



# Assisted Review Active Learning Guide

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November 24, 2021 | Version Server 2021

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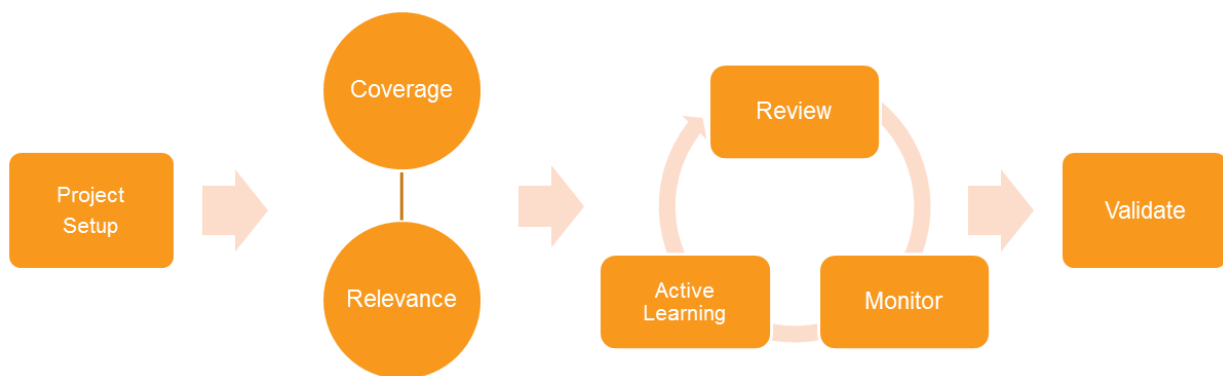
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# 1 Active Learning

Active Learning is an application that lets you run continuously updated cycles of documents for review based on your review strategy. The advantages of Active Learning include real-time intelligence, efficiency, flexibility, and integration with all the power of the Relativity platform. With very little training needed to see documents of interest, Active Learning can be used for cases of all sizes, even those as small as 1,000 documents.

Start your Active Learning project by creating a new classification index and choosing a single-choice field for reviewers to code relevance. Once you start the review, reviewers can access the review and begin coding documents. Coding decisions are ingested by the Active Learning model where Active Learning takes place. As reviewers code, the model gets better at serving documents to reviewers.

As reviewers code and the model updates, project admins can monitor for certain metrics. Once their metrics indicate that the project is done, they can take a sample of documents for validation.



See these related pages:

- [Active Learning performance baselines on page 7](#)
- [Environment and workspace setup on page 10](#)
- [Security permissions on page 13](#)
- [Project setup on page 15](#)
- [Review statistics on page 39](#)

## 1.1 Special considerations

- Once you install the Active Learning application, you can't uninstall it.
- We recommend turning off family propagation with Active Learning.
- Analytics classification indexes are copied over when a workspace is used as a template, the same behavior as a conceptual index. However, you can't copy an Active Learning project in a template.
- You need at least five documents coded with the positive designation and five coded with the negative designation to start the model's learning.

- Once the Active Learning model completes its first build, the model builds at maximum every 20 minutes after the previous build to include coding decisions not included in the most recent build. If reviewer activity has been idle for five minutes and there are coding decisions not included in the most recent build, the model will start a build.
- Reviewers must code documents based on the so-called "four corners rule". This means that a document should be judged responsive or not responsive based solely on the extracted text of that document only. Documents that are relevant based on family members should not be coded relevant on the Active Learning review field. Although individual anomalies will not hurt the algorithm, too many in aggregate could cause a higher error rate.

## 2 Active Learning performance baselines

This page is meant to be used as a reference to track the overall performance of Active Learning in RelativityOne. It should not be used as a benchmark of what you expect to see in a production client environment or Relativity Server environment due to differences in data, infrastructure, and configuration. The results may not scale linearly. Exceeding these limits may result in failure or degraded experience using Active Learning.

### 2.1 Active Learning project size recommendations

These recommendations are the result of extensive testing in RelativityOne. For the best user experience, we advise adding a maximum of 9 million total documents and a maximum of 1 million coded documents to an Active Learning project.

**Note:** We recommend no more than 150 concurrent reviewers per project. Concurrent reviewers are defined as reviewers making coding decisions in an Active Learning queue. There is no limit to how many reviewers you can add to a queue as long as the number of concurrent reviewers remains at 150 or fewer.

Max documents in classification index	Max coded documents	Max concurrent reviewers
9 million	1 million	150

### 2.2 Data set details

These tests were run on a subset of the following data set in a RelativityOne environment. Results may vary.

Data set name	File count	Average extracted text size (KB)	Total Extracted Text size (GB)
Real World	9,154,516	30.18	276.25

### 2.3 Classification index population + build results

A classification index is required for an Active Learning project. This performance run includes population of all documents and building. Start time was measured as the time the first document was sent to the Analytics server, and end time was measured as when the last document became available in Active Learning.

Index size (Documents)	Pre-coded documents	Population rate (GB/hr)	Population time (h:mm:ss)	Index build (h:mm:ss)	Total operation time (h:mm:ss)	Documents/hr
1,000,000	10	13	3:03:29	0:13:30	3:16:59	304,878

## 2.4 Active Learning index build results

Once the Active Learning model completes its initial build, the model builds at maximum every 20 minutes to include new coded documents. The documents were randomly coded 50% responsive and 50% non-responsive using Relativity's sampling feature.

The test scenarios in the following table use an index that contained 1,000,000 documents.

**Note:** The results listed below were measured after the initial model build completed and do not include the population stage as the documents have already been added to the index.

	Coded documents	Index build time (h:mm:ss)
Build 1	10	0:13:30
Build 2	100,000	0:27:17
Build 3	200,000	0:31:02
Build 4	300,000	0:38:29
Build 5	400,000	0:50:52
Build 6	500,000	0:56:21
Build 7	600,000	1:06:27
Build 8	700,000	1:09:29
Build 9	800,000	1:09:33
Build 10	900,000	2:45:09
Build 11	1,000,000	3:24:16

The test scenarios in the following table use an index that contained 9,154,516 documents.

	Coded documents	Index build time (h:mm:ss)
Build 1	10	1:38:30
Build 2	100,000	2:59:32
Build 3	700,000	5:14:47
Build 4	800,000	7:39:47
Build 5	900,000	6:50:19
Build 6	1,000,000	6:25:35

## 2.5 Update ranks results

In an Active Learning project, you can manually update the document ranks and ensure the rank categorization field is up to date. Once you click Update Ranks, you can monitor the update progress via a



fly-out modal. You can update ranks again only after the current modification is complete. Update ranks performs faster on subsequent updates than on the initial update.

<b>Project size (documents)</b>	<b>Initial update ranks Operation time (h:mm:ss)</b>	<b>Subsequent update ranks Operation time (h:mm:ss)</b>
200,000	0:02:48	0:01:59
400,000	0:06:12	0:04:42
600,000	0:09:42	0:07:02
800,000	0:13:48	0:11:39
1,000,000	0:22:24	0:15:14
9,154,516	5:47:36	3:39:54

## 3 Environment and workspace setup

Before creating an Active Learning project, you must first verify that your system and workspace meet the necessary standards, and then perform the required installation and configuration steps to successfully run an Active Learning project.

### 3.1 Installing the Active Learning application

Install the Active Learning application from the Application Library to your workspace.

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**Note:** Once you install the Active Learning application, you can't uninstall it.

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#### 3.1.1 Agent configuration

Ensure the following agents are installed and configured:

- Analytics Index Manager
- Analytics Index Progress Manager
- Analytics Categorization Manager
- Active Learning Manager (one per resource pool)
- Active Learning Worker

For more information, see the Agents Guide.

#### 3.1.2 Relevant instance setting table values

Active Learning uses the following instance settings:

- ReviewQueueRefreshThreshold
- ReviewQueueBatchSize
- ClassificationCategorizationDelay
- ClassificationCategorizationMaxDelay

## 3.2 Required workspace components

A new Active Learning project uses the following components, so you must create them before you can create a project. Even if these items already exist in the workspace, you may want to create a new instance of each specifically for your new project.

### 3.2.1 Saved search

This saved search includes the documents to be used in the Active Learning project. This set of documents is used as the searchable set when you create an Analytics index. The documents must contain extracted text, and the searchable set must contain example documents to train the model. For more information, see [Pre-project sampling on page 12](#).

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**Notes:**

- The saved search must be public.
  - For best results, we recommend no more than 9 million documents in the search.
  - If you want to use family-based review, parent documents and their family must all be added to the saved search. This includes documents without text.
- 

### 3.2.2 Analytics index

You must create an Analytics index with Classification as the Index Type. You must create a separate Analytics index for each Active Learning project. For more information, see the Analytics Guide.

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**Note:** The Analytics index you use for your project must be active and have queries enabled for your project to function properly. Before completing a full or incremental population of your index during an ongoing project, we recommend turning off all review queues and turning them back on once the index is active. Project reporting may be incorrect during a full or incremental population but will be corrected once the index is active.

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### 3.2.3 Reviewer group

Create a reviewer group with the users you want to access the Active Learning project. You can add or remove users from the group at any time.

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**Note:** The users in this group are not automatically added to the Active Learning project. You must grant each individual access to the Review queue. For more information, see [Project setup on page 15](#).

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The reviewer group accessing the Active Learning project must have the following permissions:

Object Security	Tab Visibility	Other Settings
<ul style="list-style-type: none"><li>■ <b>Active Learning Reviewer - View</b></li><li>■ <b>Document - View, Edit</b></li></ul>	<ul style="list-style-type: none"><li>■ Documents</li></ul>	<ul style="list-style-type: none"><li>■ <b>Browsers - None OR Folders and/or Field Tree and/or Clusters</b></li></ul>

- If Browser permissions are set only to Advanced & Saved Searches, reviewers can't access the Reviewer page.
- The review group must have access to all documents in the Active Learning project. If documents are not accessible (for example, documents stored in a secured folder) they are not served to reviewers in the queue.

### 3.2.4 Review field with two choices

Create a single choice field with two choices for reviewers to code on. One choice must represent the positive/responsive designation, and the other the negative/not responsive designation.

