



**Open Language Learning  
Task B**

**Developing a NOOC as an Open Educational Resource**

**Aida García Vicuña**



**MÁSTER UNIVERSITARIO EN LAS TECNOLOGÍAS DE LA  
INFORMACIÓN Y LA COMUNICACIÓN EN LA ENSEÑANZA  
Y EL TRATAMIENTO DE LENGUAS**

**UNED**

## Table of contents

<b>1. Introduction.....</b>	<b>3</b>
<b>2. Open Educational Resources</b>	
2.1 Features .....	5
2.2 Typologies of OER and OER users .....	6
2.3 Affordances and drawbacks.....	7
<b>3. Designing a NOOC as an OER</b>	
3.1 Features and pedagogical framework of NOOCs and MOOC-like courses .....	8
3.2 Target .....	9
3.3 Methodology .....	10
3.4 Structure .....	11
3.5 Technical aspects of the NOOC .....	12
<b>4. Conclusion .....</b>	<b>13</b>
<b>5. References.....</b>	<b>14</b>

## 1. Introduction

There is a close relationship between Open Educational Resources (OER) and ICT in the growing e-learning environment. Institutions such as UNESCO and the EU became interested in promoting and adopting OER during the last decade. Comas-Quinn & Borthwick (2015) state that “a discipline-based approach to creating, sharing and reusing open content has yielded fruitful results for languages in the UK context” (p. 96). The need to provide open content for formal and informal learning seems well established since it reduces the costs of education by replacing the traditional, rather expensive, textbooks and it may also contribute to enrich the educational landscape.

During the health world crisis, thousands of educators had to respond to the challenges of emergency remote teaching. Collaborative global communities of teachers such as #OER4Covid and the COVID-19 Open Education Community Contributed Resources have launched initiatives that attempt to address this issue.

Surprisingly, all these initiatives and the shift towards digital learning only increased awareness of OER by teachers and educators, but, to an extent, they failed to integrate open practices and materials in the classroom. As Lederman (2021) notes, this failure could be explained by different factors: 1) the time teachers had to invest in adapting to emergency remote teaching took up their time to explore other alternatives to the primary textbook such as OER. 2) Teachers frequently did not want to impose another challenge over students already overwhelmed with changes caused by the new emergency situation. 3) Already in pre-pandemic times, OER had to compete against commercial publishers who also adapted their business models towards digital materials.

For these reasons, some researchers proposed that these practices were to be integrated into the traditional classroom, beyond the pandemic and beyond higher

education contexts, whereby these resources have been commonly used (Van Allen & Katz, 2020).

As it is stated in the Creative Commons blog, “Open education is not a short-term fix to a passing problem—it is a long-term solution to ensuring equitable, inclusive access to effective educational resources and learning opportunities” (Vèzina & Cable, 2020, para. 5).

With this background in mind, the purpose of this paper is to report on the development, publishing and sharing of an OER for second language learning, namely a NOOC (Nano Open Online Course), in the form of an introductory course on Data-Driven Learning (DDL) methods to enhance students’ academic English writing skills. The motivation to choose this particular methodology is, firstly, that I have been researched the field during the last years, however, there are little OER available where DDL or iDDL (indirect DDL) is used. Secondly, I believe that this approach brings autonomy to the learner, once some instructions are provided. The aim is for the learner to use corpora for their advantage, knowing its main tools and strategies. Thirdly, the target also suits the DDL approach, being learners with approximately a B2 level who are interested in improving their academic writing skills, such as independent learners, researchers who share their works in English language or university students writing for different disciplines.

The present work is organized in two main parts. The first one explores an overall view of OER: their features, most important types and their advantages and disadvantages. The second one is focused on the creation of an OER, a NOOC, how it was designed, what ICT tools were used to fit the educational approach and the challenges encountered in the process.

