Interviews + Contextual Inquiries

Research Report

Insights Summary

- Users find **partitioning confusing** and in some cases **off-putting**. The dominant divisions faculty consider are school and department, followed by program and degree level. However, Slate is partitioned by applicant stage.
- **Real-time collaboration is** a **central** part of faculty admissions, comprising deciding who should review which applicants, comparing assessments, and coming to a decision. Slate is optimized for a solo reviewer model, or secondarily a staged/handoff model over simultaneous collaboration.
- For faculty, **admissions is** a **relativist, not absolutist** process**.** Applicants are not judged on a one-by-one process by their inherent merits, but in chunks or all at once, in comparison with each other, by relative merit. Slate is optimized for an absolutist model that doesn't fit with users' relativist mental models.
- The **larger the program, the more they** generally **struggle** with using Slate because of this bias towards reviewing each applicant and bias against faculty collaboration.
- There are **two review stages--macroscopic and microscopic**.
- In the **macroscopic stage**, users seek to do **high-level weighting across many applicants to eliminate and sort** them, and recognize patterns. At this stage, the process of skipping over applicants is an adaptive, not maladaptive practice, aimed at efficiently reviewing many options while balancing speed and rigor. Faculty don't have time to read each application in detail and it wouldn't be efficient to do so anyway.
- Nearly **every faculty user relies on admissions processes, workarounds, and communications outside Slate**. Very commonly this happens **at the macroscopic review phase**, which is not well served by Slate. This often takes the form of spreadsheet exporting and analysis.
- What users do use **Slate** for is as a **database of information to query and extract from** to then do external work. Users see Slate as a receptacle, not a tool.
- In the **microscopic phase**, users **drill down into select individual applications to seek detailed information** for expanding upon and qualifying their macroscopic assessment. After the best students are fast-tracked to admission and the poorest are eliminated through macroscopic review, users review only moderately promising applicants. For this phase users browse Slate for select information.
- The **output of the combined phases is an admit/waitlist/deny list**, which is often passed to staff for processing.
- There is **complexity** and hedging **around estimating the target numbers of applicants to admit** that then ideally lead to the target number of positive SIRs.

Additionally, there are complications around timing for rolling admissions, different programs in a department, and different degree levels.

- Users have **difficulty finding key features** and many **believe they don't exist**, leading to workarounds and frustration. There is also confusion around **multiple possible paths for a single action**, such as querying.
- **UX writing** and many finer **design elements** (icons, filters, forms) **do not match user expectations and don't evoke** their **actual usage**, making Slate hard to use until they are learned. Users are forced to recall, rather than being able to recognize elements.
- Users find the **flexibility of Slate lacking**, often tied to the fact that permissions are opaque, and not granular or customizable. Similar feelings abound for UI elements.
- Slate pushes users to do a **multitude of limited actions in a set order, incurring repetitive stress** across many applicants. Users would prefer to do an aggregated, powerful action (i.e. batching) in their preferred order, inspiring feelings of mastery and productivity.
- Users have substantial **privacy concerns around protecting data from being seen** by applicants or current students, other programs, or even faculty in the same program during the review process.
- The UI takes a **maximalist design philosophy**, with many elements not used, understood, or sometimes wanted by users.

USER ACTIONS TABLE

*denotes action not taken by real users
*denotes action not accounted for in Slate

Admissions step	**Slate "happy path" actions based on conceptual model**	**User actual actions based on mental model**
Getting started	• Open Slate bookmark • Log in • Look at home page • Go to reader • Look at reader home	• Google UCI Slate and open URL • Log in • Go to reader
Seeing applicant list	• Open faculty review or other appropriate bin	• Run query • Export query to CSV/Excel
Selecting which applicants to review	• Select applicants at random or by memorized criteria • Add to queue	• Filter/sort/conditional format appropriate applicants • Add notes and rank columns in

		spreadsheet ● Assign to faculty
Looking at application materials	● Open applications one by one from queue ● Scroll through reader pages ● Make notes/highlights	● Look at spreadsheet for majority ● Only when needed, look at application by searching name and looking through search preview at reader
Leaving review	● Fill out reader sheet	● Fill out rank and comment box in spreadsheet ● Adjust if needed based on applicant pool and faculty review
Collaboration with faculty	● (optional) pass to colleagues by recommending in reader sheet	● (done above)
Making admissions decisions	● Submit reader sheet ● (no further visibility into actual status)	● Meet to decide admit list ● Pass list to staff
Seeing SIRs	● Open appropriate bin ● Filter if needed	● Get list from staff
Secondary admissions	● (no formal process)	● Look through spreadsheet for top candidates not accepted in first pass and pass to staff

