BARRIERS AGAINST OPEN EDUCATIONAL RESOURCES AND POSSIBLE SOLUTIONS: TEACHERS' PERSPECTIVES AND RECOMMENDATIONS

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Abstract

Open Discovery Space (ODS) is a school-related European Project with the aim to setting up a freely accessible international platform for the centralized access to many OER repositories and fostering the exchange of Open Educational Practices through the establishment of community platforms on local, regional, national and supra-national level. In order to reach the highest possible level of acceptance in the community, provide the best possible support, and truly establishing a worldwide hub for Open Educational Resources, we investigated on barriers against the use, production, and reuse of Open Educational Resources, which are to be addressed by the Open Discovery Space platform. For that purpose, we conducted a workshop at the EDEN 2013 conference. After an introduction of the ODS project, we will present the barriers that our workshop participants reported of, their recommendations for the solutions to overcome those barriers and the mechanisms which we are going to implement in the ODS platform in order to provide the best possible support to the community.

Keywords: Open Discovery Space, Open Educational Resources, OER, School Education, Teachers, Barriers, Solutions, Action Research.

1 INTRODUCTION

With 52 partners from 21 European countries and a budget of 15.3 Million Euro, Open Discovery Space (www.opendiscoveryspace.eu) is the largest e-Learning project ever launched by the European Commission. The Open Discovery Space project started in April 2012 and is scheduled to end in March 2015 (3 years). Open Discovery Space is developing a multi-lingual web portal for the school sector that is designed to support its users (mainly teachers) regarding the accessibility, production, use, and adaptation of Open Educational Resources and to foster open practices regarding the exchange of knowledge and experiences. The ODS-platform, as the central outcome of the project, will be implemented in and affiliated to at least 2000 schools throughout Europe and involve a minimum of 10.000 teachers.

In our pre-studies, we found that the need for Open Educational Resources is very high in order to enrich educational contents and overcome the disadvantage overly long production cycles for printed school books as current educational demands quickly change [1]. However, teaching scenarios in schools can be extremely different from each other as are the particular challenges that teachers have to overcome when dealing with Open Educational Resources. One of the most extreme examples that we found so far was an inclusive school where children with special needs were jointly taught with "healthy" children. Each of those children with special learning needs suffered very particular deficits. Thus, for such a class, the same learning contents need to be provided in various different versions in order to support the particular and specific needs of learners [2].

In order to be successful in reaching its highly ambitious aims, it is crucial to facilitate common practices regarding the use, reuse, and adaptation of Open Educational Resources (OERs) by actually providing helpful solutions for potential barriers [1]. In this context, we investigated barriers that could prevent teachers in their particular situations from using, producing, and reusing Open Educational Resources and achieving possible solutions.

We conducted several qualitative studies [1, 3, 4] in order to learn more about such particular challenges. In a workshop at the EDEN conference 2013 in Oslo, we brought stakeholders together in an action-research scenario, asked for their individual challenges and discussed possible solutions that would provide support within their individual educational scenarios. We were able to compose a quite impressive list of basically different issues that will be targeted in the context of the Open Discovery Space platform and at least partly also need to be targeted by the OER community.

In the following, we will discuss related barriers against the production, usage and adaptation of OERs and solutions, which the experts in the workshop suggested. Finally, we will explain to which extent and how the Open Discovery Space platform will address those issues in order to support the school stakeholders' Open Educational Practices.

2 THEORETICAL BACKGROUND: ACTION RESEARCH

As research methodology we chose Action Research for our investigation. Different to the traditional research setting, where the researcher (interviewer) takes a neutral position amongst the interviewees, all actors involved in the Action Research process are equal participants and cooperate in theoretical, practical, and political discourse [5]. According to Zuber-Skerritt, Action Research is research conducted by practitioners for practitioners [6] and Cooperrider & Srivastva explain that it has the focus on problem solving in existing professional performance and is related to organizational structures [7]. We chose this particular research form, because we made the experience in traditional interviews that the participants tend to speak with a clear focus on the researcher and just the questions are answered which the researcher is able to ask. In action research scenarios, in contrast, the participants exchange knowledge and experiences between each other instead of just reporting to the researcher. In terms of this particular workshop, this scenario was beneficiary for both, the team of researchers, as it revealed information that we might not have thought about to ask for and for the participants, as the direct exchange of experiences supported them in finding solutions for their currently burning and not yet solved issues.

