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Practical Usage of OER Material in the EFL Classroom

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Abstract

In this research work, we want to follow the idea of using open educational resources (OER) in a classroom to gather practical experiences. The topic of our choice is English as a foreign language (EFL), because in our opinion a lot of teaching content should be available. The preparation of the lectures, as well as the final lecturing, is described to understand how OER can be used in the EFL classroom. The feedback of the pupils and the lessons learned point out that there are more obstacles than expected, mainly because of the strict copyright law in German-speaking Europe.

Keywords: EFL, language learning, open education, open educational resources

1. Introduction

Despite the fact that open educational resources (OER) movement has been around for 15 years, little attention has been paid with regard to practical usage in secondary education. Instead, the focus has been on tertiary education as well as education for developing countries. Geser [1] points out his benefits of using open educational resources in education (p. 21):

- OER offer a broader range of subjects and topics to choose from and allow for more flexibility in choosing material for teaching and learning.
 - OER leverage the educational value of resources through providing teacher's personal feedback, lessons learned, and suggestions for improvements.
 - OER provide learning communities, such as groups of teachers and learners, with easy-to-use tools to set up collaborative learning environments.
 - OER promote user-centered approaches in education and lifelong learning. Users are not only consumers of educational content but also create own materials, develop e-portfolios, and share study results and experiences with peers.
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Since those early days of the OER movement, different publications have pointed out why OER are highly relevant for higher education [2–4] as well. For example, the necessity of an own OER strategy is carried out by Schaffert [5] and executed for the first time at Graz University of Technology [6] in Austria. Despite these initiatives OER is less represented in secondary education right now, although open educational resources allow teachers to adapt teaching material in order to suit the needs of their students. Rather than having to worry about copyright-related issues, more time can be spent on creating quality material.

The author had a personal interest in determining how OER material can be used in secondary education in a subject such as English as a foreign language (EFL) where schoolbooks are said to be the primary material used [7]. Therefore, a study was conducted in an Austrian middle school with students in their second year of English study. Over the course of 2 weeks, students were taught using OER material only.

During the study, influencing factors, such as the time needed to create the material, complexity of licensing, as well as students' age and feedback, were evaluated.

The goal of this study was to determine how English as a foreign language (EFL) lessons would look like if exclusively OER material rather than traditional schoolbooks would be used.

2. Research design

The term open educational resources (OER) was first introduced in 2002 during the UNESCO Forum on the Impact of Open Courseware for Higher Education in Developing Countries [8]. According to the UNESCO websites, OER refer to “teaching, learning or research materials that are in the public domain or that can be used under an intellectual property license that allows re-use or adaptation (e.g., Creative Commons)” [9].

This means that OER material can freely be shared, remixed, and reused by both teachers and students in order to allow for the best learning experience possible. A term often associated with and seen as the “de facto standard” of OER is Creative Commons (CC) ([10], p. 7).

Creative Commons (CC) is a nonprofit organization that was founded in 2001 [11]. It allows users to release material under a license that is not “all rights reserved.” It should be noted that Creative Commons licenses do not work against copyright but work together with it and can be seen as an extension of it [11, 12]. At the moment (July 2017), users are able to license their works under one of the six licenses as well as a special public domain license. These licenses are “open” to various degrees. However, on the most basic level, material licensed under a CC license is allowed to be freely shared, modified, and even sold without restrictions as long as credit to the original source is provided. Altogether, there are four different “modules” that can make up a Creative Commons license. For the purpose of the study, particular attention was paid to exclusively use the two most open licenses: BY and BY SA.

In November 2015, a 2-week long study was conducted in an Austrian middle school in order to determine how lessons using OER material would look like with regard to EFL classes.

The middle school was selected because the staff, as well as the students, were open to trying out and using OER material in the future. A class with 30 students in their second year of English study participated in the study. The students were 11–12 years old, and the class consisted of 21 female and 9 male students.

As mentioned in the introduction, according to a study regarding schools in Germany, English is one of the subjects in which textbooks are most frequently used ([7], as cited [13], p. 36). Similar results can be assumed with regard to Austrian schools. All in all, over the course of 2 weeks, six lessons were taught focusing on the grammar topics which present perfect simple as well as comparative forms. The subject taught was English as a foreign language.

