

# **Good intentions: improving the evidence base in support of sharing learning materials**

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Supplement: Business cases

## 1 Introduction

This document is one of the deliverables of a JISC funded study into the evidence base for sharing learning materials, and acts as a supplement to the report 'Good intentions: improving the evidence base in support of sharing learning materials'. The original call for proposals asked for a set of actual business cases currently being used by the community, and a set of 'constructed business cases' which could be used as models by JISC and the community. A significant challenge in relation to this requirement is that generic business cases are always going to need adaptation depending on the context in which it will be used. One of the intentions of the study was to consider how to present the business cases in a way that would be accepted by funders, senior managers and teaching and learning practitioners. As mentioned in the 'good intentions' report practitioners may be disinclined to respond to business related terminology.

For the purposes of the study a template was developed to illustrate existing business models for sharing, ranging from formal national, institutional and subject-based repositories to less formal sharing mechanisms. This template, augmented by interviews with key stakeholders, produced some useful information around intent and motivation to share, and this contributed to the development of the business cases presented in this study.

A business case at its most basic could be described as an explanation of the likely benefits of taking a particular action or combination of actions; these benefits may often be different for each group of stakeholders. They often take the form of written reports which also identify challenges and possible solutions. Business cases are often presented as a means of procuring funding for a particular business model. **It is suggested here that what may be more useful for the UK HE community is a mechanism to help them decide which business model/s to adopt as appropriate. By going through such a process they would automatically generate a context specific business case to support funding requests.**

## 2 Approaches and models

In an effort to be accessible to as wide a group of stakeholders as possible the business cases are presented initially in a series of tables that suggest which benefits are **most likely** from each broad approach. In fact we suggest that this table could be utilised as a tool to help institutional managers and staff consider which of the benefits are important to them (at either strategic, policy, operational or practice levels). Once they have identified the benefits they could then consider which approaches or models could best support those needs. This encourages an approach which starts with the needs (required benefits) rather than identifying one business model and then trying to adapt around this. This also highlights the importance of acknowledging that no one model fits all and that often a combination of models may be appropriate. This is evident from the study; several existing models are in a transition stage which involves a broadening of original approaches. This approach also allows institutional managers to prioritise benefits and recognise that by making some business model choices certain benefits are more difficult to achieve – but at least the process makes the decision-making transparent.

The tool could also be used to support a dialogue within institutions by identifying what benefits the institution and wider community already enjoy from existing sharing activities. They could then use the tool to identify existing sharing mechanisms which could be enhanced and also identify new models that could best support the benefits they have identified as relevant to their own institutional context. It is fair to say that most educational institutions have not articulated the various sharing activities taking place, particularly those coming from a bottom-up approach. Business cases are a useful means of communicating the impact and added value of existing practice to users.

The tables offer 6 different approaches to sharing:

- open sharing (taking a completely open approach in relation to access, although there may be a layered approach to what can be done with materials and even levels of openness in relation to access too)

- sharing through a Community of Practice (CoP) (sharing between people belonging to a network with some common practice, passion or interest, often but not always subject-discipline based)
- subject-based sharing – (sharing with other subject specialists usually, but not always, through a CoP)
- institutional sharing (sharing within an institution, usually within, but sometimes across faculty and or departments)
- national sharing (sharing at a national level, possibly across institutions, possibly across subject areas or domains (e.g. HE and professional communities e.g. IRISS), and through collaborative initiatives)
- informal sharing (individuals sharing with other individuals – could be teachers, learners or other groups in the HE community and sometimes as part of a CoP)

There is clearly overlap across many of these approaches as an individual or institution could adopt a range of these approaches. Each approach could have a wide range of funding, service and contributor/user models. Regional sharing is not identified as a separate category here but could be added to this list. In the context of this study a regional approach (SURF WBL)<sup>1</sup> was considered a good example of a CoP model.

The 'Good intentions' report investigated a range of existing business models which illustrate the approaches listed here with particular reference to the open and subject-based sharing approaches. The tables included in the report reveal the wide variety of models that can result from one approach. So for example the open sharing approach could be supported by a formal national repository, an institutional repository or an individual sharing mechanism using web 2.0 technologies.