3 THE STUDY

For the workshop, we initially invited e-Learning experts, policy-makers, and curious practitioners (as beginners) to join the workshop as participants. Even though the conference participants were not expected to be schoolteachers but rather be related to the field of higher education, we assumed that their particular challenges might have a lot in common with those, schoolteachers would experience and thus, could prove very valuable to be taken into consideration in our school-related project.

3.1 Study setting

The workshop was conducted in three phases:

In the first phase, we introduced some theoretical background issues around OERs, the Open Discovery Space project, and the relevance for the project's success to address and overcome the schoolteachers' specific challenges against the production, usage, adaptation and repurposing of OERs. However, during this introduction we did not present any specific examples for such barriers in order to avoid influencing the participants' later discussions. In the end of the first phase, we formed three groups according to the participants' levels of expertise regarding their exposure to OERs. "OER-beginners" eventually were joined in one group (6 members). According to our earlier experiences, we assumed that OER-beginners would experience particular challenges regarding very basic aspects, such as legal and technical issues (e. g. where and how to search for OERs and which supportive software to use for displaying, re-arranging and presentation of OERs). With those participants who considered themselves more proficient in dealing with OERs or even as OER-experts, we built two further groups each with 5 and 6 members. We expected more proficient participants experiencing particular challenges - like how to design OERs, how to adapt and republish OERs, which quality-related strategies should be followed and how to select or even set-up institution-wide OER-policies.

The second phase of the workshop was conducted within the formed groups. The participants of each group were encouraged to contribute to discussions, which were structured in three steps, each with a fixed time limit (10, 15 and 20 minutes). A moderator who controlled the overall schedule and who did not participate in the group-work introduced each of the three steps. In the first step, the participants introduced themselves to the group considering their affiliation, their expectations regarding the workshop and their particular experiences with OERs. In the second step, the participants were asked to describe their challenges regarding any kind of activities involving OERs. In the third step, the group picked up each of those challenges determined in the second step and jointly discussed on how these could be overcome. Each group was supported and facilitated by one of the co-authors (as an additional group member). During the group-work, the estimated role of the facilitators was threefold: first, they had to keep the discussions running and to ensure that the different steps of the practical phase actually were taken. Second, the facilitators also were active members of the groups, joining and contributing their own perspectives and opinions to the group discussions and third, the facilitators had to record the outcomes.

In the third phase, the results of each group were presented by each of the facilitators to all of the workshop participants.

3.2 The sample

Apart from the three facilitators, the workgroup consisted of 17 participants, who mainly worked in the academic field (13/17). The positions of those who were associated with universities varied between research fellows (2), technical supporters (1), project managers (5), persons with administrative positions (1) head of department (1), and university professors (2). Additionally, one freelancer (project work) and three policy makers from different associations with management positions (director, chair, deputy director) took part. The gender distribution of the participants was 7/10 (m/f). Two of the three participating policy-makers joined the beginners group. The other four participants in the beginners group came from universities and were fully related to technical support and project work.

3.3 Study outcomes regarding particular challenges

In the following, the challenges are listed, which were reported and discussed during the workshop. After a short introduction of each challenge and related scenarios, suggested solutions are introduced on how to possibly overcome the particular challenge and finally, which features and/or mechanisms the ODS project implements in its ODS platform in order to support its users. The schedule of the listed challenges is related to the original list in which the results were (group-wise) presented at the workshop and is not related to their impact. Particular challenges that were named by more than a single group are only listed once.