USER MOTIVATIONS TABLE

Admissions step	**As a faculty reviewer, I want ___ (what) so ___ (why)**	
Getting started	Find my relevant page quickly	Save time and effort for the actual application review

Seeing applicant list	See all applicants by program and degree level regardless of stage	Keep tabs on applicant volume and status
Selecting which applicants to review	Filter/sort top applicants to fast-track and bottom-tier to mass deny	Focus decisions on middle tranche of applicants who are hardest to assess
Looking at application materials	Only look at relevant areas of applications in a user-friendly, scrollable, searchable, jumpable way	Efficiently look for qualitative aspects that make up for lower quantitative aspects for a better overall picture
Leaving review	Fill out a rank and comment and be able to see my colleagues' ratings concurrently; change my mind easily	Comparatively rank applicants against each other on a high level with a number and minutely with dialogue
Collaboration with faculty	Have consistent connection with colleagues, working together simultaneously	Coordinate complex department admissions processes while facilitating visibility, and without blocking anyone
Making admissions decisions	Come up with an admit/waitlist/deny list in concert with colleagues and easily submit it	Be on the same page as colleagues and conclude the primary admissions process
Seeing SIRs	See positive SIRs as they come in and always be aware of the count	Track SIRs to see if I need to pursue secondary admissions
Secondary admissions	Efficiently admit the top "maybes" in case of a shortfall	Hit the target for program attendance

CHANGE PRIORITY TABLE

Admissions step	**Priority**
Getting started	low

Seeing applicant list	moderate
Selecting which applicants to review	high
Looking at application materials	high
Leaving review	high
Collaboration with faculty	moderate
Making admissions decisions	low
Seeing SIRs	moderate
Secondary admissions	low

BLUE SKY THINKING RECOMMENDATIONS TABLE

Admissions step	**Solutions**	**New proposed user actions**
Getting started	• Reduce reader home content in favor of SIRs, help, and other relevant content	• Open Slate bookmark or from faculty portal • Land at improved reader home
Seeing applicant list	• Change bins to program/level organizer • Make querying easier • Add auto-queries • Ensure applicant list is viewable in-platform without exporting	• See program card and click appropriate auto-query
Selecting which applicants to review	• Delete queue • Add high-level review mode that approximates spreadsheet with assignments, rank and notes, color coding, and choice of	• Brought to high-level review mode with flexible controls at top • Filter/sort as needed • Assign as needed

	fields	
Looking at application materials	• Make links from high-level data to detail qualitative data • Make everything searchable, selectable • Make certain fields boldable by faculty choice • Integrate high-level view with current reader view elements	• Examine spreadsheet • Examine linked qualitative factors as needed
Leaving review	• Ensure rank and comment boxes are editable • Optional extra review dimensions replace reader sheet	• Fill out rank and comment boxes, adjusting as needed over time
Collaboration with faculty	• Add permissions role for faculty lead who can assign and admit/waitlist/deny applicants • Nominations for other faculty to review in high-level view	• Assignments as needed, real-time collaboration
Making admissions decisions	• Faculty lead to admit/waitlist/deny and staff to process letters	• Faculty lead designates admit/waitlist/deny
Seeing SIRs	• Add SIR tracker/dashboard by program/level on home with count and percentage relative to goal, list of names linked	• See SIR tracker on reader home
Secondary admissions	• Reserve an area/status in the high-level review for possible secondary admissions	• Admit top applicants from secondary admissions hold

FINDINGS DETAIL

Bins

Users struggle with seeing changes reflected in application status from stage to stage. From their perspective, students “disappear” and they aren’t able to find them. The ability to easily see all applicants independent of status is a crucial piece of visibility they need. Some users report experiencing the same pain points around queues.

The vast majority of users are confused and put off by bins, even citing that “they don’t make sense” or that they’re “mysterious.” Users perceive a permissions block that prevents faculty from fully engaging, even if they have the intent. Consequently, many users purport to spend too much time figuring out bins, or alternatively, avoid using them altogether, and have workarounds like querying for applicants or asking staff to move applicants from bin to bin.

Queue

Several users report not using queues, citing that they’re “cumbersome,” have too many steps, or again, “don’t make sense,” causing more confusion than clarity. These users avoid queuing by accessing applications from the search preview. One user reports actively requesting all collaborators bypass the queue in the same way.

