



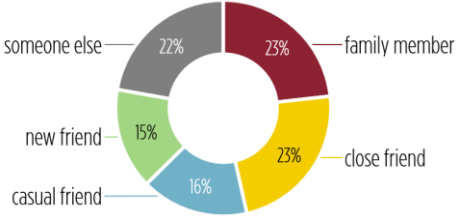
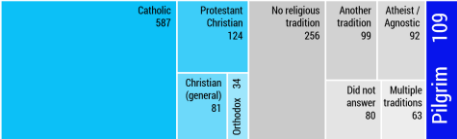
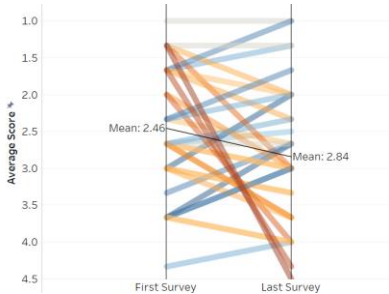
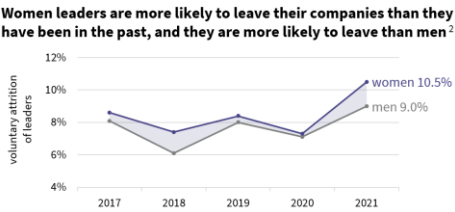
Chart type	Example	Use to show...	Demo- graphics	Single number	1 group	2 groups	3+ groups	Bench- mark	Over time
1 Pictograph	 <p>4 in 5 kids said they were healthier after joining CHC than they were before.</p>	<ul style="list-style-type: none"> # in # people 	✓	✓					
2 Waffle chart	 <p>Only 24% of women feel like their employer cares about their overall wellbeing¹¹</p>	<ul style="list-style-type: none"> %s that total to 100% Counts of up to ~150 	✓	✓					
3 Big a\$\$ number (BAN)	<p>Parents were more than</p> <p>18x as likely to say</p> <p>their child's health got better than worse since joining CHC.</p>	<ul style="list-style-type: none"> Counts/N # of people Numbers that are hard to visualize 	✓	✓					
4 Donut chart	<p>Community member's relationship to MHA</p>  <p>someone else 22% family member 23% close friend 23% casual friend 16% new friend 15%</p>	<ul style="list-style-type: none"> Percentages For a single number/group: any % For multiple groups: %s that total to 100% 	✓	✓	✓	✓	✓		
5 Treemap	 <p>Catholic 587 Protestant Christian 124 No religious tradition 256 Another tradition 99 Atheist / Agnostic 92 Pilgrim 109 Christian (general) 81 Orthodox 34 Did not answer 80 Multiple traditions 63</p>	<ul style="list-style-type: none"> Counts/N Parts of a whole 	✓				✓		

Chart type	Example	Use to show...	Demo- graphics	Single number	1 group	2 groups	3+ groups	Bench- mark	Over time
6 Basic bar		<ul style="list-style-type: none"> • Check-all-that-apply • Percentages • Averages 	✓		✓				✓
7 Stacked bar		<ul style="list-style-type: none"> • Totals to 100% • Likert scale survey Qs 	✓		✓				✓
8 Diverging bar	<p>There was a clear mismatch between the amount of effort job seekers were spending on looking for work and the success they experienced.</p>	<ul style="list-style-type: none"> • Desired vs. undesired responses • Yes/no • Present/absent • Likert scale survey Qs 			✓	✓	✓	✓	✓
9 Horizontal lollipop		<ul style="list-style-type: none"> • Check-all-that-apply • Percentages • Averages • Like a bar chart with less "ink" • Fits more text than vertical 	✓		✓				✓
10 Vertical lollipop		<ul style="list-style-type: none"> • Check-all-that-apply • Percentages • Averages • Like a column chart with less "ink" 	✓		✓				✓

