Computer Science Dashboard

Technical Report Notes

Table of Contents

Overview
Definitions and Notes
Computer Science Course
Computer Science Course Groups3
Metrics4
Participation in Computer Science Courses4
Access to Computer Science Courses4
High School/District4
Enrollment4
Data Suppression4
Navigating the Computer Science Dashboard5
Tabs5
Content Tabs
Support Tabs
Filters5
Select School Year5
Select Student Group5
Other Filters5
Data Visualizations
Data Export Tables6
Content Tab Features
State Tab6
Filters6
Select a CS Course Group6
Key Values6
Top 10 Computer Science Courses7
Access to and Participation in CS Courses by Student Group (Trend)8
Percent of Students Participating in Computer Science by District

District/School Tab	9
Filters	9
Key Values	9
Number of Students by Course	9
Computer Science Participation by Student Group	10
Courses Offered	10
Courses Tab	10
Filters	10
Key Values	11
District/School Map	12
Student Enrollment Trend by Student Group	12
Appendix A: Available Export Tables	13
State 1: Percent Access and Percent Participation by Student Group	13
State 2: Computer Science Participation by District	13
State 3: Computer Science Participation by School	13
District/School 1: Percent Participation by Student Group	13
District/School 2: Enrollment by Course	14
Courses 1: Course Enrollment by District	14
Courses 2: Course Enrollment by School	14
Courses 3: Course Enrollment by Student Group	15
Appendix B: Student Group Categories	15

Overview

The Connecticut State Board of Education believes that computer science is key to developing and integrating 21st Century Skills (e.g., technology, communication, collaboration, critical thinking, problem solving, innovation, creativity, persistence). All Connecticut public schools must provide challenging and rigorous programs of study in computer science.

This dashboard answers some of the following important questions about the state of computer science education in high schools across Connecticut:

- How many students have access to computer science courses?
- How many students participate in computer science courses?
- How does student participation in computer science courses vary by student group?
- What are the most popular courses?
- How do these measures differ between courses focused on computer science and programming fundamentals (Group 1) and courses focused on applications of computer science (Group 2)?
- What courses does my district or school offer?

For more information about computer science education in Connecticut, visit the Connecticut State Department of Education (CSDE) <u>Computer Science website</u> or contact Jennifer Michalek at <u>jennifer.michalek@ct.gov</u>.

Definitions and Notes

Computer Science Course

A computer science (CS) course is defined one that teaches the study of computers and algorithmic processes, including their principles, their hardware and software designs, their applications, and their impact on society¹. To be included in this report, a course must be listed in the <u>Computer Science Course</u> <u>Reporting Guidance</u> and at least one student in Grades 9-12 must have been enrolled during the selected school year.

• NOTE: To ensure data are comparable across schools and districts, the CSDE uses the <u>School</u> <u>Courses for the Exchange of Data (SCED)</u> codes, titles, and descriptions for all courses. As such, course titles/descriptions may not exactly match those used in a district/school's course catalog.

Computer Science Course Groups

Computer science courses are grouped into two categories.

- <u>Group 1</u>: Courses in Group 1 directly teach fundamental computer science or programming skills and may or may not include applications of computer science.
- <u>Group 2</u>: Courses in Group 2 have **applications to computer science**. These courses do not usually directly teach computer science or programming skills, but rather how to apply these skills in a variety of settings.

¹ <u>Allen Tucker. 2003. A Model Curriculum for K--12 Computer Science: Final Report of the ACM K--12Task Force</u> <u>Curriculum Committee. Technical Report. Association for Computing Machinery, New York, NY, USA</u>

Unless otherwise stated, metrics in this report are based on access to or participation in *any computer science* course – either from group 1 or group 2.

Metrics

There are two primary metrics used in this dashboard: student **participation in** computer science courses and student **access to** computer science courses. Data from the <u>Teacher-Course-Student (TCS)</u> <u>data collection</u> are used to calculate student participation and access.

Participation in Computer Science Courses

A student is considered to have participated in computer science courses if, according to the TCS data collection, they were enrolled in *one or more* <u>computer science courses</u>. Students enrolled in more than one computer science course during the school year will only count once toward participation totals.

