

# Analysis of Teaching Evaluations

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## Data Import

Copied evaluation table, added quotes around the questions and imported into excel. Converted this to a csv file for import. Did this for both 2016 and 2017 teaching evaluations, downloaded from wolverine access.

```
library(readr)
library(dplyr)
data.2016.datafile <- '2016 Evaluations.csv'
data.2017.datafile <- '2017 Evaluations.csv'

input_col_types <- cols(
  Number = col_factor(levels=NULL),
  Question = col_factor(levels=NULL))

data.2016 <- read_csv(data.2016.datafile, col_types=input_col_types) %>% mutate(Year="2016")
data.2017 <- read_csv(data.2017.datafile, col_types=input_col_types) %>% mutate(Year="2017")

te.data.wide <- full_join(data.2016,data.2017,
  by = c("Number", "Question"),
  suffix = c(".16", ".17"))

te.data <-
  rbind(data.2016,data.2017) %>%
  mutate(Total = SD+D+N+A+SA) %>%
  mutate(`Strongly Disagree`=SD/Total*100,
    `Disagree`=D/Total*100,
    `Neutral`=N/Total*100,
```

```
`Agree`=A/Total*100,  
`Strongly Agree`=SA/Total*100)
```

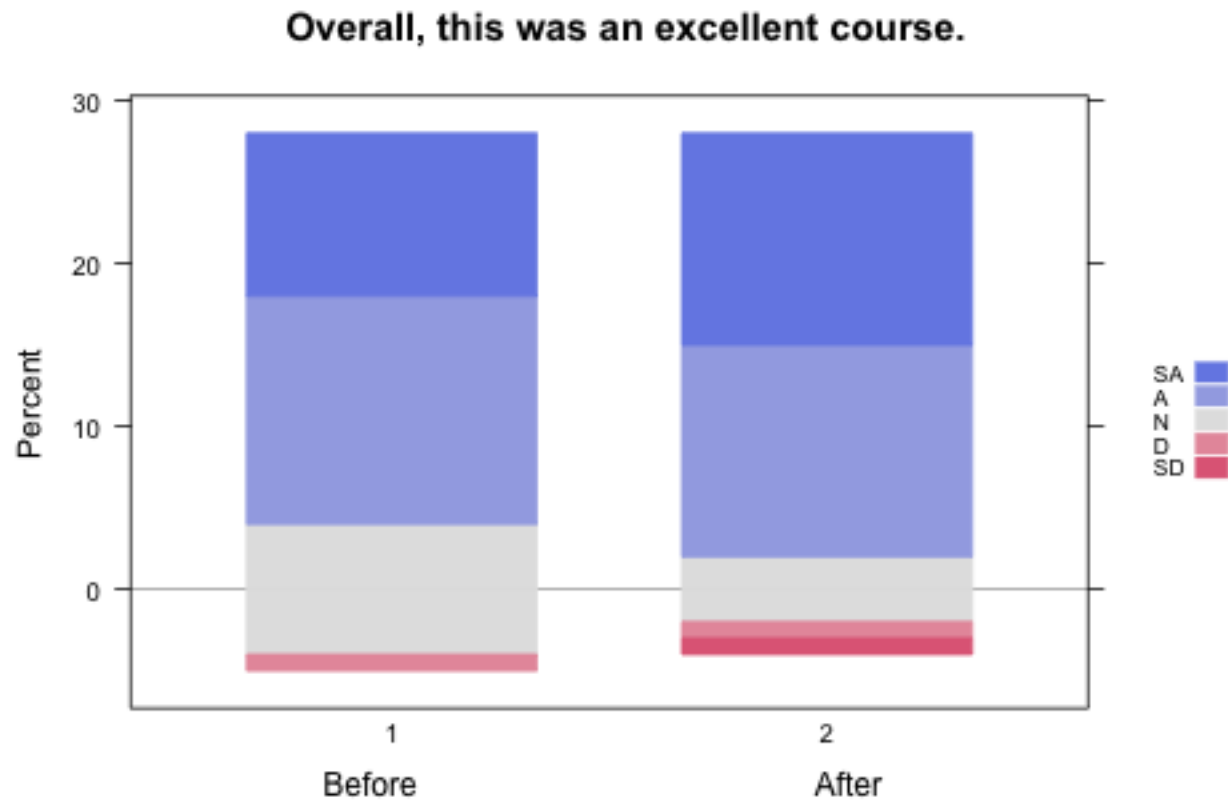
The imported datafiles include:

