What students want and need: How to deliver course materials to drive student success.

Findings from a June 2023 study of students in the US, UK and Australia
Background

Higher education institutions were forced to pivot to online learning almost overnight during the pandemic. What started out as a temporary solution to a black swan event has become the norm, with students continuing to prefer and expect on-demand digital learning resources from their schools.

Within this new digital paradigm, institutions are attempting to maintain affordable learning and ensure students can easily access the resources they need to be successful while balancing the needs and capacity of their faculty and librarians.

Solutions that bridge the gap between the library, faculty and students can have a major impact today, making it simple for students to discover and access the materials they’ve been assigned so they can thrive academically.

Project

Alterline, an independent research agency, was commissioned by Ex Libris to assess the experience of students of managing, accessing and using course materials.

This paper includes findings from a survey students from the US, UK and Australia.
Our survey of 1509 students includes:

- **US:** 33%
- **UK:** 34%
- **AUS:** 33%

**Year of study**
- First year: 43%
- Second year: 25%
- Third year: 20%
- Fourth year: 8%
- Fifth year or over: 4%

**Mode of study**
- **Full-time:** 88%
- **Part-time:** 12%

Ex Libris, Part of Clarivate
**Level of study**

- Undergraduate: 83%
- Masters: 17%

**Widening participation**

- First person in family to go to university / college: 31%
- Over 21 when starting program: 19%
- International student: 15%
- None of the above: 43%

**US Colleges**

- Public university: 53%
- Private university: 20%
- Community / technical college: 21%
- Liberal arts college: 6%

**Disciplines**

- Business: 17%
- Social science: 14%
- Applied science: 12%
- Arts: 11%
- Natural science: 9%
- Humanities: 6%
- Formal science: 4%
- Other / I don't know: 27%
Key findings

**Students want easier access to online, digital and interactive content.**

The key resources that students want to see more of are links to online sources and resources at the institution's library; PDFs of books, book chapters or articles; and videos. Students are more likely to want access to online material types than print materials.

**Ease of accessing materials online can impact students' success.**

Students report that not having access to materials through their institution can mean they do not read the material and can have a negative impact on their success. Issues with accessing materials include lack of online access, broken links, and paywalls.

**It is important that course materials are accessible from a variety of devices to allow equal opportunities to engage in materials.**

The smartphone is an essential part of the university experience, and is a key device for many students, particularly those studying part-time. However, students are most likely to use laptops for reading their course materials, and for other learning activities at university.

**Expensive course materials can have a negative impact on student's success in their degree.**

The majority of students believe that when the cost of course materials is too high, this has a negative impact on their success. 1 in 5 students have opted to not enroll in a course/module unit due to the cost of course material being too high. When the cost of course materials is too high, students opt either to obtain old materials or don’t read course materials at all.
Giving students easier access to free materials could increase their engagement in reading assigned course materials.

Only 31% of students read all of their course materials. Students who read less than half of their course materials are more likely to obtain their course materials through free methods, compared to those that read all of their course materials. Students are most likely to obtain their course materials by finding it online for free, or through their institution’s library.

**US students' concerns about paying for their course materials can impact their experience as a student.**

US students are more likely to expect to pay for all of their course materials, and they are also more likely to have opted to not enroll in a course due to the high cost of course materials. In spite of such concerns about cost, US students are less likely to look to the institution’s library for alternatives to expensive course materials. More could be done by professors to encourage students to use the library.

**Linking course material lists to the institution’s library is being underutilized by faculties.**

Around half of students who are assigned their course materials through their learning management system are unable to find out if their materials are available on the institution's library through the learning management system.

**Allowing students to engage with their course by suggesting materials can improve students’ success within the course.**

Half of students are able to suggest and add resources to use in their course. Students find that this helps them to be more active in their learning and be more successful in their course.
Students want easier access to online, digital and interactive content.