3.3.1 Language

One of the most challenging aspects in the context of OERs relates to the language of the learning resource [8]. Even though millions of high-quality learning resources are available on the Internet for free download, many of these are authored or designed in languages that teachers and particularly targeted learners do not understand or understand imperfectly. Apart from very selective contexts (such as airplane pilot education and training) there is no general language that serves all or most potential users [9]. Kickbush points out that just one out of ten people understands the English language well enough to navigate through related websites [10]. Ouane classifies the languages that are supposed to be commonly known (but which actually are not) as '*elite languages*' [11] and having learned such a language as a particular privilege. In the particular context of Africa Chumbow explains that using national languages for educational resources is not just a matter of comprehension but also a political issue as resources in national languages would lead to a far higher level of education [12]. Leonardi, further on, argues that a 'simple' translation (in terms of currently available translation tools) into national languages, however, might not entirely solve the problem [13].

The participants in the ODS workshop did not consider it possible that a single solution could solve the whole problem since there are simply too many aspects and media that need to be addressed differently. As possible steps along the way to a solution, they proposed the development and provision of freely available and easy-to-use translation tools employing closed captioning to support the translation of otherwise spoken texts and dialogue in videos. This would generally foster OER development in regional languages and facilitate transcript provision in different languages.

3.3.2 Licensing

The question of intellectual property rights in the context of freely available goods has been a critical one in the open movement from the outset. In the meantime several types of licenses have been developed, including simple solutions such as Creative Common Licenses. However, many potential users are uncertain if their activities are fully legal. As a consequence, some potential users generally avoid the situation and do not use OERs, others ignore the problem regarding existing learning resources and what they produce for public reuse [1].

As possible solutions, ODS participants suggested initiation of discussions about licenses to find ways to address this question and to introduce simple examples like the licenses from Creative Commons in order to promote better and more correct practices.

3.3.3 Up-to-date materials

One of the disadvantages of printed books is the extensive process required to produce and release new and updated versions. Users expect Open Educational Resources, which are digital resources and can easily be modified, to be highly current and up-to-date. This especially applies to the pedagogy employed, contents and the supported media. However, particularly in the context of open environments, OERs are frequently produced and published on a one-off basis and afterwards discarded and never used again. For subsequent users it is difficult or impossible to check if a learning resource actually is up-to-date or if it contains outdated contents.

The ODS participants recommended mandatory implementation of version numbers and release-dates as a possible solution. Simple tools should support such OER updates, and responsibility for updating should be shared with colleagues. Other educators apart from original authors should also be able voluntarily to implement updates. A related change and version history could support the choice from multiple available versions. In the longer term, institutions should be encouraged to install clear policies for regular updates.

3.3.4 Adaptability (to edit and change)

The value of OERs is directly related to the opportunity to reuse material in very diverse educational settings. However the developer produces an OER within and for a particular context. Even if the contents of an OER generally meet the requirements of a potential user, it cannot be expected that the developer's context is similar enough to the new context and can be implemented. Instead, in order to successfully reuse OERs in new contexts, changes regarding content presentation, the pedagogy employed, language and format may be necessary. At a minimum, OERs need to be available in a format that allows changes.

The participants of the ODS workshop recommended that OERs be produced in open and standard formats and that the specifics of the original context be described. Later on a re-uploading of modified OERs should be possible (including documentation of different versions) so that future users are able to choose the particular resource that best fits their individual requirements.

3.3.5 Discovery (to identify fitting OERs)

One significant challenge is to find OERs that actually meet the requirements of the required learning scenario. There are many OERs around but very few are tagged in a proper way. Thus it is almost impossible to decide if they are appropriate before they are downloaded and manually checked. Resources that could prove valuable even though written in a foreign language are particularly difficult to identify and deploy.

In order to overcome this barrier authors of OERs are required to properly describe their resources before uploading. However, owners of OER repositories could support them by proposing keywords in terms of standard descriptors for tagging, which form the basis for successful detection. Repository owners could provide such keywords in several languages so that, once a keyword in whatever language is chosen, it can be displayed in all of the supported languages. However, tagging an OER with keywords in a widely used language could also help. If a related database of keywords is not available, a retagging in terms of a later application of metadata in other languages by users would be a reasonable approach that also could lead to improvement.