- NOTE: Student participation in groups 1 and 2 will not necessarily sum to participation in any computer science; a student enrolled in both a group 1 course and a group 2 course during the same year will only count once toward the computer science total.
 - Similarly, student participation across all computer science courses may not sum to the participation total, as a student enrolled in more than one course will count toward the participation for each course, but only once toward the total participation.

Access to Computer Science Courses

Students with access to computer science courses are those enrolled in a school *at which at least one student participated in at least one computer science course during the given school year*. Access to computer science is reported by Group 1, Group 2, and all computer science courses.

• **NOTE:** This report does not include courses appearing in a district/school's course catalog but did not have any students enrolled in the course, as these data are not collected by the CSDE.

High School/District

All students in this report were enrolled in Grades 9-12.

Districts and schools/programs were included in this report if they have students enrolled in at least one grade between 9 and 12, and they are an in-state public school/program, including charter schools, college affiliated schools, magnet schools, endowed/incorporated academies, regional schools, Regional Education Service Center (RESC) schools, and Career Technical Education and Career System (CTECS) schools. This report does not include state agency facilities or adult education providers.

Enrollment

Percentages in this report were calculated using the student enrollment counts from the June collection of the <u>Public School Information System (PSIS</u>), which occurs on the last day of school for each year. These data were also used to determine student group membership. Students who were not included in this data collection were not included in this report, whether or not that student had a record in TCS.

Data Suppression

To protect student confidentiality, some data are suppressed. For more information, please see our <u>Data</u> <u>Suppression Guidelines</u>.

Navigating the Computer Science Dashboard

Tabs

Content Tabs

Click the content tab names for more information.

- <u>State</u>: This tab includes participation and access data across the state of Connecticut.
- <u>District/School</u>: This tab includes data specific to the user-selected district or school.
- <u>Courses</u>: This tab includes data specific to the user-selected computer science course.

Support Tabs

- <u>Course Descriptions</u>: This tab contains a list of all computer science courses, including their group, SCED code, and course description.
- <u>FAQ</u>: This tab contains definitions and dashboard navigation information.

Filters

Select School Year

Most of the key values, charts, and maps are based on the school year selected in the "Select School Year" filter at the top left of each tab. Graphs that display a trend over time will not be affected by the school year selection.

Select Student Group

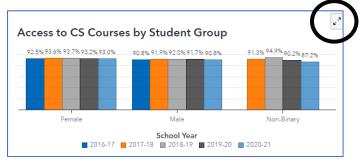
<u>Student group comparisons</u> are available in several of the graphs and many of the <u>data export tables</u>. Key values, charts, maps, and tables will include all students unless indicated in the title (e.g., Access to CS Courses by Student Group contains data broken up by the user-selected student group category). Comparisons are available by English Learner Status, Free/Reduced-Price Meal Eligibility, Gender, Grade, High Needs, Race/Ethnicity, and Students with Disabilities. See <u>Appendix B</u> for more information about student group categories.

Other Filters

See the <u>District/School</u> tab and <u>Courses</u> tab descriptions below for additional filters.

Data Visualizations

The dashboard contains a variety of data visualizations to assist with data interpretation. To see a larger view, hover over an object and select the Maximize button in the upper right-hand corner.



Hover over a data visualization object for more detailed data tips.

Data Export Tables

A variety of datasets are available to view and download in tabular form. These datasets can be accessed by double-clicking key values, charts, and maps. For a complete list of the available data tables, see <u>Appendix A</u>.

Content Tab Features

State Tab

The State tab provides information about computer science access and participation across the entire state of Connecticut.

Filters

See <u>Select School Year</u> and <u>Select Student Group</u> filter definitions above.

Select a CS Course Group

In the top middle of the State tab, the user can select either "All CS Courses," "Group 1 Courses," or "Group 2" courses. This selection will update all data visualization objects (key values, bar charts, and map). See <u>Computer Science Course Group</u> above for group definitions.

Key Values

The State tab contains four *key values*. These statistics include all students (across all student groups) and are filtered by the school year and computer science course group selected. Double-click a key value to view/export more detailed data.