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**Notes:**

- We recommend turning off family propagation with Active Learning.
  - Make this field required to prevent reviewers from skipping documents without making a coding decision.
- 

### 3.2.5 Review layout

Relativity will not create a layout automatically; you must create a layout for reviewers to make coding decisions on. However, this layout is not a prerequisite for creating your Active Learning Project.

## 3.3 Pre-project sampling

The Active Learning model only builds once you have at least five documents coded with the positive choice and five coded with the negative choice. If there are fewer than five coded documents for each choice, the system serves random documents in the prioritized review queue until the threshold number of documents are coded.

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**Note:** These random documents will appear under the Index Health column in review statistics.

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You can use pre-coded documents to help start the model's learning and begin the project with a model build and a ranking of all documents. The prioritized review queue can then serve up the highest ranked documents for review. You must ensure these coding decisions are set on the project review field, and that at least five coded documents exist for both the positive and negative choice.

If no pre-coded documents exist, you may want to have reviewers code a sample of documents prior to starting the Active Learning project. You can do this either before or after you create the project. You can draw a sample of documents with specific keywords, from key custodians, within a certain date range, etc. to help focus the sample on documents more likely to be important in the case. You must ensure these coding decisions are set on the project review field, and that at least five coded documents exist for both the positive and negative choice.

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**Note:** If relevant documents are very rare, then targeted searches for relevant documents outside of the queue can help make Active Learning more effective.

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## 4 Security permissions

This page contains information on the security permissions required for creating and interacting with an Active Learning project.

### 4.1 Creating an Active Learning project

To create an Active Learning project, you need the following permissions:

Object Security	Tab Visibility
<ul style="list-style-type: none"><li>■ <b>Active Learning Project</b> - View, Edit, Add</li><li>■ <b>Active Learning Review</b> - View, Edit, Add,</li><li>■ <b>Active Learning Reviewer</b> - View, Edit, Add</li><li>■ <b>Analytics Categorization Result</b> - View, Add</li><li>■ <b>Analytics Categorization Set</b> - View, Edit, Add</li><li>■ <b>Analytics Index</b> - View, Edit</li><li>■ <b>Field</b> - View, Edit, Add</li><li>■ <b>Object Rule</b> - View, Add</li><li>■ <b>View</b> - View, Add, Edit Security</li><li>■ <b>Workspace</b> - Edit Security</li></ul>	<ul style="list-style-type: none"><li>■ Active Learning Projects</li></ul>

### 4.2 Viewing and editing an Active Learning project

To view and edit an Active Learning project, you need the following permissions:

**Note:** It's not possible to have "view-only" Active Learning permissions. If you have permission to view but not edit an Active Learning project, you aren't able to view the project.

Object Security	Tab Visibility
<ul style="list-style-type: none"><li>■ <b>Active Learning Project</b> - View, Edit</li><li>■ <b>Active Learning Review</b> - View, Edit, Add</li><li>■ <b>Active Learning Reviewer</b> - View, Edit</li><li>■ <b>Analytics Categorization Set</b> - View, Edit</li><li>■ <b>Analytics Index</b> - View</li></ul>	<ul style="list-style-type: none"><li>■ Active Learning Projects</li></ul>

## 4.3 Deleting an Active Learning project

In order to delete an Active Learning project, you need workspace admin or system admin permissions as there's no other way to delete the view created by the project.

## 4.4 Reviewer permissions

The reviewer group accessing the Active Learning project must have the following permissions:

Object Security	Tab Visibility	Other Settings
<ul style="list-style-type: none"><li>■ <b>Active Learning Reviewer - View</b></li><li>■ <b>Document - View, Edit</b></li></ul>	<ul style="list-style-type: none"><li>■ Documents</li></ul>	<ul style="list-style-type: none"><li>■ <b>Browsers</b> - None OR Folders and/or Field Tree and/or Clusters</li></ul>

- If Browser permissions are set only to Advanced & Saved Searches, reviewers can't access the Reviewer page.
- The review group must have access to all documents in the Active Learning project. If documents are not accessible (for example, documents stored in a secured folder) they are not served to reviewers in the queue.

---

**Note:** The users in this group are not automatically added to the Active Learning project. You must grant each individual access to the Review queue. For more information, see [Project setup on the next page](#).

---

# 5 Project setup

Before creating a new Active Learning project, ensure you've properly configured the environment and workspace components. For more information, see [Environment and workspace setup on page 10](#)

## 5.1 Creating an Active Learning project

1. From your workspace, navigate to **Assisted Review > Active Learning Projects**.
2. Click **New Active Learning Project**.
3. Complete the fields on the layout. See [Fields below](#).
4. Click **Save**.

You are then redirected to the project home dashboard.

### 5.1.1 Fields

The Active Learning Project layout contains the following fields:

- **Project Name** - enter a name for your Active Learning project.
- **Analytics Index (Classification)** - select your Analytics Classification index.
- **Review Field** - select the single choice field you created for review. This field must have exactly two choices. You can edit these choices after project creation.
- **Positive Choice** - select the choice that represents the positive/responsive designation.
- **Suppress Duplicate Documents** - selecting this option stops Active Learning from serving documents that are textually similar to other coded documents to be coded (this does not consider word order). This option reduces the total number of documents needed to be reviewed. Since these are not exact duplicates, you will most likely need to review suppressed documents after the project is complete.

---

**Note:** We recommend setting the Suppress Duplicate Documents setting to No for Prioritized Review and Yes for Coverage Review. Note that you cannot change this setting once you create your project.

---

- **Reviewer Group** - select the group you want to access the Active Learning project and review queues.

---

**Note:** Once a project is created, you cannot edit the fields.

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## 5.2 Post-project setup

### 5.2.1 Project document list view

Upon saving a new project, Relativity creates a new document list view that's tied to the Active Learning project. This view has the same name as the Active Learning project and is customizable by project admins. This is the only place a logged in user can enter a project queue. This view is automatically secured to the reviewers and returns documents previously reviewed by the currently logged in reviewers.

#### 5.2.1.1 Project fields

Relativity also creates new fields that can be used for custom document list reporting. These include the following:

- **<Project Name> Reviewers** - the name of the reviewer who coded the document.
  - You can use this field to identify manually-selected documents. Search for documents where the review field **is set**, but this field **is not set**.
- **<Project Name> Reviewers::User** - the name of the reviewer who coded the document in the queue.
- **<Project Name>:: Elusion Test** - the Elusion Test in which the document was reviewed.
- **<Project Name>:: Prioritized Review** - the 200-document interval in which the document was reviewed in the Prioritized Review.

These fields are updated per document as reviewers code on the project review field.

### 5.2.2 Manually-selected documents

Any document in the project coded on the Project Review field - both from the Active Learning queue and outside of the queue - contributes to the project's learning. Coding decisions that occur outside of the queue are called "manually-selected" documents. Upon creating a new project, the Active Learning project will learn from any manually-selected documents if they exist. This includes documents coded via mass edit or documents imported through the RDC with values coded on the Project Review field.

### 5.2.3 Adding new documents

If you want to add new documents to your Active Learning project after review has begun, complete the following:

1. Click **Pause Review** to stop the review queue.
2. Add your new documents to the saved search used as the searchable set for the classification index.
3. Navigate the **Analytics indexes** tab, and then click the classification index used to create your Active Learning project.
4. On the index console, click **Populate Index: Incremental**.
5. Once the index finishes populating, return to your review queue and click **Start Review**.



---

**Note:** All documents, including the newly added documents, are given a rank score after the incremental population.

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## 6 Reviewer access

This page will cover the reviewer view and workflow in an Active Learning project.

### 6.1 Project document view

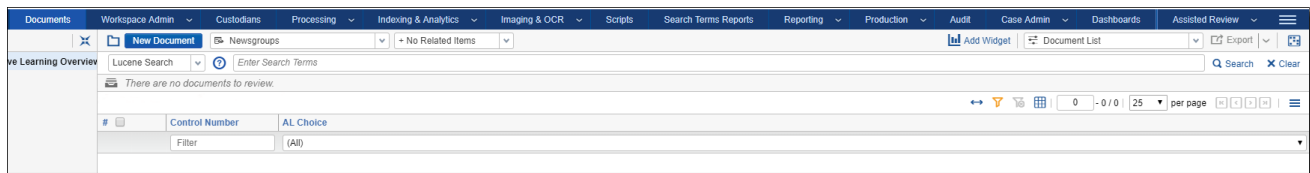
Upon saving a new project, Relativity creates a new document list view that's tied to the Active Learning project. This is the only place a logged in user can enter a project queue. This view is automatically secured to the reviewers and returns documents previously reviewed by the currently logged in reviewers. When a reviewer first accesses the view, no documents appear because none have been coded. Documents appear in the list as the reviewer codes documents from the Active Learning queue.

The project document view enables or disables reviewer access based on whether or not the logged in reviewer is added to the queue in the Active Learning project.

#### 6.1.1 Inactive reviewer

If a reviewer hasn't been added to the queue or if the queue is paused, they can't access the Active Learning queue from the project document view. The reviewer can still access the view but only for reviewing previously coded documents. An inactive reviewer can still code documents outside the queue if they have permissions to do so.

(Click to expand)



#### 6.1.2 Active reviewer

If a reviewer is added to the queue and the queue is enabled, a blue banner appears in the project document view with a **Start Review** button. Clicking **Start Review** begins the review process for that logged in user.

If the Start Review button is not appearing as expected, try these troubleshooting steps:

1. Ensure reviewers are added to the group associated with the Active Learning project.
2. Ensure the reviewers have the proper security permissions. For more information, see [Reviewer permissions on page 14](#).
3. Ensure the saved search associated with the Active Learning project contains documents with extracted text.
4. Ensure the classification index associated with the Active Learning project is active.
5. On the Project Home tab, ensure the **Start Review** button is selected.
6. When previewing permissions, ensure that you are previewing user permissions, not group permissions. The Start Review button does not appear in permissions group previews.

