



# **DDE** *for K-6 with Excel Functions*

*An Introduction to PowerSchool  
DDE, Tables and Exporting*





# Session Objectives:

This session will cover:

- What is DDE
- PowerSchool Tables
- How to Locate, View and Export Data





# PowerSchool is a Relational Database

PowerSchool is a relational database which consists of many smaller databases or Tables connected together

Each Table contains specific information related to that Table i.e. the Teachers table contains information about the teachers



# Relational Database



Think of it as a large spider web. Some tables connect directly while others do not.

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# Relational Database PowerSchool Table

The PowerSchool Tables are the “backend” of the database.  
They contain all of the information for schools, students,  
attendance, grades, etc.





# PowerSchool Table Structure

The PowerSchool database contains over 200 tables  
(Not all tables are visible through DDE)


Each record in a table is assigned a unique ID number  
Tables relate to each other using these unique ID numbers



# Example 1- Students Table(1)

It contains basic student information - Name, date of birth, address, phone, gender, custom student fields, etc.

This table then relates to other tables containing class schedules, grades, assignments, grades, attendance, etc.



CC.ID	CC.dcid	CC.Course_Number	CC.CurrentAbsences	CC.CurrentTardies	CC.DateEnrolled	CC.DateLeft	CC.Expression	CC.SchoolID	CC.Section_Number	CC.SectionID	CC.StudentID	CC.StudyYear	CC.TeacherID	CC.TeacherPrivate Note	CC.TermID
360897	360897	HOM0000	0	0	2018-09-04	2019-06-29	1(A) 7(A)	5517	18	43189	13625	1362528	3471		2800
360905	360905	SOCL2	0	0	2018-09-04	2019-06-29	11(A)	5517	28	43285	13625	1362528	3471		2800
361360	361360	SCIE2	0	0	2018-09-04	2019-06-29	11(A)	5517	28	43270	13625	1362528	3471		2800
361368	361368	PHED2	0	0	2018-09-04	2019-06-29	11(A)	5517	28	43257	13625	1362528	3471		2800

Each table has a unique number which tells PowerSchool which table to use when it retrieves information.





