

Strong Schools: Collaborative Open Access Textbooks

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Abstract: Open educational resources (OER) are learning materials that are available for free under a creative commons license. Open educational resources and open-access materials have made it easy to connect students to a world of learning at their fingertips. This paper outlines how to use open-access textbooks as collaborative writing projects drawing from a case study with 22 students at the Asian University for Women. The authors provide an overview of the intersection of open access textbooks and collaborative writing projects and describes the results of the case study.

Introduction

The term open educational resources (OER) was coined in 2002 during a forum held by the UNESCO as the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes. In the past two decades, the concept has gained an undeniable momentum. Several nations and states have formally adopted or announced policies relating to the adoption of OER and open textbooks (Wiley et al., 2014).

Open educational resources and open-access materials have made it easy to connect students to a world of learning at their fingertips. However, despite the wide availability of video tutorials, open online courses, podcasts, wiki pages, articles, and even textbooks, it is challenging to find the right fit for your students in their specific learning environment, particularly in underserved rural communities or education in emergencies settings. As educational content is increasingly available for free over the Internet, making effective use of online learning materials has become the new frontier for students and teachers. Information is everywhere; but how can learners actively make sense of their everyday information ecology and contribute to their learning environment?

This paper outlines how to use open-access textbooks as collaborative writing projects drawing from a case study with 22 students at the Asian University for Women (AUW). The authors provide an overview of the intersection of open access textbooks and collaborative writing projects and describes the results of the case study.

Open Pedagogy: Open Access Textbooks and Collaborative Writing as Sustainable Assignments

Open pedagogy refers to instructional methods that emphasize openness, cooperation, and student-centered learning. This method challenges traditional, teacher-centered approaches and encourages students to actively participate in their own and one another's learning. Open pedagogy has been proven to have a number of benefits for students, including increased motivation and engagement, deeper learning and comprehension, and the development of crucial 21st-century skills such as teamwork, critical thinking, and communication (Garreton, 2017). Additionally, it has been demonstrated that open pedagogy increases access to education, especially for marginalized groups (Geser, 2019). Despite these advantages, implementing open pedagogy might bring obstacles, such as a lack of clear norms or best practices, student privacy issues, and problems in assessing student learning in a non-traditional context (Hegarty, 2020).

Initially, the primary motivation for open textbooks was to address the high costs of learning materials in higher education, where they can account for a quarter of a student's expenses. This led to a number of widely successful projects, such as *OpenStax* and *BCcampus*. Over time the focus shifted to pedagogic opportunities (Ferguson et al., 2017). Open textbooks can challenge the established relationship between students and knowledge (Ferguson et al., 2019). The open textbook is adaptable. Students can edit and amend an open textbook as part of their study or, as with our case study, create their own textbook as a form of authentic assessment.

According to a case study by Wang & Wang (2017) adopting an open-access textbook is more work for the teacher compared to a commercial textbook. The authors suggest discipline-based communities of practice (CoP) to ease the workload problem. Open pedagogy projects offer an alternative, student-centered opportunity to adapt or create regionally relevant content. As Wiley et al. stated: "*Localization is one of the most important and least understood aspects of open educational resources*" (Wiley et al., 2014, p. 786).

Collaborative writing provides a social context for learning and fosters both interdependence and a sense of learner independence. Fung (2010) observed that during the collaborative process, students learned how to write from peers, share knowledge and make decisions together, deal with disagreements and conflicts, use strategies, and collaborate. The collaborative production of an open textbook exemplifies the concept of 'non-disposable assignments'. In contrast to 'disposable assignments' that are perceived as tedious to complete by students and are loathed to grade by instructors students, open pedagogy offers the opportunity to develop lasting, meaningful products (Wiley & Hilton, 2018).

Case Study

The Asian University for Women Master of Arts in Education program is unique in the sense that it has been launched with aspirations to empower women in education, particularly the brightest young female reformists/educational entrepreneurs dedicated to creating an impact

through educational development in society. The majority of the students who took part in this class are Afghan evacuees and/or belong to minority communities seeking to bring a change.

The “Strong Schools” course is a project-based learning class that integrates students’ future paths as educators, policymakers, innovators, and school founders. Over the winter term of 2022, students have been working collaboratively to write a book about ‘Strong Schools’ that covers multiple aspects of initiating or teaching in a secondary school. Each of the chapters reflects students’ critical ideas, observation, creative thinking and lessons from distinguished guest speakers from around the globe, with the sessions held simultaneously in the class. The chapters are also a fruitful outcome of students’ interactive discussion and mind-mapping activities throughout the sessions. In addition, the book remarks a crucial part of the modern educational process, the use of diverse technology and tools in education and learning.