- 2016 Evaluations.csv
- 2017 Evaluations.csv

## Overall Questions

Overall, this was an excellent course.

```
overall.data <-  
  te.data %>%  
  filter(Number==1) %>%  
  mutate(Item=as.factor(Year))  
  
library(HH)  
  
plot.data <- overall.data[7:3]  
rownames(plot.data) <- c("Before","After")  
  
likert(plot.data, horizontal = FALSE,  
  main = "Overall, this was an excellent course.",  
  xlab = "Percent", # becomes ylab due to horizontal arg,  
  ylab = c("Before","After"),  
  title = "Overall, this was an excellent course.",  
  auto.key = list(space = "right", columns = 1,  
    reverse = TRUE))
```



## Learning

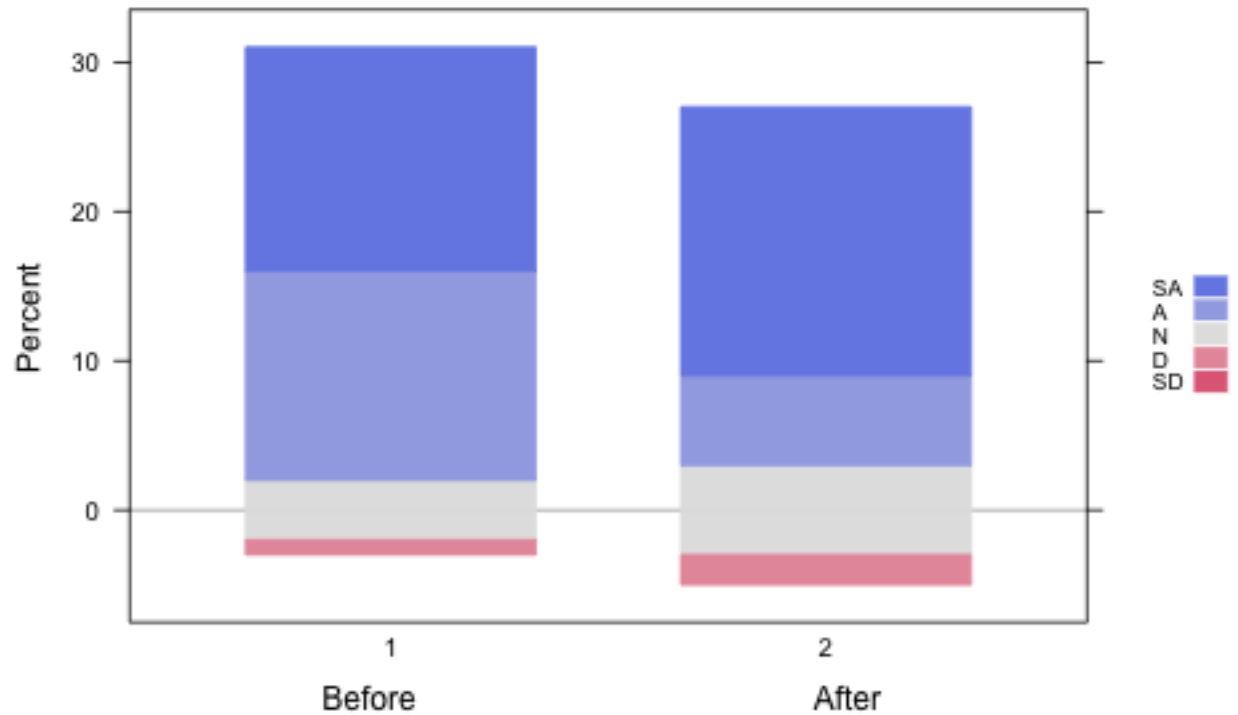
My interest in the subject has increased because of this course.

```
overall.data <-
  te.data %>%
  filter(Number==1632) %>%
  mutate(Item=as.factor(Year))

plot.data <- overall.data[7:3]
rownames(plot.data) <- c("Before","After")

likert(plot.data, horizontal = FALSE,
  main = "My interest in the subject has increased because of this course.",
  xlab = "Percent", # becomes ylab due to horizontal arg,
  ylab = c("Before","After"),
  title = "Overall, this was an excellent course.",
  auto.key = list(space = "right", columns = 1,
    reverse = TRUE))
```