# Commonly Used Tables

Students - Student demographic information

Courses - Detailed course information

Teachers - Teacher information

CC - Current Class information

Schools - School information

Sections - Section information

StoredGrades - Historical Grades

Logs - Student log entries

PGFinalGrades – Teacher Grade Book



# Table Relationships

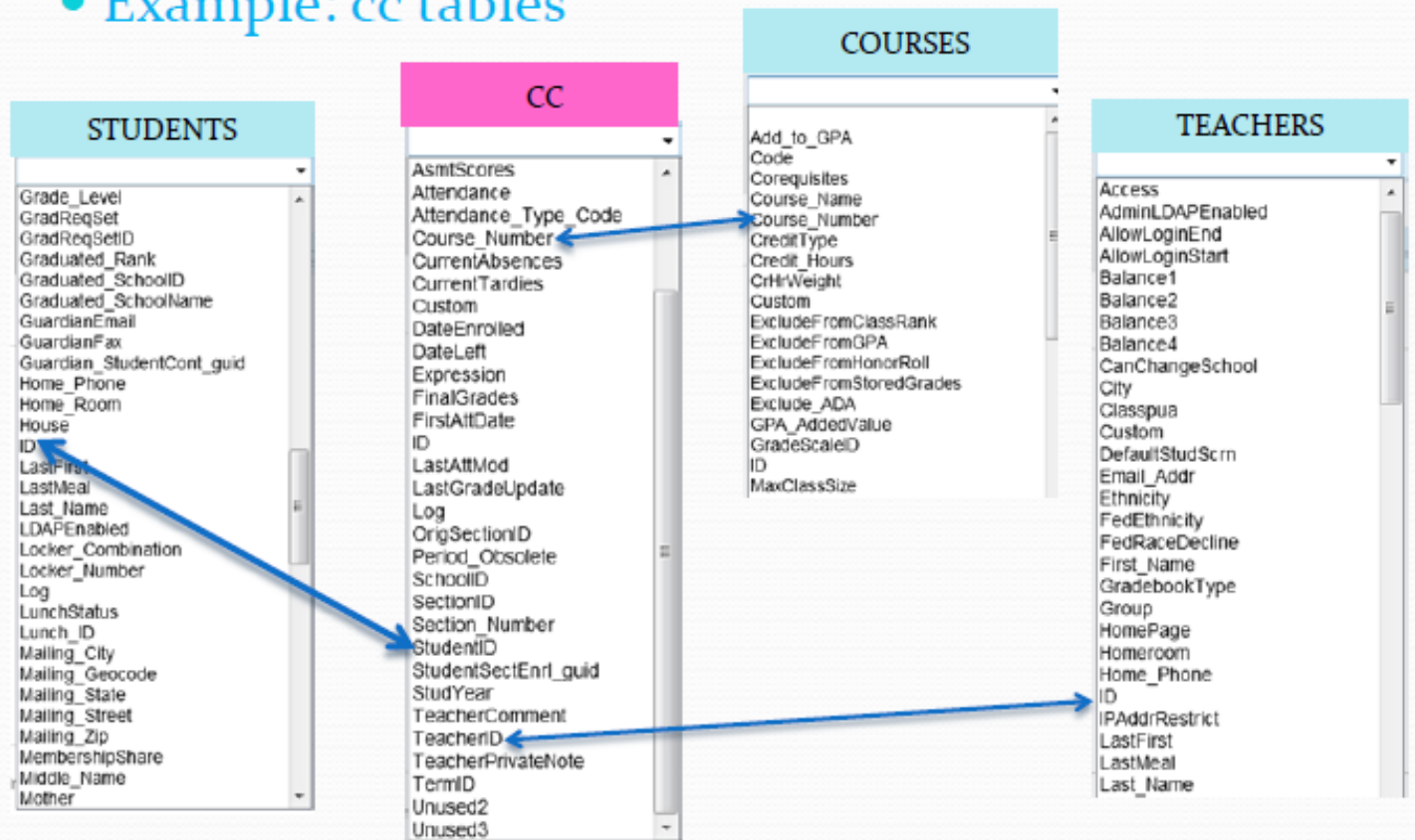
Students [1] and Schools [39]

The Students table contains a field called SchoolID

This ID relates to the ID in the Schools table. Using this ID you can retrieve information from the Schools table

# Table Relationships

- Example: cc tables





# Where to Find Common Internal ID s

See Document – “DDE Elementary Finding IDs”



# Also KEY to Remember

## Direct Database Export (DDE)

Current Table:

Current Records in Selection: 0

List View Table View Export Records Match Selection [Table View Setup](#)

Select all 19077 records in this table

### Search Students

DOB = 10/13/2003

Search only in records belonging to District Office

Search all 19077 records in this table

Search within the current 0 records only.



# Data Dictionary Tables

## Purpose

A useful and necessary tool in collecting and reporting PowerSchool data.

Includes the names and descriptions of the various tables in the PowerSchool Database

Each **Table** contains specific information related to that Table ie: the Teachers table contains information about the teachers  
The PowerSchool Database contains over 200 tables

# Why Do I Need To Know About Tables?

- When you need information for reports, you need to know where to find it.
- You need to know the name of the *records* containing the information, and the name or number of the *table* that contains the record in order to use the data.



The **Box** is the Table



Each **Package** of paper in the box is Record



Each **Piece** of paper is a Data Element (field)

CC.ID	CC.dcid	CC.Course_Number	CC.CurrentAbsences	CC.CurrentTardies	CC.DateEnrolled	CC.DateLeft	CC.Expression	CC.SchoolID	CC.Section_Number	CC.SectionID	CC.StudentID	CC.StudyYear	CC.TeacherID	CC.TeacherPrivate Note	CC.TermID
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Box is the CC Table-Package is Each Course Enrolment that exists-Sheets is each element of each Enrolment



The **Box** is the Table



Each **Package** of paper in the box is a Record



Each **Piece** of paper is a Data Element (field)



# Power of Linking Tables

The fields if you are only pulling from the cc table.