English as a foreign language (EFL) refers to English being taught in a country in which English is not the primary language and the teacher is a non-native English speaker. In most cases, both the teacher and students share a common mother tongue that can be used in order to overcome potential problems and misunderstandings. ESL, or English as a second language, on the other hand, refers to English being taught in a country in which English is the main language, and the lessons are taught by a native speaker of English. In this context, both students and teachers do not share a mother tongue, and therefore English needs to be used as a lingua franca. The above paragraph is based on information provided by LinguaServe Germany [14].

In February 2015, a preliminary study was conducted in the selected middle school. The preliminary study allowed for familiarization with the available equipment and setting of the classroom and school as well as the students. Each classroom was equipped with a desktop computer and projector. While the school had two computer labs available, English teachers do not frequently use these during their regular classes. Therefore, it was decided against using online material and instead focused on offline material in order to better simulate how OER material could be used by EFL teachers in Austria.

In order to increase reusability, the so-called free cultural licenses [15], i.e., BY and BY SA, were chosen for the material used and created over the course of the study. With the exception of one audio file that the students listened to, all the material followed the abovementioned principle [16].

As mentioned previously, 30 students participated in the study. During the course of the study, one of two English teachers was always present which allowed for consulting the teachers in order to receive feedback with regard to possible changes from students' regular behavior due to their familiarity with the said students. The students were in their second year of English study which according to the Austrian curriculum [17] means that their English level corresponds to the A1 level of the Common European Framework of Reference for Languages [18]. Due to the fact that the students were part of a special class called "English as a working language," other subjects such as mathematics, chemistry, and music were also taught in English. Therefore, it can be assumed that their level is slightly higher compared to other second year students of English in Austria.

It should be noted that OER is of particular interest for Austrian schools and teachers because, while Austrian copyright laws permit classroom usage of copyrighted material under certain restrictions, the law also states that this does not include material explicitly created for teaching purposes ([19], § 42/6).

In order to evaluate the results found during the study, an evaluation plan was created. It consisted of the three criteria briefly discussed below:

1. The first criterion was preparation time. The potential time-saving aspect of using OER material has been noted on various occasions [20, 21]. In order to evaluate the time needed to create the material, a time sheet was kept throughout the research process. The time spent researching the topics and exercises as well as the time needed to adapt and properly cite pre-existing material was included.
2. The second criterion was feedback. At the end of the research period, students were asked to evaluate the OER lessons in a special 30-minute feedback session at the end of the study in order to determine if there were any differences with regard to course content and students' motivation. In addition to that, feedback was received from the two English teachers present in order to better determine how the students' behavior was compared to their regular English lessons and whether or not any differences could be noticed.
3. The final criterion that was evaluated was the target group. Due to the results of a previous project seminar regarding OER material for EFL students in Austria, the hypothesis derived that finding appropriate material for ESL/EFL learners with a relatively low level of English (A1) would prove to be problematic. Furthermore, due to the fact that OER is currently predominantly associated with the tertiary sector, and little research has been done with regard to secondary education, this is another aspect that needs to be considered if OER material is supposed to be used in lower-level EFL classes in the near future.

3. Field study

According to the CC website, the best practice for crediting CC material is TASL [22]. Due to the fact that the material was created to be used offline, difficulties arose due to the hyperlink length of some of the source material. Unlike material created for online usage which can simply link to the source, the hyperlink of the source material needed to be included in full. Therefore, it was decided against including the links to the source material on the actual worksheets. However, the teachers were provided with a separate document containing all the links to the source material. In addition to that, for a memory game created during one of the lessons, the title of the source images was omitted from the files provided to the students. This was done in order to avoid giving away the correct answers and thus defeating the purpose of the exercise.

One of the benefits of OER material is that teachers are able to mix and match various resources in order to create material best suitable for their students. One of the exercises used as a base

for another exercise was released under a CC BY SA 4.0 version. SA stands for share alike and means that new material containing a SA license material needs to be released under the same license. The original exercise compared PDAs in order to practice the comparative and superlative forms. In order to make the exercise useful for students in 2015, it was updated to compare smartphones instead (**Figure 1**). While the base exercise as well as the pictures and texts used were all released under either BY or BY SA, the version numbers of the licensed material are different.

Therefore, some time was spent trying to evaluate what to do in a case like this. Due to the fact that this seems to be a common problem with SA licenses, the CC website provides a detailed explanation on how to deal with version numbers of SA licenses that do not match. In a case like this, the latest SA license included should be used as the license for the entire document [11].