We used the e-book publishing platform ‘Pressbooks,’ along with a variety of other technologies, to support multimodal content and introduce students to instructional design tools and techniques – i.e., Hypothes.is for peer review, Genially for infographics, Anchor for podcasting, and Badgr for microcredentials. The classroom set-up itself is the epitome of Education Technology in distant learning, where it’s fully digitalized with a hybrid mode of delivery, with students sitting in the class and the Professor delivering lectures via Zoom from USA to Bangladesh, with the Teaching Fellow’s support on the ground for class activities.

1. EDUCATION IN EMERGENCIES

EDUCATION FOR CHILDREN IN CRISIS
Mursal Amanzai and Fatima Qaseemi

Learning Objectives

At the end of this chapter, the readers will be able to understand:

- Definition, background and aims of education in emergencies.
- The value and importance of education in emergencies.
- Implementation of Education in emergencies.
- Strategies, subjects, and equipment needed for education in emergencies.

INTRODUCTION:

More than 500 million of the world's 1.2 billion school-age children live in countries where there are humanitarian crises including wars, natural disasters, and disease outbreaks. Approximately 75 million children are already falling behind in their education, are receiving insufficient instruction, or are in danger of quitting school completely. They run the risk of being forced into child labor, child marriage, exploitation, and recruitment into armed groups in the absence of safe venues to learn. Between 2013 and 2017, there were over 12,700 attacks against schools, which resulted in injuries to over 21,000 students and staff across at least 70 countries. (TheWorld, December 27, 2018).

Education is typically the first service to be interrupted after a conflict or natural disaster and the last to be restored. Governments are frequently overburdened by the needs, and traditional relief assistance prioritizes the basic needs of the population (food, water, shelter, and protection), with just 2 to 4 percent of funds going toward education. There is an \$8.5 billion annual budget shortfall for education in times of need. (Education cannot wait)

Higher education is sometimes viewed as a luxury in times of crisis, while being one of the areas of humanitarian help that receives the least funding. In contrast to the global average of 34%, barely 1% of the more than 65 million individuals who have been displaced by war and strife in the world now attend university. However, in areas of war, where it is essential for establishing new civilizations and preserving stability, the demand for higher education is particularly essential. Higher education is closely associated with more opportunities, stronger economic growth, better public health, and safer neighborhoods. It provides young people with inspiration and a way to build self-sufficient futures.

6. TEACHING WRITING SKILLS WITH BLENDED LEARNING APPROACH FOR SCHOOLS' LEARNERS

Sima Ahmadi and Anzo Sultan

Chapter Overview

Receive a badge

Objective Abstract Introduction Blended Learning models Collaborative Technologies and Tools

Importance of writing skills in schools Blended teaching methodologies a for writing skills Teaching Learning Cycle and genres of writing Evaluating 'lessons' performance Conclusion

Author: Sima Ahmadi & Anzo Sultan. 03/ 01/ 2023

able effect (Vo et al., 2017). Albaji (2020) specifically looked at how well-blended learning helped Saudi female students improve their written communication abilities in English and how satisfied they were with the teaching strategy. The results show that blended learning encourages interaction and communication while also lowering stress levels in the English writing course. Similarly to this, Keshta and Harb (2013) employed an experimental design to examine the efficacy of blended learning in educating students in Palestine about English writing. According to the study, blended learning greatly aids pupils in improving their writing abilities.

Let's listen to the advice of Dr. Brisk and Dr. Fink regarding the evaluation process of class and students in the following podcast:



10. SOCIAL EMOTIONAL LEARNING AND MENTAL WELLBEING

Alizeh Sultan, Sawdah Hoque, and Khurshid Arif

CONCLUSION:

Good mental health is the key to living a good life and social-emotional learning is important for constructing and maintaining good mental health. Teaching young kids how to handle mental stress and navigate all the ups and downs of life is essential and including SEL in the school curriculum is the best way to make sure that young kids are learning the skills to take care of their mental well-being. Integrating SEL into the school curriculum is essential but we have to also be careful in how we implement it. The teacher has to be properly trained so they don't accidentally turn any issues worse. There also has to be a balance between collective and individual well-being. And to achieve the best outcome both school teachers and staff need to be trained properly.

