EDU DATA

2024-10-25

Target Audience

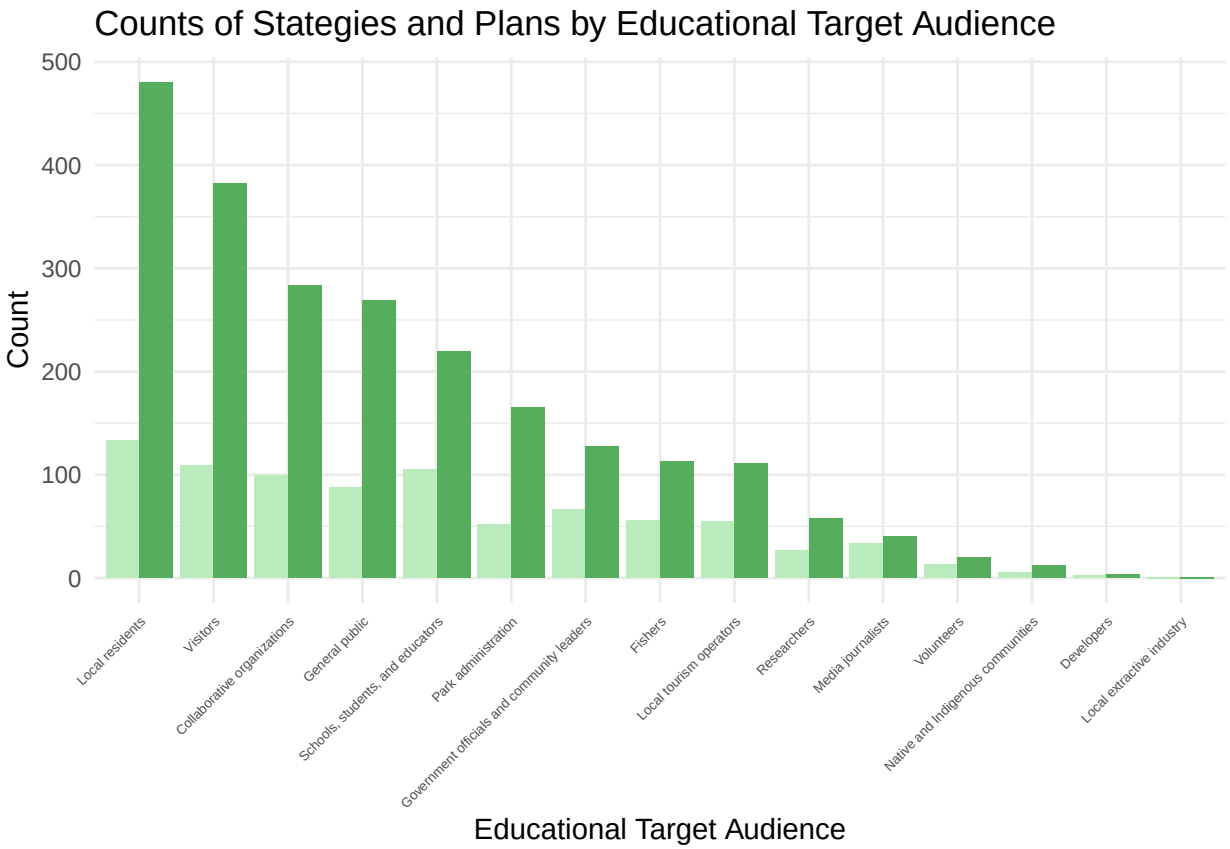
target quantifies how many strategies and plans are aimed at each recipient * each plan can have multiple strategies * each plan/strategy can target multiple recipients * edu_target_audience is who the plan/strategy targets * n_strategies is how many dinstinct action items target a recipient * n_plans is how many MPA plans target a specified recipient across all action items * percent_of_strategies is the percent of strategies that target a recipient * percent_of_plans is the percent of plans that target a recipient

```
 orig_list <- readRDS("~/MPA EDU/data/raw-ish/education_export_21Oct2024.Rds")
target <- orig_list %>%
  distinct(obs_id, plan_id, edu_target_audience) %>%
  separate(edu_target_audience, into = paste0("part_", 1:8), sep = ";", fill = "right", extra = "merge")
  mutate(across(everything(), str_trim)) %>%
  pivot_longer(part_1:part_8, values_to = "edu_target_audience", names_to = NULL, values_drop_na = T) %
  mutate(edu_target_audience = case_when(edu_target_audience == "Government officials and community lea
  mutate(edu_target_audience = case_when(edu_target_audience == "Native and Native and Indigenous commu
  group_by(edu_target_audience) %>%
  summarize(n_strategies = length(unique(obs_id)),
            n_plans = length(unique(plan_id))) %>%
  mutate(percent_of_strategies = n_strategies/length(unique(orig_list$obs_id))*100,
         percent_of_plans = n_plans/length(unique(orig_list$plan_id))*100)
```

plots

```
test = target |>
  pivot_longer(cols = c("n_plans", "n_strategies"), values_to = "count") |>
  mutate(edu_target_audience = fct_reorder(edu_target_audience, count, .desc = TRUE))

test_plot = ggplot(data = test, aes(x = edu_target_audience, y = count, fill = name)) +
   geom_bar( stat = "identity", position = position_dodge()) +
   labs(title = "Counts of Stategies and Plans by Educational Target Audience",
        x = "Educational Target Audience",
        y = "Count",
        fill = "type") +
    theme_minimal() +
  scale_fill_manual(values = c("n_strategies" = "#57ad5e", "n_plans" = "#b9ebbd")) +
  theme(legend.position = "none", axis.text.x = element_text(angle = 45, size = 5, hjust = 1))
test_plot
```



