

# Package ‘MCOE’

July 21, 2025

**Type** Package

**Title** Creates New Folders and Loads Standard Practices for Monterey County Office of Education

**Version** 0.4.0

**Description** Basic Setup for Projects in R for Monterey County Office of Education. It contains functions often used in the analysis of education data in the county office including seeing if an item is not in a list, rounding in the manner the general public expects, including logos for districts, switching between district names and their county-district-school codes, accessing the local 'SQL' table and making thematically consistent graphs.

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**URL** <https://github.com/dobrowski/MCOE>

**BugReports** <https://github.com/dobrowski/MCOE/issues>

**Depends** R (>= 2.10)

**Imports** DBI, dplyr, forcats, ggplot2, ggthemes, googlesheets4, keyring, magick, odbc, scales

**Suggests** testthat (>= 3.0.0)

**Config/testthat/edition** 3

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.2.3

**NeedsCompilation** no

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**Repository** CRAN

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|--------------------|---------------------------------------------------------------------------------------|
| left_join_codebook | <i>When using the MCOE 'SQL' tables, it will merge codebook descriptions from CDE</i> |
|--------------------|---------------------------------------------------------------------------------------|

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Description

When using the MCOE 'SQL' tables, it will merge codebook descriptions from CDE

Usage

```
left_join_codebook(df, tablename, field)
```

Arguments

- df local dataframe you want to append labels to
- tablename which 'SQL' table is the data from
- field which field in the table do you want the labels for

Value

An 'tibble' of the same type as '.data'. The output has an one column names 'definition' which contains labels for the passed argument 'field'.

Examples

```
try(  
sbac.filtered <- tbl(con, "CAASPP") |>  
head(100) |>  
collect() |>  
left_join_codebook("CAASPP", "Subgroup_ID")  
)
```

lollipop

*Graphing function to make lollipop bar graphs***Description**

Graphing function to make lollipop bar graphs

**Usage**

```
lollipop(df, y_var, x_var, colorme)
```

**Arguments**

|         |                           |
|---------|---------------------------|
| df      | dataframe source to graph |
| y_var   | variable for Y            |
| x_var   | variable for X            |
| colorme | color to make the bars    |

**Value**

a 'ggplot' class graph with horizontal bars with circles at the end of the bars

**Examples**

```
library(dplyr)
df.example <- dplyr::tribble(~name, ~rate, "Nina",32,"David",65)
lollipop(df = df.example, x_var = name, y_var = rate, colorme = "pink" )
```

mcoe\_d\_logo

*Given a CDS code, adds the district logo***Description**

Given a CDS code, adds the district logo

**Usage**

```
mcoe_d_logo(cds.number)
```

**Arguments**

|            |                                                                     |
|------------|---------------------------------------------------------------------|
| cds.number | County-District-School code from California Department of Education |
|------------|---------------------------------------------------------------------|

**Value**

‘mcoe\_d\_logo’ an object of class ‘magick-image’ from [magick::image\_read()] which is an image file of the district logo

**Examples**

```
try(mcoe_d_logo("276598700000000"))
```

---

mcoe\_logo

*Adds the MCOE logo*

---

**Description**

Adds the MCOE logo

**Usage**

```
mcoe_logo()
```

**Value**

‘mcoe\_logo’ an object of class ‘magick-image’ from [magick::image\_read()] which is an image file of the MCOE logo

**Examples**

```
mcoe_logo()
```

---

mcoe\_logo\_location

*Given a CDS code it provides the logo*

---

**Description**

Given a CDS code it provides the logo

**Usage**

```
mcoe_logo_location(cds.number)
```

**Arguments**

cds.number      County-District-School code from California Department of Education

**Value**

‘mcoe\_logo\_location’ returns a ‘string’ containing a file location the district logo

**Examples**

```
mcoe_logo_location("27659870000000")
```

---

|           |
|-----------|
| mcoe_name |
|-----------|

---

*Given a CDS code, it gives the name of the district*

**Description**

Given a CDS code, it gives the name of the district

**Usage**

```
mcoe_name(cds.number)
```

**Arguments**

|            |                                                                     |
|------------|---------------------------------------------------------------------|
| cds.number | County-District-School code from California Department of Education |
|------------|---------------------------------------------------------------------|

**Value**

a 'string' of the district name

**Examples**

```
mcoe_name("27661590000000")
```

---

|              |
|--------------|
| mcoe_sql_con |
|--------------|

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*Connects to the MCOE 'SQL' tables*

**Description**

Connects to the MCOE 'SQL' tables

**Usage**

```
mcoe_sql_con()
```

**Value**

a database connection in the form of [DBI::dbConnect]

**Examples**

```
try(mcoe_sql_con())
```

---

|            |                                               |
|------------|-----------------------------------------------|
| mcoe_theme | <i>Modifies ggplots to use a common theme</i> |
|------------|-----------------------------------------------|

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**Description**

Modifies ggplots to use a common theme

**Usage**

mcoe\_theme

**Format**

An object of class list of length 4.

**Value**

a 'list' of [ggplot] elements to add to a graph

**Examples**

```
library(dplyr)
df.example <- dplyr::tribble(~name, ~rate, "Nina",32,"David",65)
g <- ggplot2::ggplot(df.example, ggplot2::aes(name, rate)) + ggplot2::geom_col()
g + mcoe_theme
```

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|          |                                  |
|----------|----------------------------------|
| mry.dist | <i>School District Directory</i> |
|----------|----------------------------------|

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**Description**

A subset of data from California Department of Education identifying schools

**Usage**

mry.dist

**Format**

## 'mry.dist' A data frame with 256 rows and 50 columns:

**District** District name

**School** School name

**CDScode** County, District, School code ...

**Source**

<<https://www.cde.ca.gov/ds/si/ds/pubschls.asp>>

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|        |                                                               |
|--------|---------------------------------------------------------------|
| round2 | <i>Rounding the way most people do it with .5 roudning up</i> |
|--------|---------------------------------------------------------------|

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**Description**

Rounding the way most people do it with .5 roudning up

**Usage**

```
round2(x, digits = 2)
```

**Arguments**

|        |                             |
|--------|-----------------------------|
| x      | number to be rounded        |
| digits | how many digits to round to |

**Value**

‘round2‘ returns a truncated ‘numeric‘ with decimal places equal to ‘digits‘ argument

**Examples**

```
x <- 1.2345
round2(x, digits = 2)
```

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|         |                                                            |
|---------|------------------------------------------------------------|
| %notin% | <i>MCOE The inverse of _in_ where the list is excluded</i> |
|---------|------------------------------------------------------------|

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**Description**

MCOE The inverse of \_in\_ where the list is excluded

**Usage**

```
x %notin% table
```

**Arguments**

|       |                                     |
|-------|-------------------------------------|
| x     | Item or list to look at             |
| table | List to make sure it is not part of |

**Value**

‘

**Examples**

```
fruit <- c("apple", "banana", "pear", "pineapple")  
"kiwi" %notin% fruit
```



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