**My interest in the subject has increased because of this course.**



**I learned a great deal from this course.**

```
overall.data <-  
  te.data %>%  
  filter(Number==3) %>%  
  mutate(Item=as.factor(Year))  
  
plot.data <- overall.data[7:3]  
rownames(plot.data) <- c("Before","After")  
  
likert(plot.data, horizontal = FALSE,  
  main = "I learned a great deal from this course..",  
  xlab = "Percent", # becomes ylab due to horizontal arg,  
  ylab = c("Before","After"),  
  title = "Overall, this was an excellent course.",  
  auto.key = list(space = "right", columns = 1,  
    reverse = TRUE))
```



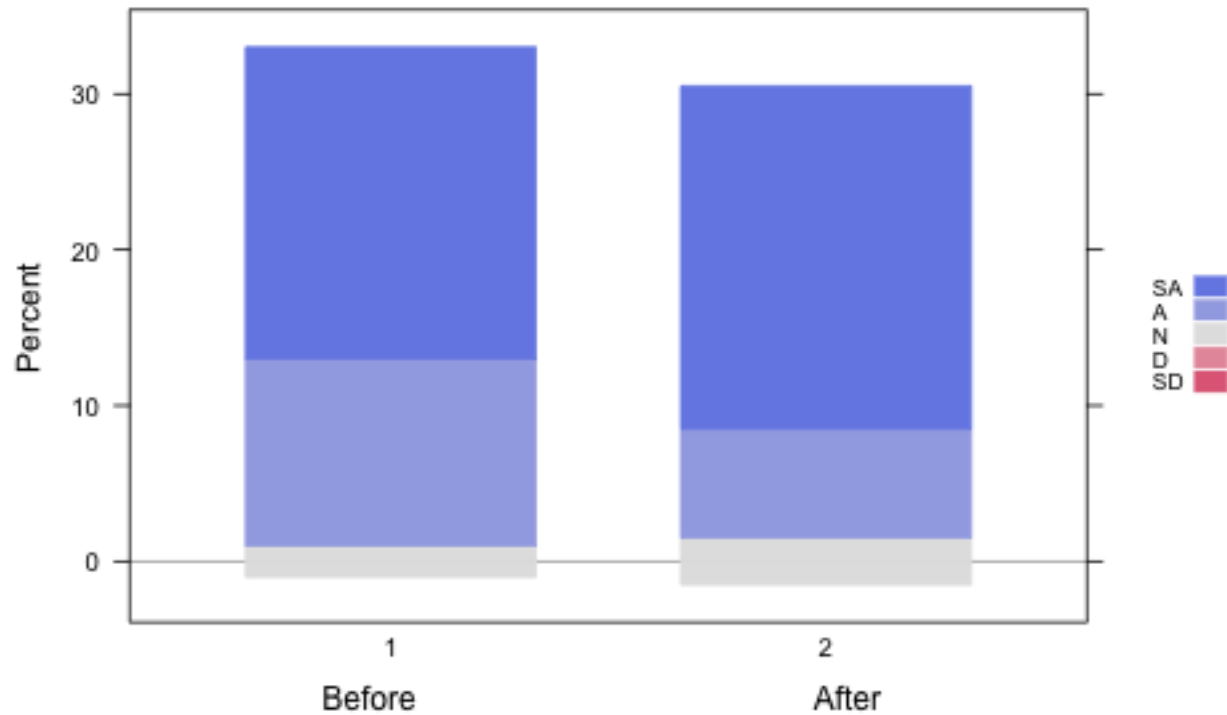
This course advanced my understanding of the subject matter.

```
overall.data <-
  te.data %>%
  filter(Number==1631) %>%
  mutate(Item=as.factor(Year))

plot.data <- overall.data[7:3]
rownames(plot.data) <- c("Before","After")

likert(plot.data, horizontal = FALSE,
  main = "This course advanced my understanding of the subject matter.",
  xlab = "Percent", # becomes ylab due to horizontal arg,
  ylab = c("Before","After"),
  title = "Overall, this was an excellent course.",
  auto.key = list(space = "right", columns = 1,
    reverse = TRUE))
```