Students with Access to Computer Science Courses

This is the percentage of all students in grades 9-12 who had access to computer science courses during the selected school year. See the definition of <u>Access to CS Courses</u> above for more information. This value will update based on the **school year** and **CS course group** selections.

- **Numerator**: The number of students in grades 9-12 during the selected school year who were enrolled in a school that offered at least one computer science course, according to data from the <u>Teacher-Course-Student (TCS) data collection</u>.
- **Denominator**: The total number of students enrolled in grades 9-12 during the selected school year, according to the June collection of the <u>Public School Information System (PSIS)</u>.
- **Data Export**: Double click this value to view/export the *Percent Access and Percent Participation by Student Group* table (State 1). This table contains the percent participation and percent access for students, disaggregated by student group, for all years and for all course groups. See the description of table <u>State 1 in Appendix A</u> for more information.

Students Participating in Computer Science Courses

This is the percentage of all students in grades 9-12 who participated in one or more computer science courses during the selected school year. <u>See the definition of Participation in CS Courses above for more information</u>. This value will update based on the **school year** and **CS course group** selections.

• **Numerator**: The number of students in grades 9-12 during the selected school year who were enrolled in at least one computer science course, according to data from the <u>Teacher-Course-Student (TCS) data collection</u>.

- **Denominator**: The total number of students enrolled in grades 9-12 during the selected school year, according to the June collection of the <u>Public School Information System (PSIS)</u>.
- **Data Export**: Double click this value to view/export the *Percent Access and Percent Participation by Student Group* table (State 1). This table contains the percent participation and percent access for students, disaggregated by student group, for all years and for all course groups. See the description of table <u>State 1 in Appendix A</u> for more information.

Districts with Computer Science Courses

This is the percentage of school districts that offered at least one computer science course. This value will update based on the **school year** and **CS course group** selections.

- **Numerator**: The number of school districts which, during the selected school year, offered at least one grade between Grades 9 and 12 and had at least one student enrolled in a computer science course. *Please note that districts who offer a computer science course in their course catalog will not be included if no students were enrolled in the course.*
- **Denominator**: The total number of school districts which, during the selected school year, offered at least one grade between Grades 9 and 12.
- **Data Export**: Double click this value to view/export the *Computer Science Participation by District* table (State 2). This table contains the number and percentage of all students participating in computer science courses for each course group during the selected school year, disaggregated by district. See the description of table <u>State 2 in Appendix A</u> for more information.

Schools with Computer Science Courses

This is the percentage of high schools/programs that offered at least one computer science course. This value will update based on the **school year** and **CS course group** selections.

- **Numerator**: The number of schools/programs which, during the selected school year, offered at least one grade between Grades 9 and 12 and had at least one student enrolled in a computer science course. *Please note that schools/programs who offer a computer science course in their course catalog will not be included if no students were enrolled in the course.*
- **Denominator**: The total number of schools/programs which, during the selected school year, offered at least one grade between Grades 9 and 12.
- **Data Export**: Double click this value to view/export the *Computer Science Participation by School* table (State 3). This table contains the number and percentage of all students participating in computer science courses for each course group during the selected school year, disaggregated by school. See the description of table <u>State 3 in Appendix A</u> for more information.

Top 10 Computer Science Courses

This bar chart displays the ten computer science courses with the most students enrolled across the state. For more information on computer science courses offered, see the <u>Computer Science Course</u> <u>definition</u> above. This chart will update based on the **school year** and **CS course group** selections.

- **Data Export**: Double click this chart to view/export the *Course Enrollment by Student Group* table (Courses 3). This table contains the number of students participating in each computer science course, across all school years, disaggregated by student group. See the description of table <u>Courses 3 in Appendix A</u> for more information.
 - **NOTE**: The student group disaggregation is based on the student group selection on the *Courses tab, <u>not</u> the State tab.*

Access to and Participation in CS Courses by Student Group (Trend)

These bar charts display data on access and participation **across multiple school years, disaggregated by student group**. Use the buttons above the bar chart at the bottom left of the State tab to select Access to CS Courses or Participation in CS Courses. These charts will update based on the **student group** and **CS course group** selections.