7. Ensure the following agents are installed and running:
  - Active Learning Manager
  - Active Learning Worker
  - Analytics Categorization Manager
8. In SQL, ensure there aren't orphaned jobs in the **EDDS.ActiveLearningProjects** table that don't correspond with an existing project. In other words, you look for projects that were deleted on the front end but still exist in the EDDS.ActiveLearningProjects table.
9. Check the **EDDS.AnalyticsCategorizationSetQueue** table and look for any 'ERROR' jobs.
10. Ensure rows exist (records) in the **EDDSDBO.DRQ\_<long guid>** table in the workspace database. If there are no records here that means documents are not being properly submitted to the Active Learning Review Queue.
11. Ensure the language is English on the agent server where the Active Learning agents reside.

If the queue is disabled or a reviewer is removed from the queue while reviewing documents, a warning message will appear.

(Click to expand)

#	Control Number	Designation
1	34	Not Responsive
2	1501	Not Responsive
3	2192	Not Responsive
4	2887	Not Responsive
5	3466	Not Responsive
6	3493	Not Responsive
7	4708	Not Responsive
8	5418	Not Responsive
9	5425	Not Responsive
10	6376	Not Responsive
11	6526	Not Responsive
12	6587	Not Responsive
13	7452	Not Responsive
14	8131	Not Responsive
15	9436	Not Responsive

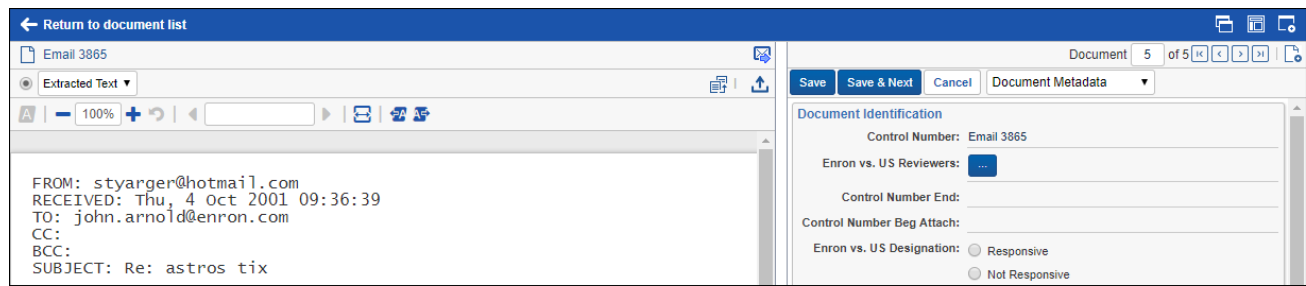
## 6.2 Review workflow

The reviewer clicks **Start Review** to access the Active Learning queue viewer and start reviewing documents. This viewer looks the same no matter which type of queue is active. The Active Learning viewer contains the same functionality available in the standard viewer for non-Active Learning projects.

---

**Note:** Admins can still grant permissions to specific users or groups for certain icons in the Viewer.

---



Relativity checks the following before assigning a document to a reviewer:

- The current reviewer has permission to the document
- The document has not been coded already
- The document is not assigned to any other active reviewer

Documents can only be assigned to one reviewer except in cases where the reviewer leaves the viewer without making a coding decision or is automatically logged out. When this happens, the queue can reassign the document. Once a document has been coded by a reviewer, the **Project Reviewers::User** field will show that reviewer's name.

Reviewers code documents on the review field specified for the project and then click **Save and Next** to get a new document. They can also code other fields not associated with the project. Reviewers can skip documents without making a coding decision unless the review field is a required field. They can also click



to skip the current document and open a new document. In the upper right of the viewer, reviewers can see a running count of all documents they've coded in the project, including skipped documents. Skipped documents are also reflected in the Admin dashboard on Project Home.

---

**Note:** Reviewers can change the coding decision on documents they previously reviewed. These documents aren't considered manually-selected documents. The next model build will include the most recent coding update.

---

## 6.3 Active Learning reviewer protocol

Reviewers must code documents based on the so-called "four corners rule". This means that a document should be judged responsive or not responsive based solely on the extracted text of that document only. Documents that are relevant based on family members should not be coded relevant on the Active Learning review field. Although individual anomalies will not hurt the algorithm, too many in aggregate could cause a higher error rate.

## 6.4 Active Learning process

The actual Active Learning process takes place using a combination of time and detection of new coding decisions. By default, the classification index rebuilds every 20 minutes since the last completed build. However, if Active Learning detects reviewer inactivity of at least five minutes, a build will take place before the twenty-minute threshold is reached.

## 7 Project home

Once you've created the Active Learning project, you're redirected to the project homepage. Here, you can see a new dashboard with the following items:

- **Project Size** - the number of documents in the project. This count reflects the documents successfully indexed. Documents that were removed during the index build are excluded during this count.
- **Coded [Positive Choice]** - the number of documents coded with the positive designation on the review field. This count includes documents coded from the queue and manually-selected documents. These documents are used to teach the model.
  - **Positive Choice manually-selected** - the number of documents that were coded on the positive choice designation field outside of the queue.
- **Coded [Negative Choice]** - the number of documents coded with the negative designation on the review field. These documents are used in teaching the model. This count includes documents coded from the queue and manually-selected documents.
  - **Negative Choice manually-selected** - the number of documents that were coded on the negative choice designation field outside of the queue.
- **Skipped** - the number of documents served to a reviewer that weren't coded by an end reviewer.

Once the Active Learning model completes its first build, the model builds at maximum every 20 minutes after the previous build to include coding decisions not included in the most recent build. If reviewer activity has been idle for five minutes and there are coding decisions not included in the most recent build, the model will start a build.

---

**Note:** Click the hamburger menu icon in top-right corner of the Document Rank Distribution or Prioritized Review Progress charts to export either chart as a PNG file.

---

### 7.1 Document Rank Distribution

This chart lays out all of the project's documents, ranking them from 0 to 100. Documents plotted toward 0 are less likely to be considered as relevant to the reviewer, as predicted by the model. On the other hand, documents closer to 100 are more likely to be coded as relevant. For more information, see [Project Monitoring](#).

### 7.2 Prioritized Review Progress

The Prioritized Review Progress chart measures the relevancy rate every 200 documents, as confirmed by reviewers' coding decisions in the Prioritized Review queue. More specifically, of the documents in that set of 200, how many were coded as relevant by the reviewer(s). Documents included in the Active Learning model for index health are not included in the relevance rate calculation. For more information, see [Project Monitoring](#).

---

**Note:** This chart only updates when documents are coded in the Prioritized Review queue.

---

## 7.3 Review Statistics

In the Review Statistics tab, you'll find data summarizing Prioritized Review, Coverage Review, Manually-Selected Documents and Elusion Tests.

For more information, see [Review Statistics](#).

## 7.4 Update Ranks

In the top-right corner of the Project Home, you'll see three icons. The first icon is the Update Ranks button



. Here, you can manually update the document ranks and ensure the rank categorization field is up to date. Note that updating ranks doesn't change the coding decision on the document.

In order to update ranks, you must specify the responsive cutoff. This value determines the minimum rank needed for a document to receive a responsive categorization. You can look at the Document Rank Distribution chart for insight as to where to set this cutoff score. Every document on or above the rank cutoff (to the right when looking at the Document Rank Distribution chart) receives the responsive categorization, while everything below the rank cutoff (to the left) receives the non-responsive categorization. Note that this responsive/non-responsive categorization is distinct from the coding decision on the document.

Clicking Update Ranks for the first time creates the following fields:

- **Categories - <Project Name> Cat. Set** - the positive or negative choice based on the Responsive Cutoff value. Documents below the cutoff are automatically given the negative choice category.
- **CSR- <Project Name> Cat. Set::Category Rank** - the rank score, on a scale from 0 to 100, from the last time update ranks was run.
- **CSR- <Project Name> Cat. Set::Category Name** - the positive or negative choice based on the Responsive Cutoff value. Documents below the cutoff are automatically given the negative choice category.

---

**Note:** The values in the rank categorization fields are distinct from the coding decision on the document. For example, a document may be coded not responsive, but if the rank is above the responsive cutoff value, it is categorized as responsive.


---

The next time you update ranks, these fields are populated with the most up-to-date rank and category information.

While updating ranks, the Update Ranks icon displays a small clock icon in the corner. If you click the icon to open the fly-out modal, you can view the update progress. You can update ranks again only after the current modification is complete.

## 7.5 Notifications



The next icon, Notifications , informs you of any notifications you may have in the project. More specifically, you'll see any project errors here. A red circle will appear in the bottom corner of the

Notifications icon if a notification exists. Follow the instructions in the error message to resolve the project error. Once you've resolved the error, the error message will automatically disappear.

## 7.6 Project Settings

The third icon, found in the top-right corner of the Project Home, is Project Settings . This gives an overview of the settings that were selected during the initial project setup (with the exception of Responsive Cutoff). It includes the following Project Details:

- Project Name
- Analytics Index
- Review Field
- Positive Choice
- Suppress Exact Duplicates

Click the  icon to edit the responsive cutoff value.

The Project Settings also include Review Setup and the Reviewer Group selected.

## 7.7 Prioritized Review

The Prioritized Review queue serves documents that are most likely to be coded on the positive choice (ex. Relevant) with a small set of documents included for index health. The documents included for index health are system-selected to help the model develop a better range of training.

Prioritized Review gives you the option to review family documents together. When you enable **Include Family**, Active Learning serves documents with their family documents to reviewers. All family documents included in the index are served to the reviewer, including documents that were previously coded.

---

**Note:** Family-based review is optimized for email and attachments only. Textual near duplicates and threads aren't supported.

---

### 7.7.1 Adding Reviewers

From the project homepage, admins can add reviewers to each queue on a user-by-user basis or in bulk.

---

**Note:** After you ARM an Active Learning project, you must re-add reviewers to the queue.

---

To add reviewers:

1. Click **Add Reviewers** in the queue modal.
2. Find and select an individual reviewer, or type to enter a reviewer name. You can also click **All Users** to select every user in the group.
3. Click the green check mark to save your changes.
4. Click the red X to cancel reviewer changes.

---

**Note:** We recommend no more than 150 concurrent reviewers per project. Concurrent reviewers are defined as reviewers making coding decisions in an Active Learning queue. There is no limit to how many reviewers you can add to a queue as long as the number of concurrent reviewers remains at 150 or fewer.