The main reason users are reluctant to use queues is the perceived bottlenecking of applications that happens around a single applicant when one user would like to view an applicant while another is filling out the applicant’s review form. The single-user-at-a-time viewability and lack of real-time collaboration “causes a big backlog.”

The minority of users use queues, but find them lacking in flexibility for their needs. For example, one user describes a need to have a private queue that he controls independent of staff movements, and that allows partitioning per program.

Exporting data

Users very commonly export applicant data post-querying (selecting only relevant fields and running query) into a CSV or Excel file. They may run the query from home or bins. One user finds the exporting process “clunky,” something that has to be “figured out” annually.

Filtering down applicant pool

The vast majority of users experience frustration around having to set one-time-use filters, and believe they should be persistent. Because users set the same or similar filters each time, often for broad categories like department, they experience repetitive stress having to constantly redo the action. Users believe filters should “remember” them, or at least filters should be savable to be reapplied when needed.

Generally, filters are perceived as a useful feature that users engage with regularly, particularly for narrowing a large pool of applicants. Some useful filters users identified are GPA, location, and demographics.

One of the most important unmet filtering needs for the majority of users is Master’s vs. Ph.D. level applicants. Users currently have to browse the list and pick them out manually.

Despite the general utility of the filter feature, **many users struggle with the finer points of its implementation**, citing difficulty with understanding what each filter’s nomenclature refers to, stacking filters, combining filtering and searching, finding the correct filter from the long list, distinguishing between filters in multiple locations, permissions around filtering, customizing filters, pinning filters, and the number of steps to apply filters. One user states that filtering is “a pain,” citing that it was easier in GATS. Overall, the main difficulty (after lack of filter stickiness) is the huge volume of filters, which cause uncertainty and mask findability.

Users also express an interest in easier searching, particularly around faculty names that applicants have mentioned in their applications. One user was able to find the feature through filters but the vast majority believe it doesn’t exist. One user also expresses an interest in having more information from the search screen.

Many users run or build queries for exporting, but experience pain points around the difficulty of setting up queries, the inability to save queries, multi step procedures around querying, the inability to add or remove queries, the inability to sort query outputs, and difficulty keeping track of where querying is offered in multiple parts of the UI.

Application review process

The vast majority of users have devised a complex and custom system of faculty assignments and review processes outside Slate. Most commonly, a graduate director or faculty member decides who in the committee or department will review (typically by discipline) and make assignments through email notifications (typically by sending a list of names) or a shared spreadsheet. For other schools/departments, the list may be sent to staff to program into faculty queues. It’s rare for there to be autonomy in faculty choosing the students they review,

though some departments take a randomization approach to evenly disperse review responsibilities.

The number of reviewers per applicant varies but generally most users agree that multiple reviews is desirable, and in many cases is required. These rules are set by the programs.

The review process may continue through spreadsheet or email, or in Slate's reader sheets. Users are split on whether there's a need for collaborators to see each others' scores and comments in real-time, combined. For some, it's critical. For others, it's critical that scores be kept separate for reasons of bias until comparison time, at which point decisions are made. The majority of users prefer to see comments in a spreadsheet format over Slate.

Some departments have opted to only do reviews in the spreadsheet, and some do a hybrid of spreadsheet, then Slate. It is exceedingly rare for Slate to be a one-stop-shop for reviewing applicants.

One user expresses that it would be helpful if Slate could send notifications to review certain applications.

Some programs have an in-person or digital meeting process around reviewing applicants, most commonly to make a shortlist or admit list, or both.

The volume of applicants varies from program to program, with some receiving thousands while others have under a hundred. **The larger the program, the more challenging the collaboration, and the higher the need to reduce the number of applications to view.**

In general, the pre-application packet viewing functionality in Slate is lacking, and users are often resigned to the process of doing much of the work outside Slate. A few express dissatisfaction, citing that "the software is unfriendly for review purposes."

Before looking at application packets, the vast majority of programs do a high-level weighting process to sort and potentially eliminate applicants without needing to delve deeper. Some common factors include favoring domestic students and considering the caliber of undergraduate universities, GPA, and GRE scores, but this varies widely by program. **Users often look at quantitative data to decide whether to then invest time in looking at qualitative data**. On the qualitative side, users weight transcripts and recommendation letters, but again, this varies.

Users expressed an interest in better standardization across applicants, such as an averaged score across reviewers, as in GATS, better translation of GPAs so they can be weighted, or even the ability to auto-generate scores.