### **3 Benefits**

For each of these approaches the tables offer suggestions of likely benefits. The benefits of sharing are arranged into 5 tables relating to key stakeholder groups:

1. General benefits of sharing for global community
2. Benefits of sharing for national community
3. Benefits of sharing for educational institutions
4. Benefits of sharing for those supporting/facilitating learning
5. Benefits of sharing for learners

Whilst several of the benefits are relevant to more than one stakeholder group each benefit is identified in only one of the sections here for simplicity. It is anticipated that most stakeholders in the HE sector would need to be aware of the benefits in a broad sense as most of these operate in the context of an educational institution, which has a place in both a wider national and global context. The complete tables are included at the end of this document.

### **4 Business cases**

All of these cases have been drawn from the tables and illustrate how these can be used as a tool to support institutional dialogue and decision making. Whilst most of the following scenarios are likely to reflect a set of specific and well articulated needs these examples illustrate the extra, value added, benefits that different approaches may offer.

If, for each scenario, we selected only the relevant benefits from each table (1.1 to 5.11) we would be able to produce a picture specific to each scenario. It can be useful to try to rank these benefits

<sup>1</sup> <http://www.jisc.ac.uk/whatwedo/programmes/x41/surfwbld.aspx>

into some kind of order of importance as this could support decision making. Once the benefits/intentions are selected and ranked we can then identify which approaches are most likely to support these benefits. The tables are intended to be a guide to encourage dialogue and reflection so whilst it is useful to start by identifying all of the purple boxes in the tables (which are identified as likely to have a significant impact), it is important to think through what conditions may affect some of the approaches in this particular context. In the following illustrations some of the yellow boxes in the tables (possible with right conditions) are as appropriate as the purple boxes depending on the context. This process develops a new table which provides a snapshot of the benefits, possible approaches and priorities.

#### 4.1 Sustainable global sharing

This scenario is likely to reflect a broad community ideal, such as that of the United Nations, where the underlying principles relate to the global economy, supporting developing countries and disadvantaged learners.

Table 1 which identifies *General benefits to global community* is very significant for this scenario. But each table has some benefits that are relevant.

<b>Key benefits/intentions</b>	<b>Approaches most likely to support this within this context</b>
1.3 Shares expertise and resources between developed and developing countries 1.2 Encourages innovation and experimentation 1.4 Supports re-use and re-purposing 1.7 Ensures trust through appropriate licensing 1.10 Supports the sharing and re-use of individual assets 1.11 Supports the sharing and re-use of complex learning resources 1.13 Supports ease of access through search engines such as Google	1.3 Open, Informal  1.2 Open, CoP, Informal 1.4 Open, CoP, Subject-based, Informal 1.7 Open 1.10 Open, CoP, Subject-based, Informal 1.11 Institutional, National  1.13 Open, Informal
2.1 Cost efficiencies 2.2 Decrease in duplication 2.4 Provides access to non educational institutional bodies such as employers, professional bodies, trade unions, etc. 2.7 Supports discovery of most used/highest quality resources 2.9 Supports sustained long-term sharing 2.10 Promotes the concept of lifelong learning 2.13 Mitigates cost of keeping resources closed	2.1 Open, CoP, Subject-based 2.2 Open, CoP, Subject-based 2.4 Open, CoP, Subject-based, Informal  2.7 Open, CoP, Subject-based  2.9 CoP, Subject-based 2.10 Open, Informal 2.13 Open, informal
3.7 Encourages high quality learning & teaching resources 3.11 Supports the altruistic notion that sharing knowledge is in line with academic traditions and a good thing to do	3.7 Open, CoP, Subject-based 3.11 Open, CoP, Subject-based
4.2 Supports sharing of knowledge and teaching practice 4.3 Encourages improvement in teaching practice 4.7 Encourages multidisciplinary collaboration and sharing	4.2 Open, CoP, Subject-based 4.3 Open, CoP, Subject-based 4.7 Open, CoP
5.1 Easy and free access to learning materials for learners 5.6 Increased access for non-traditional learners (widening participation)	5.1 Open, Informal 5.6 Open, Informal
<b>Secondary benefits/intentions (added value)</b>	
1.1 Supporting subject-discipline communities to share 1.8 Supports continued development of standards and interoperability 1.9 Supports continued development of tools to support sharing and exchange 1.12 Helps to develop critical mass of materials in particular	1.1 Open, CoP, Subject-based 1.8 Open, CoP, Subject-based  1.9 Open, CoP, subject-based  1.12 Open, CoP, Subject-based