3.3.6 Curriculum perceptions & incompatibility

In many countries, curricula define the particular contexts and demands that learning resources need to take into consideration - and how those should be designed. Closely linked to this, as described in 3.3.5, it is almost impossible to find out if a resource meets such demands before it has manually been checked, which is very time-consuming.

The participants of the ODS workshop stated that it might be impossible to take other curricula into consideration. It is actually possible however to map a resource linked to the particular curriculum in which it originally was designed and to provide transfer practices that actually work.

3.3.7 Lack of institutional compromise and institutional constraints: Time

Even though most institutions appear to expect educators to find and select new and free educational resources on their own, they seldom provide necessary supports. Time constraints often make finding appropriate resources impossible. Educators may invest their private time in order to improve their educational materials. Institutional leaders often seem unaware that the search and selection of appropriate learning resources is quite time consuming. In addition, many institutions and policies are concerned that educational materials not produced in-house will not fit the institutions' requirements. This problem is already well known in the literature and called the "not-invented-here syndrome" [3].

As for time-constraints, it would be very helpful if institutional leaders and policy makers could be informed on the benefits but also on particular challenges that are related to OERs. Such information material should explicitly be designed for policy makers and institutional leaders.

3.3.8 Lack of interdisciplinary support

A particular strength of Open Educational Resources is the opportunity for specialists from different disciplines to contribute easily to the development of learning resources by jointly using online authoring tools, whether through cooperative writing or interdisciplinary reviews. However, apart from exceptional projects such interdisciplinary productions seem undeveloped or possibly too time-consuming. Particularly in the context of topics related to more than just a single field, such cooperation could give a boost to the quality of educational resources.

The participants recommended providing special programs, infrastructure and support groups departments as well as related policies, to ensure interdisciplinary knowledge transfer and sharing of good practices. It was felt that institutional or policy incentives could help to improve the current situation.

3.3.9 Quality of resources

Many issues regarding the quality of e-Learning resources are already targeted by international standards. Among others these include 'Dublin Core' as well as the 'ISO/IEC 19788-1:2011', which foster the unified description of educational resources through standardized metadata. 'Learning Objects Metadata' deals with descriptions of course content and course requirements. 'IMS Learning Design' supports authors systematically to define didactical aspects of their learning resources. 'ISO/IEC 10796-1:2005' provides a structured process on how *Technology Enhanced Learning* can systematically be developed. However, producers of Open Educational Resources often are not professional authors and produce educational resources for themselves that, at first hand, need to fit their individual purposes. They voluntarily make those resources freely available for the community. Even though some protagonists think that regarding formal quality, it should not make any difference if a professional or a "user" produces learning resources, the difference actually is present. While a professional generally may plan to sell learning resources to an audience and thus has a personal interest in reaching the highest level of acceptance in the community, the user (teachers, learners, parents) who generates content has a very concrete scenario in mind during the production time and is unlikely to invest more time. From that perspective, the community can just use the resource or leave it. Asking a voluntary user to know and strictly follow common standards thus somehow appears like an unreasonable demand, which eventually could lead users to stop sharing educational resources.

In addition, what the common standards do not regulate is defining when a resource is to be considered appropriate for particular learning scenarios. In terms of successfully applying quality standards in the context of User Generated Content, user-friendly versions of standards and mechanisms would be required which do not overburden common users. This would avoid them having to read and comprehend complicated documents first and instead would support them to reach a certain level of quality without having to invest a lot of additional time. As for metadata creation, OER repositories could

provide a predefined list of limited criteria from which users could choose. This step would not only support users but also ensure that a common vocabulary for keywords is being used.