---

## 7.7.2 Starting the Prioritized Review queue

To start the Prioritized Review queue:

1. Successfully add reviewers to the queue.
2. If you want to review family documents, toggle the **Include Family** field. For more information, see [Considerations for family-based review below](#).

---

**Note:** Once you click **Start Review**, you can't change your family review settings.

---

- a. Next to **Family Field**, select the relational field you want to review from the drop-down. This drop-down includes the friendly name of all relational fields in the workspace. Note that family review is optimized for email and attachments.
3. Click **Start Review**.

The next time an active reviewer accesses the view for the Active Learning project, they will see a blue banner which indicates they have access to the queue. The view also displays any documents coded by the logged in user for that particular Active Learning project. The Prioritized Review queue serves documents that are most likely to be relevant with a small set of documents included for index health. The Active Learning model only builds once you have at least five documents coded with the positive choice and five coded with the negative choice. However, if you start the Prioritized Review queue before a model build occurs, the queue initially serves up random documents.

After the project begins, you can see the following items in the Prioritized Review queue modal:

- **Coded** - the number of documents coded and skipped in the Prioritized Review queue.
- **Active Reviewers** - the number of reviewers added to the project.

Admins can pause the review at any point in the project by clicking the **Pause Review** button on the project modal. Once the review is paused, the access point on the document view is disabled. You can restart the review at any time. Documents coded on the review field while the review is paused are included the next time the model rebuilds. For more information, see [Project Setup](#).

## 7.7.3 Considerations for family-based review

Enabling **Include Family**, lets you leverage the efficiency of Active Learning while letting you review and code all documents in a family together. There are several special considerations to keep in mind as this setting is not needed for every case. Review the following special considerations prior to starting your review.

### 7.7.3.1 Project setup considerations

In order for family documents to be served together in Prioritized Review, the parent documents and their family must all be added to the classification index. This includes documents without text.



---

**Note:** Textually empty documents will receive a rank at 50 (visible on the histogram), but they must be included in order to be served up to reviewers.

---

### 7.7.3.2 Prioritized Review considerations

- Family-based review is only available for new projects or Prioritized Review queues that have never been started.
- Once you click **Start Review**, you can't edit the **Include Family** settings. This means you can't turn family-based review on or off mid-project.

### 7.7.3.3 Reviewer considerations

- Family review is optimized for email and attachments, and documents are sorted in the queue by control number. Using a relational field other than the family group relational field, such as the email thread group or textual near duplicate identification group fields can cause undesirable results.
- When family-based review is enabled and the document that served to a reviewer has family, the documents are presented to the reviewer in ascending control number order.
  - Upon requesting a document, the document with the lowest control number is served first, which is typically the parent document of the family
  - When a reviewer clicks Save and Next, the next document in the family is served, letting the reviewer to review family documents in an intuitive order.
  - This means the first document you see may not necessarily be the document most likely to be relevant; you could see a family document first.
- Reviewers must code documents based on the so-called "four corners rule". This means that a document should be judged responsive or not responsive based solely on the extracted text of that document only. Documents that are relevant based on family members should not be coded relevant on the Active Learning review field. Although individual anomalies will not hurt the algorithm, too many in aggregate could cause a higher error rate.
- A document and its family are assigned to a single reviewer. If a reviewer is removed from the project after a set of family documents have been assigned and reviewed, you may need to manually find those unreviewed "abandoned" family documents.

Use the following saved searches to find all unreviewed "abandoned" family documents:

#### Search 1

- Conditions: **<Project Name> Reviewed On** is set
- Related items:
  - + Family
- Fields:
  - <Review field>
  - <Project Name>::Prioritized Review
  - <Project Name> Reviewed On

- <Project Name> Reviewers::User
- <Family Field>

## Search 2

- Conditions: (**Saved Search**) document is in <Saved Search 1  
AND  
<Project Name> Reviewed On is not set

---

**Note:** To find unreviewed documents for a specific user, substitute the <Project Name> Reviewers::User in place of the <Project Name> Reviewed On field.

---

- Fields:
  - <Family Field>

### 7.7.4 Adding new documents

If you want to add new documents to your Active Learning project after review has begun, complete the following:

1. Click **Pause Review** to stop the review queue.
2. Add your new documents to the saved search used as the searchable set for the classification index.
3. Navigate the **Analytics indexes** tab, and then click the classification index used to create your Active Learning project.
4. On the index console, click **Populate Index: Incremental**.
5. Once the index finishes populating, return to your review queue and click **Start Review**.

---

**Note:** All documents, including the newly added documents, are given a rank score after the incremental population.

---

If one of the new documents is part of a group of family documents that was already reviewed in Active Learning, the document can be reviewed by any reviewer. The other previously reviewed family documents won't be served again with this new document.

## 7.8 Elusion Test

An Elusion Test is used to validate the accuracy of an Active Learning project. The goal of the Elusion Test is to estimate how many low-ranked documents are actually highly relevant documents that you would leave behind if you stopped the project at that point. We recommend running the Elusion Test near the end of the project when you believe the project has stabilized and the low-ranking documents have an acceptably low relevance rate. However, you can run an Elusion Test at any point during the project.

When you run the Elusion Test, you specify either the number of documents in the sample or the confidence level, margin of error, and rank cutoff. The elusion sample is taken from the not coded documents below the specified rank cutoff. The not coded documents include documents never reviewed and documents that were skipped. Reviewers then code these documents on the same project review field to see what relevant documents remain, which ultimately result in elusion calculations.

The following are helpful definitions to better understand elusion calculations:

- **Discard pile** – the set of not coded documents with ranks below the rank cutoff. Reviewers in the Elusion Test are served a sample of documents from the discard pile.
- **Discard-pile elusion rate** – the percentage of documents in the discard pile that are relevant. It's not possible to calculate this number precisely (with zero error) without coding every document in the discard pile. Therefore, we use sampling to estimate the discard-pile elusion rate. Sampling results in a sample elusion rate along with a margin of error and confidence level, which capture the amount of uncertainty in the estimate. To calculate a more precise margin of error after a completed Elusion Test, see [Calculating a post-test margin of error on page 30](#).
- **Sample elusion rate** – the percentage of documents in the Elusion Test's sample that are relevant.

## 7.8.1 Starting the Elusion Test

The Elusion Test appears along with the other review queues after a new project is created. Starting an Elusion Test disables all other active queues in the project and suspends model updates until the Elusion Test is completed.

To run an Elusion Test, complete the following:

1. Click **Add Reviewers** on the Elusion Test and confirm you want to start an Elusion Test.

---

**Note:** We recommend no more than 150 concurrent reviewers per project. Concurrent reviewers are defined as reviewers making coding decisions in an Active Learning queue. There is no limit to how many reviewers you can add to a queue as long as the number of concurrent reviewers remains at 150 or fewer.

---

2. Wait for the system to set up the test. Once the queue reads **Click to setup the Elusion Test**, click the queue.
3. On the Elusion Test set up window, complete the following fields:
  - **Responsive Cutoff** - the rank below which the Elusion Test will sample not coded, predicted not relevant documents (not reviewed, skipped, suppressed duplicates).

---

### Notes:

- When you update the responsive cutoff value, the value is updated in all three places where it's used in the application: Elusion Test, Update Ranks, and Project Settings.
  - Manually coded documents are not sampled for Elusion Tests because they are, by definition, coded.
- 

### ■ Sample Type

- **Fixed** - creates a random sample of fixed number of documents.
- **Statistical** - creates a random sample set of a size that is based on a given Confidence and Margin of Error.

- **Confidence (%)** - the probability that sample elusion ratesample is a good estimate of the discard pile elusion rate (i.e., within the margin of error). Selecting a higher confidence level requires a larger sample size.

- **Margin of Error (%)** - the maximum difference between the sample elusion rate and the discard-pile elusion rate. Selecting a lower margin of error requires a larger sample size. Margin of error can change if documents were skipped in the Elusion Test.

---

**Note:** The actual margin of error will often be lower than what's reported by the Elusion Test. To calculate a more precise margin of error after a completed Elusion Test, see [Calculating a post-test margin of error on page 30](#).

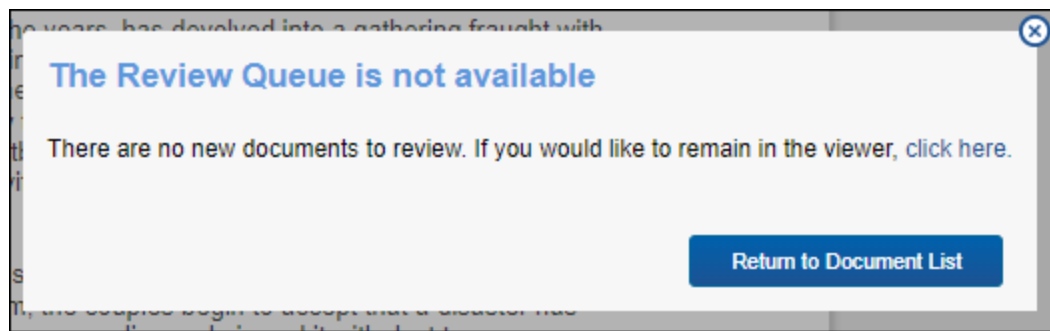
---

- **Reviewers** - the users that will review documents in the Elusion Test.
4. Click the green check mark to accept your settings.
  5. Click **Start Review**.

## 7.8.2 Running an Elusion Test

Elusion Test statistics are reported in Review Statistics and updated during an Elusion Test. You can cancel an Elusion Test at any time. You can also pause a review by clicking the **Pause Review** button.

Reviewers access the queue from the document list like all other queues. Reviewers code documents from the sample until all documents have been served, at which point the following message appears:



---

### Notes:

- For best results, we strongly recommend coding every document in the Elusion Test and avoiding skipping documents. Skipped documents are counted as relevant in Elusion Test results.
- If a document was skipped during Prioritized Review or Coverage Review and is then served during the Elusion Test, the Review Statistics for that queue are also updated.

---

When a reviewer saves a document in the Elusion Test, the document is tagged in the **<Project Name> Elusion Test** multi-choice field.

## 7.8.3 Reviewing Elusion Test results

Once reviewers code all documents in the sample, you can access Elusion Test results by clicking **View Elusion Test Results**.