The most commonly used resources in students' courses are links to online resources and resources at the institution's library, and PDFs of books, book chapters or articles. Linked resources are more common than unlinked references, with 30% of students saying that references without links are used by faculty most or all the time. Digital and physical course packs which students can purchase are more common in the US (36% and 32% respectively).

The key resources that students want to see more of are links to online sources and resources at the institution's library; PDFs of books, book chapters or articles; and videos. The resource students are more likely to want to see less of is references, without links, to articles/papers. Students prefer more online course materials, with 82% saying they would like more of at least one of the online material types, compared to 61% that said they would like more of at least one of the offline material types.

II

[Universities should...] keep providing course materials, keep adding content for the modules and reading material; and links to helpful websites and videos we can watch to enhance our knowledge on the subjects.

UK, Social Sciences student
Types of materials faculty are using in courses most or all of the time, and the types that students would like to be included a little or a lot more.

- Used most or all of the time:
  - Links to resources available online: 65%
  - Links to resources available in your institution's library: 56%
  - PDFs of books/book chapters/articles: 56%
  - Videos: 47%
  - References to physical textbooks: 41%
  - References to physical books: 34%
  - References, without links, to articles/papers: 30%
  - Digital course packs which students can purchase: 21%
  - Physical course packs which students can purchase: 19%

- Would like to be included a little or a lot more:
  - Links to resources available online: 58%
  - Links to resources available in your institution's library: 49%
  - PDFs of books/book chapters/articles: 52%
  - Videos: 50%
  - References to physical textbooks: 29%
  - References to physical books: 29%
  - References, without links, to articles/papers: 23%
  - Digital course packs which students can purchase: 28%
  - Physical course packs which students can purchase: 25%

How to deliver course materials to drive student success
Ease of accessing materials online can impact students’ success.

The majority of students agree that it is easy to access materials online via their institution (66%). This is higher for students whose institution has Leganto (71%) than those that do not (61%).

If students are unable to access this information it can have an impact on their experience. 41% of students agree that if they are unable to access course materials via their institution, they will not read it. 58% of students agree that being unable to access materials through their institution negatively impacts their success on their course.

![Diagram showing the percentages of students' perceptions](image)

- 66% of students agree it is easy to access course materials through their institution.
- 41% of students agree if they can't access course materials through their institution, they won't read it.
- 58% of students agree if they are unable to access course materials online through their institution, it negatively impacts their success on their course.

Hyperlink materials that are not limited to number of people using them before lectures on a slide and in an accessible Moodle page, in order of topic and essential to the course vs optional.

Australia student, subject area not specified
The most common factor stopping students from accessing their course material was not being able to find it online (51%). This was followed by broken links (50%) and needing to pay (49%).

The proportion of students who reported issues with the following when accessing course materials...

- Being unable to find course materials online: 51%
- Encountering broken links to materials: 50%
- Needing to pay to access course materials online: 49%
- Difficulties in meaningfully engaging with course materials online: 37%
- Materials that were not compatible with mobile devices: 35%
- Not being able to access materials online because other students were using them: 25%
It is important that course materials are accessible from a variety of devices to allow equal opportunities to engage in materials.

A laptop is the most commonly used device for reading course materials (91%), followed by smartphones (54%). A laptop/desktop computer is the preferred device for all activities students were asked about. Other popular devices included mobile phones for time management and task management (31%), and non-digital method (28%) and tablets (20%) for note-taking. Nearly three quarters of students agree that a mobile phone is an essential part of the university experience.

Part-time students are less likely to use a laptop to read course materials, and are more likely to use a smartphone, tablet or e-book reader than full-time students. This trend is consistent among all activities listed, with part-time students being less likely to say a laptop/desktop computer is their preferred device than full-time students.
Most-preferred device / method for the following activities...