REVIEW QUESTIONS:

- Think about the class you are in or teaching, do you/ or your school incorporate SEL in the curriculum? If SEL is incorporated is there any gap? How can it be improved and how do you think SEL should be modified for your context?

MENTAL HEALTH CHECK IN ACTIVITY - ORGANIZE MENTAL HEALTH AWARENESS SESSION / PLAY MENTAL HEALTH MANAGEMENT BINGO WITH STUDENTS.

- Introduce your topic Know Your Feelings and Mental Health Management Bingo
- Map out how the activity will work and its steps for the students/teachers.
- Students will explain and draw 3 of their coping mechanisms for stress or another mental health issue. We can put all of the mechanisms on a bingo board and play MIMM BINGO.
- To play, students require a copy of each sheet and a pencil, and each Bingo worksheet will contain a list of positive coping mechanisms that are related to maintaining good mental health. Students can check on each box as the teacher/facilitator explains and the class as a whole discusses each coping mechanism, its benefits and other implications. It's easy for students to play, and just as easy for teachers or parents to join in!

Figure 1: Sample Chapter Content from <https://pressbooks.pub/schools/>

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The class resulted in a textbook with 11 chapters, organized in the three sections, as well as a podcast channel. The book can be accessed at <https://pressbooks.pub/schools/>.

Students used their chapter as writing samples in applications, and productively interacted with writing and review tools that they were previously unfamiliar with. The students were also empowered to co-design the grading criteria by developing rubrics.

Rubric for Chapter Content: Total Grade 40%				
Criteria	Poor	Acceptable	Good	Exemplary
Chapter Summary/ Learning Objective 4 marks	The summary of the chapter does not consider the "who, what, when, where, why, and how" while we are reading the chapter. Learning objectives, referred to as learning outcomes, do not refer to learning outcomes. The statements do not clearly describe what students are expected to achieve as a result of instruction.	The summary of the chapter is considered good. The "who, what, when, where, why, and how" while we are reading the chapter. Learning objectives, referred to as learning outcomes, described well what students are expected to achieve as a result of instruction.	The summary of the chapter is considered very well. The "who, what, when, where, why, and how" while we are reading the chapter. Learning objectives, referred to as learning outcomes, clearly and concisely describe what students are expected to achieve as a result of instruction.	The summary of the chapter is considered excellent. The "who, what, when, where, why, and how" while we are reading the chapter. Learning objectives, referred to as learning outcomes, are stated in a way that is clear, concise, and measurable.
Introduction/ Background 7 marks	Poor background information, does not give reasons for interest, does not have a relevant description of the topic's relevancy and historical context or development/ discovery of topic. Uses less than 3 references.	Uses Adequate background information, gives reason for interest, describes the topic's relevancy and uses historical context or development/ discovery of topic at least 4-8 references.	Uses good background information, gives reason for interest, describes the topic's relevancy and uses historical context or development/ discovery of the topic to give the reader a clear idea about the chapter and more than 10 references.	The introduction is relevant, states the main topic and background information clearly, gives reason for interest, describes the topic's relevancy and uses historical context or development/ discovery of the topic to give the reader a clear idea about the chapter and more than 10 references.
Literature Review 10 marks	Literature survey includes irrelevant studies unrelated of the chapter topic. Literature is chosen from questionable sources. The literature review is not properly organized. Less than 10 literature sources was used.	Literature survey includes relevant studies, based on the global, regional and local aspects of the chapter topic. Literature is chosen from reliable sources. The literature review is somewhat organized. More than 10 literature was used.	Literature survey includes relevant studies, based on the global, regional and local aspects of the chapter topic. Each literature is chosen from reliable and updated source. The literature review is organized in a sequential way. More than 10 literature was used.	Detailed literature survey of relevant studies, based on the global, regional and local aspects of the chapter topic. Each literature is chosen from reliable and updated source. The literature review is organized and synthesized in a logical way that makes it easy for readers to follow. More than 15 literature was used.
Chapter Body/ Sub-Topic 5 marks	No direction/connection of subtopics was followed between the topic and the body part of the chapters.	Few direction/connection of subtopics was followed between the topic and the body part of the chapters but all sections and paragraphs are not in logical order.	Many direction/connection of subtopics was followed between the topic and the body part of the chapters but some sections and paragraphs are in logical order.	All direction/connection of subtopics was followed between the topic and the body part of the chapters but every section and paragraph are in a logical order such as from general ideas to a specific ending which the overline teacher.
Illustrations/ Graphics 3 marks	The use of graphics is not relevant and does not match the flow of the chapter. The graphics do not help readers learn about the relevant topic clearly and it does not visually connect them with the content. The graphics used are unprofessional and primary.	The use of graphics seems good. Flow of the chapter. The graphics help readers learn about topics more.	The use of graphics is in the correct way and flows of the chapter. The graphics help readers learn about the relevant topics more clearly and it connects them with the content. The graphics used are well and correct.	All direction/connection of subtopics was followed between the topic and the body part of the chapters but every section and paragraph are in a logical order such as from general ideas to a specific ending which the overline teacher.
Conclusion 5 marks	Conclusion does not adequately summarize the main points. No suggestions for change, improvement and/or opinions are included.	The conclusion summarizes the main topics but is repetitive. There is no suggestion for change and/or opinions included.	The conclusion summarizes the main topics concisely without being repetitive. There is some suggestion for change and/or opinions included.	The conclusion summarizes the main topics concisely without repeating previous sentences; Gives an well-thought-out and logical opinions and suggestions for change/improvement.
Language Proficiency - Grammar - Structure - Punctuation & Spelling	Distorting errors in spelling, sentence structure, and punctuation.	Many errors in spelling, sentence structure, and punctuation.	Few errors in spelling, sentence structure, and punctuation.	No errors in spelling, sentence structure, and punctuation.