Access to CS Courses by Student Group

This bar chart displays, for all school years, the percentage of students in grades 9-12, disaggregated by the selected student group, who had access to computer science courses for all school years. See the definition of <u>Access to CS Courses</u> above for more information. This chart will update based on the **student group** and **CS course group** selections.

- **Numerator**: The number of students each year in grades 9-12 who belong to a given student group, according to data from the June collection of the <u>Public School Information System (PSIS</u>), and who were enrolled in a school that offered at least one computer science course, according to data from the <u>Teacher-Course-Student (TCS) data collection</u>.
- **Denominator**: The number of students each year in grades 9-12 who belong to a given student group, according to data from the June collection of the <u>Public School Information System (PSIS)</u>.
- **Data Export**: Double click this value to view/export the *Percent Access and Percent Participation by Student Group* table (State 1). This table contains the percent participation and percent access for students, disaggregated by student group, for all years and for all course groups. See the description of table <u>State 1 in Appendix A</u> for more information.

Participation in CS Courses by Student Group

This bar chart displays, for all school years, the percentage of students in grades 9-12, disaggregated by the selected student group, who participated in at least one computer science course. See the definition of <u>Participation in CS Courses</u> above for more information. This chart will update based on the **student group** and **CS course group** selections.

- Numerator: The number of students each year in grades 9-12 who belong to a given student group, according to data from the June collection of the <u>Public School Information System (PSIS)</u>, and who were enrolled in at least one computer science course, according to data from the <u>Teacher-Course-Student (TCS) data collection</u>.
- **Denominator**: The number of students each year in grades 9-12 who belong to a given student group, according to data from the June collection of the <u>Public School Information System (PSIS)</u>.
- **Data Export**: Double click this value to view/export the *Percent Access and Percent Participation by Student Group* table (State 1). This table contains the percent participation and percent access for students, disaggregated by student group, for all years and for all course groups. See the description of table <u>State 1 in Appendix A</u> for more information.

Percent of Students Participating in Computer Science by District

This map displays the percentage of students participating in a computer science course for all school districts offering at least one grade between Grades 9-12. Darker shading indicates that a higher percentage of students were enrolled in computer science. Districts shaded light grey are suppressed to protect student confidentiality. Hover over a school district for exact values. This map will update based on the **school year** and **CS course group** selections.

Data Export: Double click this value to view/export the Computer Science Participation by
District table (State 2). This table contains the number and percentage of all students
participating in computer science courses for each course group during the selected school year,
disaggregated by district. See the description of table <u>State 2 in Appendix A</u> for more
information.

District/School Tab

The District/School tab provides information about computer science participation for each district and school with students in at least one grade between Grades 9-12.

Filters

The District/School Tab has four filters: Select School Year, Select District, Select School, and Select Student Group. See <u>Select School Year</u> and <u>Select Student Group</u> filter definitions above. To view data pertaining to a school district, select a district from the dropdown menu and leave the school dropdown menu blank. If necessary, you can clear the school dropdown list by selecting "Clear Filter." To view data pertaining to a school, first select the school district in the "Select District" dropdown and then select the school in the "Select School" dropdown.

Key Values

The District/School tab contains three *key values*. They each display the percentage of students in grades 9-12 enrolled in the selected district/school who participated in one or more computer science courses during the selected school year. See the definition of <u>Participation in CS Courses</u> above for more information.

The <u>first key value</u> contains students in all computer science courses (including both Group 1 and Group 2 courses). The <u>second key value</u> contains students participating in Group 1 computer science courses only. The <u>third key value</u> contains students participating in Group 2 computer science courses only. See the definition of <u>Computer Science Course Groups</u> above for more information.

These values will update based on the **school year**, **district**, and **school** selections. Double-click a key value to view/export more detailed data.

- **Numerator**: The number of students in grades 9-12 enrolled in the selected district/school who were enrolled in at least one computer science course during the selected school year, according to data from the <u>Teacher-Course-Student (TCS) data collection</u>.
- **Denominator**: The total number of students in grades 9-12 enrolled in the selected district/school during the selected school year, according to the June collection of the <u>Public</u> <u>School Information System (PSIS)</u>.
- **Data Export**: Double click this value to view/export the *Percent Participation by Student Group* table (District/School 1). This table contains the percent participation for students enrolled in the selected district/school, disaggregated by student group, for all years and for all course groups. See the description of table <u>District/School 1 in Appendix A</u> for more information.