During the study, in addition to being taught about the topics of shopping and vacation which included exercises for the grammar points present perfect simple and the comparative, students also received a brief introduction to OER and Creative Commons licenses. The reason for this is that the students are the future generation, and therefore it is important to make them aware of issues such as copyright infringements and possible solutions, e.g., material released under CC license.

Furthermore, in order to raise even more awareness for the topic of OER and CC licenses, the majority of the final lesson was used to create a class poster together with the students (**Figure 2**). For this purpose, the students were asked to bring pictures from their previous vacations, attach the said pictures to the poster, and write a short sentence about their experiences during the vacation using the present perfect simple which they had learned in one of the previous lessons. It should be noted that during the study the students were also introduced to the concept of “right to one’s own picture”; therefore, the pictures included on the poster did not feature people but rather featured objects and landscapes [19].

In the second to the last lesson, the students were introduced to the concept of OER and CC licenses. During this lesson, the students heard about the various modules that make up CC licenses, and the benefits of OER material compared to copyrighted material were explained. This was done because the poster of the students created would be released under a CC licenses. Therefore, it was important to raise students’ awareness.

Due to the fact that the students were underage, a written permission by the parents needed to be obtained before the poster could be released under a CC license. In order to protect the integrity of the students, the poster was not released under a BY or BY SA license but was instead released under a BY NC ND license. This means that the poster can be shared but cannot be modified or resold. Additionally, while explaining the various licensing modules to the students, it was discovered that they had difficulties with the SA concept; therefore, it was decided against using a license that contained the SA module.

For the future research with older students, it would be beneficial to include them in the license choosing process in order to get them more involved with OER as a whole and start a possible discussion regarding which license to use and why. However, due to the fact that

Smartphone Comparison

	<p>Title: BlackBerry Passport Author: Maurizio Pesce CC BY 2.0 http://creativecommons.org/licenses/by/2.0</p>	<p>Title: Mockup/drawing of iPhone 6S Author: Rayukk at English Wikipedia CC BY SA 3.0 http://creativecommons.org/licenses/by-sa/3.0/</p>	<p>Title: Samsung Galaxy Note Edge Author: GadgetsGuy CC BY 3.0 http://creativecommons.org/licenses/by/3.0/</p>
Name	Blackberry Passport	Apple iPhone 6s	Samsung Galaxy Note Edge
Price	~ € 530	~ € 738	~ € 655
Memory	32 GB	16/64/128 GB	32/64 GB
Weight	194g	143g	174g
Battery	~ 30 hours	~ 20 hours	~ 25 hours
Display	1440×1440 pixel	750 x 1334 pixels	1600 x 2560 pixels
Easy to Use	😊😊😊😊😊😊	😊😊😊😊	😊😊😊😊
Features	13 MP Camera BlackBerry Assistant BlackBerry Keyboard	12 MP Camera 3D Touch 4K Video	16 MP Camera Fingerprint sensor TouchWiz Interface
Operating System	Blackberry OS 10	iOS 9	Android 4.4
	Text Source: BlackBerry Passport Wikipedia, the free encyclopedia CC BY SA 3.0 http://creativecommons.org/licenses/by-sa/3.0/	Text Source: iPhone 6S Wikipedia, the free encyclopedia CC BY SA 3.0 http://creativecommons.org/licenses/by-sa/3.0/	Text Source: Samsung Galaxy Note Edge Wikipedia, the free encyclopedia CC BY SA 3.0 http://creativecommons.org/licenses/by-sa/3.0/

True or False:

1. The BlackBerry is cheaper than the iPhone.
2. The Samsung Galaxy has a better camera than the iPhone.
3. The iPhone is easier to use than the Samsung Galaxy.
4. The BlackBerry has a larger memory than the Samsung Galaxy.
5. The Samsung Galaxy has a bigger display than the iPhone.
6. The BlackBerry is more expensive than the Samsung Galaxy.
7. The iPhone is lighter than the BlackBerry.
8. The battery of the iPhone is better than the battery of the Samsung Galaxy.
9. The BlackBerry is heavier than the Samsung Galaxy.

Which Smartphone:

1. is the easiest to use?
2. is the cheapest?
3. has the best features?
4. has the biggest display?
5. has the most buttons?

