Package ‘SGPdata’

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Type Package
Title Exemplar Data Sets for Student Growth Percentiles (SGP) Analyses
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Depends R (>= 3.6)
Suggests SGP (>= 1.9-0.0), knitr, rmarkdown
Imports crayon, data.table (>= 1.9.6)
Description Data sets utilized by the ‘SGP’ package as exemplars for users to conduct their own student growth percentiles (SGP) analyses.
URL https://CenterForAssessment.github.io/SGPdata,
     https://github.com/CenterForAssessment/SGPdata,
     https://cran.r-project.org/package=SGPdata
BugReports https://github.com/CenterForAssessment/SGPdata/issues
VignetteBuilder knitr
LazyLoad Yes
LazyData Yes
License GPL-3
NeedsCompilation no
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R topics documented:

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**SGPdata-package**

*Exemplar Data Sets for Student Growth Percentile (SGP) Analyses*

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**Description**

The 'SGPdata' package contains four exemplary data sets utilized by the 'SGP' package for testing and examples.

**Details**

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**sgpData**

*Longitudinal Student Assessment Data*

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**Description**

A dataset comprising a subset of five years of state assessment reading data suitable for student growth percentile and percentile growth projection/trajectory analyses. The dataset is used in examples provided in the documentation for the studentGrowthPercentiles and studentGrowthProjections functions, and serves as an exemplar for user construction of their own datasets for growth percentile analyses.

**Format**

A data frame of student level observations for five years on the following variables.
**Description**

A lookup table comprising student IDs associated with INSTRUCTOR_NUMBER by YEAR and CONTENT_AREA. The dataset is in LONG format with each record representing a unique teacher by student by year by content area combination.
Format
A data frame of student level observations for five years and two content areas for the following variables.

- **ID**: Unique Student Identification Number
- **CONTENT_AREA**: Content area for student/teacher record (Reading or Mathematics)
- **YEAR**: Year for student/teacher record
- **INSTRUCTOR_NUMBER**: Unique instructor number identifier
- **INSTRUCTOR_LAST_NAME**: Instructor last name
- **INSTRUCTOR_FIRST_NAME**: Instructor first name
- **INSTRUCTOR_WEIGHT**: Proportional weight associated with student/teacher record
- **INSTRUCTOR_ENROLLMENT_STATUS**: Indicator of full enrollment status of student with teacher

Source
Anonymized student/teacher lookup table in LONG format

See Also
sgpData_LONG

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**sgpData_LONG**

Longitudinal Student Assessment Data in LONG format

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Description
A dataset comprising a subset of five years of state assessment reading and mathematics data suitable for student growth percentile (SGP) and percentile growth projection/trajectory analyses. The dataset is in LONG format with each record representing a unique student, by year by content area combination. The example data is used in examples and illustration in the enclosed documentation to show how SGPs can be operationalized across years with the results being used to produce a variety of high quality visualizations both at the aggregate (e.g., school) and individual level.

Format
A data frame of student level observations for five years and two content areas for the following variables.

- **ID**: Unique Student Identification Number
- **LAST_NAME**: Student last name
- **FIRST_NAME**: Student first name
- **CONTENT_AREA**: Content area for student observation (Reading or Mathematics)
- **YEAR**: Year for student observation
- **GRADE**: Grade level of student observation
sgpData_LONG

SCALE_SCORE  Student Scale Score
ACHIEVEMENT_LEVEL  Achievement level associated with student scale score
GENDER  Student gender
ETHNICITY  Student ethnicity
FREE_REduced_LUNCH_STATUS  Student free/reduced lunch status
ELL_STATUS  Student English Language Learner status
IEP_STATUS  Student Individual Education Plan status
GIFTED_AND_TALENTED_PROGRAM_STATUS  Student Gifted and Talented Program status
SCHOOL_NUMBER  School number associated with student record
SCHOOL_NAME  School name associated with student record
EMH_LEVEL  Elementary, Middle, High school indicator for school attended
DISTRICT_NUMBER  District number associated with student record
DISTRICT_NAME  District name associated with student record
SCHOOL_ENROLLMENT_STATUS  Indicator of full academic year student enrollment in school
DISTRICT_ENROLLMENT_STATUS  Indicator of full academic year student enrollment in school
STATE_ENROLLMENT_STATUS  Indicator of full academic year student enrollment in school
VALID_CASE  Indicator of whether the case is valid or invalid

Note

All datasets used with studentGrowthPercentiles and studentGrowthProjections must be specifically formatted as wide format files. The first variable/column is the student ID variable. The next set of columns provide the grade of the student across all the years provided in the dataset (possibly missing). The last set of columns provide the scales scores of the student in the respective grades. Operational users of this package are advised to use data formatted similar to the sgpData_LONG with the higher level functions prepareSGP, analyzeSGP, combineSGP, summarizeSGP, visualizeSGP, and outputSGP

Source

Anonymized student level state assessment data in LONG format

See Also

sgpData
sgptData_LONG

Longitudinal Student Assessment Data in LONG format with DATE for SGPt analyses.

Description

A dataset comprising a subset of 3 years (and time periods) of interim assessment early literacy, reading and mathematics data suitable for time dependent student growth percentile (SGPt) and percentile growth projection/trajectory analyses. The dataset is in LONG format with each record representing a unique student, by year/time period by content area combination. The example data is used in examples and illustrations in the enclosed documentation to show how SGPts can be operationalized across years with the results being used to produce a variety of high quality visualizations both at the aggregate (e.g., school) and individual level.

Format

A data frame of student level observations for five years and two content areas for the following variables.

- **COUNTRY**: Variable indicating the COUNTRY associated with test record.
- **STATE**: State associated with the test record.
- **VALID_CASE**: VALID_CASE variable.
- **CONTENT_AREA**: Variable indicating content area associated with test record.
- **YEAR**: Variable indicating the year associated with the test record.
- **DATE**: Variable indicating the year associated with the test record: Must be in YYYY-MM-DD format.
- **ID**: Unique student identifier associated with test record.
- **GRADE**: Variable indicating the grade associated with the test record.
- **SCALE_SCORE**: Variable providing the scale score associated with the test record.
- **SCALE_SCORE_RASCH**: Variable providing the Rasch score associated with the test record.
- **SEM**: Variable indicating the standard error of measurement associated with the scale score.
- **ACHIEVEMENT_LEVEL**: Variable indicating the achievement level associated with the scale score.

Source

Anonymized student level interim assessment data in LONG format

See Also

sgpData_LONG
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