**This course advanced my understanding of the subject matter.**



I learned a great deal from this course.

```
overall.data <-  
  te.data %>%  
    filter(Number==3) %>%  
    mutate(Item=as.factor(Year))  
  
plot.data <- overall.data[7:3]  
rownames(plot.data) <- c("Before","After")  
  
likert(plot.data, horizontal = FALSE,  
  main = "I learned a great deal from this course.",  
  xlab = "Percent", # becomes ylab due to horizontal arg,  
  ylab = c("Before","After"),  
  auto.key = list(space = "right", columns = 1,  
    reverse = TRUE))
```



## Fairness in Grading

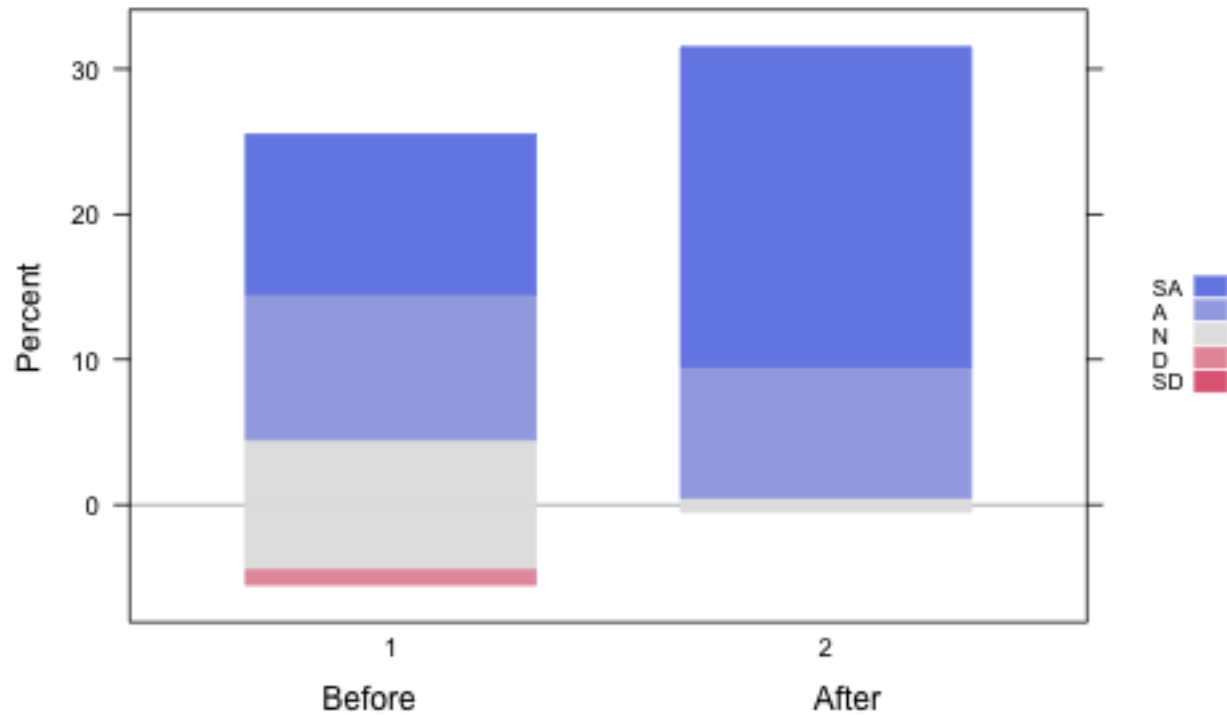
The grades in this course were fairly determined.

```
overall.data <-
  te.data %>%
  filter(Number==894) %>%
  mutate(Item=as.factor(Year))

plot.data <- overall.data[7:3]
rownames(plot.data) <- c("Before","After")

likert(plot.data, horizontal = FALSE,
  main = "The grades in this course were fairly determined.", # or give "title",
  xlab = "Percent", # becomes ylab due to horizontal arg,
  ylab = c("Before","After"),
  title = "Overall, this was an excellent course.",
  auto.key = list(space = "right", columns = 1,
    reverse = TRUE))
```

