

# Package ‘MCOE’

January 20, 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")
)
```

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|          |  |
|----------|--|
| lollipop | <i>Graphing function to make lollipop bar graphs</i> |
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**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" )
```

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|             |   |
|-------------|---|
| mcoe_d_logo | <i>Given a CDS code, adds the district logo</i> |
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**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("27659870000000"))
```

---

|           |                           |
|-----------|---------------------------|
| mcoe_logo | <i>Adds the MCOE logo</i> |
|-----------|---------------------------|

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**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 | <i>Given a CDS code it provides the logo</i> |
|--------------------|--|

---

**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 | <i>Given a CDS code, it gives the name of the district</i> |
|-----------|--|

---

**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")
```

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|              |  |
|--------------|--|
| mcoe_sql_con | <i>Connects to the MCOE 'SQL' tables</i> |
|--------------|--|

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**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                      *Rounding the way most people do it with .5 rounding up*

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**Description**

Rounding the way most people do it with .5 rounding 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)
```

---

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

---

**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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