Research Question:

How are students' aspirations as expressed through their role models and planned level of education related to how they allocate time across academic, social, and digital activities?

The aim was to examine if students' self-concept and future goals are even reflected in the way how they spend their time in different areas of everyday life.

Key Findings:

The visualization shows that online activity defines students' daily time allocation, especially among Religious, Political, or Peer admirers. They are more likely to report over 10 hours/day of digital media use, which suggests high engagement with online communities or content driven activities. On the other hand, students who dream of being Educators or Business leaders, particularly those with undergraduate or graduate aspirations, also show a more evenly distributed time frame, with more academic activity and moderate utilization of digital or social media.

Social activity is more diverse, with students who are influenced by Family or Peers generally spending more time with others. Some extreme outliers were discovered and eliminated to allow averages to reflect possible behavior.

These trends suggest that the aspirations and role models of students are strongly connected to how they plan their time, demonstrating how aspirations can have an impact on not just future aspirations, but also daily routine and behavioral priorities.

Design Decisions:

To examine the relationship between time use and student aspirations, I developed a Faceted Grouped Bar Chart in Tableau. The chart categorizes data by level of education (as facets), activity type (academic, social, digital), and role model category (using color-coded bars). This structure allows for easy comparison within and across groups side-by-side.

I scaled weekly totals for comparison on a fair basis with average hours per day. Following Tufte's minimalist philosophy the color choice was made, and direct bar labels are used to support readability at the cost of not having to read axes or

tooltips. The figure is appropriate for close, chunked analysis without overloading the viewer.

Design Iterations:

Staked bars were an early experiment with early iterations of the chart, exaggerating the values at times by more than 900 hours/week. This was fixed by reworking data into long form and aggregating raw types of role models into 12 standardized groups. I also removed outliers (300+ hours/week) and restricted values at 18 hours/day to encourage interpretability.

In addition, Tableau's extensive layout was adjusted by establishing a set dashboard dimensions and using "Fit Entire View" for tidy export. These iterations consistently improved clarity and directed development towards an enhanced and more important outcome visualization.

Lessons Learned:

This project also taught me that raw averages can be misleading unless normalized and outliers filtered. I also learned how tool defaults; like stacked bars, automatic axis scaling, or export behavior; can easily manipulate the intended message if not well tuned.

Grouping of raw responses (for example: putting "sports person" under "Athlete") added a lot of clarity and analytical insight. Lastly, I learned that small design choices like labeling, filtering, and axis control can make a visualization enormously more readable and effective.

Conclusion:

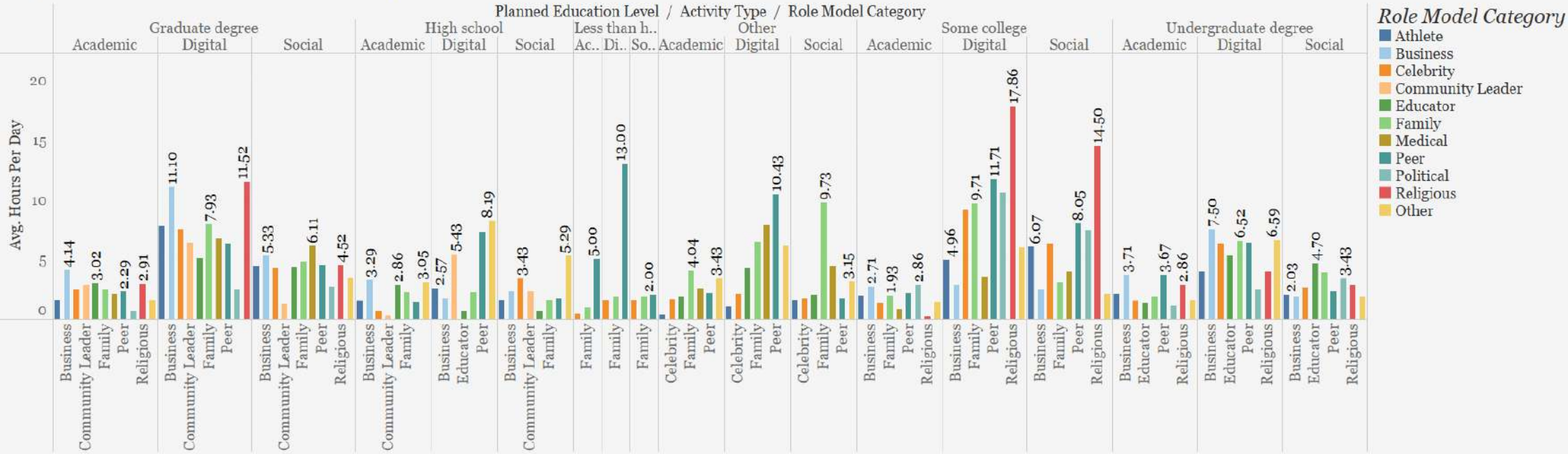
This project demonstrates the ways in which visualization has the potential to reveal the ways that identity and aspiration influence behavior. By preparing the data carefully and designing with intent, I was able to transform a raw dataset into a story about how students spend their time which was based not only on what they are doing, but on whom they admire and where they want to be.

Acknowledgement:

ChatGPT was used to assist with grammar correction, sentence refinement, and improving the overall flow and clarity of the writing.

The following page contains the attached visualization design.

Aspirations vs. Academic, Social, Digital Time



Average of Hours Per Day for each Role Model Category broken down by Planned Education Level and Activity Type. Color shows details about Role Model Category. The view is filtered on average of Hours Per Day, which includes values less than or equal to 18.00.