## The grades in this course were fairly determined.



## Graded assignments reflected the material covered

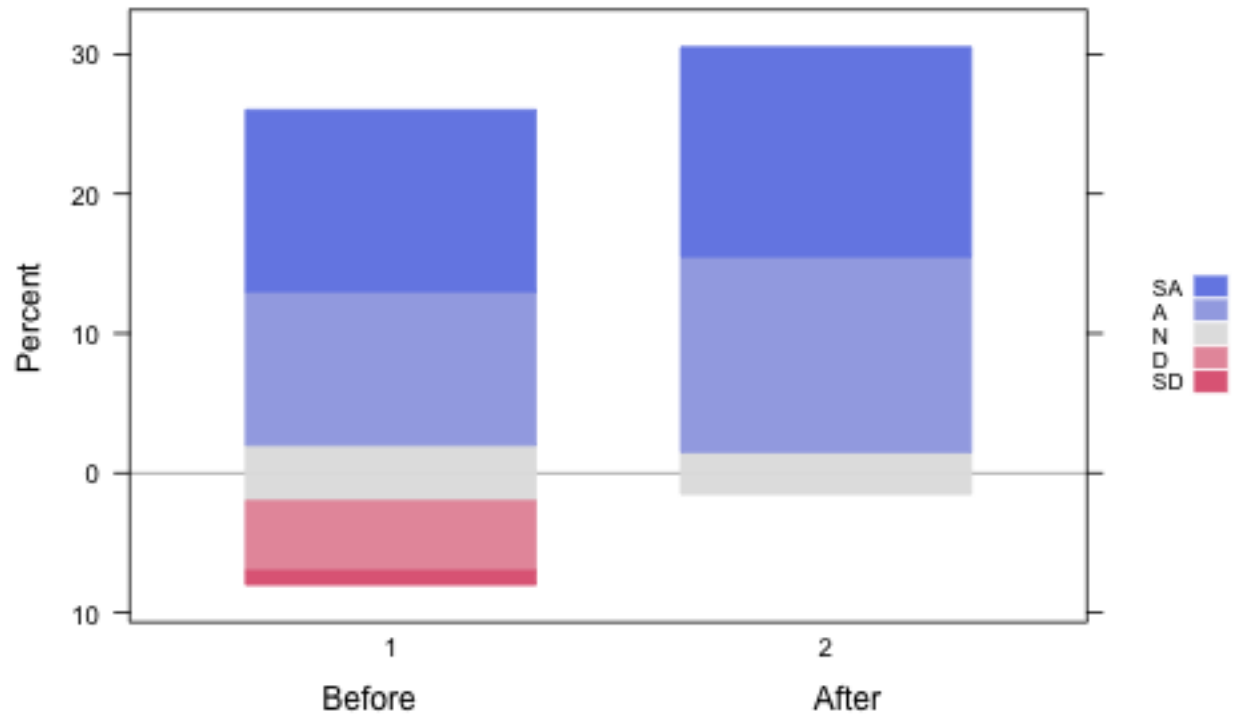
```
overall.data <-
  te.data %>%
  filter(Number==893) %>%
  mutate(Item=as.factor(Year))

plot.data <- overall.data[7:3]
rownames(plot.data) <- c("Before","After")

likert(plot.data, horizontal = FALSE,
  main = "Graded assignments reflected the material covered.", # or give "title",
  xlab = "Percent", # becomes ylab due to horizontal arg,
  ylab = c("Before","After"),
  title = "Overall, this was an excellent course.",
  auto.key = list(space = "right", columns = 1,
    reverse = TRUE))
```