Barring such features, **users still need better ranking and sorting features to parse candidates based on criteria**. This is the primary reason users turn to spreadsheets and exportation. Another helpful feature of spreadsheets is the ability to apply conditional formatting to color-code applicants from great to poor.

Spreadsheets have many benefits over Slate: everyone can see all applicants at once regardless of stage; users can compare across applicants; they can collaborate in real-time; they can apply filtering, sorting, and searching; they can leave comments in text viewable without scrolling; they feel protected from privacy concerns.

Some users feel so comfortable with the spreadsheet that they don't return to Slate after ranking and choosing admits from the list--they simply pass on the admit list to staff.

Users have a need for a high-level view of the applicant pool. Users use their spreadsheet processes for pattern recognition beyond individuals. This helps them with reviewing efficiency.

Users would like to batch-process applications, including batch admissions and denials, rather than doing an individual process per applicant, particularly for large applicant pools. Ideally users could batch admit the top ranked applicants, and batch deny the bottom ranked.

The number of students to admit is based on a loose calculation of target admissions, or target attendees plus a margin for those who are accepted but don't SIR positively. If there's a shortfall to the target attendees, a secondary admissions process may follow.

Applicant packet

In the reader application packet view, some **users struggle with searching**, citing that they have a need to search through transcripts and essays to save time, but don't realize there are searching or highlighting functions.

Users struggle with non-selectable text.

Some users dislike the columnar layout, citing that it's hard to read and takes up too much space.

The majority of users struggle with scrolling in the reader, expressing that horizontal scrolling is awkward and unusual, mouse scrolling is too sensitive, and that using keyboard arrows to scroll sometimes makes the reader get stuck. One user points out the difficulty of getting from one part of the application to another, and would prefer a PDF-style viewer where it's possible to easily jump around.

Within the reader, one user details a process for combing through essays to look for motivations and fit, and recommendation letters, looking for if the students recognizes professors by name, have waived their rights to view letters, have long letters, ideally from full professors.

Several users cite GPA inconsistency in the reader, particularly related to international students, which makes comparison challenging.

Review form

Users have mixed to negative opinions on the reader sheet form. Some users cite using it, with various programs and users choosing different parts to fill out. There is sometimes a lack of consensus on which portions to complete. Several users converge on using the comment section, however.

More commonly, **users use the reader sheet form with difficulty**. Several users state that the overall rating is the most or even the only useful rating, and that other fields are not necessary. One user points out that the reader form differs depending on the stage of admission, which adds to the challenge. Some users have a lack of confidence that their ratings are confidential, and worry students may see them. Some users are confused by the auto-saving message and are concerned it may be a time-out warning (the opposite of its meaning). Some users struggle to find the reader sheet. A significant portion of users express frustration that they can't edit their reviews after making them, but must submit a new review. One user reports wanting the ability to flag up an applicant for review to another faculty member at this stage.

Some users avoid using the form, citing that the sheet has many options that aren't useful, the ratings aren't applicable to their program but they can't be customized, and that score numbers are opaque.

Users have a need to change their ratings easily, due to the relative nature of assessing applicants. For instance, they may decide after seeing a number of applicants that they graded earlier ones too harshly; or, they may see other faculty members' reviews and decide they graded them too easily. Users are extremely frustrated at having to submit new forms each time they change their mind because it exposes this process whereby they outwardly look like they've made mistakes, eroding their credibility, when in fact it's natural to have to adjust based on the year's crop of applicants and changing faculty.

SIR status

A sizeable number of users express difficulty getting visibility into SIR status, stating that they aren't sure how to do it in Slate or believe they can't do it, that they consult their admin, or

ask grad division. A small number of programs have asked for a query around SIRs to circumvent this.

In general, **programs have a desire to track positive SIRs**. Various stakeholders may be in charge of SIR tracking, such as the admissions chair or staff. For one department, faculty are encouraged to make personal contact with admitted students to make them more likely to SIR positively.

Collaboration

As highlighted in other areas, **faculty to faculty collaboration is a huge part of graduate admissions**. Some other findings not covered in the reviewing setup or review process include the difficulty of restricting access for graduate students on the committee and having to manually write down an admit list.

Following the primary admissions process, some programs may institute a secondary process, either because they haven't reached their admit goal or their positive SIR goal. In order to do this, potential applicants must NOT have already been denied, which adds administrative complexity. For one user, this involves asking faculty to recommend other faculty in different areas or departments review applicants. One user has a secondary process of choosing applicants who were rejected by another program that receives many more applicants.