What do you think? Which one:

1. Is prettiest?
2. Is best for teenagers?
3. Is best for you?

Based on:
COMPARATIVES AND SUPERLATIVES
Walton Burns
<http://www.englishadvantage.info/lesson/comparativesuperlatives/>
http://creativecommons.org/licenses/by-sa/4.0/deed.en_US
CC BY SA 4.0

Maria Haas
<http://creativecommons.org/licenses/by-sa/4.0/>
CC BY SA 4.0

Figure 1. Worksheet: smartphone comparison.

Figure 2. Class poster.

prior written permission needed to be obtained, the license was chosen beforehand. However, the students were involved in the naming process, that is to say that the class as a whole chooses the author name under which the poster was released.

4. Results and discussion

4.1. Preparation of the lecture

All in all, it took about 39 hours to prepare the lessons. Around 20 hours were spent trying to find suitable OER material online that could be used as a base for the lessons. The first 4 hours of the research period were spent comparing Austrian EFL schoolbooks as well as finding material relevant to the Austrian curriculum. This was done in order to get a better understanding of the students' prior English knowledge and to ensure that the created OER lessons would be useful and suitable for students in the future. This task would not be necessary for experienced secondary school teachers. The remaining 15 hours consisted of adjusting the exercises to suit the students' needs and licensing material under a CC license.

Throughout the research period, instances such as a website no longer hosting material under a CC license and a website releasing material under "a Creative Commons license" without any reference to a particular CC license led to an additional increase in preparation time.

It should be noted that the preparation time cannot be seen as representative for all teachers due to the limited prior teaching experience and the fact that certain material needed to be newly created due to the lack of available material for the target group.

Initially, it was believed that repositories with EFL and ESL material could easily be found. The reason for this was that OER material is predominantly produced in English or by institutions situated in either the USA or Europe [23]. However, as mentioned in the introduction, the OER movement is also mostly focused on the tertiary sector. Therefore, despite the fact that material is available in English, the students' level is assumed to be relatively high. While there are repositories available that provide users with suitable language learning activities, the beginner activities are mostly focused on Romance languages such as Spanish or French. Very little material with regard to EFL/ESL beginner students was found. While it would be possible to reuse language learning material for other languages, due to the lack of Romance language knowledge, this was not possible during this study [24].

Due to the fact that a relatively small number of repositories with material for secondary education as well as EFL material in a suitable level could be found, so-called little OER were frequently used throughout the study process [25].

Big OER refers to repositories often hosted by renowned universities that provide users with material for a variety of subject areas. Since these repositories are backed by abovementioned universities, users are more likely to trust the provided material [25].

According to Clements and Pawlowski [26], trust is one of the main reasons that determine whether or not a teacher decides to reuse the material.

Little OER, on the other hand, are websites that are hosted by individual users. Therefore, due to the fact that rating systems are often missing, the quality of the material cannot always be easily determined [25]. Throughout the research process, it was found that teachers often had their own blogs or websites where they offered material they had created themselves. In addition to providing the material, some of the websites also included information and ideas on how to incorporate the material in a classroom setting. Therefore, despite the fact that according to Weller [25] little OER are seen to be of lesser quality than big OER, this could not be confirmed during the study.

One of the reasons why so little suitable material for English beginner students was found might be due to the fact that teachers are not openly sharing their material online. This does not mean that no sharing takes place but rather that this sharing happens covertly, e.g., in password-protected forums or via email. Due to the fact that teachers are often unaware of copyright-related issues [27], sharing in this close-knit setting allows them to do so, seemingly without having to worry about possible copyright infringement. In turn, this means that OER material that could be shared and be useful for a larger group of people is hidden in password-protected networks ([28], p. 4). Therefore, it is important to make people as a whole and teachers in particular more aware of the OER movement and the benefits it entails.

OER allows teachers to draw from each other's experiences instead of having to reinvent the wheel. Due to the fact that material is allowed to be changed and adapted, students can highly benefit from OER material. One of the misconceptions found during Richter and Ehlers' [27] study with teachers in Germany was that the interviewed teachers thought that offering and putting material online were enough in order to ensure that the said material could be shared, remixed, and reused by their colleagues. Once again, this reinforces the fact that awareness

raising and educating about copyright as well as the OER movement is important in order for more people to benefit from material created by others.

One of the difficulties found during the research period of the study was that material marketed as OER did not necessarily only include material that was licensed under a Creative Commons license or material in the public domain. One of the examples was a shopping dialog. While the text was released under a BY license, the image credit was provided as “Google images.” Due to the fact that no link to the source images was provided, it could not be determined whether or not the images were released under an appropriate license.