Figure 2: Chapter Rubric Developed by Students

Furthermore, students reported an increase in both writing skills and digital literacy skills based on the exposure to and use of a wide variety of online tools and environments.

Table 1 provides an overview of the components we developed in this course, the flow of activities, the tools, and the results. For future iterations of the course we will consider writing sprints and additional mid-course writer conferences.

Table 1: Session and activity flow of 'Strong Schools' course

Session	Collaborative Writing Activity	Description	Tools	Results / Products
1	Forming groups, selecting topics	Students form writing teams of 2-3 peers and decide upon a topic. To avoid overlap, they individually state preferences, then form groups, then decide on a first and second choice. Students draft book covers, and jointly decide on title.	Typical collaboration tools, Post-Its Whiteboard. E-Book environment (e.g. Pressbooks)	Author Teams Table of Contents Book cover drafts Book title
2	Structure and genre decisions	The main topic of the chapter is placed in the center of the mind map. Important themes or questions form branches connected to the center. In addition, students (with guidance) decide on standardized genre expression for each chapter (e.g., learning objectives, expert corner, review questions, glossary terms). Students upload photo and bio for author section of chapter.	Mindmap or Concept Map Collaboration tools (brainstorming, mood board) to decide on text types for the book.	Chapter outline (entered in Pressbooks) Sample chapter structure (for example as

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				Word or Google doc).
3	Literature Review	Students use academic databases and search engines, and organize the results using a bibliographic reference management tool.	Zotero	Reference section of chapter, literature added to outline
4	First Draft (extended outline)	Writing teams work on an extended outline, producing text.	Pressbooks	More robust draft, including glossary terms, learning objectives, paragraphs
5	Writer Conference	Writing teams meet with instructor for feedback,	Zoom	Directions for writing team
6	Peer Review	Each chapter is assigned 2-3 reviewers, who leave comments, questions and suggestions using online annotation tool with limited visibility to the peer review circle.	Hypothesis	Hypothesis group, annotations per chapter
7	Interview/ Podcast	Each chapter team conducts and records 1-3 expert interviews. Students write a script, and recruit expert interview partners.	Anchor.FM	Podcast, transcript or excerpt is part of chapter, video/audio can be embedded in chapter.
8	Infographic	Infographics offer an opportunity for students to summarize information.	Genial.ly	Multimedia infographic embedded in book chapter.
9	Microcredentials	Based on their learning objectives or transfer learning activities students create badges that readers of their chapter can earn.	Badgr (Canvas Credentials)	Badge integrated into chapter content.
10	Final Draft, Quality Criteria	Students finalize their chapter, and generate rubrics to evaluate each other's work.	Pressbooks Grammar.ly	Close-to-finished chapter Rubrics for chapter quality
11	Final (Peer) Review	Reviewers provide feedback, author teams have chance to make final revisions. Teachers conduct plagiarism check and share results with students.	Hypothesis Plagiarism checker Grammar.ly	Final edit notes for each chapter
12-13	Publication & Celebration	Each author team presents on their chapter content and learning outcomes. This may take two sessions, depending on group size.	Presentation tools, recording	Presentation recordings, reflection.

