- ■ ■ ■ One on one mentoring. Hearing about other people's plans. Hearing from students. Seeing examples of others' strategic plan language and discussing the issues. Karen was always very affirming and engaged.
- ■ ■ Meeting others who are working on similar problems, looking at other people's ideas, and thinking in a structured way about planning.

- I appreciate the effort to help us develop an open education strategic plan for our university and providing on-going help to work on this plan over the next year.
- Meeting and discussing theoretical and practical ideas with like-minded colleagues helped me conceptualize how I could be a leader in OER. Hearing the students discuss their experiences and ideas motivated me to make it happen.
- The breakout rooms were where we had guidance and time to work, but it was not enough time. The reading material is excellent and will be using that for more information.
- The networking opportunities were wonderful, as were the connection to resources.
- OER assist marginalized groups. OER supports equity, inclusion, and culture. Students can also produce OER and make it accessible to other students.

Appendix D: RLOE Network Program OE Implementation

Table 1

Coding frame created from themes generated across institutions of the RLOE Network for Goals, Activities and Accomplishments with counts across institutions (N = 45) with efforts for each category.

Category	Example criteria for thematic coding of Goals, Activities and Accomplishments of OE Plans	N	%
Professional Development	Includes training, PD, and/or certification of OE/OER for faculty/staff	37	82.22%
Awareness	Includes initiatives to further OER awareness amongst students, faculty, staff, administration (campus)	33	73.33%
Partnerships	Includes efforts to join additional OE networks & professional societies as well as participation in national or regional training programs	33	73.33%
OER Creation /Adoption	Includes efforts to contribute materials to OER repositories; 31 course conversion pushes; swapping commercial texts for open textbooks/materials for courses; and adoption of OER/OEP	31	68.89%
Diversity, Equity, & Inclusion (DEI)	Includes reference to 1) fostering educational equity through access and/or inclusivity; 2) promoting sense of belonging for all students; and/or 3) utilizing OER/OEP as tools for	31	68.89%

	accessibility, diversity, inclusion, or culturally responsive teaching		
Funding	Refers to institutional financial support for OE (e.g., hiring/adding personnel, providing stipends to faculty members, operating budgets) and/or seeking additional funding through grants, etc.	26	57.78%
Student Input	Incorporates student voice into OE planning and implementation (e.g., student focus groups, surveys, panels, and committee representation)	23	51.11%
Faculty Support	Includes specific initiatives to support faculty commitment to OE (e.g., mini-grants, work reduction/release time, creating resources for faculty, etc.)	21	46.67%
Course Adoption	Refers to small and large scale adoption of OER across institutional courses, departments and schools	18	40.00%
Recognition	Initiatives to recognize OE efforts through showcases and/or awards	16	35.56%
Cost Savings	Focused on cost-savings of OE for students	15	33.33%
Course Marking	Includes initiatives that support course registration systems to code courses as OER	15	33.33%
Taskforce	Includes networking and capacity building efforts within an institution to form advocacy groups, support teams, and/or campus alliances which support developing and implementing OE policies	14	31.11%
Metrics	Included efforts to focus on measures of success for OE efforts	12	26.67%
Administrative Support	Specifies collaborating and meeting with institutional leadership to promote OE and OP awareness and advocacy	11	24.44%
OE Pedagogy	Refers to innovative approaches to using OER and OP	11	24.44%
Policy	Includes initiatives to align OE goals within existing programs or plans (e.g., revise/rewrite or forge new policies)	9	20.00%

around Open, and/or working with promotion/tenure committees to recognize open ed work)

ZTC	Focus to include ZTC (Zero Textbook Costs) within institutional courses	8	17.78%
OER Guide	Refers to the creation or adoption of OE guide or framework	7	15.56%