Nots

- plans and strategies in separate graphs
- in descending order
- consolidate redundant categories
- aes – finalized version with vertical and horizontal bars
  - readability
  - rename categories
  - no legend

EDU WHAT

- edu_what is social strategies and action steps of each overarching educational strategy
- plans can have multiple education strategy action steps

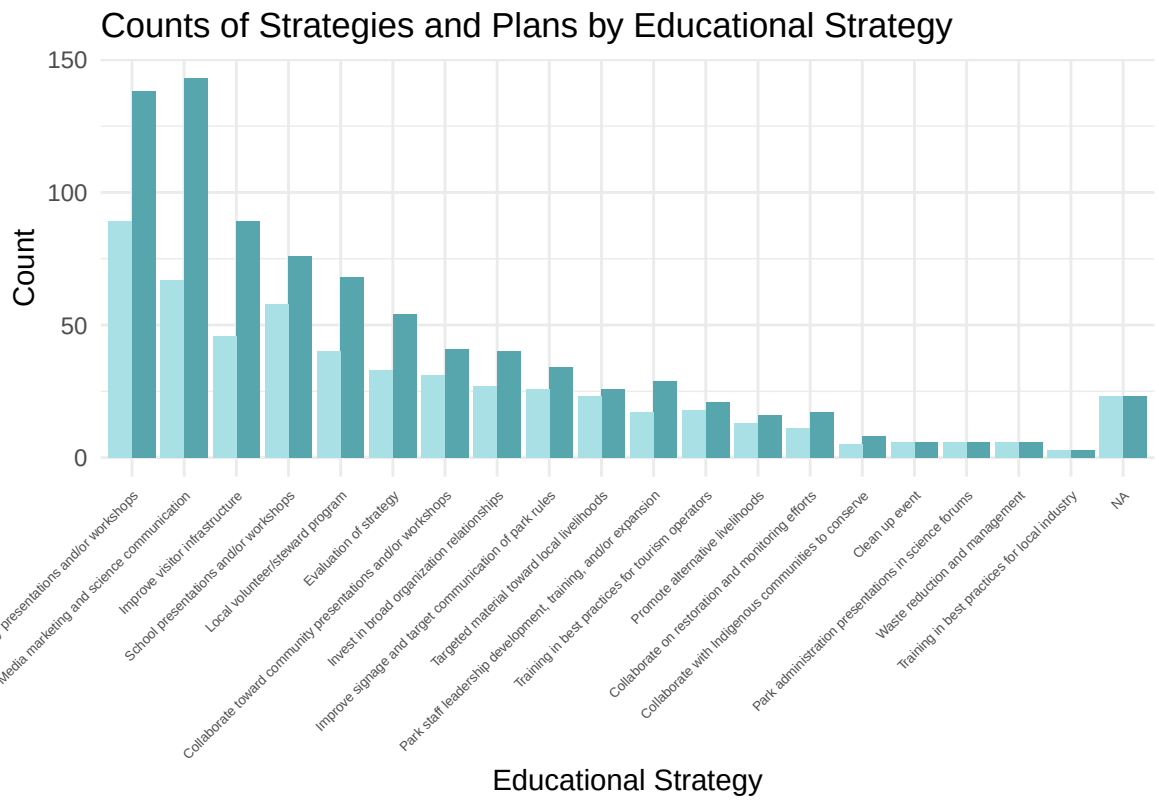
```
edu_what <- orig_list |>
  distinct(obs_id, plan_id, edu_what) |>
  group_by(edu_what) |>
  summarize(n_strategies = length(unique(obs_id)),
            n_plans = length(unique(plan_id))) |>
  mutate(percent_of_strategies = n_strategies/length(unique(orig_list$obs_id))*100,
```

```
                percent_of_plans = n_plans/length(unique(orig_list$plan_id))*100) |>
  rename(strategy_type = edu_what)
```

plots

```
edu_what_plot = edu_what |>
  pivot_longer(cols = c("n_strategies", "n_plans"), values_to = "count") |>
  mutate(strategy_type = fct_reorder(strategy_type, count, .desc = TRUE))

ggplot(data = edu_what_plot, aes(x = strategy_type, y = count, fill = name)) +
  geom_bar(stat = "identity", position = position_dodge()) +
  labs(title = "Counts of Strategies and Plans by Educational Strategy",
       x = "Educational Strategy",
       y = "Count",
       fill = "type") +
  theme_minimal() +
  scale_fill_manual(values = c("n_strategies" = "#57a6ad", "n_plans" = "#a8e0e6")) +
  theme(legend.position = "none", axis.text.x = element_text(angle = 45, hjust = 1, size = 5),
        plot.margin = margin(10, 10, 20, 30))
```



QUESTIONS * how to read the orig_list