3.3.10 Reputational risk

Linking OERs with the names of institutions in which authors are employed could enhance users' trust in quality of the resources. However, some institutions identify a risk when their employees publish freely available learning resources. Usually, OERs are not checked by external specialists in extended review processes as, for example, journal articles would. Thus, instead of proudly presenting their own internal professionalism and expertise to the community, institutional leaders fear that published resource could reveal internal issues or effect a potentially negative impact on institutional reputation.

ODS participants did not provide suggestions for a solution: The problem is considered very complex, as it is not only relates to the professionalism (discretion) and quality of the resources but also to the institutions' internal quality processes and policies. Who else should decide if a learning resource is correct and valuable if the author is the institution's only expert in a particular field? How should evaluation processes be designed and implemented? Would the time efforts required to conduct an external review process even contradict one of the basic strengths of online resources (rapid publishing cycles)? This issue eventually needs to be solved on a policy level.

3.3.11 Localization and varying stakeholder interests/perspectives

This issue is closely related to adaptability of resources as well as to the sections on languages and curricula. While OERs are produced in and for a particular context, they shall be reused in another. Critical problems not only can occur on cultural/national levels but also on regional or even individual levels. Given that a resource on history is produced in a central Spanish area and shall be reused in the Basque area (which is located in the very north of Spain), different perspectives on historical events could cause major problems even though the nations in which the OER was produced and the one in which it is to be reused are identical. Another example would be a course containing elements related to basic issues on religion, produced in a catholic context and subsequently reused in a protestant context. A last example, this time related to basic political issues: If a learning resource has been produced in one federal state in Germany and shall be reused in another, does it actually meet the curriculum requirements of this particular federal state (In Germany, the federal states are self-responsible for their curricula)?

What these examples show is how complicated it might become if all possibly relevant information need to be defined in metadata. Many issues that are central requirements within a particular context may not even be imaginable for people who are not familiar with such a context. The mass of relevant metadata would increase to an amount, which easily becomes unmanageable particularly for authors. As solutions, adaptability and rigorous tagging with metadata would be the central demands. However, a compromise between manageability and usefulness still needs to be found. In case of very particular learning scenarios, the perfect learning resource simply will not be available. Therefore the central demand for OERs is changeability. The educators who reuse OERs are responsible to take the last step that eventually ensures that a learning resource fits the individual requirements of a learning scenario and its learners.

3.3.12 Appropriateness of use & applying OER

While on the one hand, learning resources need to be appropriate for educational scenarios where they are to be used, usage of learning resources is required to be appropriate. But who responsible if an OER causes a form of damage, just because it was designed for a very particular educational context and eventually has been reused within another without proper adaptation?

The participants expressed that the original author surely is the least person to be held responsible. However, if potential authors are unsure about this issue they might decide to not give their self-made resources to the community. In the context of OER repositories, it could be helpful if repository owners provide a declaration that clearly defines the level of responsibilities for both authors and users. In addition, Open Educational Practices from the community should be made available in terms of best practice examples on how to deal with OERs, how to adapt learning resources, and where and what to look for in terms of adaptation requirements.

3.3.13 Sharing own resources (teachers)

Participants reported that they feel unsure about their intellectual property and owner rights. Once an OER is uploaded into a repository, it is easy to loose it out of sight. If other users make changes to a particular resource, who becomes the owner of the resource and whose intellectual property rights are relevant? Who is responsible for a particular resource, once changes have been applied? How to properly cite once a resource has been changed? Why should someone want to improve other people's work if there is nothing that could be understood as a reward?

Generally, the intellectual property rights are related to the originator of the learning resource. It would be a question of good style, if modified versions of an OER could and would be uploaded as separate documents, including a change history. It should not be possible to modify (overwrite) an existing resource but instead, an additional resource in a different version would have to be uploaded. In this way it always is possible for users to recognize changes according to the originator's version.

3.3.14 "Phlegm" of educators (ICT in general and OER in particular)

Educators tend to rather keep their self-created resources for themselves instead of sharing them with the community. There might be several reasons of which some already have been introduced and discussed above. However, reasons for the "phlegm" of educators regarding the upload of educational resources is not limited to the lack of rewards and uncertainty about intellectual property rights. Particularly school teachers but also other professionals often are not proficient enough with authoring systems and ICT in general that they feel capable to share their material with the community. Additionally, why should a teacher share his work results with the community if this generally means to invest even more time?