It should be noted that particularly with regard to pictures, proper credit was not always present. Therefore, instead of simply not using the exercises, the parts that were credited properly were used, while others were omitted. However, in order to be able to remove pictures without credit and for reuse to be feasible, it is important that the material is offered in an easily editable format [23, 29]. An example for this can be providing users with PDF files for easier printing as well as a Word document if the user wants to edit the provided material.

The pictures used for the exercises were almost always obtained from the Flickr website [30] which allows users to search for pictures with a varying degree of openness. As mentioned previously, suitable material for the students’ level could not always be obtained; therefore, new material is needed to be created. It should be noted that pictures found on Flickr were also used as a base to create new material for the students.

4.2. Lecturing

The students’ regular English class was predominantly teacher-centered, and the textbook provided by the teacher was primarily used throughout the lessons. Over the course of the study, particular attention was paid to use a more student-centered and interactive teaching approach.

During the first lesson, students were provided with a shopping dialog in order to act as an awareness-raising activity [31] for the comparative and superlative forms. They were asked to read the dialog together with a partner and form concepts about the new grammar point. This allowed students to actively contribute to the grammar explanation process rather than merely receiving information from the teacher. Additionally, the dialog provided students with a guideline for creating their own shopping dialog during the lesson.

The second lesson was used to reinforce the comparative and superlative forms. Students were asked to read a text about a raccoon trying to find the ideal car and highlight the appropriate comparative forms. The text was chosen because it was seen as an interesting read that still included grammar points from the last lesson. Afterward, a game was played in order to practice the grammar formation. For this purpose, the class was divided into two teams, and students had to race to the board and add the comparative and superlative forms to words provided on the board.

Lesson 3 was the last lesson to deal with comparisons. Prior to this lesson, students had never directly compared people or objects, e.g., “Lisa is taller than Tim.” Therefore, as a warm-up

activity for the lesson, students were asked to compare the two English teachers present. The class enjoyed the exercise, and a few students even asked to volunteer when talking about criteria such as height, age, and hair length. Afterward, students were asked to find the best smartphone for one of the English teachers. They received a worksheet which included information about three different smartphones as well as comprehension questions. At the end of the lesson, the answers to the questions were compared, and students were asked to vote for their favorite smartphone.

In order to incorporate the upcoming Halloween holiday, students were asked to create and write about a “superpet” as their homework. The worksheet included images of superheroes as well as sentences and useful words and phrases. In addition to writing about their superpet, students were asked to draw a picture. This part was included to allow students to be more creative and to make their texts more visible.

The fourth lesson was created to give students an overview of the differences between British and American English. In Austrian schools, students are predominantly taught British English, and often times they are not aware of the differences between the two language variations. In addition to providing an overview of some of the main differences between British and American English, the lesson also acted as an introduction for the topic of vacation and traveling to other countries.

Pictures of various objects with different terms in British and American English were used as a stimulus for the students. The pictures were stuck to the chalkboard located in class, and index cards with the corresponding terms were randomly distributed on the teacher’s desk. Students were then asked to come to the front of the class and work together in order to add the correct terms to the pictures. Other differences with regard to spelling and pronunciation were discussed in class. Later, students were provided with the pictures and terms located on the chalkboard. They were then asked to cut the worksheet in order to create their own memory game. This activity not only reinforced the vocabulary but also allowed students to create the material themselves, an activity that would not easily be possible with a textbook.

The last two lessons introduced the present perfect tense. As mentioned previously, the last lesson predominantly consisted of students creating a class poster using sentences with the present perfect alongside vacation pictures. Prior to that, a worksheet as well as a listening comprehension was used to familiarize the students with the present perfect tense.

4.3. Feedback

At the end of the study, a 30-minute feedback session was held with the students. Prior to the study, a preliminary study was conducted in which it was discovered that the students’ feedback had mostly focused on the teacher rather than on the material itself. Therefore, the students were provided with some guiding questions during the feedback session in order to ensure that feedback regarding the OER material was received.

The students’ feedback was overwhelmingly positive, with only 2 of 30 students noting that they did not like the OER material but preferred using the schoolbook. The others noted that the material was as good as or better than the material they used during their regular classes.

Additionally, they positively mentioned the games and activities that were incorporated in the lessons. According to an email received by the two English teachers, the students were more engaged and motivated than usual, and one of the teachers noted that she thought that this was due to the fact that the material was created specifically for the students which made the exercises more “authentic” rather than, e.g., simply telling students to open the book on page 45.

