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Developing an OER Textbook to Meet Student Needs

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Context

Families Across the Life Course (2012) was originally published by Pearson Education. It was written for Canadian college level/lower-level undergraduate classes in Family Sociology.

- Used at 13 higher education institutions across Canada
- Used as primary teaching resource in the authors' introductory 'Sociology of the Family' course

Once out of press, copyright was reverted to the authors.

The final product will become part of the B.C. Open Collection by BC Campus and used as part of an open course

Why Create an Open Textbook?

Current research regarding Open Educational Resources (OER) reported that benefits to OER include; **versatility presenting coursework and ease of accessibility** (Henderson & Ostashewski, 2018; Shams et al., 2020).

The implementation of OER's has additionally been shown to facilitate **deeper learning of course content, reduce the time required to conceptualize class material, and improve grades** (Islim & Cagiltay, 2016).
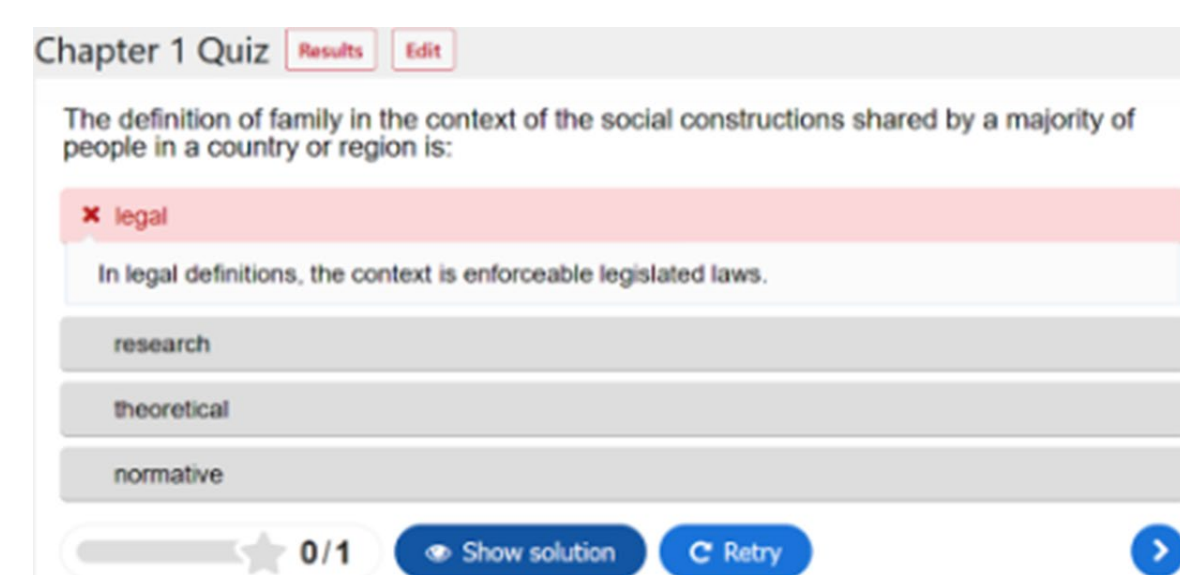
A significant benefit of an OER are its **cost-saving features.** Some university students with basic need insecurities (food, housing, etc.,) often delay or forgo purchasing their textbook due to its costly nature (Van Allen & Katz, 2020).

Creating OER initiatives can **eradicate the barriers to accessing essential learning materials.**

Adding Interactives – H5P

Studies have found that **retrieving** previously learned information **improves memory** retention (Kubik et al., 2021).

Incorporating feedback into the retrieval process can **improve memory retention even more** and information learned can be more readily applied to new contexts (Roediger & Butler, 2011).

H5P software allows instructors to incorporate interactive learning tools into online materials, such as quizzes and essay questions.

With H5P, once a student selects an answer, feedback will be provided about the selected answer.

Getting Students Involved

In addition to research assistance from undergraduate RAs, we tapped into ideas from students in the course.

Students were assigned a weekly reflection where they were asked to discuss one of the following:

1. **A missing topic** from the chapter that should be included;
2. **A teaching technique**/idea for an aspect of the chapter; or
3. **An addition in the form of a 'box' item** (e.g., link to news article with discussion etc.)

