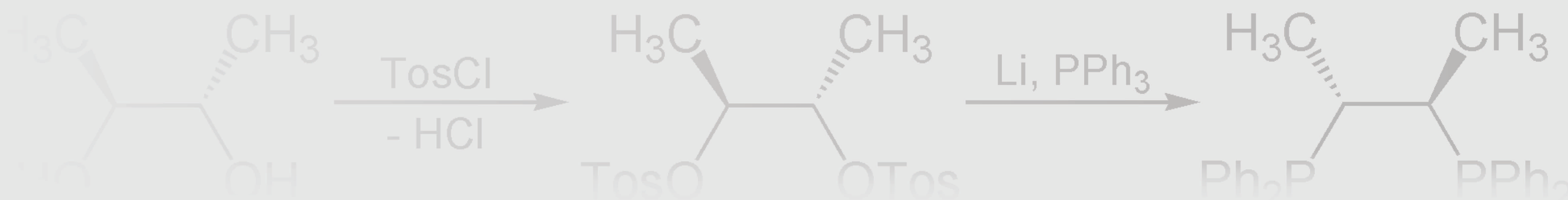


How much?!



ESTIMATING THE COST OF AN ASSIGNMENT IN AN ORGANIC CHEMISTRY CLASS

Objective: To estimate the library costs of completing an assignment in an organic chemistry class.

Methods: Students in Chemistry 254: Organic Chemistry for Majors were required to write a paper on an organic name reaction (a reaction named after the chemist who discovered it). This study attempts to take a holistic account of various costs associated with completing this assignment. Upon submission of their papers, students' bibliographies were collected. Different price estimates, such as cost per use of the particular journals and interlibrary loan cost for the individual articles, were used to determine a range of possible costs for each article a student cited. An estimated cost of a librarian's time in delivering SciFinder training sessions was factored in, as was the cost of each student having access to SciFinder.



Cost Analysis Methods

Obtain journal costs from

- Direct purchase (actual amount paid)
- Ulrich's
- OhioLINK (Library consortium) paid

Obtain total usage data from

- Local stats
- OhioLINK stats

Calculate estimated cost per use

Cost Analysis Scenario

- 53 students
- Sophomores
- Chemistry majors
- Organic chemistry class
- Average 9 articles per paper

How much did it cost?

1a. Journal List Price Cost per Use

- 365 Articles
Total cost: \$12,008.78
Mean cost per use: \$32.90
Median cost per use: \$4.25
- 28 Open Access Articles
Cost per use without OA: \$35.63

1b. OhioLINK Journal Adjustments

Savings (or expenses!)

from OhioLINK: \$9,696.92

\$12,008.78 (List cost for 365 articles)
– 9,696.92 (OhioLINK)
= **\$2,312.71** (Actual cost of journal access)

2. SciFinder Cost

- Cost per session: \$18.73
- Low estimate: 31 sessions
- 31 sessions x \$18.73 = \$468.31

Likely SciFinder usage based on average sessions per month: 207 sessions
207 sessions x \$18.73 = **\$3,877.58**

3. Estimated Librarian Cost

- Median salary for an academic librarian in the Midwest U.S.: \$39,800/year¹
 - 52 weeks, 40 hours per week
 - 2 hours prep time
 - 6, 1-hour sessions
 - 2 hours of follow-up
- = **\$191.35**

¹<http://lj.libraryjournal.com/2013/10/placements-and-salaries/2013-survey/explore-all-the-data-2013/>

Total Cost Estimates

	LIST COST	LOW ESTIMATE	LIKELY COST
Journals:	\$12,008.78	\$2,312.72	\$2,312.72
SciFinder:	3,877.58	468.31	3,877.58
Librarian:	+ 191.35	+ 191.35	+ 191.35
Total:	= \$16,077.71	= \$2,972.38	= \$6,381.65

Potential ILL Savings

- Typical interlibrary loan charge: \$15/article
- 8 titles less expensive through ILL
- For non-OhioLINK titles, potential savings of **\$898.47**
- 4 titles with savings \$49.84 or greater per use

Potential ILL Savings Applied

\$2,312.72 (Journals)
3,877.58 (SciFinder)
+ 191.35 (Librarian)
= \$6,381.65
– 898.47 (ILL savings)
= **\$5,483.18**

Limitations

- Abstract vs. Full Text
- Cost Estimations
- Ulrich's
- Small Sample Size/Scale

Future Directions

- Longevity study (same students or multiple years)
- Similar study on theses
- Comparison across disciplines