Faculty also collaborate heavily with staff. Faculty frequently report that staff handle queries, admit and deny lists (often provided via spreadsheet or an email list because otherwise they're hard to find), moving applicants from bin to bin, and communications post review. In general, faculty state that staff have too much work, or are not optimally used because of limitations of the system (i.e. being unable to batch admit so defaulting to one by one).

Training

The vast majority of users found the training sessions not helpful, stating that they were high-level and not usage-focused, and that training occurred too far ahead of admissions.

Users feel that Slate support, in contrast, is very helpful, whether through email or in person.

Users generally report moderate difficulty learning to use Slate, citing that it has a "steep learning curve," it's learned through "trial and error," and that it has to be relearned each year due to the gap in use. One user serves as an onboarding coach for new faculty, and finds that system works well.

The majority of users also find documentation useful for learning to use Slate, stating that they can look up what they need help on.

Slate is only used for admissions season, which varies in length and intensity for various programs, **often intensely** during this period. This leads to an annual period of re-learning and re-forgetting, which is arduous for users.

GATS

Users have mixed feelings on GATS in comparison with Slate, with some preferring one or the other. One user feels the transition was difficult.

User-cited benefits of GATS include its facility for sorting and high-level viewing, facilitating data exploration, averaged staff ratings, batch processes, partitioning by department, and the absence of bins.

Other

In general, **Slate has a poor conception of numerical constraints on programs**, which force faculty to work around quotas for reviewing, admitting, and accepting students post-admission, and making adjustments when those numbers are off. The philosophy Slate takes is numerically boundless.

Consequently, **Slate construes admissions as a single-stage process, when in reality it's three phases**: high-level review of the masses, fine-grained review of a few applicants, and in some cases, a third review of either waitlisted students to admit or moderate-promise students neither accepted nor denied.

Lack of customization to the user's school and department is a major pain point. Users want to display only information relevant to them, not to search or filter for what they need every time.

Overall, **users rarely use the Slate reader home page** with its graphs and other items.

Users overwhelmingly use Slate on desktop, and even go so far as to say that a full screen is required, and that mobile use is "hysterical and bad." Only one user uses Slate jointly on desktop and mobile, the latter only for reviewing at a high level to create a shortlist to then review in depth on desktop. This user finds that usability on mobile is middling, but similar to desktop, and makes uses of rotating and zooming for better visibility.

Several users access the Slate URL by Googling it. Others have it bookmarked, and still others open it via an email link.

Users have privacy and trust issues around Slate, due primarily to rumors that students have access to faculty comments, information is not partitioned by school/department, and previous mistakes in the system.

A sizable number of users prefer to avoid Slate as much as they can in favor of their external processes, primarily around spreadsheets.

Users cite several usability issues with Slate. Broadly, they struggle with navigation, finding it “not intuitive,” inefficient, and constrained architecturally. One user states that when there are too many steps, he stops trying. One user finds it too slow.

A select few programs take special student input into the application, like choosing a track, which can be useful to faculty users but causes issues when students choose incorrectly.

On the **plus side of usability**, users find that not having to download applications, and seeing them digitally, is a plus.

Overall, **the majority of faculty users have a mixed to negative opinion of Slate**, calling it “cumbersome” and pointing out its permissions inflexibility and bias towards small programs.

Those who have a more neutral to positive overall opinion state that it has a lot of functionality, the reader view encourages focus, and that faculty have figured it out.

GOAL

To gain detailed qualitative insight into how users handle graduate admissions, comprising how they see and interact with UCI Slate (focusing on pain points and positives), as well as outside processes and workarounds (focusing on utility and rationale for adopting them), for a comprehensive understanding of their mental model and workflows.

METHODOLOGY

Half of the allotted 1-hour time was spent on a semi-structured interview of the user based on a selection of areas of interest, including usage and perceptions of Slate, challenges and workarounds, other admissions tools, collaboration, and training.

The other half of each session was spent on a contextual inquiry-type exploration where the user shared their screen and talked through their workflow, focusing on the areas of home, browse, queue, reader, and review process.

USERS

9 faculty who are current active users of Slate for graduate admissions and our primary user group. They range in school and department but most have 2 years of experience with Slate, corresponding with the length of time it has been implemented at UCI.

(2 staff/administrators interviewed for supplemental data are excluded here)

RAW MATERIALS

Discussion guide, recordings, raw notes, and synthesis data available on request.