	Chart type	Example	Use to show...	Demo- graphics	Single number	1 group	2 groups	3+ groups	Bench- mark	Over time																																																									
11	Dot plot	<p>Pilgrims say their Pantheon visit was more impactful than did non-pilgrims The difference was greatest for spiritual/religious outcomes.</p> <table><thead><tr><th>Outcome</th><th>Pilgrims</th><th>Non-pilgrims</th></tr></thead><tbody><tr><td>Better understand history</td><td>4.0</td><td>4.3</td></tr><tr><td>Better understand the world</td><td>3.0</td><td>3.7</td></tr><tr><td>Strengthen connection with cosmos</td><td>2.8</td><td>3.5</td></tr><tr><td>Better understand yourself</td><td>2.2</td><td>2.9</td></tr><tr><td>Better understand other people</td><td>2.2</td><td>3.0</td></tr><tr><td>Engage in spiritual exploration</td><td>2.0</td><td>3.2</td></tr><tr><td>Deepen your faith</td><td>1.7</td><td>3.3</td></tr><tr><td>Strengthen connection with God</td><td>1.7</td><td>3.4</td></tr></tbody></table>	Outcome	Pilgrims	Non-pilgrims	Better understand history	4.0	4.3	Better understand the world	3.0	3.7	Strengthen connection with cosmos	2.8	3.5	Better understand yourself	2.2	2.9	Better understand other people	2.2	3.0	Engage in spiritual exploration	2.0	3.2	Deepen your faith	1.7	3.3	Strengthen connection with God	1.7	3.4	<ul style="list-style-type: none">Check-all-that-applyPercentagesAverages			✓	✓	✓	✓																															
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13	Vertical dumbbell	<p>CPI students earn higher GPAs than Knollcrest students in all but one course</p> <table><thead><tr><th>Course</th><th>CPI students</th><th>Knollcrest students</th></tr></thead><tbody><tr><td>IDIS-100</td><td>3.99</td><td>3.61</td></tr><tr><td>SNOW-240</td><td>3.88</td><td>3.39</td></tr><tr><td>SOC-250</td><td>3.87</td><td>3.40</td></tr><tr><td>CMS-251</td><td>3.79</td><td>3.72</td></tr><tr><td>ENGL-102</td><td>3.78</td><td>3.09</td></tr><tr><td>PSYC-151</td><td>3.75</td><td>3.04</td></tr><tr><td>ASC-311</td><td>3.75</td><td>2.97</td></tr><tr><td>REL-332</td><td>3.68</td><td>3.41</td></tr><tr><td>MUSC-103</td><td>3.67</td><td>3.47</td></tr><tr><td>CAS-101</td><td>3.65</td><td>3.32</td></tr><tr><td>ENGL-200</td><td>3.62</td><td>3.40</td></tr><tr><td>SOC-151</td><td>3.58</td><td>3.40</td></tr><tr><td>IDIS-150</td><td>3.57</td><td>3.21</td></tr><tr><td>BIOG-123</td><td>3.51</td><td>3.06</td></tr><tr><td>ENGL-100</td><td>3.50</td><td>2.83</td></tr><tr><td>REL-353</td><td>3.40</td><td>3.09</td></tr><tr><td>PHIL-153</td><td>3.40</td><td>2.9</td></tr><tr><td>REL-131</td><td>3.3</td><td>2.9</td></tr></tbody></table>	Course	CPI students	Knollcrest students	IDIS-100	3.99	3.61	SNOW-240	3.88	3.39	SOC-250	3.87	3.40	CMS-251	3.79	3.72	ENGL-102	3.78	3.09	PSYC-151	3.75	3.04	ASC-311	3.75	2.97	REL-332	3.68	3.41	MUSC-103	3.67	3.47	CAS-101	3.65	3.32	ENGL-200	3.62	3.40	SOC-151	3.58	3.40	IDIS-150	3.57	3.21	BIOG-123	3.51	3.06	ENGL-100	3.50	2.83	REL-353	3.40	3.09	PHIL-153	3.40	2.9	REL-131	3.3	2.9	<ul style="list-style-type: none">Check-all-that-applyPercentagesAveragesShorter item names				✓		✓	
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15	Overlapping bar	<p>Randy's Big Five Personality Scores Compared to Group Average</p> <table><thead><tr><th>Trait</th><th>Randy's Score</th><th>Group Average</th></tr></thead><tbody><tr><td>Openness</td><td>63</td><td>50</td></tr><tr><td>Conscientiousness</td><td>78</td><td>50</td></tr><tr><td>Extraversion</td><td>32</td><td>40</td></tr><tr><td>Agreeableness</td><td>14</td><td>30</td></tr><tr><td>Neuroticism</td><td>23</td><td>30</td></tr></tbody></table>	Trait	Randy's Score	Group Average	Openness	63	50	Conscientiousness	78	50	Extraversion	32	40	Agreeableness	14	30	Neuroticism	23	30	<ul style="list-style-type: none">Comparison of actual to goal or benchmarkComparison of sample to populationComparison of person or org to others	✓			✓		✓																																								
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16	Proportion plot		<ul style="list-style-type: none"> • Comparing 2 points in time or 2 "shares of" scenarios • %s that total to 100% 	✓		✓	✓	✓		✓
17	Slope chart		<ul style="list-style-type: none"> • 2 points in time • Percentages • Averages 	✓		✓	✓	✓		✓
18	Line chart		<ul style="list-style-type: none"> • 2+ points in time 			✓	✓	✓		✓
19	Area chart		<ul style="list-style-type: none"> • 2+ points in time 			✓				✓
20	Stacked area chart		<ul style="list-style-type: none"> • 2+ points in time 				✓	✓		✓

For a more comprehensive decision-tree and step-by-step instructions for creating each viz using several software programs, check out Evergreen Data at www.stephanieevergreen.com. The Evergreen Data Academy taught me about some of these vizzes and honed my data viz skills! -Laura Luchies

Data Viz Best Practices

DataWise Consulting, LLC | info@wearedatawise.com



1. Identify the purpose of the viz: What's the point?
2. Choose the chart to communicate the point: Chart chooser
3. Use a title to tell the point
4. Use colors to highlight the point
5. Use a condensed font (fits more text)
6. Declutter and reduce cognitive burden
 - a. Remove [almost all] borders and lines
 - b. Remove unnecessary decimal places
 - c. Reduce scale points & remove tick marks
 - d. Use data labels OR an axis with numbers
 - e. Embed legends
7. Consider calling out the most important details