Number of Students by Course

This bar chart displays the number of students enrolled in each computer science course in the selected district/school for the selected school year. This chart will only show the 10 courses with the highest enrollment. For more information on computer science courses offered, see the <u>Computer Science</u> <u>Course definition</u> above. This chart will update based on the **school year**, **district**, and **school** selections.

• **Data Export**: Double click this chart to view/export the *Enrollment by Course* table (District/School 2). This table contains the number of students participating in each computer science course, across all school years, for the selected district/school. See the description of table <u>District/School 2 in Appendix A</u> for more information.

Course titles may differ from those that appear in a district/school's course catalog because the CSDE uses the <u>School Courses for the Exchange of Data (SCED)</u> codes, titles, and descriptions for all courses.

Computer Science Participation by Student Group

This bar chart displays, for all school years, the percentage of students in grades 9-12, disaggregated by the selected student group, who participated in at least one computer science course (either Group 1 or Group 2). See the definition of <u>Participation in CS Courses</u> above for more information. This chart will update based on the **district**, **school**, and **student group** selections.

- Numerator: The number of students enrolled in the selected district/school each year in grades 9-12 who belong to a given student group, according to data from the June collection of the <u>Public School Information System (PSIS)</u>, and who were enrolled in at least one computer science course, according to data from the <u>Teacher-Course-Student (TCS) data collection</u>.
- **Denominator**: The number of students enrolled in the selected district/school each year in grades 9-12 who belong to a given student group, according to data from the June collection of the Public School Information System (PSIS).
- **Data Export**: Double click this value to view/export the *Percent Participation by Student Group* table (District/School 1). This table contains the percent participation for students enrolled in the selected district/school, disaggregated by student group, for all years and for all course groups. See the description of table <u>District/School 1 in Appendix A</u> for more information.

Courses Offered

This table displays the titles, SCED codes, and CS Course Group for all courses offered by the selected district/school for the selected school year. This chart will update based on the **school year**, **district**, and **school** selections.

• **Data Export**: Double click this chart to view/export the *Enrollment by Course* table (District/School 2). This table contains the number of students participating in each computer science course, across all school years, for the selected district/school. See the description of table <u>District/School 2 in Appendix A</u> for more information.

Course titles may differ from those that appear in a district/school's course catalog because the CSDE uses the <u>School Courses for the Exchange of Data (SCED)</u> codes, titles, and descriptions for all courses. Additionally, courses offered in a district/school's course catalog but did not have any students enrolled will not appear on this list. See the definition of <u>Computer Science Course</u> above for more information.

Courses Tab

The Courses Tab provides state-wide information about participation for each computer science course.

Filters

The Courses Tab has three filters: Select School Year, Select Student Group, and Select a Course. See <u>Select School Year</u> and <u>Select Student Group</u> filter definitions above. The Select a Course filter at the left of the tab displays all courses offered during the selected school year, along with their SCED code and

computer science course group. If the full course name is not visible, hover over the course name. Use the radial buttons to view data for the selected course.

The current course selection will appear above the data visualizations. The course description will appear below the title on the right. Course titles and descriptions may differ from those that appear in a district/school's course catalog because the CSDE uses the <u>School Courses for the Exchange of Data</u> (<u>SCED</u>) codes, titles, and descriptions for all courses.

Courses available in the Select a Course filter will depend on the selected school year. For example, AP Computer Science AB is not included in the 2020-21 school year because that course is no longer offered by the College Board.

Key Values

The Courses tab contains three *key values*: Number of Districts, Number of Schools, and Number of Students. These statistics include all students (across all student groups) and are filtered by the school year and course selected. Double-click a key value to view/export more detailed data.

Number of Districts

The number of districts which, during the selected school year, offered the selected course. *Districts who offer the selected computer science course in their course catalog will not be included if no students were enrolled in the course.* This value will update based on the **school year** and **course** selections.