## 2. Open Educational Resources

### 2.1 Features

OER are defined as “materials used to support education that may be freely accessed, reused, modified and shared by anyone” (Downes, 2011). They are also closely linked to the online medium due to the wide distribution that is achieved through it. Wiley coined the term OER in 1998 and also developed what he called the “5Rs framework” (2014), describing the rights for accessing the materials: retain, reuse, revise, remix and re-distribute. *Retain* entails having retentions rights, owning the content and controlling its copies, for instance, by managing how it is stored, duplicated and downloaded. *Reuse* implies that the resource can be used in a number of ways, for example, embedded in a website, in a video, in a face-to-face classroom, etc. *Revise* is about the right to modify the content, by adapting it to other educational context needs, translating it to another language, peer-reviewing it, amongst others. *Remix* implies the right to mix open content with another one, creating something new, for instance, a mashup. *Re-distribute* means that the materials can be shared freely, including the original content and re-mixes.

This framework is legally supported by certain permissions, i.e., open licenses. Creative Commons (CC) licenses are the most common ones. In CC licenses, the author determines the extent of the permissions they provide to the users by choosing amongst six licenses which range from the most restrictive (CC BY-NC-ND) to the least restrictive (CC: BY). However, one right is always reserved, the right of attribution, whereby the author of the material needs to be credited.

Social media has changed the scenario since each network has its own copyright settings by default. Thus, a paradoxical situation arises when these platforms try to maintain control over the content generated by users and, at the same time, users need

these platforms to achieve broad distribution of their content. This concerns educators who create their own content and upload it to a social network. Therefore, it is important that we choose the appropriate license for our work, whenever possible.

OER and open practices can be found in specific repositories or by narrowing search results adding usage rights filters in a web browser like Google. Some of the most popular repositories are OER Commons, Merlot and Openstax. There are also certain repositories where open resources and materials are focused on language learning, such is the case of COERLL (Center for Open Educational Resources and Language Learning) or the case of LangOER, for the teaching of less used languages in the EU.

## 2.2 Typologies of OER and OER users

OER range from single exercises to multi-functional and complex learning platforms. OER may be software, e-learning platforms such as an LMS (Learning Management System), course materials, videos, rubrics or journals, each one meeting different learners' needs. Hylén (2021) distinguishes between the media and the type of resource: "Resource types might be courses, animations, simulations, games etc. and resource media might be web pages on the Internet, radio, television or paper" (p. 8). However, this classification is not very helpful since nowadays the vast majority of resources are found online. If we choose to classify open content according to the educational context in which they are used, resources can be related to formal and informal learning settings. Nevertheless, the expansion of MOOC-like (Massive Open Online Courses) learning might also blur this distinction, since most of the times these free courses are created and launched by universities, integrating "formal traditional courses with informal learning experiences" (Cha & So, 2020, para. 2).

Interestingly, Weller et al. (2016) also identified three types of OER users: Firstly, “OER active” is a group of users who are the real advocates of open practices and beliefs, being well established in OER communities. Secondly, “OER as facilitator” is a group formed by individuals who are aware of OER issues, may be familiar with licenses, however, OER are not their main interest as educators. Thirdly, “OER consumer” is a group of users mostly formed by learners, rather than educators, generally using open content as an aid to complete their formal studies. These users lack information about licenses and they are interested in free access resources, whether they are pirated or legal.

### **2.3 Affordances and drawbacks**

One of the main opportunities that OER offer is that they provide equal access to knowledge for any learner. As Van Allen & Katz (2020) state: “disparities in student access to resources can be lessened through OER” (p. 209). Considering that some learning communities only have access to outdated books, holding their students back, open content may be a great alternative since it is constantly reviewed by other members of the OER community. This support is extremely helpful, especially within our field of interest, EFL (English as a Foreign Language) teaching, given that many English teachers are non-native speakers. In communities like Rebus, educators can submit their projects for peer review. Likewise, they may contribute by reviewing OER submitted by others. As argued by the open source software movement “what you give, you receive back improved” (Hyland, 2013).

Moreover, another important advantage of open content is that it is free to produce, unless printed copies are needed for the face-to-face classroom. Besides, OER variety motivates educators to adapt the curricula to the particular needs of their students.