Implications or Discussion

In a collaborative open access textbook project, the instructor enlists the students as textbook authors and editors. The class work can be based on an existing textbook, or the students can research and write their own content. It is an example of project-based learning that offers a way to encourage students to engage critically with open educational resources, strengthen their research and writing skills, contextualize learning material to their region, language and culture ('decolonializing learning', cf. Charles, 2019) and enhance coding and web literacy skills. In a multilingual classroom, it can empower bilingual learning and target-language acquisition. While the adoption of open access material and the co-creation of learning material should not be seen as a golden ticket to student success, in our experience it was an extremely empowering and gratifying process for the student writing teams. As Goode et al. (2021) pointed out based on survey data at their institution, the readiness to access and use textbooks varies across disciplines and is interconnected with students' perceptions of usefulness. In our case, the graduate students needed a strong writing sample to apply for future learning and work opportunities, which made them intrinsically motivated to produce high-quality open access work. In addition, the class enjoyed connecting to guest speakers, and they were able to present their work to an international audience on the podcast 'Silver Lining For Learning' (Bonk, 2023).

Conclusion

Writing is a transformative learning activity: It allows learners to organize their thoughts, communicate effectively, receive feedback from others, correct misconceptions, improve and clarify their understanding, and, as a result, create an artifact that has meaning and value for themselves and others. In their writing, students can draw from a wide variety of sources from OER repositories. The case study demonstrated what students can achieve when instructors allow them to use their creativity and match this with academic rigor. It aligns with the observation by Fung (2010) that successful collaboration depends not only on the learner's language skills, but also on the right attitude and motivation to succeed in the group.

References

- Bonk, C. (2023). Bans Don't Work in an Open World: Afghan Women Find Educational Opportunities in Bangladesh. *Silver Lining for Learning Podcast, Episode 140*. <https://silverliningforlearning.org/episode-140-bans-dont-work-in-an-open-world-afghan-women-find-educational-opportunities-in-bangladesh/>
- Charles, E. (2019). Decolonizing the curriculum. *Insights*, 32(1), 24.
- Ferguson, R., Barzilai, S., Ben-Zvi, D., Chinn, C.A., Herodotou, C., Hod, Y., Kali, Y., Kukulska-Hulme, A., Kupermintz, H., McAndrew, P., Rienties, B., Sagy, O., Scanlon, E., Sharples, M., Weller, M., & Whitelock, D. (2017). *Innovating Pedagogy 2017: Open University Innovation Report 6*. Milton Keynes: The Open University, UK.
- Fung, Y. M. (2010). Collaborative writing features. *RELC journal*, 41(1), 18-30.

TCC 2023 Conference Papers

- Garreton, P. (2017). Open education practices in higher education: An overview of initiatives, challenges and future directions. *Journal of Open, Flexible, and Distance Learning*, 21(1), 1-10.
- Geser, G. (2019). Open Pedagogy: Empowering students through open education. *Journal of Interactive Technology and Pedagogy*, 12.
- Gibson, D., Ostashewski, N., Flintoff, K., Grant, S., & Knight, E. (2015). Digital Badges in Education. *Education and Information Technologies*, 20(2), 403–410.
- Goode, J. R., Morris, K. K., Smith, B., & Tweddle, J. C. (2021). Why Aren't My Students Reading: Faculty & Student Research Unveiling the Hidden Curriculum of Course Material Usage. *International Journal for the Scholarship of Teaching and Learning*, 15(1), 2.
- Hegarty, B. (2020). An exploratory study of open pedagogy in higher education. *Journal of Open Education Studies*, 9(1), 1-13.
- Wang, S., & Wang, H. (2017). Adoption of open educational resources (OER) textbook for an introductory information systems course. *Open Learning: The Journal of Open, Distance and e-Learning*, 32(3), 224-235.
- Wiley, D., Bliss, T. J., & McEwen, M. (2014). Open Educational Resources: A Review of the Literature. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 781–789). Springer.
- Wiley, D., & Hilton Iii, J. L. H. (2018). Defining OER-Enabled Pedagogy. *The International Review of Research in Open and Distributed Learning*, 19(4).
<https://doi.org/10.19173/irrodl.v19i4.3601>