TAs flagged top suggestions for each chapter that will be considered in the final revision.
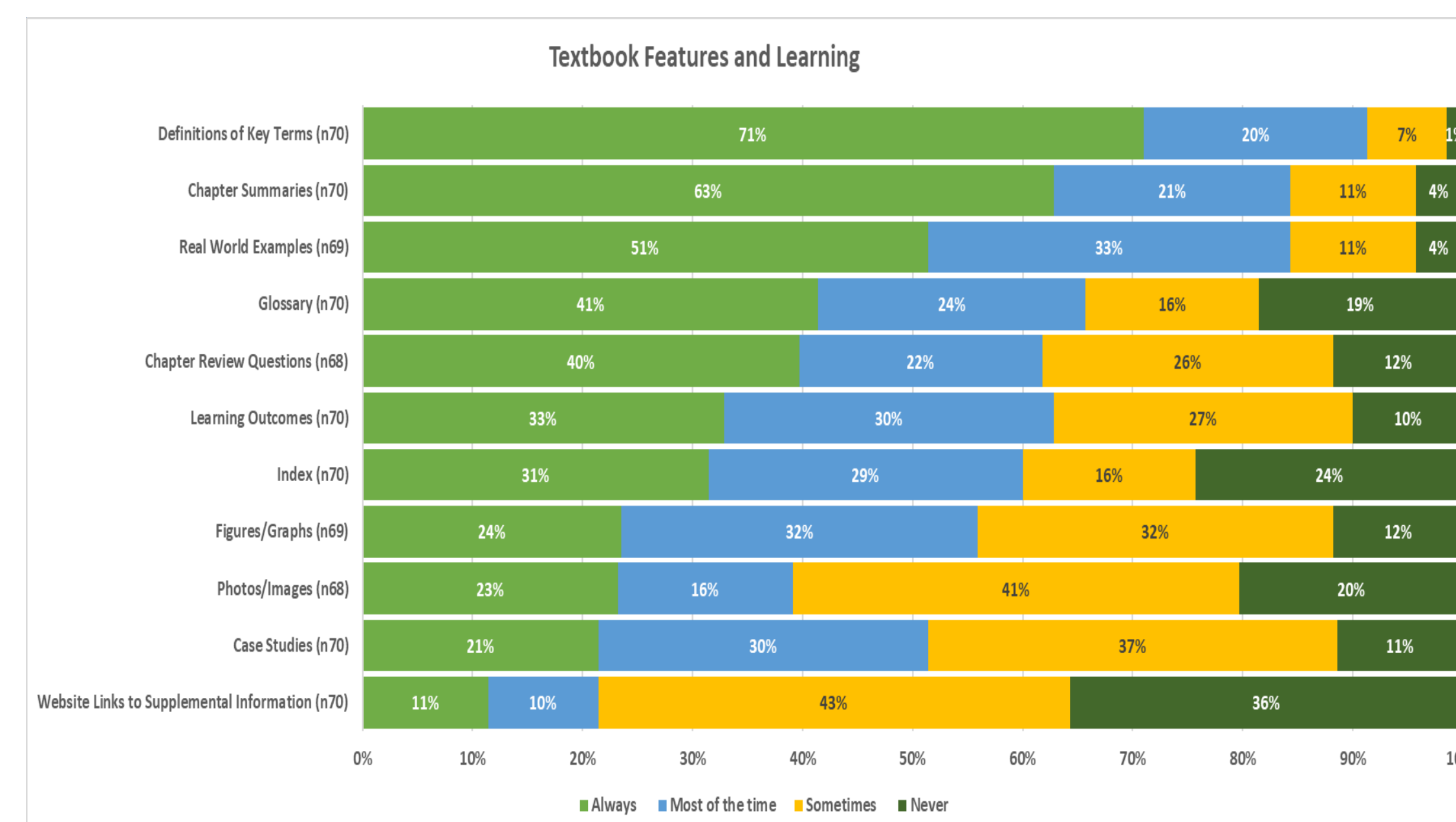
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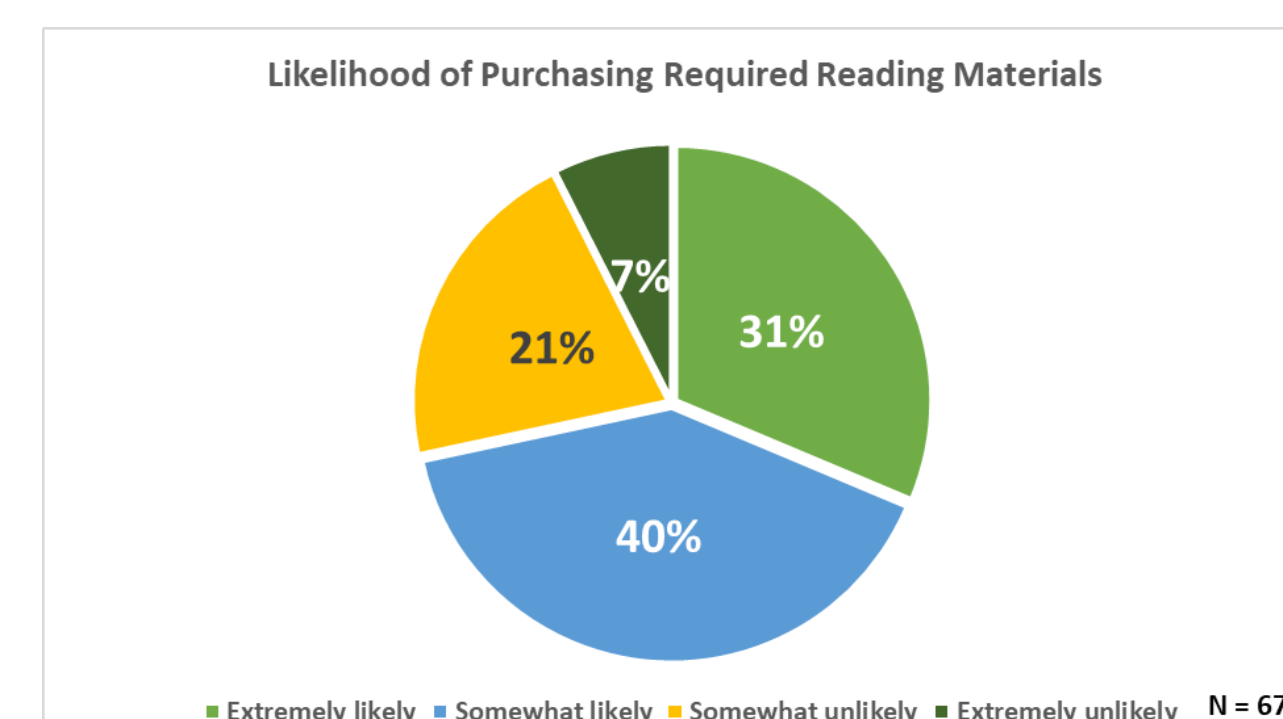
Twenty-eight percent of students indicated that it would be somewhat or extremely **unlikely** that they would **purchase a required textbook** for a course (N = 67).

"Textbooks are almost always outrageously expensive, and all too often they aren't used enough to justify purchasing them."

Eighty-one percent of students report engaging with **multiple choice review questions** always or most of the time while for **essay questions, only 17%** of students engage in this way.

Benefits of Online Textbooks

- Easier and faster access to content N = 61
- Ability to search for specific terms or keywords quickly N =35
- Portability and not having to carry physical books N = 25
- Cost savings N = 14

Costs of Online Textbooks

- Eye strain or discomfort from staring at screens N = 21
- Difficulty in annotating and making notes directly on the textbook N = 21
- Potential for distractions when accessing textbooks on devices N =16
- Need for an electronic device and internet access N =13

Key Takeaways

- Converting a textbook to one that is Open Access **takes time** but can cater to student's needs and **increase accessibility and sustainability.**
- **Recall practice with immediate feedback**, included through embedding H5P interactives, has been found to **improve retention**.
- However, **access to an electronic device/internet** is still required.
- The **potential for distractions** while reading is increased.

References

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