While the participants of the workshop did not propose a solution on how to motivate educators, we think that generally establishing and promoting the concept of sharing by presenting Open Educational Practices would already help to overcome this kind of "phlegm". OER repositories should be easy to be used, offer support for all levels of ICT-proficiency, and demonstrate that it is rewarding to share educational resources by presenting best practices and reports on experiences.

3.4 Limitations of the study

This study surely is not representative for all educators, institutional leaders, and policy-makers. This qualitative study was conducted to get a better understanding of barriers against the establishment of Open Educational Practices and OERs and to provide an insight on how to overcome such barriers. The results neither are complete. Once again, we realized that there are very general barriers, which often have to do with uncertainty, basing on a lack of information and experience. Further barriers are related to issues that are already well known but where the community has no easy solution to present. However, the largest part of barriers, which we discussed about, seems to be related to very individual scenarios.

In the context of the workshop, we generalized such very individual barriers in order to make them better applicable, understandable, and particularly discussable for the other. An example would be the report of a participant who explained that in his institution, on the one hand, it is expected that OERs are used in order to save money, but on the other hand, the institution does neither provide the necessary IT infrastructure, nor supports the educators with free time or rewards them in any way. In the context of the group discussions we presented such reports to the other group members, discussed if such issues could also be applied to their particular scenarios, and how to give the experiences a more general context. For this paper, we additionally clustered the reported barriers as some were listed more than a single time (from each group) and others, even though slightly different, were thematically very close to others.

3.5 Relevance of found barriers for the school sector

In this workshop we did not explicitly invite schoolteachers as participants, even though our focal interest is related to the school sector. This had the simple reason that the conference was not limited to schoolteachers. While earlier EDEN conferences had an own section for the school sector, this section had not been implemented in this year's conference. Thus, it is relevant to check to which extent the found barriers actually are relevant for the school sector. We think that all found barriers are relevant for the school sector. However, there are barriers, which appear less threatening for the school context, such as the "non-invented-here syndrome" or obligations against the production of OERs be-

cause of a possible loss of reputation. Those barriers seem to be much more relevant in the academic sector, where publications and authorship are general criteria for the evaluation of an institution's or researcher's "quality".

Subsuming the results, we eventually found barriers that were related to an insufficient information flow, to the usability of OERs in scenarios that are different to the originator's setting, to lacking professionalism regarding the use of ICT, and we found legal issues that caused uncertainty amongst the participants. Some of the issues were already well known, others actually were completely new for us, such as the fear to loose ones institution's reputation if OERs are found to be inappropriate or even incomplete or inaccurate.

4 THE OPEN DISCOVERY SPACE PLATFORM

In order to reach the highest level of acceptance and support through the international community, the freely accessible Open Discovery Space platform provides mechanisms to overcome most of the barriers that have been found in our workshop. In the following, we will discuss some of the features of the Open Discovery Space platform.

The Open Discovery Space platform contains two generally different parts. The first part is a multilingual and central access point to learning resources and educational materials and the second part is a community platform that supports multiple community scenarios.

In terms of the functionality as a centralized access point, 1.500.000 OERs from various European repositories are being linked and searchable as a first starting point. For the search, we implemented a particular vocabulary, which is available in a multitude of languages. Thus, it is possible to look for a particular type of resource by keywords in the own language even if the resource itself is written in another one. The vocabulary also supports users who like to upload new OERs or changed versions of existing OERs and need to select and apply relevant metadata.