Based on the coding of the elusion test sample, the results display the following:

- **Elusion Rate** - the percentage of documents coded relevant in the elusion sample. The elusion rate results are displayed as a range that applies the margin of error to the sample elusion rate,

which is an estimate of the discard pile elusion rate. The rate is rounded to the nearest tenth of a percent.

---

**Note:** Documents that are skipped during the Elusion Test queue are treated as relevant documents. Therefore, coding all of the documents in the elusion sample guarantees the statistical validity of the calculated elusion rate as an estimate of the entire discard-pile elusion rate.

---

- **Eluded Documents** - the estimated number of eluded documents, calculated by multiplying the sample elusion rate by the number of documents in the discard pile. This number is subject to the final confidence and margin of error which can be found in review statistics.
- **Pending Documents** - the number of documents that have not been submitted to the model, including documents in the elusion test sample and manually-selected documents coded while the elusion test was taking place.

If documents were skipped during the Elusion Test, a warning appears on the modal. You can review these skipped documents, and they'll be reflected in the results as if they were coded during the test. If these documents are coded after you click **Complete Project**, only the Pending Documents count is updated.

If you find the results of the Elusion Test acceptable, select whether to **Update ranks upon completion**, and then click **Complete Project** to close the project. Once the project is complete, the model remains frozen. Any coding decisions that occurred after the Elusion Test was administered will not be used to train the (now frozen) model.

---

**Note:** Updating ranks upon accepting Elusion Test results will use the Elusion Test Rank Cutoff.

---

If you don't find the results of the Elusion Test acceptable, click **Resume Project**, and then click again to re-open the Active Learning project. This unlocks the model, and allows it to rebuild. Any documents coded since the Elusion Test began, including those from the Elusion Test queue itself, are included in the model build.

Elusion Test statistics are reported in Review Statistics and persist after an Elusion Test is finished. This data is located under the Elusion Test tab.

See [Review Statistics](#) for more information.

✔ Complete Elusion Test
✕

**Warning:** All **skipped documents** are considered Responsive in the Elusion Test results.  
Code the **3 skipped documents** for the most accurate results.

<b>Elusion Rate</b> 0.0% - 10.7%  <b>3.0%</b>	<b>Eluded Documents</b> 0 - 586  <b>164</b>	<b>Pending Documents</b> Not included in the model  <b>157</b>
--	--	---

*Elusion Test Settings: Sample Size: 157, Confidence: 95.0%, Margin of Error: +/- 7.7%*

### Complete Project

The results of the Elusion Test are acceptable and the project can be considered complete. **The project can be re-enabled at any time.**

- Do not submit coding decisions to the model
- Pause all review queues
- Update document ranks upon completion  
*Responsive Cutoff: 75*

Complete Project

### Resume Project

Additional review is required. The Elusion Test statistics will be invalidated and a new Elusion Test is required. **Elusion Test results are available in Review Statistics.**

- Submit all coding decisions to the model
- Enable all review queues

Resume Project

## 7.8.4 Calculating a post-test margin of error

In most situations, the margin of error estimated by the Elusion Test may be too high (i.e. too conservative). More detail can be found in this article on the [Community site](#). When the Elusion Test is completed, you can re-calculate the margin of error using a more precise formula.

This new "margin of error" may not be symmetric, and for that reason, it would be more accurate to call it a confidence interval, which provides a range on the elusion rate rather than a single percentage to be added and subtracted.

### 7.8.4.1 Assumptions

Except in rare cases, this new confidence interval will never be larger than that of the original margin of error. Below are five sets of assumptions (conditions) to ensure the post-test confidence interval is shorter than the pre-test confidence interval:

Pre-test margin of error	Pre-test confidence level	Documents in discard pile	Population (discard pile) elusion rate
Greater than or equal to 0.01	Less than or equal to 0.99	1 million	No restrictions
Greater than or equal to 0.01	Less than or equal to 0.99	Greater than or equal to 100,000	Less than 0.31

Pre-test margin of error	Pre-test confidence level	Documents in discard pile	Population (discard pile) elusion rate
Greater than or equal to 0.01	Less than or equal to 0.99	Greater than or equal to 10,000	Less than 0.10
Greater than or equal to 0.01	Less than or equal to 0.95	Greater than or equal to 10,000	Less than 0.15
Greater than or equal to 0.01	Less than or equal to 0.90	Greater than or equal to 10,000	Less than 0.18

#### 7.8.4.2 Calculating the confidence interval

To calculate the confidence interval, use the equation below or a tool such as this one from [Epitools](#).

$$\frac{p + \frac{z^2}{n}}{1 + \frac{z^2}{n}} \pm \frac{z}{1 + \frac{z^2}{n}} \sqrt{\frac{p(1-p)}{n} + \frac{z^2}{4n^2}}$$

Where:

- n = the number of documents coded and sampled in the Elusion Test.
- p = the elusion rate from the completed Elusion Test
- C = the desired confidence level
- z = a statistical constant:
  - 1.64 if confidence level = 90%
  - 1.96 if confidence level = 95%
  - 2.57 if confidence level = 99%

#### 7.8.4.3 Estimating recall

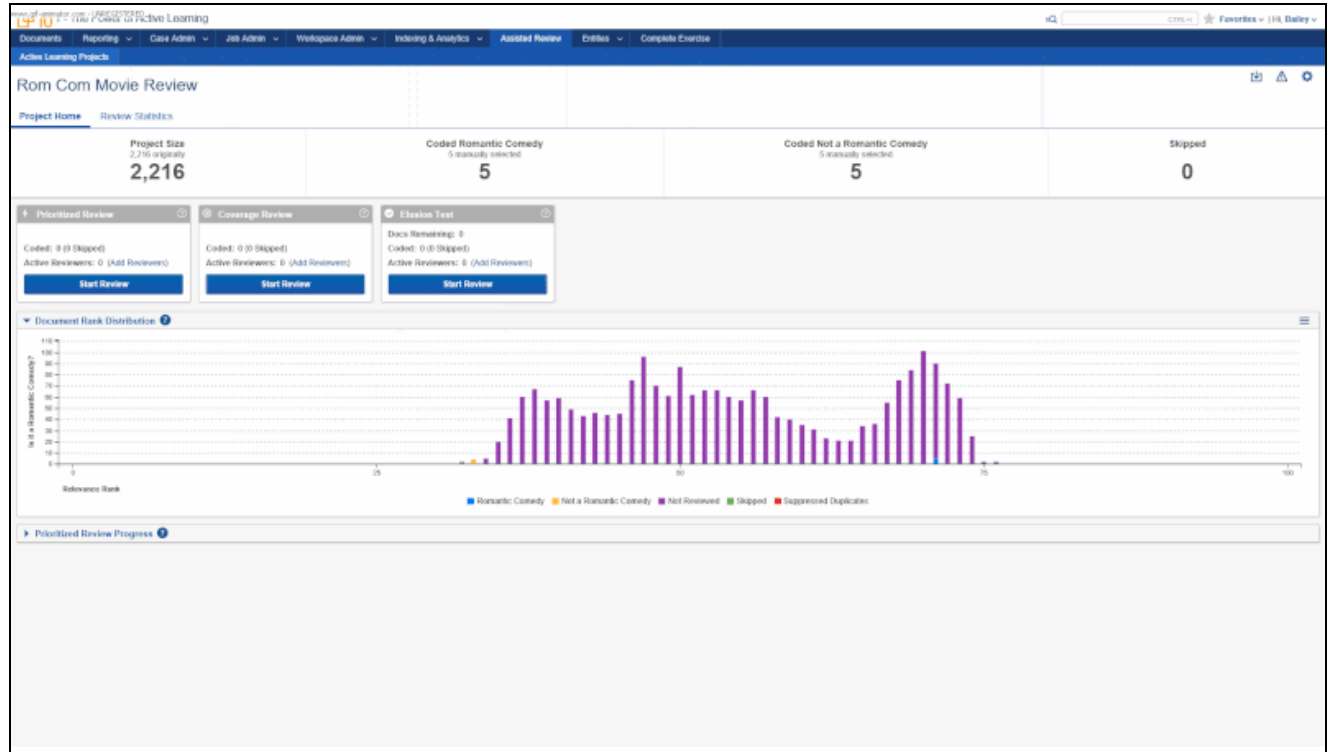
You can use either the Elusion Test margin of error or the confidence interval calculation to estimate recall using the recipe "Estimating recall in an Active Learning project.". If using the confidence interval, complete the following to calculate the high and low ends of eluded documents needed in the recipe, follow these steps:

- **To calculate the high end:** Let x be the high end of the post-test confidence interval. This should be a number between 0 and 1, and it should be larger than your point estimate for the elusion rate. Multiply x by the number of documents in the discard pile and round the result up to the nearest integer. This rounded integer is the high end of the eluded documents (*TOTAL\_RESP\_HIGH* in the recipe).
- **To calculate the low end:** Let y be the low end of the post-test confidence interval. This should be a number between 0 and 1, and it should be smaller than your point estimate for the elusion rate. Multiply y by the number of documents in the discard pile and round the result down to the nearest integer. This rounded integer is the low end of the eluded documents (*TOTAL\_RESP\_LOW* in the recipe).

## 7.9 Coverage Review

Coverage Review serves up documents that are optimal for training the model. The goal of Coverage Review is to quickly separate your documents into the positive choice and negative choice categories. Unlike Prioritized Review, which serves up the highest ranking documents, Coverage Review is intended for quick production use cases where you want to train the model as fast as possible.

The documents that are served up during Coverage Review can be either relevant or non-relevant and are the most impactful to training the model. Coverage Review begins by serving the documents the model is most unsure about - these are documents with a rank near 50. Coverage Review continues serving up documents until there are no longer any documents to review.



### 7.9.1 Special considerations

- In order to make the Coverage Review even more efficient, we recommend suppressing duplicate documents from your Active Learning project on project setup. For more information, see [Project setup on page 15](#).
- The Active Learning model only builds once you have at least five documents coded with the positive choice and five coded with the negative choice.

### 7.9.2 Starting the Coverage Review

**Note:** Starting the Coverage Review disables all other queues.



To start the review, click **Start Review**. If you haven't already added reviewers to your queue, you are prompted to add reviewers. For more information, see [Adding Reviewers below](#).

