Sheet 1

IDEAS

Education level

Education level

Suspensions / years — male / female

suspension — males / female

grades — funding

reading, numeracy, science, spelling, writing, grammar

Funding — VIC, TAS, SA, NSW, NA, WA

Funding — TAS, VIC, NSW, NA, SA

male / female — suspension reasons — suspension — Violence, inattention, threats

reason of suspension — number of suspension

attendance — states — male / female

FILTER

suspension — male / female
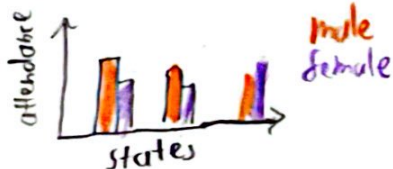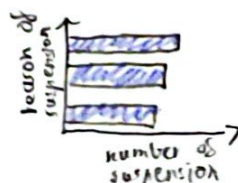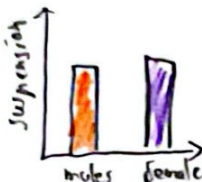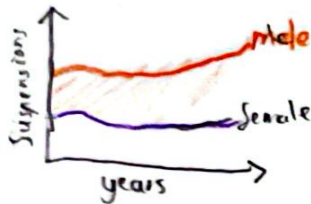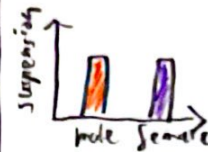
- To simplistic could be represented better

NT, Qld, NSW, SA, WA, Vic

- Could be shown in a more clear way

CATEGORIZE

Australia funding
↓
Australia educational scores
↓
Discipline
- Attendance
- Suspensions

---

suspension — male / female — year

+
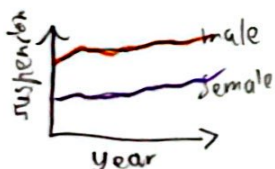
Area chart for emphasis on total numbers

→

suspension — male / female — year

grades — funding

+

Another element to add extra depth
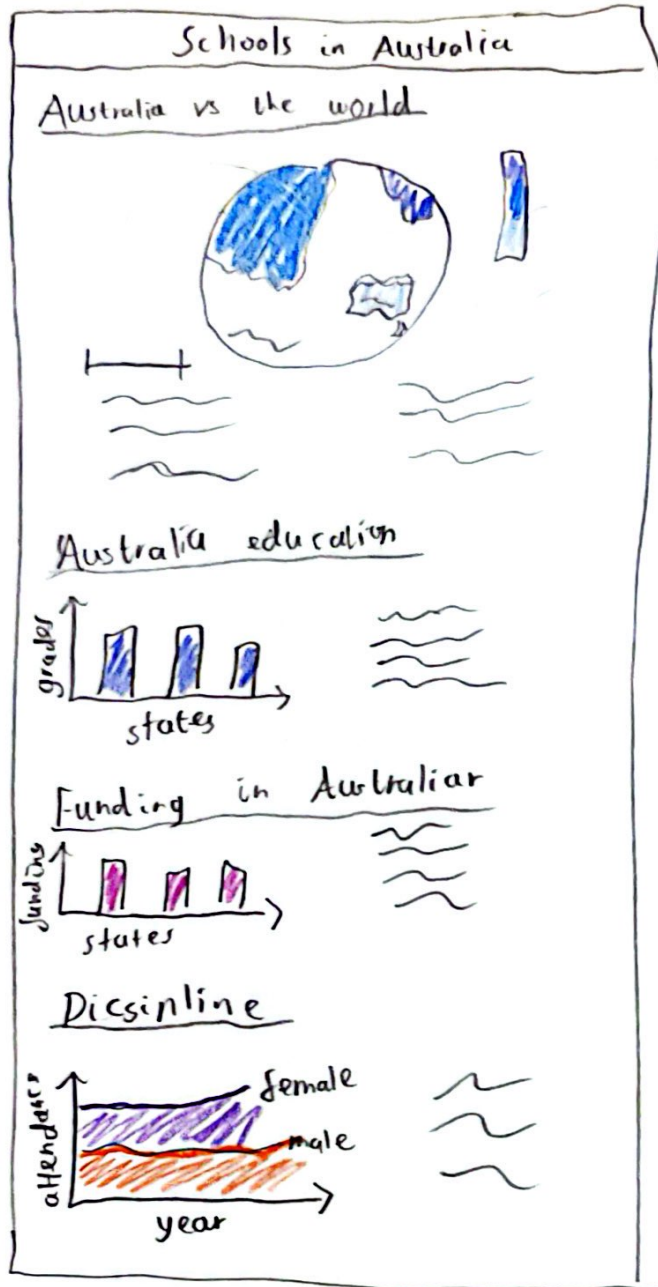
→

grades — funding

size = population of state
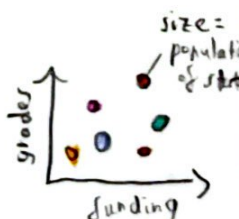
QUESTION

- Is there a clear storytelling element?
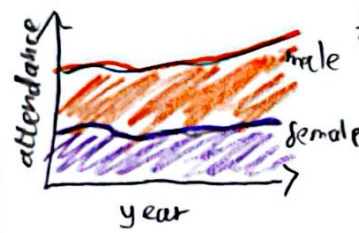- What is the most effective way of showing educational level in Australia

