For readers interested in studying the reports in greater detail, we provide the following list of the elements of each report and an explanation of how they should be interpreted. Numbers refer to the labels in Diagram A.

1. The text of the item (labels 1 and 3) appears as it did in the survey.
2. The factor box (label 2) indicates the importance respondents placed on the factor (e.g. reliability, responsiveness, assurance, etc.) associated with this item. If the average of the responses was 30%, then the red box occupies 30% of the total height.
3. The ordering of the items in the reports was determined by placing the items associated with the most important factor (e.g. reliability, responsiveness, assurance, etc.) first, the items associated with the second most important factor second, and so forth. These were calculated based on data from all respondents to the survey. In other words, what faculty and graduate students as a whole determined to be most important. This was done to avoid a situation wherein individual items had to be re-ordered for each of the reports produced (e.g. faculty as a whole, graduate students as a whole, arts & humanities respondents, users of the Physics Library, etc.) There are a few items in the survey not associated with any of the five factors. They are so indicated by the placement of “NA” in the factor box.

The Gap Column

4. The number of respondents that gave an opinion on both the UC Berkeley Library and what constitutes an excellent library (label 4) is the number of respondents used to calculate the gap between the UC Berkeley Libraries and an excellent library's performance. Results for any item with very few responses should be interpreted carefully.
5. The number of respondents that did not give either an opinion on the UC Berkeley Library or an opinion on an excellent library (label 5) is useful because an item where a
relatively large number of respondents did not respond indicates an area where people either did not have much knowledge or experience. It is possible that items towards the bottom of the survey (e.g., items 15-21) will have fewer responses due to *survey fatigue*.

6. The **range of responses box** (label 6) extends from the 25th percentile up to the 75th percentile of all of the calculated gaps. The 25th percentile is the point where 25% of the responses fell below. For example, if the 25th percentile rests at \(-1.0\), then 25% of the responses fell below \(-1.0\). The point of specifying a range in this way is to give the reader an indication of the range of opinions, i.e. was their strong agreement or strong disagreement? The wider the bar, the greater the range of opinions; a narrower bar indicates less range in opinions. The entire range is not given, as this would potentially assign too much importance to single responses.

7. The **black line at the center of the confidence band** (label 7) is the *estimate* of the population average gap between an excellent and the UC Berkeley library. It is an *estimate* of what the average response would have been *if* the entire population had been surveyed, and *if* the entire population had responded. If the entire population of individuals was surveyed, and had responded, there would be no need for an estimate. This is not simply the average of all opinions of the gap, since weighting was required to take into account the fact that different departments were sampled at different rates.

8. Service items preceded by a **bold arrow** (label 8) indicate services where there is strong statistical evidence that the gap between user expectations of “an excellent library” and the UC Berkeley Library’s performance is one or greater than one. This indicates that the UC Berkeley Library is under-performing in the particular feature. Without data on the entire population, it is impossible to know with surety whether or not the *population average gap* is greater than 1.0. However, a sufficient number of responses indicating that people believe that the UC Berkeley library is under-performing do allow us to make such claims and rarely be incorrect. There are also cases where the total population’s average gap is greater than 1.0 but due to an insufficient amount of data it cannot be confidently stated that the UC Berkeley library is under-performing.

9. The **confidence band** (label 9) which extends on either side of the black line in the center, is a critical component of the *estimate* of the population average gap. The *estimate* given by the
center black line in label 7 (above) is not exact. We are confident (in this case, 95% confident) that the range specified by this band includes the population average gap. In other words, this band was calculated using a method that 95% of the time returns a range that includes the population average gap. A wider band indicates less certainty in the estimate.

The UC Berkeley Library column

10. The upper number is the **number of respondents that gave an opinion on the UC Berkeley Library** (label 10). See 4 of this list.
11. The lower number is the **number of respondents that did not give an opinion on the UC Berkeley Library** (label 11). See 5 of this list.
12. The **range of responses box** (label 12) extends from the 25th percentile up to the 75th percentile of all responses on the opinion of the local library. See 6 of this list.
13. The **black line at the center of the confidence band** (label 13) is the estimate of the population average opinion of the UC Berkeley Library. See 7 of this list.
14. The **confidence band** (label 14) is a range that with 95% confidence includes the population average opinion of the UC Berkeley Library. See 9 of this list.

The “Excellent Library” column

15. The upper number is the **number of respondents that gave an opinion on an excellent library** (label 15). See 4 of this list.
16. The lower number is the **number of respondents that did not give an opinion on an excellent library** (label 16). See 5 of this list.
17. The **range of responses box** (label 17) extends from the 25th percentile up to the 75th percentile of all responses on the opinion of an excellent library. See 6 of this list.
18. The **black line at the center of the confidence band** (label 17) is the estimate of the population average opinion of an excellent library. See 7 of this list.
19. The **confidence band** (label 19) is a range that with 95% confidence includes the population average opinion of an excellent library. See 9 of this list.

The relationship between the positioning of the **estimate** of the population average (labels 7, 13 and 18) and the edges of the “range of responses boxes” (labels 6, 12 and 17) needs some additional explanation. Nothing requires that the estimate be at the center of the range of responses boxes, though generally it will tend to be. Occasionally, the estimate is outside of the range of responses box. There are different reasons for this.

First, the range of responses boxes are based only on the sample responses, while the **estimate** of the population average is formed in such a way as to take into consideration the different sampling fractions for different departments. Second, the average is a measurement that is affected by the extreme values in the sample, while a percentile (represented by the range of responses box) is not. For example, if in a group of responses 25% of the responses are less than 5, then the 25th percentile is 5, regardless of what those bottom 25% responded. Alternatively, the value of the average will depend heavily on those bottom values.

The bottom of each report includes a series of graphs describing the distribution of certain characteristics among the members of the sample that meet the current criteria for the particular report. The specific graphs included depend on the situation, but include such things as descriptions of the academic departments of the respondents, the libraries most often used by the respondents, the frequency of office/home and in-person usage, and so forth. The specific plots to include were chosen at the time of report creation.