Regarding OER shortcomings, I would highlight the difficulty to find specific open content, since the number of resources is overwhelming. In addition, formal education institutions, especially outside the context of higher education, are frequently unprepared to integrate these practices into the classroom. Some of them lack computer rooms or ban the use of mobile devices on their premises. This entails obstacles to the use of OER, given that the majority of them are meant to be used online or in multimodal learning settings. Other setbacks are the lack of a system to track the use and adaptation of one's own OER and the lack of user friendly environments.

### **3. Designing a NOOC as an OER**

#### **3.1 Features and pedagogical framework of NOOCs and MOOC-like courses**

NOOCs are shorter courses than MOOCs that can be completed within few hours, usually intended for time-constrained learners. Its structure is very similar to that of MOOCs. Firstly, an introduction to the course, usually in form of a video. Secondly, contents are showcased, structured in several modules, divided in small capsules of information either in text or audio-visual format, followed by different kinds of assessment, such as self-assessment or peer-assessment. Overall, learners can engage in discussions about the content in a forum, which can also be the place to submit their replies to open ended questions proposed by the teaching team. In terms of certification, participants can obtain badges for every module and a final badge once they complete the course (Pérez Sánchez et al., 2017).

It is noteworthy to mention that not all NOOC or MOOC-like courses are open educational resources. Even though this is the general understanding, they should be released under an open license to consider them as such. However, as Stracke et al. note



(2019), “some MOOCs are licensing all their materials as OER and curating them outside the MOOC platform for easy re-usage and adaptation” (p. 338).

MOOCs and MOOCs-like approach to education is underpinned by Connectivist Learning Theory (Fontana & Leffa, 2018) and by Constructivist Vygotskian theories, thus, learner centric in nature (LeCounte & Johnson, 2015). An interesting type of MOOC was suggested by Teixeira et al. (2019): iMOOCs. These open courses are aimed to guarantee equal opportunities of quality learning for all, reassuring that every participant succeeds in their learning journey. They combine elements from non-formal education with formal education settings, include voluntary graded assessments and a balance between reflective, individual work with “networked” collaborative activities developed by means of student-driven content.

### **3.2 Target**

The target of this OER are independent learners, with approximately a B2 level of English proficiency according to the Common European Framework of Reference (CEFR). It would be desirable that participants were also digitally competent. These prerequisites are justified by the importance for learners to comprehend the contents and to be able to complete the proposed tasks. The focus of the NOOC is on improving academic writing skills, thus, two main groups who could be interested in taking the NOOC are identified: 1) University students from any discipline who are asked to write assignments in English and 2) Researchers from different fields who are starting to write their articles in English.

### 3.3 Methodology

DDL is usually described as a learner-centred method focused on introducing to the learner authentic and natural instances of language produced by native speakers (Talai & Fotovatnia, 2012). It is been often argued that DDL methods are of inductive nature: within this view, teachers are facilitators rather than prescribers and learners would achieve language proficiency by being exposed to a number of texts written by native speakers from which students would be able to infer lexico-grammar patterns by themselves.

However, appropriate language scaffolding should be provided when designing any material in writing instruction (Hyland, 2013), whether in the form of examples, exercises or analysis. Being this NOOC of introductory nature, it is mostly grounded in learners' previous knowledge and the provision of examples of how corpus-based tools could be used for achieving greater autonomy in their writing. In fact, the first two modules of the NOOC contain teacher-developed corpus-based materials and teacher-directed tasks, thus, within the iDDL (indirect use of DDL) approach. It is not until learners start the third module that they can get their hands on corpora themselves, by using Google Scholar and Sketch Engine.

### 3.4 Structure

The NOOC consists of six sections. The first section is a stand-alone video recorded by myself which is aimed to explain the stages of the learning itinerary, pre-requisites to the course, approximate time of completion and the tools that learners are going to use. This is followed by four sections which are the core contents of the course. As above mentioned, they consist of four modules. Each of them has a similar structure, since the intention was to achieve certain coherence within its multimodality. Therefore, every

module has a lesson with multimedia content about the learning outcomes expected from the module, another lesson including instructional contents in the form of text and/or multimedia, tasks (fill-in the blanks and self-assessment tests) and reflection over open-ended questions related to each module. The sixth section contains two questionnaires to be submitted once the course is finished. One of them is aimed to be answered by teachers or educators and the other one by students. Some of the answers would provide demographic data which could serve for further analysis on students and educators profiles. The rest of the questions are meant to improve and revise the OER.