After the project begins, you can see the following items in the Coverage Review modal:

- **Coded** - the number of documents coded or skipped in the Prioritized Review.
- **Active Reviewers** - the number of reviewers added to the review.

Admins can pause the review at any point in the project by clicking the **Pause Review** button on the project modal. Once the review is paused, the access point on the document view is disabled. You can restart the review at any time. Documents coded on the review field while the review is paused are included the next time the model rebuilds. For more information, see [Project Setup](#).

### 7.9.2.1 Adding Reviewers

From the project homepage, admins can add reviewers to each queue on a user-by-user basis or in bulk.

---

**Note:** After you ARM an Active Learning project, you must re-add reviewers to the queue.

---

To add reviewers:

1. Click **Add Reviewers** in the queue modal.
2. Find and select an individual reviewer, or type to enter a reviewer name. You can also click **All Users** to select every user in the group.
3. Click the green check mark to save your changes.
4. Click the red X to cancel reviewer changes.

---

**Note:** We recommend no more than 150 concurrent reviewers per project. Concurrent reviewers are defined as reviewers making coding decisions in an Active Learning queue. There is no limit to how many reviewers you can add to a queue as long as the number of concurrent reviewers remains at 150 or fewer.

---

### 7.9.3 Adding new documents

If you want to add new documents to your Active Learning project after review has begun, complete the following:

1. Click **Pause Review** to stop the review queue.
2. Add your new documents to the saved search used as the searchable set for the classification index.
3. Navigate the **Analytics indexes** tab, and then click the classification index used to create your Active Learning project.
4. On the index console, click **Populate Index: Incremental**.
5. Once the index finishes populating, return to your review queue and click **Start Review**.

---

**Note:** All documents, including the newly added documents, are given a rank score after the incremental population.

---

# 8 Project monitoring

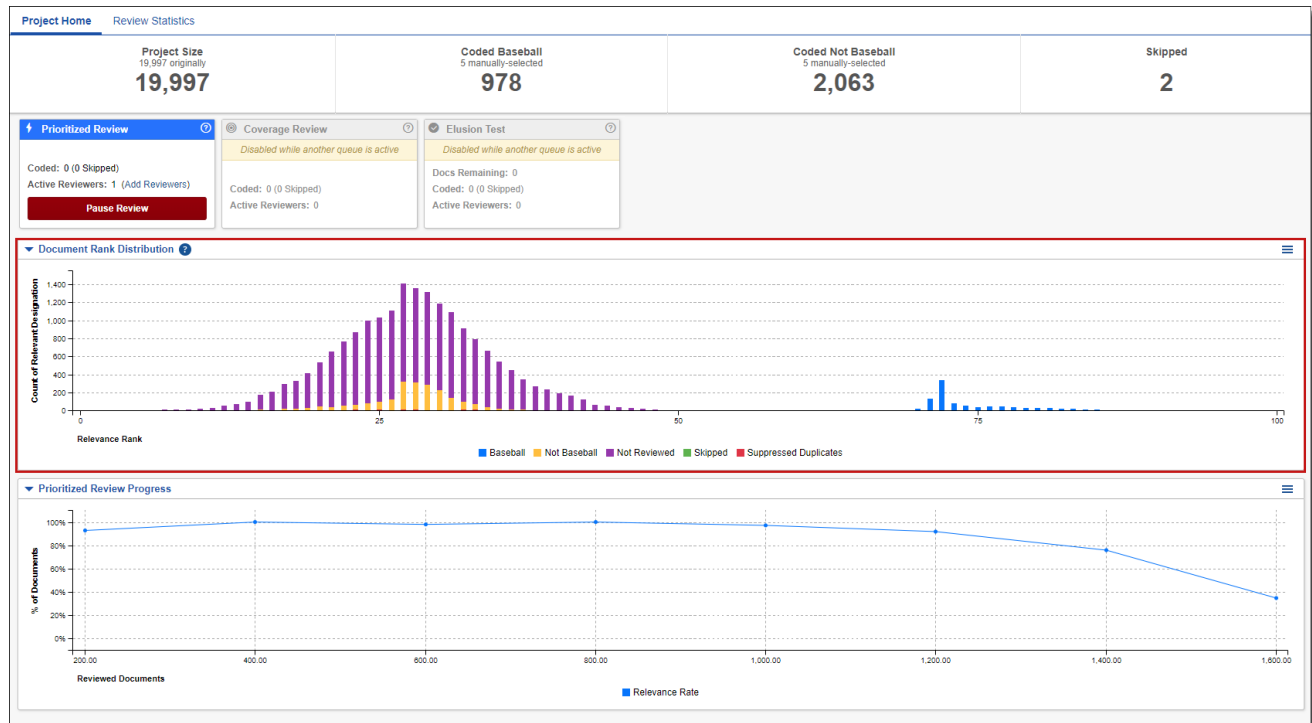
Once the Active Learning model completes its first build, the model rebuilds every twenty minutes to include coding decisions not in the most recent build. However, if Active Learning detects reviewer inactivity of at least five minutes, a build will take place before the twenty-minute threshold is reached. Admins have a number of ways to monitor the progress of an Active Learning project.

## 8.1 Document rank distribution

The Document Rank Distribution is one of the monitoring charts in the Active Learning project homepage. This ranks each document in the model, including manually-selected documents, based on how it relates to the overall project. A relevance rank near zero indicates the model believes the document is more likely coded on the negative review field choice. On the other hand, a rank closer to 100 means the model believes a document is more likely to be coded on the positive review field choice. In the early stages of an Active Learning project, most documents will have a relevance rank score between 40 and 60 until the model begins training.

The review state of the documents are also overlaid on this distribution. Note that it is possible for a document coded on the positive choice to have a lower relevance ranking; this is because the rank is simply the model's prediction.

(Click to expand)



The dashboard reports documents reviewed from the Prioritized Review or Coverage Review queue, as well as documents coded outside of the queue. Admins will see the following colors on the chart:

- **Blue (Coded Positive Choice)** - a document was coded on the positive choice review field.
- **Yellow (Coded Negative Choice)** - a document was coded on the negative choice review field.

- **Purple (Not Reviewed)** - the documents are within the project's scope, but have not yet been coded and are based on Relativity's predictions.
- **Green (Skipped)** - a document was skipped.
- **Red (Suppressed Duplicate)** - the documents are suppressed because their learning is taken care of by other textually similar documents.

---

**Note:** When a full population is performed, all previously identified suppressed documents are marked as "Not Reviewed" in the Document Rank Distribution chart.

---

You can interact with the Document Rank Distribution Chart to hide the different categories of documents. You can easily view particular categories of documents that remain in the chart. For example, to hide the Not Reviewed documents, click Not Reviewed. Upon clicking, the bar chart will rescale for the remaining documents.

### 8.1.0.1 Monitoring document rank distribution

Use the rank distribution chart to understand the following:

- The number of predicted, relevant documents that remain for review.
- The agreement between reviewers and the Active Learning model.
- The number of documents the model does not understand well.

As the model learns throughout the project life cycle, the Rank Distribution is expected to gravitate toward 0 or 100 depending on how documents are coded on the positive choice or negative choice. Each time an admin accesses this page - via a page refresh or from a different page - the latest data will reflect in the Project Home display.

---

**Note:** If a coding decision is updated on a document reviewed in the queue, it will not change to a manually selected document.

---

## 8.2 Prioritized review progress

The Prioritized Review Progress chart displays the effectiveness of the prioritized review queue's ability to locate the relevant documents by measuring the relevance rate. More specifically, the relevance rate measures the percentage of documents that were predicted to be relevant that were then confirmed as relevant by reviewers' coding decisions.

---

### Notes:

- This chart only updates when documents are coded in the Prioritized Review queue.
  - Documents included in the Active Learning queue for index health are excluded from the relevance rate calculation.
  - If only manually-selected documents are coded, the Prioritized Review Progress chart won't display relevance rate data.
  - This measurement is not cumulative with regard to the entire document set.
- 

The x-axis charts documents in groups of 200 which have been reviewed in the Prioritized Review queue. Data won't appear on the chart until at least 200 documents are coded. Once 200 documents are coded in

prioritized review, relevance rate data appears on the chart. A new data point appears every time another 200 documents are coded.

The y-axis charts the relevance rate. This is the percentage of the highly ranked documents which are confirmed by the reviewer to be relevant. The Prioritized Review queue serves up a mixture of documents: 10% of documents are randomly selected; 20% of documents are chosen for scores "in the middle" of the review (in the 40 to 60 range) for index health; and the final 70% are the highest-ranking uncoded documents remaining in the project.