subject areas	
5.2 Increased access options for students enrolled on courses (particularly remote students)	5.2 Open, Informal

In this example the open approach is appropriate for 24 of the benefits, the CoP approach is identified 17 times and the subject-based approach has 15 occurrences. This would indicate that an open sharing model based around CoPs, particularly CoPs with subject-based interests would be highly appropriate for this scenario. Whilst we could have expected the open sharing model to be a useful approach for this scenario the benefits of combining this with a CoP approach has the potential to add significantly to the range of benefits, not least in relation to sustainability (see 2.9). These approaches could manifest as an open community based service that offers a range of mechanisms to support sharing of learning and teaching practice and resources for different subject disciplines.

## 4.2 National sharing

This scenario is likely to reflect government ideals of widening participation, encouraging effective utilisation of publicly funded collections of resources, promoting cross institutional collaboration, encouraging re-use and re-purposing and supporting lifelong learning.

<b>Key benefits/intentions</b>	<b>Approaches most likely to support this within this context</b>
1.1 Supporting subject-discipline communities to share 1.4 Supports re-use and re-purposing  1.7 Ensures trust through appropriate licensing 1.9 Supports continued development of tools to support sharing and exchange 1.10 Supports the sharing and re-use of individual assets 1.11 Supports the sharing and re-use of complex learning resources 1.12 Helps to develop critical mass of materials in particular subject areas	1.1 Open, CoP, Subject-based, National, 1.4 Open, CoP, Subject-based, National, Informal 1.7 Open, National 1.9 Open, CoP, Subject-based, National  1.10 Open, CoP, Subject, National, Informal 1.11 National  1.12 Open, CoP, Subject-based, National
2.1 Cost efficiencies 2.2 Decrease in duplication 2.3 Supports cross institutional sharing 2.4 Provides access to non educational institutional bodies such as employers, professional bodies, trade unions, etc. 2.5 Supports shared curricula 2.6 Provides evidence of the provenance of learning materials 2.7 Supports discovery of most used/highest quality resources 2.8 Supports broad vision of sharing across UK HE 2.9 Supports sustained long-term sharing 2.10 Promotes the concept of lifelong learning 2.11 Supports the notion that educational institutions should leverage taxpayers' money by allowing free sharing and reuse of resources 2.12 Mitigates the risk of doing nothing in a rapidly changing environment 2.13 Mitigates cost of keeping resources closed	2.1 Open, CoP, Subject-based, National 2.2 Open, CoP, Subject-based, National 2.3 Open, CoP, Subject-based, National, Informal 2.4 Open, CoP, National  2.5 National 2.6 National  2.7 Open, CoP, Subject-based, National  2.8 Open, National 2.9 CoP, Subject-based, National 2.10 Open, National, Informal 2.11 Open, National, informal  2.12 National  2.13 National
3.7 Encourages high quality learning & teaching resources 3.8 Supports preservation of learning resources 3.11 Supports the altruistic notion that sharing knowledge is in line with academic traditions and a good thing to do	3.7 Open, CoP, Subject-based, National 3.8 Open, CoP, Subject-based, National 3.11 Open, National