### **3.5 Technical aspects of the NOOC**

The NOOC is launched under a CC license (CC BY-NC-SA). This means that it can be remixed, modified and used for non-commercial purposes only. Authorship should be credited and new creations built upon the NOOC should to be licensed under the same terms. Although I created most of the materials, to meet open movement's philosophy and practices and enrich the course, I also reused other existing OER, crediting their authors. Some of these OER are embedded in the lessons and the rest of the open content can be accessed through hyperlinks.

Wordpress is the platform on which the NOOC is built and published. I considered other alternatives such as Wix and other hosting sites related to OER like Merlot and Edublogs. However, the latter ones do not offer LMS APIs with ready and easy to use templates and I was already acquainted with some of the Wordpress functionalities.

I chose the "LifterLMS REST API" which in its free version allows to create an online course that include the following affordances:

- 1) Features to motivate the students such as a progress bar to track their own progress and a system of achievements and badges. Every time learners complete a

lesson, an achievement is shown on their screen to encourage their advances. Once they complete a module, they are awarded a badge and once they complete the whole NOOC, a final badge is provided as a certificate of completion.

2) Features favouring openness: Students do not need to register for the course, provide any e-mail address or other personal data. Besides, each lesson can be viewed without completing the previous ones.

3) Features that facilitate course navigation: Buttons and hyperlinks to the homepage, to the previous and following lesson and sidebar displayed on the left.

Regarding tasks, open-ended questions are answered in the comments section and simple quizzes can be created and added directly through the API. However, for more complex self-assessment exercises, I had to turn to other alternatives and embed the tasks in the lessons. Therefore, other tools in addition to Wordpress were used: I chose Curriki Studio to create fill-in exercises and to provide feedback when wrong answers were selected. Genial.ly was used to create interactive presentations, as well as Powtoon, in order to produce introductory videos to each module. Finally, Camtasia was used to record my own screen and voice in the “Course welcome” video.

Interestingly, Wordpress also features a “Stats and Insights” tool. In the absence of a learning analytics layer, it provides the creator of the NOOC with relevant information, such as how long visitors have remained on the site, from which other sites are accessing, etc.

### **3.2.5 Sharing the NOOC**

Lastly, once the NOOC was revised, published and piloted, it was shared on my own Twitter account created for academic purposes ([@aidavicu](https://twitter.com/aidavicu)). The website that hosts

the NOOC ([englishclassroom.online](http://englishclassroom.online)) will also serve for the purpose of hosting the current essay in PDF format.

#### **4. Conclusion**

This paper aimed to report on the creation of a NOOC by explaining the rationale behind the steps taken in the process, such as the choice of ICT tools and pedagogical approach used. It was also important to consider how and up to what extent open content and practices have shaped the current state of education.

However, based on the literature reviewed on the matter, there are still important barriers to OER adoption in the traditional classroom, such as lack of OER awareness outside the open content community.

With regard to the creation of the NOOC, it has been found that it can benefit the educational community and its own author, by discovering new practices and by contributing to knowledge dissemination. Nevertheless, some opportunities were missed, especially by failing to expand the course towards social networks or to implement task and collaborative learning experiences. In other words, it could be improved by incorporating some of the mentioned iMOOCs' key features.