## Graded assignments reflected the material covered.



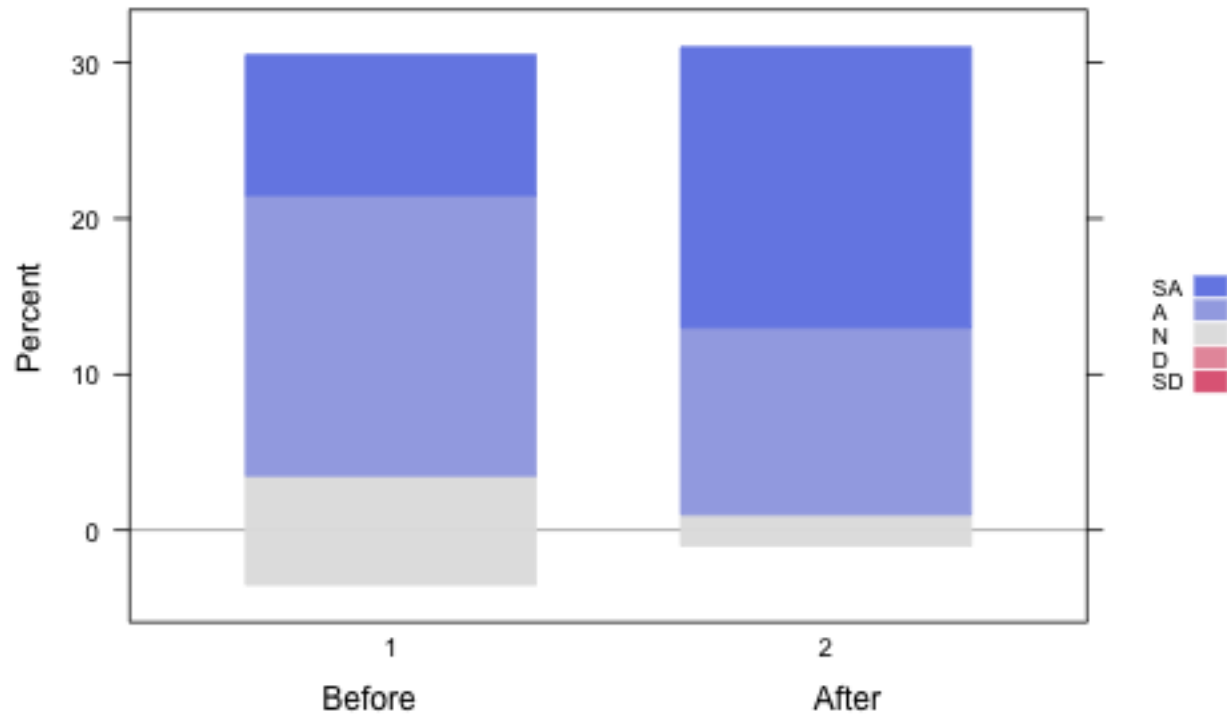
Knew what was expected of me

```
overall.data <-
  te.data %>%
  filter(Number==1633) %>%
  mutate(Item=as.factor(Year))

plot.data <- overall.data[7:3]
rownames(plot.data) <- c("Before","After")

likert(plot.data, horizontal = FALSE,
  main = "I knew what was expected of me in this course..", # or give "title",
  xlab = "Percent", # becomes ylab due to horizontal arg,
  ylab = c("Before","After"),
  title = "Overall, this was an excellent course.",
  auto.key = list(space = "right", columns = 1,
    reverse = TRUE))
```

## I knew what was expected of me in this course..



## Workload

```
overall.data <-
  te.data %>%
  filter(Number==891) %>%
  mutate(Item=as.factor(Year))

plot.data <- overall.data[7:3]
rownames(plot.data) <- c("Before","After")

likert(plot.data, horizontal = FALSE,
  main = "As compared with other courses of equal credit, the workload of this course was:", # or
  xlab = "Percent", # becomes ylab due to horizontal arg,
  ylab = c("Before","After"),
  title = "Overall, this was an excellent course.",
  auto.key = list(space = "right", columns = 1,
    reverse = TRUE))
```

Compared with other courses of equal credit, the workload of this course

