

KCSE

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Background

This is an analysis of the 2020 Kenya Certificate of Secondary Education (KCSE) examinations results. The examination is taken by all form four students in Kenya after 12 years of education. In other countries form four is the equivalent of grade 12 ¹

I start by reading in the data which I got from the Nation Newspapers website. Note that I cannot verify the veracity or completeness of the data. Rather, I use the data as is.

```
kcse <- read_csv("data-RE5RC.csv") %>%  
  janitor::clean_names()
```

Note that the data consists of 116 schools and 3 variables: school, mean grade, and county.

Top Schools Nationally

The Table below shows the top 20 schools in Kenya.

```
kcse %>%  
  head(20) %>%  
  knitr::kable(caption = "Top 20 Schools, 2020 KCSE", booktabs = TRUE) %>%  
  kableExtra::kable_styling(bootstrap_options = "striped", full_width = TRUE)
```

Counties with the Most Schools in the Top 100

```
## Counties with most schools  
kcse %>%  
  count(county) %>%  
  arrange(desc(n)) %>%  
  knitr::kable(caption = "Counties with the Most Schools in the Top 100, 2020 KCSE", booktabs = TRUE)  
  kableExtra::kable_styling(bootstrap_options = "striped", full_width = TRUE)
```

¹The link address for the data is <https://nation.africa/kenya/news/education/2020-kcse-list-of-top-100-schools-3397314>

Table 1: Top 20 Schools, 2020 KCSE

school	mean_grade	county
Kapsabet Boys	10.530	Nandi
Kenya High School	10.300	Nairobi
Mang'u School	10.280	Kiambu
Alliance High School	10.180	Kiambu
Light Academy	10.050	Nairobi
Mary Hill Girls	9.890	Kiambu
Murang'a High School	9.860	Murang'a
Alliance Girls	9.820	Kiambu
Pangani Girls High School	9.820	Nairobi
Maranda	9.760	Kisumu
Moi Girls, Eldoret	9.680	Uasin Gishu
Friends School Kamusinga	9.610	Bungoma
Moi High School Kabarak	9.590	Nakuru
Maseno School	9.580	Kisumu
Asumbi Girls	9.569	Homa Bay
Kisima Mixed Secondary School	9.550	Nyandarua
Baricho Boys High School	9.480	Kirinyaga
Starehe Boys Centre	9.430	Nairobi
Kagumo High School	9.410	Nyeri
Nairobi School	9.410	Nairobi

Top Schools in laikipia County

I was born and brought up in Laikipia County and got secondary school education at Nanyuki High School. I have a personal interest to know how the county and especially my former school was faring. Laikipia county had 2 schools in the top 100 going by the data.

```
## Laikipia schools ranked
kcse %>%
  filter(county == "Laikipia") %>%
  knitr::kable(caption = "Top Schools in Laikipia County, 2020 KCSE", booktabs = TRUE) %>%
  kableExtra::kable_styling(bootstrap_options = "striped", full_width = TRUE)

## Nyeri county schools
kcse %>% filter(county == "Nyeri")

## # A tibble: 4 x 3
##   school                mean_grade county
##   <chr>                  <dbl> <chr>
## 1 Kagumo High School      9.41 Nyeri
## 2 Bishop Gatimu Ngandu Girls 9.23 Nyeri
## 3 Mahiga Girls Secondary School 8.55 Nyeri
## 4 Nyeri High School        8.13 Nyeri
```

Table 2: Counties with the Most Schools in the Top 100, 2020 KCSE

county	n
Nairobi	11
Kisii	10
Kericho	8
Nyamira	8
Homa Bay	7
Kiambu	6
Mombasa	6
Elgeyo Marakwet	4
Embu	4
Machakos	4
Nyeri	4
Taita Taveta	4
Baringo	3
Bomet	3
Kwale	3
Migori	3
Murang'a	3
Nandi	3
Tharaka Nithi	3
Kisumu	2
Laikipia	2
Makueni	2
Meru	2
Bungoma	1
Busia	1
Kirinyaga	1
Kitui	1
Nakuru	1
Nyandarua	1
Samburu	1
Siaya	1
Turkana	1
Uasin Gishu	1
West Pokot	1

Table 3: Top Schools in Laikipia County, 2020 KCSE

school	mean_grade	county
Nanyuki School	8.68	Laikipia
Ndururumo High School	8.03	Laikipia