**Table 1.1** Comparison Female Undergraduate and Graduate Enrolment

|  |  |  |
| --- | --- | --- |
|  | Female Undergraduate | Female Graduate |
| 2012-2013 | 55 | 72 |
| 2014-2015 | 84 | 76 |
| 2016-2017 | 121 | 97 |

**Source:** Dalhousie Analytics, https://www.dal.ca/dept/oiar/Advanced-analysis-planning/enrollment.html

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**Figure 1.1** Comparison Female Undergraduate and Graduate Enrolment

**The explanation**

Column bar graphs are useful in representing data with distinct units, such as years in this comparison sample. The disadvantage of bar chart is that it often require additional explanation because sometimes bar chart can be easily manipulated to give false impressions. But in this sample, the comparison is simple and data is clear. So the column bar has been chosen for this.

**Table 1.2** Comparison Undergraduate Student Enrolment by Place of Residence

|  |  |  |  |
| --- | --- | --- | --- |
|  | 2012-2013 | 2014-2015 | 2016-2017 |
| Nova Scotia | 232 | 288 | 363 |
| Rest of Atlantic Canada (NB, PE, NL) | 20 | 24 | 20 |
| Other Canadian | 63 | 81 | 95 |
| International | 109 | 164 | 253 |

**Source:** Dalhousie Analytics, https://www.dal.ca/dept/oiar/Advanced-analysis-planning/enrollment.html

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**Figure 1.2** Comparison Undergraduate Student Enrolment by Place of Residence

**The explanation**

Stacked bar charts are sued to show how a larger category is divided into smaller subcategories and what the relationship of each part has on the total amount. For this sample, the enrolment by place of residence can be shown clearly, at the same time, the readers can find the different proportion of different place in each year. So the stacked bar chart has been chosen for this sample.

**Table 1.3** Comparison Undergraduate Student Enrolment by Place of Residence

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | 2012-2013 | 2014-2015 | 2016-2017 |
| Canadian | **Nova Scotia** | 232 | 288 | 363 |
| **Rest of Atlantic Canada (NB, PE, NL)** | 20 | 24 | 20 |
| **Other Canadian** | 63 | 81 | 95 |
| International |  | 109 | 164 | 253 |

**Source:** Dalhousie Analytics, https://www.dal.ca/dept/oiar/Advanced-analysis-planning/enrollment.html

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**Figure 1.3** Comparison Undergraduate Student Enrolment by Place of Residence

2012-2013 2014-2015 2016-2017

**The explanation**

The challenge for this sample is that there are two groups: Canadian/international students and in Canadian student, there are three subtypes. So the basic bar chart is not suitable for this sample because the author would like to show the two difference in one chart. As a result, the grouped stacked bar chart is good option. There are two bars for each year. The left is Canadian, the right is international. At the same time, the Canadian bar is stacked, so it’s convenient for the readers to learn the whole scope of the raw data.