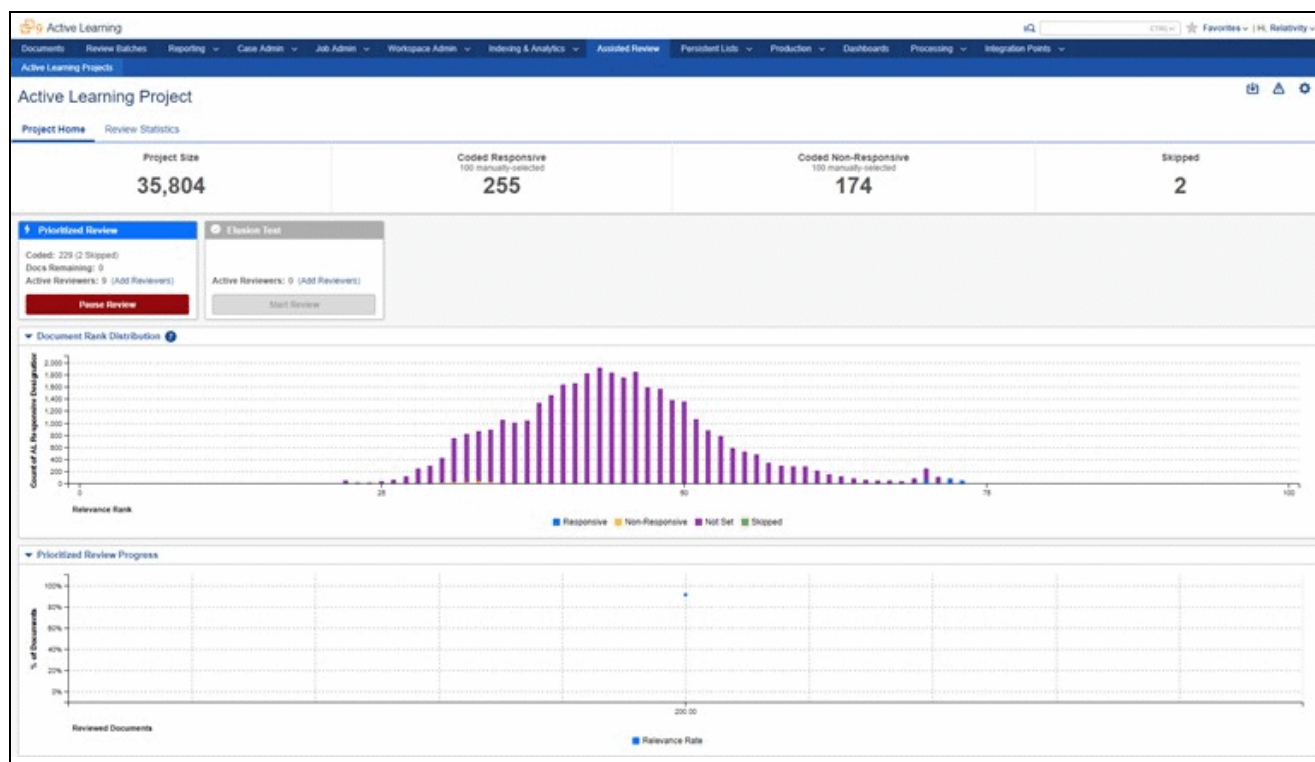
This means for every 200 documents, around 140 (70%) are chosen for being highly ranked. If you wanted to calculate the relevance rate manually, you would take **Number of Highest Ranked Coded [Positive Choice] / Number of Highest Ranked**. You can view these values in the Prioritized Review queue review summary on the Review Statistics tab. For more information, see [Review Statistics](#).

### 8.2.0.1 Monitoring prioritized review progress

In the beginning of the project, the relevance rate may be low as the model learns the meaning of responsive. However, as reviewers code documents and the model learns, this rate will improve because the model becomes better at locating relevant documents. Documents might have active learning ranks in the 80-100 range, which typically corresponds to very high rates of responsiveness. It's not unusual to see 100% reported in the graph. However, as the review progresses, the highest-ranking documents that haven't yet been coded are going to have lower and lower rank scores.

**Note:** You may see a spike in the relevance rate if a large amount of new documents are added to the project, or if the definition of relevance changes during the course of the review.

Eventually, the relevance rate will plateau and decline. Declines in relevance rate indicate that the project is near completion since the model is serving up fewer relevant documents to reviewers. This indicates that you can move to the Elusion Test to validate completion. For more information, see [Elusion Test](#).



**Note:** Documents used for Index health are not included in the Relevance Rate calculation.

## 8.3 Running a search on a classification index

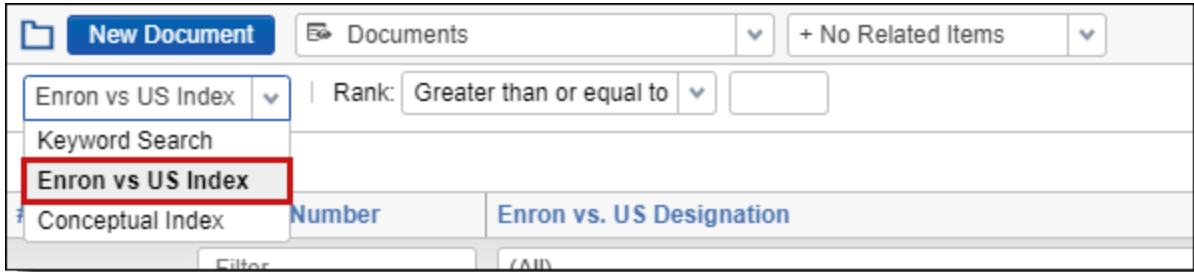
You can run a search against a classification index to quickly return documents of a certain rank or within a range of ranks instead of having to run Update Ranks.

### Notes:

- If you try running a search for the first time while the classification index is populating and building, the search will try to complete for five minutes. If the index hasn't finished building within this time, the search will fail. However, you can re-run the search after the index finishes.
- If you've previously run the search, these results are cached. If you try re-running the search while the classification index is building, you'll see these old, cached results. Once the index build completes, the results are refreshed with the latest index build results.

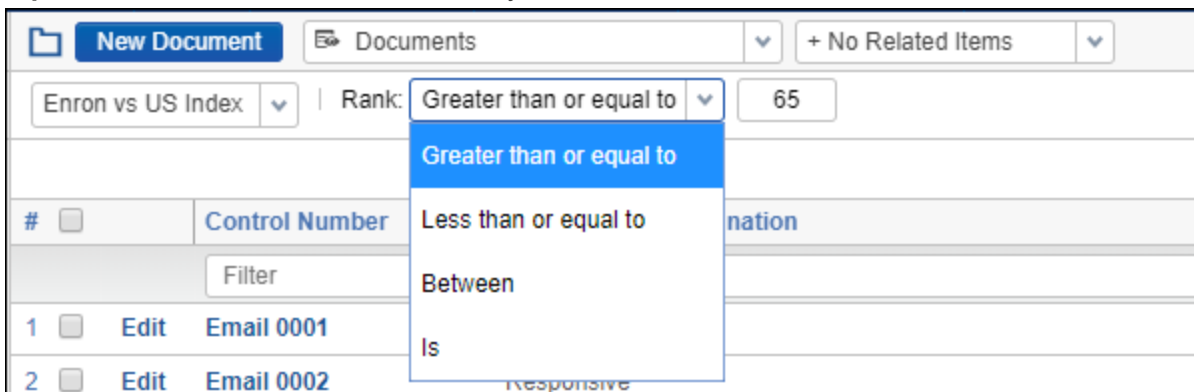
To run the search:

1. Navigate to the **Documents** tab.
2. From the search bar, select the classification index associated with your Active Learning project.



**Note:** The index you select must be associated with an Active Learning project that has been built (at least five documents coded with the positive designation and five coded with the negative designation).

3. Using the next drop-down, select whether to search for **Greater than or equal to**, **Less than or equal to**, **Between**, or **Is** the rank value you enter.



4. Click **Search**.

The Rank column displays rank results relevant to your search for the most recent index build. This differs from the **CSR- <Project Name> Cat. Set::Category Rank** field generated by Update Ranks, which stores old results until you manually re-run.

The rank scores are rounded to two decimal places. Note that these results are temporary, and you can't run the mass operations Sum, Tally, and Average on them.

(Click to expand)

### 8.3.1

The screenshot shows the Relativity interface with a search results table. The search criteria are 'Enron vs US Index' and 'Rank: Greater than or equal to 65'. The table has columns for '#', 'Enron vs. US Designation', and 'Rank'. The results are sorted by rank in descending order. The table shows 18 rows of data, all with a designation of 'Responsive'. The rank values range from 70.66 to 72.58. The interface includes a search bar, filters, and a 'Run Search' button.

#	Enron vs. US Designation	Rank
1	Responsive	70.66
2	Responsive	65.93
3	Responsive	71.75
4	Responsive	71.39
5	Responsive	66.87
6	Responsive	71.21
7	Responsive	71.06
8	Responsive	70.61
9	Responsive	70.07
10	Responsive	70.27
11	Responsive	72.16
12	Responsive	70.77
13	Responsive	70.66
14	Responsive	71.81
15	Responsive	71.28
16	Responsive	67.11
17	Responsive	72.11
18	Responsive	72.58

The results in the Rank column are temporary, and you can't run the mass operations Sum, Tally, and Average on them.

### 8.3.2 Quality control

If you want to run a quality control check on reviewer's coding decisions, run a search for documents **Greater than or equal to** your rank cutoff. Then, filter on the **Designation** field to return documents within this rank that were coded on the negative designation.

## 9 Review statistics

The Review Statistics tab contains project statistics for each queue as well as a model update history.

### 9.1 Review Summary

The Review Summary section contains four tabs:

- [Prioritized Review below](#)
- [Coverage Review on the next page](#)
- [Elusion Test on page 41](#)
- [Manually-Selected on page 42](#)

#### 9.1.1 Prioritized Review

The Prioritized Review tab shows the effectiveness of the Prioritized Review queue's ability to locate relevant documents by reporting the review field breakdown and relevance rate each 200 documents. For every 200 documents that are coded (excluding additional reviewed by family), a new row appears in the Prioritized Review table. The first row in the table provides a summary for the entire project.

The Prioritized Review table contains the following columns:

- **Prioritized Review** - the set of documents the statistics apply to (excludes additional reviewed by family). The sum of the count of **Coded [Positive Choice]**, **Coded [Negative Choice]**, and **Skipped** documents should equal 200.
- **# of Reviewers** - the number of unique reviewers who reviewed documents in the Prioritized Review queue.
- **Coded [Positive Choice]** - the number of documents coded with the positive designation on the review field (excludes additional reviewed by family).
- **Coded [Negative Choice]** - the number of documents (excluding family) coded with the negative designation on the review field (excludes additional reviewed by family).
- **Skipped** - the number of documents that were saved or had **Save and Next** selected with no coding decision supplied on the review field (excludes additional reviewed by family).
- **Index Health** - the number of index health documents reviewed in the Prioritized Review queue. These documents are excluded from the relevance rate calculation.
- **Highest Ranked** - the number of highly ranked documents reviewed in the Prioritized Review queue.
- **Highest Ranked Coded [Positive Choice]** - the number of highly ranked documents that were coded with the positive designation in the Prioritized Review queue.
- **Relevance Rate** - the percentage of documents that were predicted to be relevant that were then confirmed as relevant by reviewers' coding decisions. You can calculate the relevance rate manually using the following formula:  $\text{Highest Ranked Coded [Positive Choice]} / \text{Highest Ranked}$ .