One of the complaints the students frequently mentioned was the number of worksheets they received. In order to decrease the amount of paper used for student copies, as well as to speed up the communication process, email was supposed to be used. However, during the preliminary study, only about one-third of the students made use of the email feature. This is why it was decided against using it for the main study. Additionally, the school website had recently been restructured, and students were not allowed to use mobile devices in class. Therefore, the material was provided only in hardcopy format.

Over the course of the six lessons, the students were provided with nine worksheets each. This means that all together over the course of 2 weeks or six lessons around 420 copies were produced. This not only meant a huge amount of paper usage but also led students feeling frustrated because they needed to hole punch each sheet and loose sheets could easily get lost. While it would have been possible to decrease the number of copies by printing double sided, it was decided against it in order to increase flexibility.

5. Conclusion

Open educational resources are a great opportunity for teachers to increase the quality and enjoyment of students. As could be seen throughout the study, the students enjoyed working with the material and were eager to learn. This suggests that students would not be opposed to using OER material in class instead of using their schoolbooks.

However, the study also showed that while it is possible to exclusively use OER material in an EFL setting in an Austrian school, at the moment there are certain challenges encountered when doing so. Therefore, in order for OER material to be used on a regular basis in an EFL classroom in Austria, certain changes need to occur.

While it is possible to use OER material in an offline setting, there are certain drawbacks associated with it. In addition to the paper used to create hardcopies, citing Creative Commons material became more difficult and confusing due to the offline setting. Further research needs to be conducted in order to determine if measurements such as providing material online could decrease the time needed to prepare the lessons.

Furthermore, it is important to spread awareness of the OER movement as a whole in order to make teachers aware of its benefits. Doing so will stop teachers from sharing material in a private setting and allow a larger audience to benefit from the material created by others. Therefore, the author suggests implementing a course with regard to OER usage as a requirement in the curriculum for teacher training in order to allow the future generation of teachers to learn about the benefits associated with using OER material and provide an introduction to OER usage.

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References

- [1] Geser G. Open Educational Practices and Resources – OLCOS Roadmap 2012. Salzburg. 2007. Available from: <http://www.olcos.org/english/roadmap/> [Accessed: November 2017]
- [2] Caswell T, Henson S, Jensen M, Wiley D. Open educational resources: Enabling universal education. *International Review of Research in Open and Distance Learning*. 2008;**9**(1):1-11
- [3] Hylén J. Open educational resources: Opportunities and challenges. *Open. Education*. 2006;49-63
- [4] Johnstone SM. Open educational resources serve the world. *EDUCAUSE Quarterly*. 2005;**28**(3):15-18
- [5] Schaffert S. Strategic integration of open educational resources in higher education. Objectives, case studies, and the impact of Web 2.0 on universities. In: Ehlers U-D, Schneckenberg D, editors. *Changing Cultures in Higher Education – Moving Ahead to Future Learning*. New York: Springer; 2010. pp. 119-131
- [6] Ebner M, Stöckler-Penz C. Open educational resources als lifelong-learning-strategie am Beispiel der TU Graz. In: Tomaschek N, Gornik E, editors. *The Lifelong Learning University*. Oldenburg: Waxmann; 2011. pp. 53-60
- [7] Neumann D. *Bildungsmedien Online. Kostenloses Lehrmaterial aus dem Internet: Marktsichtung und empirische Nutzungsanalyse*. Julius Klinkhardt: Bad Heilbrunn; 2015
- [8] UNESCO promotes new initiative for free educational resources on the Internet. February 17, 2016. Available from: http://www.unesco.org/education/news_en/080702_free_edu_ress.shtml
- [9] Open Educational Resources|United Nations Educational, Scientific and Cultural Organization. February 11, 2016. Available from: <http://www.unesco.org/new/en/unesco/themes/icts/open-%5C%20educational-resources>
- [10] Kreutzer T. *Open Educational Resources (OER), Open-Content Und Urheberrecht*. 2013. Available from: https://irights.info/wp-content/uploads/2013/08/Kreutzer_Studie_OER-Open-Content-Urheberrecht.pdf