4.2 Supports sharing of knowledge and teaching practice 4.3 Encourages improvement in teaching practice 4.7 Encourages multidisciplinary collaboration and sharing	4.2 Open, CoP, Subject-based, National 4.3 Open, CoP, Subject-based, National 4.7 Open, CoP, National
5.1 Easy and free access to learning materials for learners 5.2 Increased access options for students enrolled on courses (particularly remote students) 5.6 Increased access for non-traditional learners (widening participation)	5.1 Open, Informal, National 5.2 Open, Informal, National, Institutional  5.6 Open, Informal
<b>Secondary benefits/intentions (added value)</b>	
1.2 Encourages innovation and experimentation 1.8 Supports continued development of standards and interoperability 1.13 Supports ease of access through search engines such as Google	1.2 Open, CoP, Subject-based, National 1.8 Open, CoP, Subject-based, National  1.13 Open, Informal
3.1 Maintaining and building on institutional reputations globally 3.3 Attracting new staff and students to institutions	3.1 National, Institutional  3.3 Open, National, Institutional
5.7 Likely to encourage self-regulated and independent learning 5.8 Likely to increase demand for flexible learning opportunities	5.7 Open, Informal  5.8 Open, Informal

Obviously a national approach would be required to facilitate these benefits but it is also clear that combining this with an open approach (on a national scale) could add many benefits, particularly if this meant open to learners as well as those supporting learning and teaching. Again a CoP approach could support sustainability (2.9), and a subject-based approach would also support the development of a critical mass in different subject areas (1.12). So a possible model to support this scenario could be an open national repository with access by students, possibly opened wider than the UK with subject based community support mechanisms to encourage sharing of practice, deposit of materials and re-use/re-purposing.

### 4.3 Institutional sharing

This scenario is likely to reflect HE institutional ideals of encouraging transparency and enhanced quality of learning resources, improving learning and teaching practice and student access to effective learning opportunities. The institution is also likely to be concerned with key government expectations such as widening participation and lifelong learning and also with their own reputation nationally and globally.

<b>Key benefits/intentions</b>	<b>Approaches most likely to support this within this context</b>
1.4 Supports re-use and re-purposing 1.5 Supports community input to metadata through tagging, notes, reviews 1.6 Supports development of effective retrieval through professionally created metadata 1.7 Ensures trust through appropriate licensing	1.4 Open, CoP, Subject-based, Institutional, Informal 1.5 CoP, Subject-based, Institutional, Informal 1.6 Open, CoP, Subject-based, Institutional  1.7 Open, Open, CoP, Subject-based, Institutional
1.10 Supports the sharing and re-use of individual assets 1.11 Supports the sharing and re-use of complex learning resources 1.12 Helps to develop critical mass of materials in particular subject areas	1.10 Open, CoP, Subject-based, Institutional 1.11 Open, CoP, Subject-based, Institutional  1.12 Open, CoP, Subject-based, Institutional
2.1 Cost efficiencies	2.1 Open, CoP, Subject-based, Institutional