- **Research**: 85% (Laptop/desktop computer), 12% (Other digital device), 2% (Non-digital device/method)
- **Essay writing**: 87% (Laptop/desktop computer), 9% (Other digital device), 4% (Non-digital device/method)
- **Collaborative projects**: 81% (Laptop/desktop computer), 14% (Other digital device), 6% (Non-digital device/method)
- **Reviewing lecture materials**: 73% (Laptop/desktop computer), 21% (Other digital device), 6% (Non-digital device/method)
- **Reading course materials**: 68% (Laptop/desktop computer), 21% (Other digital device), 10% (Non-digital device/method)
- **Time management and task management**: 46% (Laptop/desktop computer), 43% (Other digital device), 10% (Non-digital device/method)
- **Revising**: 69% (Laptop/desktop computer), 19% (Other digital device), 12% (Non-digital device/method)
- **Taking exams**: 76% (Laptop/desktop computer), 8% (Other digital device), 16% (Non-digital device/method)
- **Note-taking**: 44% (Laptop/desktop computer), 28% (Other digital device), 28% (Non-digital device/method)
Expensive course materials can have a negative impact on student's success in their degree.

The majority of students feel the cost of course materials is important to them when selecting course/modules/units to enroll in (63%), which results in 1 in 5 students opting to not enroll in a course/module/unit due to the course material being too expensive.

Of students who have opted not to enroll in a course because the cost of the course materials was too high:
- 69% negative
- 23% no affect
- 8% positive

Impact of high cost of course materials on success as a student.
The expenses involved in course materials can have an impact on student success. 69% of students say that the high cost of a course material can have a negative impact on their success as a student. If the cost of course materials is too high, students are most likely to obtain an old version of the materials (48%). This is followed by not reading the materials (39%).

**Methods used all or most of the time for obtaining course materials**

- Obtained older version of same materials that was more affordable or free: 48%
- Did not read the material: 41%
- Requested a copy from my institution’s library: 39%
- Requested a copy from a classmate/shared with classmate: 37%
- Requested a copy from the professor: 16%
- Other: 7%

**UK, Social Sciences student**

Usually material that comes with a cost are high quality academic sources that provide useful and meaningful insight into a topic. Not being able to look at it puts you in a position where you’re missing out on something that can help you to develop further. Typically, you will find little online for free about the source due to the severity of privacy rules.
Giving students easier access to free materials could increase their engagement in reading assigned course materials.

31% of students read all of their assigned course materials, and 36% read more than half but not all. One in eight students (13%) report reading less than half or none of their assigned reading, and a further one in five (20%) only read around half.

The most popular ways for students to obtain course materials is through finding it online for free (50%), or through their institution’s library (48%). Students whose institution has Leganto are more likely to find materials through the library compared to students who institution does not.
76% of students said they would use one of the free methods (i.e. finding it online or in the library, or borrowing from a friend) most or all of the time to find course materials, whereas only 40% would use of the paid for methods (i.e. buying or renting) most or all of the time. Use of paid methods is largely driven by US students. 69% said they used paid methods most of all of the time, compared to a quarter of UK and Australian students.

Those that do not read their course materials may struggle to obtain materials due to their cost. Students who read less than half or none of their course materials are more likely to obtain their course materials through free methods (79%), compared to those that read all of their course materials (73%).

### Methods used all or most of the time for obtaining course materials

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding it online for free</td>
<td>50%</td>
</tr>
<tr>
<td>My institution's library</td>
<td>48%</td>
</tr>
<tr>
<td>Buying it myself online</td>
<td>21%</td>
</tr>
<tr>
<td>Renting the materials</td>
<td>18%</td>
</tr>
<tr>
<td>Buying it myself from the campus</td>
<td>17%</td>
</tr>
<tr>
<td>Borrowing from my peers</td>
<td>16%</td>
</tr>
<tr>
<td>Buying it from another physical</td>
<td>16%</td>
</tr>
</tbody>
</table>
US students' expectation to pay for their course materials can impact their experience as a student.

US students are more likely to expect to pay for all or some of their course materials (60%), than students in the UK and Australia (20% and 24% respectively). 76% of Australian students and 80% of UK students expect their institution to pay for all their course materials.