- Data Export: Double click this value to view/export the *Course Enrollment by District* table (Course 1). This table contains the number of students enrolled in the selected course, disaggregated by district, for each school year. See the description of table <u>Course 1 in Appendix</u> <u>A</u> for more information.
 - **NOTE**: The number of districts that appears in the key value may not match the number of rows in the export table because the export table contains all school years, while the key value only includes the selected school year.

Number of Schools

The number of schools/programs which, during the selected school year, offered the selected course. *Schools/programs who offer the selected computer science course in their course catalog will not be included if no students were enrolled in the course.* This value will update based on the **school year** and **course** selections.

- Data Export: Double click this value to view/export the Course Enrollment by School table (Course 2). This table contains the number of students enrolled in the selected course, disaggregated by school, for each school year. See the description of table <u>Course 2 in Appendix</u> <u>A</u> for more information.
 - **NOTE**: The number of schools that appears in the key value may not match the number of rows in the export table because the export table contains all school years, while the key value only includes the selected school year.

Number of Students

The number of students who, during the selected school year, were enrolled in the selected course. If necessary, hover over the value to see the exact count. This value will update based on the **school year** and **course** selections.

• **Data Export**: Double click this chart to view/export the *Course Enrollment by Student Group* table (Courses 3). This table contains the number of students participating in each computer science course, across all school years, disaggregated by student group. See the description of table <u>Courses 3 in Appendix A</u> for more information.

District/School Map

This map displays all schools/districts offering the selected course during the selected school year. Hover over districts and schools for more detailed information. Hover over the map and click the maximize icon in the upper right for a larger view.

• Data Export: Double click this value to view/export the *Course Enrollment by School* table (Course 2). This table contains the number of students enrolled in the selected course, disaggregated by school, for each school year. See the description of table <u>Course 2 in Appendix</u> <u>A</u> for more information.

Student Enrollment Trend by Student Group

This bar chart displays the number of students enrolled in the selected course for each school year, disaggregated by student group. This value will update based on the **student group** and **course** selections.

• **Data Export**: Double click this chart to view/export the *Course Enrollment by Student Group* table (Courses 3). This table contains the number of students participating in each computer science course, across all school years, disaggregated by student group. See the description of table <u>Courses 3 in Appendix A</u> for more information.

Appendix A: Available Export Tables

State 1: Percent Access and Percent Participation by Student Group

This data table contains:

- Measures:
 - o Percent of students with access to computer science courses
 - Percent of students participating in computer science courses
- Level: State of Connecticut total
- **Courses**: Separate values for group 1 courses, group 2 courses, and combined CS courses
- Years included: Trend
- Student Group: Disaggregated based on "Select Student Group" prompt on State tab
- Filtered by: Select Student Group

This table can be accessed by double-clicking any of the following objects from the State tab: (a) Key Value: Students with Access to Computer Science; (b) Key Value: Students Participating in Computer Science; (c) Bar Chart: Access to CS Courses by Student Group; and (d) Participation in CS Courses by Student Group.

State 2: Computer Science Participation by District

This data table contains:

- Measures:
 - o Number of students participating in computer science courses
 - Percent of students participating in computer science courses
- Level: All districts offering computer science
- Courses: Separate values for group 1 courses, group 2 courses, and combined CS courses
- Years included: Single year, based on "Select School Year" prompt on State tab
- **Student Group**: Total students
- Filtered by: Select School Year

This table can be accessed by double-clicking either of the following objects from the State tab: (a) Key Value: Percent Districts; and (b) Map: Participation by District.

State 3: Computer Science Participation by School

This data table contains:

- Measures:
 - o Number of students participating in computer science courses
 - o Percent of students participating in computer science courses
- Level: All schools offering computer science
- **Courses**: Separate values for group 1 courses, group 2 courses, and combined CS courses
- Years included: Single year, based on "Select School Year" prompt on State tab
- Student Group: Total students
- Filtered by: Select School Year

This table can be accessed by double-clicking the Key Value: Percent Schools on the State tab.