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<p>2.2 Decrease in duplication                  2.4 Provides access to non educational institutional bodies such as employers, professional bodies, trade unions, etc.                  2.5 Supports shared curricula                  2.6 Provides evidence of the provenance of learning materials                  2.7 Supports discovery of most used/highest quality resources                  2.9 Supports sustained long-term sharing                  2.10 Promotes the concept of lifelong learning                  2.12 Mitigates the risk of doing nothing in a rapidly changing environment                  2.13 Mitigates cost of keeping resources closed</p>	<p>2.2 Open, CoP, Subject-based, Institutional                  2.4 Open, CoP, Subject-based, Institutional                  2.5 Institutional                  2.6 Institutional                  2.7 Open, CoP, Subject-based, Institutional                  2.9 CoP, Subject-based, Institutional                  2.10 Open, National, Institutional, Informal                  2.12 Institutional                  2.13 Open, Institutional</p>
<p>3.1 Maintaining and building on institutional reputations globally                  3.2 Maintaining &amp; building on institutional reputation nationally                  3.3 Attracting new staff and students to institutions                  3.4 Increased transparency and quality of learning materials                  3.5 Supports sharing across/between departments within institutions and interdisciplinary cross-fertilisation                  3.6 Shares expertise efficiently within institutions                  3.3 Attracting new staff and students to institutions                  3.7 Encourages high quality learning &amp; teaching resources                  3.8 Supports modular course development                  3.9 Supports storage, management, preservation, attribution and retrieval of student content                  3.10 Easily incorporated with institutionally-owned technologies                  3.11 Supports the altruistic notion that sharing knowledge is in line with academic traditions and a good thing to do                  3.12 Likely to encourage review of curriculum, pedagogy and assessment.                  3.13 Supports preservation of learning resources.                  3.14 Facilitates presentation of resources for accreditation bodies                  3.15 Enhancing connections with external stakeholders by making resources visible</p>	<p>3.1 Open, National, Institutional                  3.2 Open, National, Institutional                  3.3 Open, National, Institutional                  3.4 Open, National, Institutional                  3.5 Institutional                  3.6 Institutional                  3.3 Open, CoP, Subject-based, National, Institutional                  3.7 Open, CoP, Subject-based, National, Institutional                  3.8 Institutional                  3.9 Institutional                  3.10 Institutional, Informal                  3.11 Open, National, Institutional                  3.12 CoP, Subject-discipline, Institutional                  3.13 National, Institutional                  3.14 Institutional                  3.15 Open, CoP, Subject-discipline, National, Institutional</p>
<p>4.2 Supports sharing of knowledge and teaching practice                  4.3 Encourages improvement in teaching practice                  4.6 Offers one-stop access point for staff                  4.7 Encourages multidisciplinary collaboration and sharing                  4.8 Supports CPD and offers evidence of this</p>	<p>4.2 Open, CoP, Subject-based, National, Institutional                  4.3 Open, CoP, Subject-based, National, Institutional                  4.6 Institutional                  4.7 Open, CoP, National, Institutional                  4.8 CoP, Subject-based, Institutional</p>
<p>5.2 Increased access options for students enrolled on courses (particularly remote students)                  5.6 Increased access for non-traditional learners (widening participation)</p>	<p>5.2 Open, Informal, National, Institutional                  5.6 Open, Informal, Institutional</p>
<p><b>Secondary benefits/intentions (added value)</b></p>	
<p>1.2 Encourages innovation and experimentation                  1.9 Supports continued development of tools to support sharing and exchange</p>	<p>1.2 Open, CoP, Subject-based, National, Institutional                  1.9 Open, CoP, Subject-based, National, Institutional</p>

2.8 Supports broad vision of sharing across UK HE 2.11 Supports the notion that educational institutions should leverage taxpayers' money by allowing free sharing and reuse of resources	2.8 Open, National, Institutional 2.11 Open, National, Institutional, informal
5.3 Supports collaborative learning 5.4 Supports development of student content within and outside formal learning activities 5.5 Easily accessed through student-owned technologies 5.7 Likely to encourage self-regulated and independent learning 5.8 Likely to increase demand for flexible learning opportunities 5.10 Likely to encourage peer support, mentorship and ambassadorial programmes 5.11 Evidencing skills development/recording assessment and feedback	5.3 Institutional, Informal 5.4 Institutional, Informal 5.5 Informal 5.7 Open, Informal 5.8 Open, Informal 5.10 Institutional, Informal 5.11 Institutional

Every institution is likely to develop a unique list of benefits that are most important to them – so this example is not necessarily relevant for all institutions. In fact different people, or groups of people, within an organisation are likely to identify a different set of benefits and priorities. This is why we stress the need to create a dialogue around these benefits. For example, the above snapshot suggests that taking an informal approach should help to achieve the benefits listed in the 'Secondary benefits/intentions' section. If, however, the priority benefits were to outweigh this, so for example the discussions around 1.7 - licensing and trust led to the conclusion that a closed system was best to support this benefit, then this might outweigh the arguments in the secondary benefits list. What this example highlights is that there is no one simple approach. It does illustrate the range of approaches that could be taken to fulfil institutional needs and shows the kinds of additional benefits that may result by opening access to students, linking to informal mechanisms or considering making it open outside the institution.

**NB. What is not captured here is the likely dialogue around the various benefits and approaches, and the resulting models that are selected.** So for example, in relation to 5.4 - 'Supports development of student content within and outside formal learning activities' - an institutional approach could support this benefit but it would mean that students needed to have access, could use it, were supported to utilise the mechanism/system during and outside formal learning activities, found it useful, understood the issues around ownership, attribution and licensing, etc. This would involve the support and input of a wide range of staff, both in relation to the decision making process and in actually achieving such an aim. This benefit would need to be balanced with other priorities and would need to be costed accordingly.