LAYOUT

Schools in Australia

Australia vs the world

Australia education

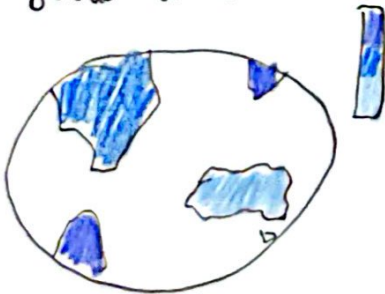### Funding in Australiar

Dicsinline

Operations

* Will be adjustible by year

* Filter by gender will be available

FOCUS

Main focus is the world map

- Educational level of the world
- Map takes a lot of space on the visualisation

DISCUSSION

Pros

- Shows awstralia compared to the world
- Very clearly shows facts biq bal charts

Cons

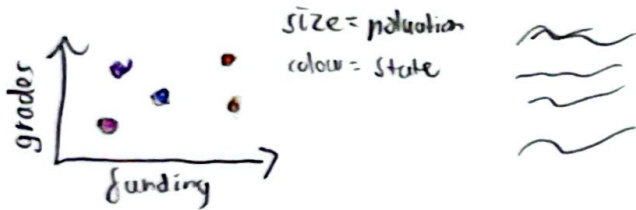- Too simplistic
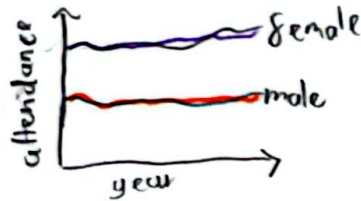- Difficulty finding data for world education.
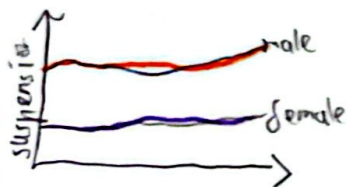
LAYOUT

Schooling in Australia

Funding vs grades

size = population
colour = state

grades
funding

Attendance

attendance
female
male
year

Dicipline

suspensions
male
female

---

colour
are
states

• Filter
   by states

grades
funding

attendance
male
female
year
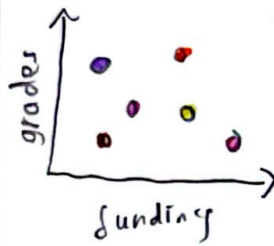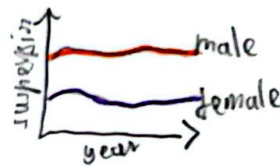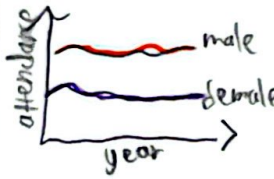
} Both these
   will be able
   to be
   filtered by
   gender

truancy
male
female
year

Focus

• Map Section
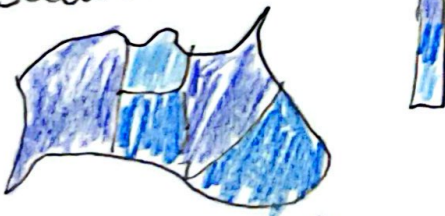
* Choropleth map of australia and its educational
  level across states
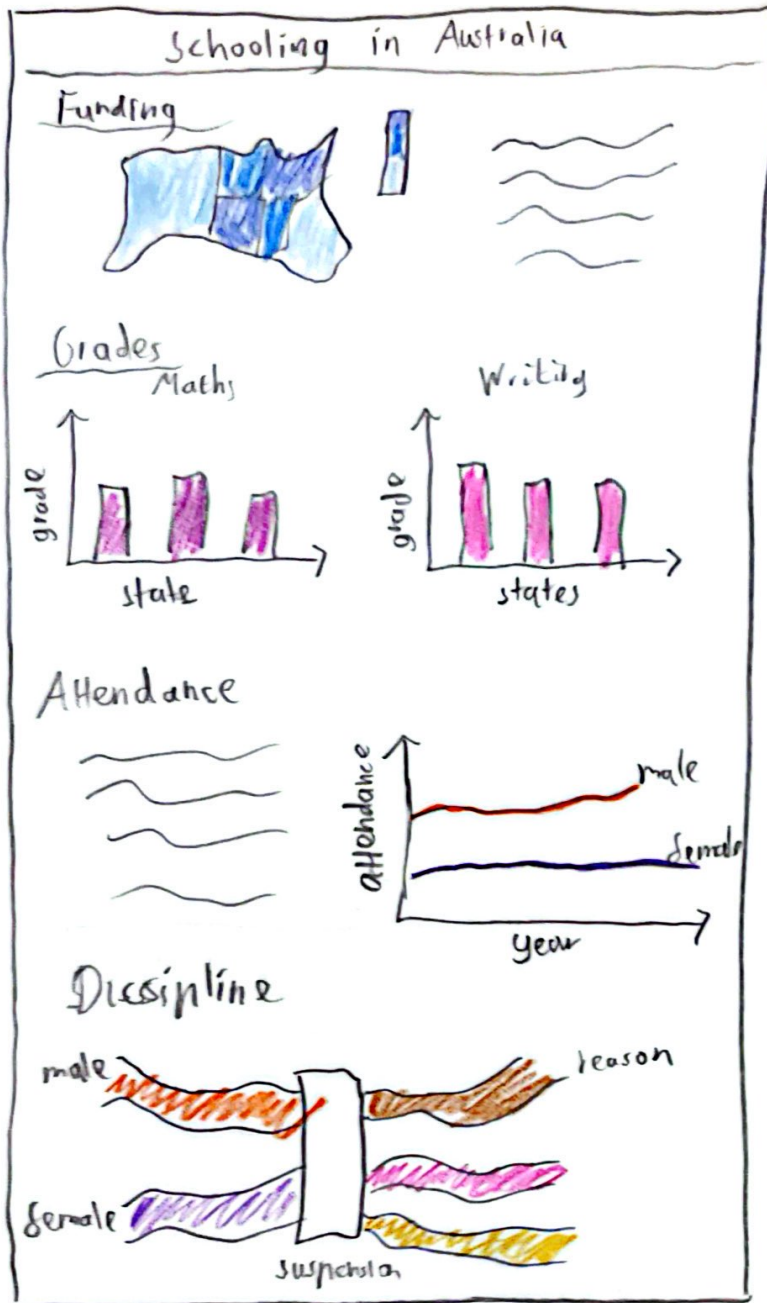
* Gives a good overview of the
  country