- **Additional Reviewed by Family** - the number of family documents reviewed in the Prioritized Review queue.
- **Additional Review by Family Coded [Positive Choice]** - the number of family documents coded with the positive designation in the Prioritized Review queue.

(Click to expand)

Project Home		Review Statistics																																																									
Project Size 2,501 originally		Coded Responsive 0 manually selected				Coded Not Responsive 0 manually selected				Skipped																																																	
2,501		10				14				45																																																	
▼ Review Summary																																																											
<table border="1"> <thead> <tr> <th>Prioritized Review</th> <th>Coverage Review</th> <th>Elusion Test</th> <th>Manually Selected</th> <th colspan="8"></th> </tr> <tr> <th>#</th> <th>Prioritized Review</th> <th># of Reviewers</th> <th>Coded Responsive</th> <th>Coded Not Responsive</th> <th>Skipped</th> <th>Index Health</th> <th>Highest Ranked</th> <th>Highest Ranked Coded Responsive</th> <th>Relevance Rate</th> <th>Family Group Documents</th> <th>Responsive Family Group Documents</th> </tr> </thead> <tbody> <tr> <td></td> <td>Summary</td> <td>2</td> <td>10</td> <td>13</td> <td>45</td> <td>60</td> <td>8</td> <td>2</td> <td>25.00%</td> <td>1</td> <td></td> </tr> <tr> <td>1</td> <td>1-68</td> <td>2</td> <td>10</td> <td>13</td> <td>45</td> <td>60</td> <td>8</td> <td>2</td> <td>25.00%</td> <td>1</td> <td></td> </tr> </tbody> </table>												Prioritized Review	Coverage Review	Elusion Test	Manually Selected									#	Prioritized Review	# of Reviewers	Coded Responsive	Coded Not Responsive	Skipped	Index Health	Highest Ranked	Highest Ranked Coded Responsive	Relevance Rate	Family Group Documents	Responsive Family Group Documents		Summary	2	10	13	45	60	8	2	25.00%	1		1	1-68	2	10	13	45	60	8	2	25.00%	1	
Prioritized Review	Coverage Review	Elusion Test	Manually Selected																																																								
#	Prioritized Review	# of Reviewers	Coded Responsive	Coded Not Responsive	Skipped	Index Health	Highest Ranked	Highest Ranked Coded Responsive	Relevance Rate	Family Group Documents	Responsive Family Group Documents																																																
	Summary	2	10	13	45	60	8	2	25.00%	1																																																	
1	1-68	2	10	13	45	60	8	2	25.00%	1																																																	

## 9.1.2 Coverage Review

The Coverage Review tab shows the progress of the Coverage Review by reporting the review field breakdown every 200 documents. For every 200 documents that are coded, a new row appears in the Coverage Review table. The first row in the table provides a summary for the entire project.

The Coverage Review table contains the following columns:

- **Coverage Size Review** - the set of documents the statistics apply to.
- **# of Reviewers** - the number of unique reviewers who reviewed documents in the Coverage Review queue.
- **Coded [Positive Choice]** - the number of documents coded with the positive designation on the review field.
- **Coded [Negative Choice]** - the number of documents coded with the negative designation on the review field.
- **Skipped** - the number of documents that were saved or had **Save and Next** selected with no coding decision supplied on the review field.

(Click to expand)

Project Home		Review Statistics																																																									
Project Size 47,993 originally		Coded Responsive 0 manually selected				Coded Not Responsive 0 manually selected				Skipped																																																	
47,993		14				8				0																																																	
▼ Review Summary																																																											
<table border="1"> <thead> <tr> <th>Prioritized Review</th> <th>Coverage Review</th> <th>Elusion Test</th> <th>Manually-Selected</th> <th colspan="8"></th> </tr> <tr> <th>#</th> <th>Coverage Review</th> <th># of Reviewers</th> <th>Coded Responsive</th> <th>Coded Not Responsive</th> <th>Skipped</th> <th colspan="6"></th> </tr> </thead> <tbody> <tr> <td></td> <td>Summary</td> <td>1</td> <td>6</td> <td>8</td> <td>0</td> <td colspan="6"></td> </tr> <tr> <td>1</td> <td>1-14</td> <td>1</td> <td>6</td> <td>8</td> <td>0</td> <td colspan="6"></td> </tr> </tbody> </table>												Prioritized Review	Coverage Review	Elusion Test	Manually-Selected									#	Coverage Review	# of Reviewers	Coded Responsive	Coded Not Responsive	Skipped								Summary	1	6	8	0							1	1-14	1	6	8	0						
Prioritized Review	Coverage Review	Elusion Test	Manually-Selected																																																								
#	Coverage Review	# of Reviewers	Coded Responsive	Coded Not Responsive	Skipped																																																						
	Summary	1	6	8	0																																																						
1	1-14	1	6	8	0																																																						



### 9.1.3 Elusion Test

Use the Elusion Test tab to monitor the progress to completing the Active Learning project. A new row is created when an Elusion Test starts and is populated with the available information about the Elusion Test. The last four columns populate as documents are coded and appear upon page refresh. If an Elusion Test is stopped before completion, the last four columns display values for what was coded.

The Elusion Test tab contains the following columns:

- **Review** - each review is called Elusion Test plus a numeral. For example, the first Elusion Test is "Elusion Test 1" and it will increase by one each sequential Elusion Test.
- **Start Date** - the UTC date and time the Elusion Test was started.
- **Rank Cutoff** - user input when turning on the Elusion Test.
- **Discard Pile Size** - Number of documents below the rank cutoff that are not coded.
- **Sample Size** - number of documents in the Elusion Test. This number is computed when the Elusion Test is started.
- **Skipped** - the number of documents that were saved or had **Save and Next** selected with no coding decision supplied on the review field.
- **Pending Document Count** - number of documents with coding changes, including documents coded in the Elusion Test (not skipped documents in Elusion Test) and manually selected documents not contributing to the model's learning.
- **Confidence Level** - user input or calculated when turning on the Elusion Test.
- **Margin of Error** - user input when turning on the Elusion Test. Margin of error can change if documents were skipped in Elusion Test.
- **Coded [Positive choice]** - the number of documents coded with the positive designation on the review field.
- **Coded [Negative choice]** - the number of documents coded with the negative designation on the review field.
- **Elusion Rate** - the percentage of documents coded relevant in the elusion sample. Please note this value is rounded to the nearest percent.
- **Eluded Document** - the Elusion Rate measured in number of documents.

(Click to expand)

Project Home		Review Statistics								
Project Size 19,997 originally <b>19,997</b>		Coded Baseball 5 manually-selected <b>978</b>	Coded Not Baseball 5 manually-selected <b>2,063</b>	Skipped <b>2</b>						
▼ Review Summary										
Prioritized Review	Coverage Review	Elusion Test	Manually-Selected							
#	Review	Start Date	Rank Cutoff	Discard Pile Size	Sample Size	Coded	Skipped	Pending Document Count	Confidence Level	Margin of Error
1	Elusion Test 1	01/30/2018 11:55 PM	75	19,987		2	2	0	95.0%	
2	Elusion Test 2	02/07/2018 5:52 PM	60	18,472		2	2	0	95.0%	
3	Elusion Test 3	02/07/2018 9:44 PM	75	18,247	1,417		1,416	1	95.0%	
4	Elusion Test 4	02/08/2018 3:51 PM	75	16,836		1	1	0	95.0%	
5	Elusion Test 5	03/09/2018 8:44 PM	75	16,833	1,408		0	0	95.0%	
Total Items: 5										

### 9.1.4 Manually-Selected

The Manually-selected Documents chart displays the number of document coding decisions made outside of the Active Learning queue on a given day.

The Manually-Selected tab contains the following columns:

- **Manually-selected Documents** - the number of documents coded outside of the Active Learning queue.
- **Coded [Positive Choice]** - the number of documents coded with the positive designation on the review field.
- **Coded [Negative Choice]** - the number of documents coded with the negative designation on the review field.
- **Date submitted (UTC)** - the date in UTC that the statistics were submitted.

(Click to expand)

Project Home		Review Statistics		
Project Size 19,997 originally <b>19,997</b>		Coded Baseball 5 manually-selected <b>978</b>	Coded Not Baseball 5 manually-selected <b>2,063</b>	Skipped <b>2</b>
▼ Review Summary				
Prioritized Review	Coverage Review	Elusion Test	Manually-Selected	
#	Manually-Selected Documents	Coded Baseball	Coded Not Baseball	Date Submitted
1	10		5	01/30/2018
Total Items: 1				

## 9.2 Model Updates

The Model Updates section contains a history of Active Learning model builds. A new row is added each time the model builds, and the statistics are based off of the responsive cutoff set in the [Project Settings on page 23](#). If you update the responsive cutoff at any point, the statistics will update accordingly.

- **Build Date** - a timestamp indicating when the model build completed, displayed in local time.
- **Above or At Cutoff** - the number of documents above or at the responsive cutoff.
- **Below Cutoff** - the number of documents below the responsive cutoff.

The subsequent columns indicate the number of documents in each relevance rank range.

(click to expand)

#	Build Date	Above or At Cutoff (65)	Below Cutoff (65)	0 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100
1	07/11/2019 9:31 AM CDT	504	4496	0	0	52	470	1872	1661	780	165	0	0
2	07/10/2019 10:07 AM CDT	500	4500	0	0	52	468	1877	1657	781	165	0	0
3	07/10/2019 10:06 AM CDT	492	4508	0	0	52	462	1877	1661	783	165	0	0
4	06/27/2019 8:01 AM CDT	499	4501	0	0	44	477	1871	1693	743	172	0	0
5	06/27/2019 8:00 AM CDT	536	4464	0	0	41	414	1862	1688	838	157	0	0
6	06/27/2019 7:59 AM CDT	616	4384	0	0	38	408	1799	1629	942	184	0	0
7	06/27/2019 7:57 AM CDT	526	4474	0	0	28	429	1879	1779	698	186	1	0
8	06/26/2019 12:03 PM CDT	527	4473	0	0	28	430	1897	1748	712	182	3	0
9	06/26/2019 12:02 PM CDT	438	4562	0	0	21	462	2021	1723	608	159	6	0
10	06/26/2019 11:55 AM CDT	398	4602	0	0	42	518	2119	1638	552	120	11	0

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