## 5. References

- Cha H. & So HJ. (2020) Integration of Formal, Non-formal and Informal Learning Through MOOCs. In Burgos D. (Ed.) *Radical Solutions and Open Science. Lecture Notes in Educational Technology*. Springer, Singapore.  
[https://doi.org/10.1007/978-981-15-4276-3\\_9](https://doi.org/10.1007/978-981-15-4276-3_9)
- Comas-Quinn, A., & Borthwick, K. (2015). Sharing: Open Educational Resources for Language Teachers. In R. Hampel & U. Stickler, *Developing Online Language Teaching* (pp. 96–112). New York: Palgrave Macmillan.  
[https://doi.org/10.1057/9781137412263\\_7](https://doi.org/10.1057/9781137412263_7)
- Fontana, M., & Leffa, V. (2018). Moocs for Language Teaching: a Study on Call From the Connectivist Perspective. *Alfa : Revista de Lingüística*, 62(1), 73–86. Retrieved from <http://doi.org/10.1590/1981-5794-1804-4>
- Hyland, K. (2013), ‘Corpora and innovation in English language education’, in K. Hyland and L. Wong, (Eds.), *Innovation and Change in English Language Education*. New York: Routledge.
- Hylén, J. (2021). Open educational resources: Opportunities and challenges. *Proceedings of Open Education*. From [http://www.knowledgeall.com/files/Additional\\_Readings-Consolidated.pdf](http://www.knowledgeall.com/files/Additional_Readings-Consolidated.pdf)
- LeCounte, J. F., & Johnson, D. (2015). The MOOCs: Characteristics, Benefits, and Challenges to Both Industry and Higher Education. In Nafukho, F. M., & Irby, B. J. (Ed.), *Handbook of Research on Innovative Technology Integration in Higher Education* (pp. 228-247). <http://doi:10.4018/978-1-4666-8170-5.ch011>

- Lederman, D. (2021). Awareness of Open Educational Resources Grows, but Adoption Doesn't. In *Inside Open Education*. Retrieved from <https://www.insidehighered.com/digital-learning/article/2021/03/18/pandemic-didnt-speed-adoption-open-educational-resources-outlook>
- Pérez Sánchez, L., Jordano de la Torre, M., & María Martín-Cuadrado, A. (2017). NOOCs for the development of university teachers' digital competences. A pilot experience by the UNED (Universidad Nacional de Educación a Distancia). *Red - Revista de Educación a Distancia*, (55).
- Schmidt, P. (2007, November). "6.3 Licensing Guidelines." UNESCO OER toolkit. *WikiEducator*. Retrieved March 21, 2008, from [http://www.wikieducator.org/UNESCO\\_OER\\_Toolkit\\_Draft#Licensing\\_guidelines](http://www.wikieducator.org/UNESCO_OER_Toolkit_Draft#Licensing_guidelines)
- Stracke, C., Downes, S., Conole, G., Burgos, D., & Nascimbeni, F. (2019). Are MOOCs Open Educational Resources? A literature review on history, definitions and typologies of OER and MOOCs. *Open Praxis*, 11(4), 331-341. doi:<http://dx.doi.org/10.5944/openpraxis.11.4.1010>
- Talai, T., & Fotovatnia, Z. (2012). Data-driven learning: A student-centered technique
- Teixeira, A. M., Mota, J., Morgado, L., & Do Carmo, M. (2019). Can MOOCs close the Opportunity Gaps? The contribution of social inclusive pedagogical design. *Revista Fuentes*, 21(2), 239–252. <https://doi.org/10.12795/revistafuentes.2019.v21.i2.08>
- Van Allen, J., & Katz, S. (2020). Teaching with OER during pandemics and beyond. *Journal for Multicultural Education*, 14(3–4), 209–218. <https://doi.org/10.1108/JME-04-2020-0027>



Vézina, B. & Cable, G. (2020). Education in times of crisis and beyond: maximizing copyright flexibilities, in *Creative Commons blog*, 31 March, retrieved from: <https://creativecommons.org/2020/03/31/education-in-times-of-crisis-and-beyond-maximizing-copyright-flexibilities/>

Weller, M., Arcos, B. d. I., Farrow, R., Pitt, R., & McAndrew, P. (2016). 4. Identifying Categories of Open Educational Resource Users. In Blessinger, P., & Bliss, T. (Eds.), *Open Education: International Perspectives in Higher Education*. Open Book Publishers. Retrieved from <http://books.openedition.org/obp/3545>