Discussion

Pros

• Good use of charts to
  paint a picture of
  australia
• Good layout

Cons

• Too few charts
• Difficulty obtaining/coding
  this layout.

LAYOUT

Schooling in Australia

Funding

Grades
Maths — grade / state
Writing — grade / states

Attendance
attendance / year — male, female

Discipline
male — reason
female — suspension

OPERATIONS

grade / state — year
* Will be able to filter by year
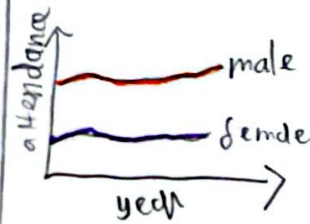
attendance / year — male, female
* Will be able to filter by gender

FOCUS

- Sankey (Discipline)

gender — reasons

* Occupy a whole row
* Reveals main reasons for student behaviour problems across genders.

DISCUSSION

Pros
- Good variation of charts
- Good layout.

Cons
- Difficult to obtain the data
- Difficulty coding and the time will take to implement.
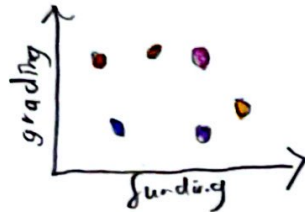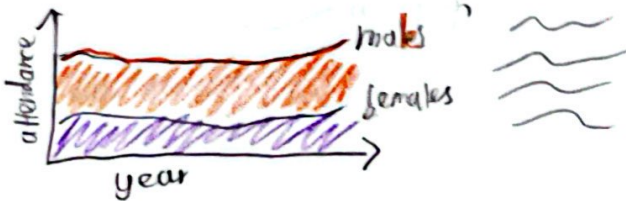
LAYOUT

Schooling in Australia

Funding in Australia

Grading & Funding

Attendance

Discipline
males
females
suspensions
reason for suspension

OPERATIONS

* Filter by gender
  o male
  o female
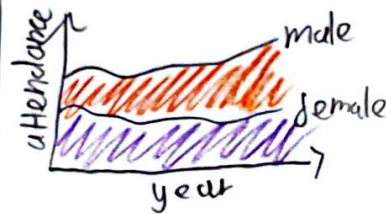
attendance
male
female
year

age filter → filter by different age groups.

FOCUS

* Area graph of attendance

attendance
male
female
gender filter
year
age filter
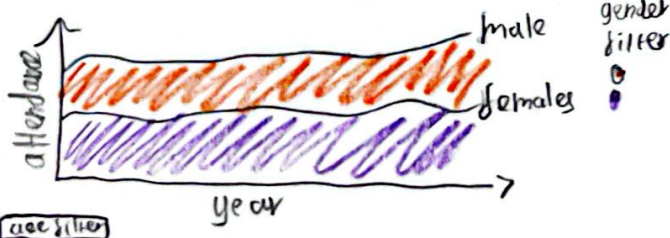
* Gives a good representation of behaviour in males and females
* Also shows how behaviour changes over the years and with age

---

DETAIL

* Dependencies: Vega-lite, custom libraries, html, css, github

* Estimated time:
  - 1 day map and area (done for hw) just tweak
  - 1 day for bubble
  - 1.5 days for sankey

* Requirements
  - Appropriate use of colours (colourblindness etc)