District/School 1: Percent Participation by Student Group

This data table contains:

- **Measures**: Percent of students participating in computer science courses
- Level: Individual district or school, based on "Select District" and "Select School" prompts on the District/School tab
- Courses: Separate values for group 1 courses, group 2 courses, and combined CS courses
- Years included: Trend
- Student Group: Disaggregated based on "Select Student Group" prompt on District/School tab
- Filtered by: Select District, Select Student Group

This table can be accessed by double-clicking any of the following objects from the District/School tab: (a) Key Value: All Computer Science; (b) Key Value: Group 1; (c) Key Value: Group 2; and (d) Bar Chart: Participation by Student Group.

District/School 2: Enrollment by Course

This data table contains:

- Measure: Number of students participating in each computer science course
- Level: Individual district or school, based on "Select District" and "Select School" prompts on the District/School tab
- **Courses**: All courses offered by selected district/school
- Years included: Trend
- Student Group: Total Students
- Filtered by: Select School

This table can be accessed by double-clicking either of the following objects from the District/School tab: (a) Bar Chart: Number of Students by Course; and (b) List: Courses Offered.

Courses 1: Course Enrollment by District

This data table contains:

- Measure: Number of students participating in the selected computer science course
- Level: All districts offering the selected computer science course
- Courses: Single course, based on "Select a Course" prompt on the Courses tab
- Years included: Trend
- Student Group: Total Students
- Filtered by: Select a Course

This table can be accessed by double-clicking on the Key Value: Number of Districts object from the Courses tab.

Courses 2: Course Enrollment by School

This data table contains:

- Measure: Number of students participating in the selected computer science course
- Level: All schools offering the selected computer science course
- Courses: Single course, based on "Select a Course" prompt on the Courses tab
- Years included: Trend
- Student Group: Total Students
- Filtered by: Select a Course

This table can be accessed by double-clicking either of the following objects from the Courses tab: (a) Key Value: Number of Schools; and (b) Map: Districts/Schools.

Courses 3: Course Enrollment by Student Group

This data table contains:

- Measure: Number of students participating in each computer science course
- Level: State of Connecticut total
- **Courses**: Separate values for all courses
- Years included: Trend
- Student Group: Disaggregated based on "Select Student Group" prompt on Courses tab
- Filtered by: Select Student Group (from Courses tab)

This table can be accessed by double-clicking either of the following objects from the Courses tab: (a) Key Value: Number of Students; and (b) Bar Chart: Enrollment by Student Group.

Additionally, this table can be accessed by double-clicking the Bar Chart: Top 10 CS Courses object from the State tab. **NOTE:** The Student Group filter from the Courses tab will be used even the table is accessed through the Bar Chart on the State tab.

Appendix B: Student Group Categories

- All Students
- English Learner Status (EL)
 - o English Learners
 - English language learners are students who lack sufficient mastery of English to "assure equal educational opportunity in the regular school program" (C.G.S. 10-17e).
 - o Non-English Learners
- Free/Reduced Price Meal Eligibility (2-level)
 - Eligible for Free or Reduced-Price Meals
 - Students in this category are eligible for free or reduced-price meals or free milk in accordance with the Income Guidelines for the National School Lunch Program.
 - Not Eligible for Free or Reduced-Price Meals
- Gender
 - o Female
 - o Male
 - \circ Non-Binary
- Grade
 - o Grades Kindergarten through Grade 12
- High Needs (F/R, EL or SWD)
 - o High Needs
 - To be included in the High Needs student group, a student must be a student with a disability, an English Learner, or a student eligible for free or reducedprice meals.
 - Not High Needs
- Race/Ethnicity
 - o American Indian or Alaska Native

- A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- o Asian
 - A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam.
- o Black or African American
 - A person having origins in any of the black racial groups of Africa.
- Hispanic/Latino of any race
 - A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- o Native Hawaiian or Other Pacific Islander
 - A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- o Two or More Races
 - A person who identifies as two or more races, not including Hispanic/Latino
- o White
 - A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- Special Education Status (SWD)
 - o Students with Disabilities
 - Students in this category are students with Individualized Education Programs (IEPs) only. This category does not include students with 504 Plans.
 - Students without Disabilities