We provide lots of information material and guidelines, related to quality, licensing and other legal issues, to the production, adaptation, and modification of OERs, and on how to use OERs in diverse learning scenarios. For the latter case, we particularly provide support for course planning by giving access to a steadily growing number of best practices, lesson plans (over 5000), educational pathways (338), and pedagogical scenarios (373; the numbers in brackets are the numbers of resources, which already are available or known to be available at the end of the project's runtime). Further pathways and scenarios are to be generated during the project's runtime.). Additionally, we provide the ODS toolbox, which is a collection of freely available tools that can be used for the design of lectures, such as lesson plan templates, Universal Design for Learning guidelines, user guides, guidelines for setting up inter-school collaboration projects, and a library of tools that can be helpful for creating, adapting (re-purposing), modifying and (re-)publishing of OERs.

The ODS Platform further on, will provide opportunities for users to comment available OERs that the accessed through the platform. In this context, teachers can report about the scenarios in which the particular resources were used, how valuable the resources actually proved for that setting and provide recommendations on changes.

In terms of the second functionality of the ODS platform, the community platform has been implemented. It is designed to support the exchange of experiences and know-how between the different stakeholders from the school sector and thus, to establish an opportunity for the development of an open educational culture. The community platform needs to be understood as a communication hub for any level, as local, regional, national and international communities can be implemented. Several national communities have already been implemented where teachers, institutional leaders, policy makers, and all other school-related stakeholders can communicate with each other in their native languages. By enabling and encouraging the information exchange of any kind of stakeholders, we expect that also interdisciplinary cooperation is being fostered. Additionally, the vivid discussions of the peers shall encourage those users who usually would not contribute own resources due whatever reasons.

In order to overcome barriers that are related to legal issues, policies, and curricula, the ODS project closely cooperates with several national ministries, standardization bodies, and other international community hubs.

5 CONCLUSION

The open education movement forms a quickly growing, worldwide community. It offers opportunities that were unimaginable 20 years ago, such as providing fully adaptable educational materials to learners and educators who are not privileged in terms of living in the developed world and having the financial resources to afford any kind of education or for individual requirements of children with special needs. However, we should not limit our understanding of the open education movement to a beneficiary institution. The open education movement offers a situation of giving and taking and benefits for everyone. With Open Educational Resources and Open Educational Practices, we have the chance to learn from other colleagues, we do not need to invent the wheel again and again by developing courses that already exist for several scenarios. We have the chance to enrich our lectures by adapting materials, which we could not produce ourselves, e. g., because we do not have access to the necessary information or technology. And, of course, we have the chance to share experiences with other educators, realize that we are not alone with our problems and get quick support by colleagues, who experienced similar challenges before and who already found solutions that at least worked within their educational settings.

There still are unsolved problems, such as legal and quality issues. Further on, too little support and incentives are provided through institutions and governments. Also, we need to be aware that according to the millions of different individual learning scenarios, the chance is quite low that we will find a single educational resource that perfectly meets our particular requirements. If one starts the search with this aim, he anyways will fail. When reusing OERs, we need keep in mind that we do not choose and buy professional contents but get a chance to see what other educators have done in their particular scenarios – for free. We have a chance to reuse their learning materials in the case that they roughly fit into our own educational scenario, as a whole as well as in parts. And we have a chance to modify found resources in order to make them appropriate. Sure, still a lot of potential for improvement and thus, work remains in order to make OERs more attractive and accessible for everyone.

The Open Discovery Space platform is a step into this direction. By directly involving policy makers from governments and institutions, providing a centralized access to many different OER repositories, intelligent search algorithms and unified tagging, offering a lot of support for producers, users and reusers of OERs and establishing a social platform for the exchange of experiences and knowledge, the Open Discovery Space platform has the potential to become the world's hub for the open education movement. As for now, it is limited to the school sector but for the future, further educational sectors can and will be attached.

However, we need your support, as educators, as schools, as institutions and associations, as media partners, as publishers, network partners, policy makers and repository owners. For the moment and because of its funding through the European Commission, the Open Discovery Space platform focuses on the European context. In order to expand to a truly worldwide level, we would like to invite every stakeholder of the school sector to join our community and profit from but also to contribute to the Open Discovery Space platform. As a very first step, you invited to register yourself and/or your institution at www.portal.opendiscoveryspace.eu.

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