

# THINGS YOU SHOULD KNOW ABOUT...

# COLLABORATIVE ANNOTATION

## Scenario

Carlos is a first-year law student, working through a heavy course load. In one course, Carlos is part of a team working on an assignment simulating a dispute between a landlord and a tenant. Carlos and his team are to argue how they believe the case should likely be adjudicated, based on statutes and precedents in a particular jurisdiction. When the team meets at a coffee shop to plan for the assignment, they agree that a collaborative annotation tool might be helpful to keep their sources and ideas organized, and they decide to use a tool called Diigo. They set up accounts, define their group on Diigo, and agree on specific tags to use for the resources they uncover.

Over the next two weeks, the members of the team research applicable legal codes and locate relevant case law in several public-records databases. Once they each sign into Diigo, they can use the application's tools to highlight important phrasing on web pages and add comments that other members of the group can see on their own browsers when they visit those websites. They review rental contracts to see what language might have been used to avoid the dispute altogether, and these annotated resources are added to their collection of resources. Team members add and annotate cases and build on each other's comments, something that brings them to consensus quickly. As he and his team use Diigo throughout the semester, Carlos builds a collection of annotated phrases from a large number of contracts.

During the summer, Carlos is invited to work in the law school's affordable housing clinic. He and his colleagues examine rental agreements on behalf of financially disadvantaged tenants, give legal assistance to victims of discrimination, and provide mediation for numerous disputes. The clinic is also developing a selection of sample rental agreements to be posted on the clinic website as a public service. Anyone can download these contracts and fill in the names and dates. Consequently, the wording has to be fair to both landlord and tenant, easy to understand, and unambiguous from a legal standpoint. Carlos retrieves his notes from Diigo and shares them with the clinic team. The legal phrases he and his collaborators had highlighted and annotated serve as a valuable starting point for the clinic as they craft example rental agreements.

## 1 What is it?

Collaborative annotation tools, such as Diigo, Reframe It, MyStickies, and Google Sidewiki, expand the concept of social bookmarking by allowing users not only to share bookmarks but also to digitally annotate web pages. Rather than simply pointing to particular web pages, collaborative annotation lets users highlight specific content on a web page and add a note explaining their thoughts or pointing to additional resources. Users highlight text or images, add their own comments, and share those annotations with colleagues and friends of their choosing. Bookmarks and comments can be grouped and tagged to provide organization. As a result, students in a course or members of research teams can compile an annotated bibliography of useful sites, complete with marked paragraphs they found important and notes about why a site is significant to the topic under study. Students who use these tools for academic research can, over time, build a collection of their own studies and observations in much the same way generations of students have saved texts with dog-eared pages, highlighted passages, scribbled comments, and sticky notes. For students who intend to pursue academic work as a career or for researchers working on long-term projects, the ability to collect these research components can be extremely valuable. In the context of a college course, collaborative annotation tools involve students in a more active investigation and evaluation of resources.

## 2 Who's doing it?

These applications see wide use in the humanities, where patterns are sought between textual sources for evaluative purposes and where scholars often build on their insights and those of others. In the anthropology department at Kansas State University, for instance, students use collaborative annotation in a digital ethnography course. As students conduct anthropological investigation on the web, these applications allow them to enter and share personal "field notes" on promising sites and keep a record of the sites and the annotations. For a project on learning communities at the University of Texas at El Paso, students team with colleagues at Victoria University in Australia. Teams that include students from both universities work on common assignments, using Diigo to share research. At Stanford University's Media X collaboration of university with industry, Reframe It connects those on remote teams working on research, policy, and analysis. As a student service, Cornell University has installed A.nnotate, an application that takes "snapshots" of web pages, PDFs, or other document types, which users can annotate and upon which they can collaborate by reading and responding to one another's comments.

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### 3 How does it work?

Most collaborative annotation sites require registration and a plug-in that installs a toolbar on the browser menu or provides some other means of accessing the application tools. The application then superimposes a “layer” over any web page. This layer stores highlighting and comments and can be seen only by those who have been granted viewing permission. Instructors might set up a group for a specific course, for example, and assign a task that familiarizes students with the practice of academic annotation and trains them on the application at hand. Students can specify whether notes and observations they add are public, private, or directed toward a specific group. Anyone who shares the resources of the designated group can see the markups and “digital sticky notes” when they access the web page. Because users can set up multiple accounts, students can set aside an account for any group project where they share resources. Depending on the application, features can include integrated blog services and an RSS feed that presents the student comments as a slideshow.

### 4 Why is it significant?

The activity of adding reflections as marginalia can move students from being passive consumers of information to active readers engaged in scholarly discussions. To this end, these applications are more than standard social bookmarking tools—they offer new ways for students to work collaboratively to find and evaluate information, share ideas, and create knowledge. Collaborative annotation tools also facilitate the incremental growth of information as users review others’ thoughts on a resource before adding their own. By providing the ability to designate who is allowed access to collections of resources, these tools reinforce the character of a cohesive group. Because they are web-based, collaborative annotation applications can be made available to a global community, inviting experts in academic disciplines to provide valuable insight on students’ efforts. As students collectively annotate, organize, and add value to existing resources, they learn how to sift, evaluate, and contribute. When instructors use these tools over time, student efforts might constitute an archive or library of remarks so that subsequent classes can benefit from the observations of their predecessors.

### 5 What are the downsides?

The plug-ins that these applications require may not work with all browsers. Further, the applications themselves present a way of working that is unfamiliar to some students. Students new to or uneasy with the practice of annotating the work of others might need extra time or guidance, and some students might struggle with appropriate and effective tagging, which is an important component of how these tools work. As with nearly all cloud services, the service provider stores the data, meaning that if providers’ servers are unavailable, data cannot be retrieved. Unless comments are marked private or are otherwise designated to be seen only by a specific group, they can be viewed by any subscriber to the service, which could raise privacy concerns. The

group features require other users for buy-in and collaboration, and instructors who subscribe to the RSS slideshow features will not be able to see all the students’ comments at one time.

### 6 Where is it going?

While these applications are being used by early adopters, they may eventually integrate with other resources or collections of resources through their use of RSS. In introductory classes, the tools might encourage students to see themselves as active processors of content. For more advanced undergraduates and graduate students, collaborative annotation provides the building blocks to extend the learning processes beyond the individual course and into academic careers. As more materials move online, it could become commonplace for scholars to work collaboratively online to build the traditional literature review from which they and others might draw for subsequent papers and projects. In this sense, an individual’s bookmarks, observations, and reflections might become part of a larger learning portfolio. This collection of tools and accumulated research could be a scholar’s private, portable library for reference in any field, forming an academic bridge between college work and a career.

### 7 What are the implications for teaching and learning?

Collaborative annotation tools offer an excellent starting place for immersing students in the scholarly practice of research and annotation, while encouraging them to share information and build on the work of others in a dynamic community of thought. With such tools, students might have the opportunity to collaborate on the interpretation of resources in ways not possible inside a classroom (where the loudest voices sometimes have the final say) or with printed materials that shouldn’t be written in, such as library books. Further, while scholars have found in the web an unparalleled information resource, using it effectively increasingly depends on tools that help organize the data and simplify the process of locating resources when they are needed. These tools empower users, giving them the capability of commentary and reflection rather than restricting it to authors and website creators. Finally, academics across disciplines and institutions value these tools and the accumulated observations of instructors, experts, and peers that they facilitate.

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