It would be useful for this dialogue (or it's outcomes) to be recorded in some way and this is why we suggest that this tool could be developed further. It could also be supported by real case studies.

#### 4.4 Individual sharing of those supporting learning and teaching

This scenario is likely to reflect the needs of individual practitioners who have confidence in the quality and provenance of their learning and teaching materials and who acknowledge the benefits of sharing with others in their field.

<b>Key benefits/intentions</b>	<b>Approaches most likely to support this within this context</b>
1.7 Ensures trust through appropriate licensing 1.13 Supports ease of access through search engines such as Google	1.7 Open, CoP, Subject-based, National, Institutional 1.13 Open, Informal

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2.6 Provides evidence of the provenance of learning materials	2.6 National, Institutional
3.7 Encourages high quality learning & teaching resources	3.7 Open, CoP, Subject-based, National, Institutional
3.9 Supports storage, management, preservation, attribution and retrieval of student content	3.9 Open, Institutional, Informal
3.14 Facilitates presentation of resources for accreditation bodies	3.14 Institutional
3.15 Enhancing connections with external stakeholders by making resources visible	3.15 Open, Informal
4.1 Increased personal recognition	4.1 Open, CoP, Subject-based, National, Institutional
4.2 Supports sharing of knowledge and teaching practice	4.2 Open, CoP, Subject-based, National, Institutional, Informal
4.3 Encourages improvement in teaching practice	4.3 Open, CoP, Subject-based, National, Institutional, Informal
4.4 Supports attribution	4.4 Open, National, Institutional
4.5 Supports immediate one-off instances of sharing	4.5 Open, CoP, Subject-based, National, Institutional, Informal
4.6 Offers one-stop access point for staff	4.6 National, Institutional
4.7 Encourages multidisciplinary collaboration and sharing	4.7 Open, CoP, Institutional
4.8 Supports CPD and offers evidence of this	4.8 Open, Institutional
5.1 Easy and free access to learning materials for learners	5.1 Open, Informal
5.2 Increased access options for students enrolled on courses (particularly remote students)	5.2 Open, Informal
5.3 Supports collaborative learning	5.3 Informal
5.4 Supports development of student content within and outside formal learning activities	5.4 Informal
5.6 Increased access for non-traditional learners (widening participation)	5.6 Open, Informal
5.7 Likely to encourage self-regulated and independent learning	5.7 Open, Informal
5.10 Likely to encourage peer support, mentorship and ambassadorial programmes	5.10 Open, Informal
5.11 Evidencing skills development/recording assessment and feedback	5.11 Institutional
<b>Secondary benefits/intentions (added value)</b>	
1.4 Supports re-use and re-purposing	1.4 CoP, Subject-based, National, Institutional
1.5 Supports community input to metadata through tagging, notes, reviews	1.5 CoP, Subject-based
1.6 Supports development of effective retrieval through professionally created metadata	1.6 Institutional, National
1.10 Supports the sharing and re-use of individual assets	1.10 Open, CoP, Subject-based, Institutional, Informal
1.11 Supports the sharing and re-use of complex learning resources	1.11 Institutional, National
1.12 Helps to develop critical mass of materials in particular subject areas	1.12 Open, CoP, Subject-based

An individual teacher can probably utilise all of the approaches to sharing and the key issue for them is their motivation. The snapshot above does not assume that such an individual will be overly concerned with some of the wider benefits to sharing although, of course, many of the staff working to support learning and teaching do care about broader issues such as widening participation and equality for developing countries. What we have focused on here are the more personal motivations and it seems that open and informal methods probably offer the most personal benefits. As mentioned in the 'Good Intentions' report the problem for teaching staff is

often the wide number of potential places to deposit their own content and similarly, the challenge of finding good quality content that they may want to re-use and/or re-purpose. In reality the type of supporting mechanisms available at their institutions may provide more benefits than this table suggests, but in the past institutions have not taken very co-ordinated approaches to supporting sharing between staff.