**Expectations for how course materials should be funded...**

<table>
<thead>
<tr>
<th>Country</th>
<th>Pay for all</th>
<th>Access some but purchase some myself</th>
<th>Pay for all materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>76%</td>
<td>22%</td>
<td>2%</td>
</tr>
<tr>
<td>UK</td>
<td>80%</td>
<td>19%</td>
<td>1%</td>
</tr>
<tr>
<td>USA</td>
<td>40%</td>
<td>54%</td>
<td>6%</td>
</tr>
</tbody>
</table>

...of US students have decided not to enroll in a course because the cost of course materials is too high.
58% of US students feel that high cost of materials has a negative impact on their success. However, US students are less likely to feel high-cost course materials have a negative impact on their success than students from Australia and UK, and are more likely to think it has no effect. This may be due to the US student’s expectation of having to pay for course materials.

![Negative impact of high cost of course materials on success as a student](image)

If the course material is too expensive for them, US students are most likely to obtain an older version of the materials (48%). US students are less likely than students from the UK and Australia to request a copy of course materials from their institution's library (32%, compared to 46% and 40% respectively), whereas this is the most common response for UK students.

It indeed has a very negative impact because college is already expensive and I’ve found myself in situations of getting a barely passing grade because I couldn’t find one book that was really necessary for an assignment

US, Natural Sciences student
Linking course material lists to the institution’s library is being underutilized by faculties.

75% of students get assigned course materials through their learning management system. 63% are notified of assigned course materials during class, and 57% through direct communication such as email.

Method for notifying students of assigned materials...

Of the students that get notified of their course materials through their learning management system, only 55% can see whether the materials are available through the institution’s library in the system. 30% say they have to go to a separate website to find out if it is available.

Lecturers and library should work together to provide a wider range of reading material and course resources to better facilitate students success in their assignments and examinations

UK student, unnamed subject area
Allowing students to engage with their course by suggesting materials can improve students’ success within the course.

Around half of students are able to add or suggest resources for their professor or lecturer to use in the course. 23% can do so through their learning management system, but 27% have to do so by approaching the professor/lecturer directly.

54% of students agree that being able to add/suggest resources helps them to be more active in their learning. 55% agree that being able to add/suggest resources helps them to be more successful in their course.

![bar chart](image)

- **Disagree**: 16%
- **Neither agree nor disagree**: 29%
- **Agree**: 54%

- **Disagree**: 11%
- **Neither agree nor disagree**: 34%
- **Agree**: 55%

.. of students can add/suggest resources for the professor/lecturer to use in the course
Reflections

Students’ access to up-to-date course materials is key to their academic success.

The library’s digital collection has the potential to solve access issues and make learning more accessible and affordable for all students. However, at the time of writing, challenges remain for both librarians and faculty members building digital course material lists, including:

• Highlighting the availability of course materials within the library’s existing collections
• Linking course materials directly to the online source within the library to improve ease of access
• Making faculty more aware of student budget limitations and helping them build lists of course materials that reduce students’ financial burdens.

Librarians and faculty can work together to address these issues to make it easier and more affordable for students to access the materials they need to succeed.

As one student from the UK that we surveyed suggested, “Lecturers and library should work together to provide a wider range of reading material and course resources to better facilitate students’ success in their assignments and examinations.”

Based on the student expectations and experiences shared in this survey, we believe that in the coming years librarians and faculty will have a unique opportunity to give students what they want and what they need at the same time - by investing in how they deliver course resources. Solutions for delivering and accessing course materials can streamline the process for librarians, faculty staff and students and encourage better student outcomes.
Ex Libris, part of Clarivate, is a leading global provider of cloud-based solutions that enable institutions and their individual users to create, manage, and share knowledge. In close collaboration with its customers and the broader community, Ex Libris develops solutions that maximize the impact of research activities, increase library productivity, enhance teaching and learning, and drive student mobile engagement. The Ex Libris suite of research solutions enables institutions to aggregate, manage, and expose all research output and data, across all disciplines, match scholars with the right funding opportunities, and automate processes to reduce administrative burden on the research office, library, and researchers.