- [11] Creative Commons. Home. January 15, 2016. Available from: <https://creativecommons.org/>
- [12] Klimpel P. Folgen, Risiken und Nebenwirkungen der Bedingung "nicht-kommerziell" – NC. 2012. Available from: https://irights.info/wp-content/uploads/userfiles/CC-NC_Leitfaden_web.pdf
- [13] Ebner M, Köpf E, Muuß-Merholz J, Schön M, Schön S, Weichert N. Ist-Analyse zu freien Bildungsmaterialien (OER). Norderstedt: Books on Demand; 2015
- [14] LinguaServe Germany. Difference between EFL and ESL. February 17, 2016. Available from: <https://www.youtube.com/watch?v=soYWBBNkC6o>
- [15] Understanding Free Cultural Works – Creative Commons – Creative Commons. July 2, 2016. Available from: <https://creativecommons.org/freeworks/>
- [16] Creative Commons. ShareAlike Compatibility. February 7, 2016. Available from: https://wiki.creativecommons.org/wiki/%20ShareAlike_compatibility
- [17] Bundesministerium für Bildung und Frauen. Lehrplan. July 20, 2015. Available from: https://www.bmbf.gv.at/schulen/unterricht/lp/ahs8_782.pdf
- [18] Council for Cultural Co-operation, editor. Common European Framework of Reference for Languages: Learning, Teaching, Assessment (10. Printing). Cambridge: Cambridge Univ. Press; [u.a.] 2016. Available from: https://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf
- [19] RIS. Gesamte Rechtsvorschrift für Urheberrechtsgesetz – Bundesrecht konsolidiert, Fassung vom 17.02.2016. February 17, 2016. Available from: <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10001848>
- [20] Hanna A, Wood D. Bridging the gap between OER initiative objectives and OER user needs in higher education. ASCILITE. 2011. Available from: http://www.researchgate.net/profile/Denise_Wood/publication/264856532_Bridging_the_Gap_between_OER_Initiative_Objectives_and_OER_User_Needs_in_Higher_Education/links/5400be610cf2c48563aeaa43.pdf
- [21] Sinclair J, Joy M, Yau JY-K, Hagan S. A practice-oriented review of learning objects. IEEE Transactions on Learning Technologies. 2013;6(2):177-192. DOI: 10.1109/TLT.2013.6
- [22] Best practices for attribution – Creative Commons. February 11, 2016. Available from: https://wiki.creativecommons.org/wiki/Best_practices_for_attribution
- [23] Amiel T. Identifying barriers to the remix of translated open educational resources. The International Review of Research in Open and Distributed Learning. 2013;14(1):126-144. Available from: <http://www.irrodl.org/index.php/irrodl/article/view/1351>
- [24] Winchester S. Repurposing Open Educational Resources: Creating Resources for Use and Reuse. Dublin Ireland: Research-publishing.net; 2013. DOI: 10.14705/rpnet.2013.000110
- [25] Weller M. Big and little OER. In: 2010 Proceedings. Barcelona: UOC, OU, BYU; Available from: <http://openaccess.uoc.edu/webapps/o2/handle/10609/4851>

- [26] Clements K, Pawlowski J. User-oriented quality for OER: Understanding teachers' views on re-use, quality, and trust: User-oriented quality for OER. *Journal of Computer Assisted Learning*. 2015;**28**(1):4-14. DOI: 10.1111/j.1365-2729.2011.00450.x
- [27] Richter T, Ehlers UD. Barriers and motivators for using open educational resources in schools. In: *Proceedings*. Barcelona: UOC, OU, BYU; 2010. Available from: <http://openaccess.uoc.edu/webapps/o2/handle/10609/4868>
- [28] Sawyer RK. Optimising learning implications of learning sciences research. *Innovating to learn, learning to innovate*. OECD/CERI International Conference "Learning in the 21st Century: Research, Innovation and Policy" 2008:45 <http://www.oecd.org/edu/ceri/40805146.pdf>
- [29] Richter T, Kretschmer T, Stracke CM, Bruce A, Hoel T, Megalou E, Sotirou S. Open educational resources in the context of school education: Barriers and possible solutions. *European Scientific Journal*. 2014;**10**(19):1-19. Available from: <http://eujournal.org/index.php/esj/article/view/3782/3598>
- [30] Flickr. February 11, 2016. Available from: <https://www.flickr.com/>
- [31] Awareness-raising|TeachingEnglish|British Council|BBC; 2016. February 14, 2016. Available from: <https://www.teachingenglish.org.uk/article/awareness-raising>