#### 4.5 Individual learner sharing

This scenario reflects learners' needs to share with other learners, either as part of a formal (possibly assessed) learning activity or as part of their informal learning activities.

<b>Key benefits/intentions</b>	<b>Approaches most likely to support this within this context</b>
1.13 Supports ease of access through search engines such as Google	1.13 Open, Informal
2.6 Provides evidence of the provenance of learning materials	2.6 National, Institutional
3.7 Encourages high quality learning & teaching resources	3.7 Open, CoP, Subject-based, National, Institutional
3.9 Supports storage, management, preservation, attribution and retrieval of student content	3.9 Open, Institutional, Informal
5.1 Easy and free access to learning materials for learners	5.1 Open, Informal
5.2 Increased access options for students enrolled on courses (particularly remote students)	5.2 Open, Informal
5.3 Supports collaborative learning	5.3 Informal
5.4 Supports development of student content within and outside formal learning activities	5.4 Informal
5.6 Increased access for non-traditional learners (widening participation)	5.6 Open, Informal
5.7 Likely to encourage self-regulated and independent learning	5.7 Open, Informal
5.10 Likely to encourage peer support, mentorship and ambassadorial programmes	5.10 Open, Informal
5.11 Evidencing skills development/recording assessment and feedback	5.11 Institutional
<b>Secondary benefits/intentions (added value)</b>	
1.5 Supports community input to metadata through tagging, notes, reviews	1.5 Open, Informal
1.12 Helps to develop critical mass of materials in particular subject areas	1.12 Open, CoP, Subject-based

Learners can utilise informal mechanisms to share and more open approaches also make more materials available to them. Some departments in some institutions may also offer secure places for students to share, which is particularly important if linked to assessment or if students are not confident about sharing their own content more widely. Challenges around ownership and rights are significant and the ease of informal sharing can often mask these issues. It is increasingly likely that students will encounter and use CC licences through informal activities as they become pervasive.

**Table 1**

<b>1. General benefits to global community</b>	<b>Open</b>	<b>CoP</b>	<b>Subject-based</b>	<b>Institutional</b>	<b>National</b>	<b>Informal</b>
1.1 Supporting subject-discipline communities to share	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SOME IMPACT
1.2 Encourages innovation and experimentation	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT	SOME IMPACT	SOME IMPACT	SIGNIFICANT IMPACT
1.3 Shares expertise and resources between developed and developing countries	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS			SIGNIFICANT IMPACT
1.4 Supports re-use and re-purposing	SOME IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT
1.5 Supports community input to metadata through tagging, notes, reviews	SOME IMPACT	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
1.6 Supports effective retrieval through professionally created metadata	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
1.7 Ensures trust through appropriate licensing	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
1.8 Supports continued development of standards and interoperability	SOME IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
1.9 Supports continued development of tools to support sharing and exchange	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT
1.10 Supports the sharing and re-use of individual assets	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT
1.11 Supports the sharing and re-use of complex learning resources	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
1.12 Helps to develop critical mass of materials in particular subject areas	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT	SOME IMPACT	
1.13 Supports ease of access through search engines such as Google	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT

**Table 2**

<b>2. Benefits for national community</b>	<b>Open</b>	<b>CoP</b>	<b>Subject-based</b>	<b>Institutional</b>	<b>National</b>	<b>Informal</b>
2.1 Cost efficiencies	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
2.2 Decrease in duplication	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
2.3 Supports cross-institutional sharing	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT
2.4 Provides access to non-educational institutional bodies such as employers, professional bodies, trade unions, etc.	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
2.5 Supports shared curricula	SOME IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT	
2.6 Provides evidence of the provenance of learning materials	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
2.7 Supports discovery of most used/highest quality resources	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT
2.8 Supports broad vision of sharing across UK HE	SIGNIFICANT IMPACT	SOME IMPACT	SOME IMPACT	SOME IMPACT	SIGNIFICANT IMPACT	SOME IMPACT
2.9 Supports sustained long-term sharing	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
2.10 Promotes the concept of lifelong learning	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
2.11 Supports the notion that educational institutions should leverage taxpayers' money by allowing free sharing and reuse of resources	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	
2.12 Mitigates the risk of doing nothing in a rapidly changing environment	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
2.13 Mitigates cost of keeping resources closed	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT

**Table 3**

<b>3. Benefits for educational institutions</b>	<b>Open</b>	<b>CoP</b>	<b>Subject-based</b>	<b>Institutional</b>	<b>National</b>	<b>Informal</b>
3.1 Maintaining & building on institutional reputation globally	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SOME IMPACT
3.2 Maintaining & building on institutional reputation nationally	SOME IMPACT	SOME IMPACT	SOME IMPACT	SIGNIFICANT IMPACT	SOME IMPACT	POSSIBLE WITH RIGHT CONDITIONS
3.3 Attracting new staff and students to institution - recruitment tool for students and prospective employer partners	SIGNIFICANT IMPACT			SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS
3.4 Increased transparency and quality of learning materials	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT
3.5 Supports sharing across/between departments within institutions and interdisciplinary cross-fertilisation	SOME IMPACT	SOME IMPACT	SOME IMPACT	SIGNIFICANT IMPACT	SOME IMPACT	SOME IMPACT
3.6 Shares expertise efficiently within institutions	SIGNIFICANT IMPACT			SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	SOME IMPACT
3.7 Encourages high quality learning & teaching resources	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
3.8 Supports modular course development	SIGNIFICANT IMPACT	SOME IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT	SOME IMPACT
3.9 Supports storage, management, preservation, attribution and retrieval of student content	POSSIBLE WITH RIGHT CONDITIONS			POSSIBLE WITH RIGHT CONDITIONS		POSSIBLE WITH RIGHT CONDITIONS
3.10 Easily incorporated with institutionally-owned technologies	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS
3.11 Supports the altruistic notion that sharing knowledge is in line with academic traditions and a good thing to do	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT
3.12 Likely to encourage review of curriculum, pedagogy and assessment.	SIGNIFICANT IMPACT	SOME IMPACT	SOME IMPACT	SIGNIFICANT IMPACT	SOME IMPACT	
3.13 Supports preservation of learning resources	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	

3.14 Facilitates presentation of resources for accreditation bodies	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SOME IMPACT	
3.15 Enhancing connections with external stakeholders by making resources visible	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT

**Table 4**

<b>4. Benefits for those supporting/facilitating learning</b>	<b>Open</b>	<b>CoP</b>	<b>Subject-based</b>	<b>Institutional</b>	<b>National</b>	<b>Informal</b>
4.1 Increased personal recognition	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS
4.2 Supports sharing of knowledge and teaching practice	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT	SOME IMPACT	SOME IMPACT
4.3 Encourages improvement in teaching practice	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SOME IMPACT	SOME IMPACT
4.4 Supports attribution	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS
4.5 Supports immediate one-off instances of sharing	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT
4.6 Offers one-stop access point for staff	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	SIGNIFICANT IMPACT	
4.7 Encourages multidisciplinary collaboration and sharing	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS
4.8 Supports CPD and offers evidence of this	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS

**Table 5**

<b>5. Benefits for learners</b>	Open	CoP	Subject-based	Institutional	National	Informal
5.1 Easy and free access to learning materials for learners	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.2 Increased access options for students enrolled on courses (particularly remote students)	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.3 Supports collaborative learning	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.4 Supports development of student content within and outside formal learning activities	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.5 Easily accessed through student-owned technologies	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.6 Increased access for non-traditional learners (widening participation)	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.7 Likely to encourage self-regulated and independent learning	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.8 Likely to increase demand for flexible learning opportunities	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SOME IMPACT	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.9 Likely to increase the demand for assessment and recognition of competences gained outside formal learning settings	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.10 Likely to encourage peer support, mentorship and ambassadorial programmes	SIGNIFICANT IMPACT	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	SIGNIFICANT IMPACT
5.11 Evidencing skills development/recording assessment and feedback	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS	POSSIBLE WITH RIGHT CONDITIONS		POSSIBLE WITH RIGHT CONDITIONS