Export the 54 selected records

Course\_Number  
StudentID  
TeacherID  
TermID

Field delimiter

The fields if you also pull from the Course Table, Teachers and the Student table.

```
[1]lastfirst  
StudentID  
Course_Number  
[2]course_name  
[5]lastfirst  
TermID
```

Field Delimiter

Record Delimiter

	A	B	C	D	E	F
1	[1]lastfirst	StudentID	Course_Number	[2]course_name	[5]lastfirst	TermID
2		11414	SCN22315	Biology 20	Mori,	2602
3		11519	SCN22315	Biology 20	Mori,	2602
4		11540	SCN22885	Science 24	Hudso	2602
5		11605	SCN22885	Science 24	Hudso	2602
6		11669	SCN22885	Science 24	Hudso	2602
7		11673	SCN22885	Science 24	Hudso	2602
8		12337	SCN22885	Science 24	Hudso	2602
9		11424	SCN27975	Physics 20	Manhe	2602
10		11511	SCN27975	Physics 20	Manhe	2602
11		11535	SCN27975	Physics 20	Manhe	2602
12		11109	SCN32305	Biology 30	Maste	2602
13		11146	SCN32305	Biology 30	Maste	2602
14		11149	SCN32305	Biology 30	Maste	2602
15		11165	SCN32305	Biology 30	Maste	2602
16		11178	SCN32305	Biology 30	Mori,	2602
17		11188	SCN32305	Biology 30	Maste	2602
18		11193	SCN32305	Biology 30	Mori,	2602

# Where to find DDE?

PowerSchool Start Page – “System” link found under the *Set Up* menu.  
Look for “*Direct Database Export (DDE)*”

<b>Reports</b>
<a href="#">System Reports</a>
<a href="#">ReportWorks</a>
<b>People</b>
<a href="#">Student Search</a>
<a href="#">Staff Search</a>
<a href="#">Parent Search</a>
<a href="#">Enroll New Student</a>
<a href="#">New Staff Entry</a>
<a href="#">New Parent Entry</a>
<b>Setup</b>
<a href="#">School</a>
<a href="#">System</a>
<a href="#">Personalize</a>

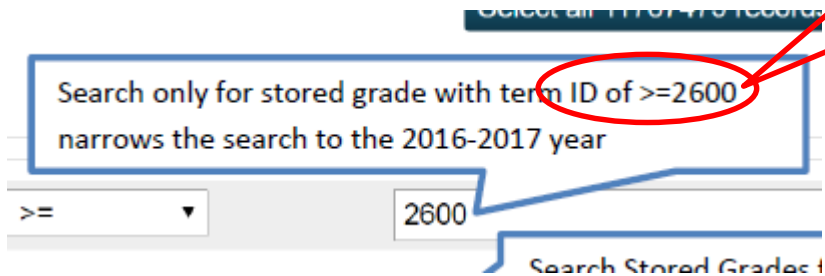
## System Administrator

Function	Description
<a href="#">Assign New Student Numbers</a>	Replaces student numbers with new ones.
<a href="#">Attendance Bridge Synchronization</a>	Synchronize one or two-way attendance bridge records.
<a href="#">AutoComm Setup</a>	Set up AutoComm functions.
<a href="#">AutoSend Setup</a>	Set up AutoSend functions.
<a href="#">Average Final Grades</a>	Calculate and store averaged final grades.
<a href="#">Calculate Honor Roll</a>	Calculate and store honor rolls.
<a href="#">Change Course Number</a>	Changes a course number system-wide.
<a href="#">Change School Number</a>	Changes a school number system-wide.
<a href="#">Clear Activities</a>	Clears students activities.
<a href="#">Copy Master Schedule</a>	Copies the master schedule (sections) from one year to another.
<a href="#">Copy School Setup Info</a>	Overwrites existing school information with new information.
<a href="#">Custom Fields / Screens</a>	Creates and edits fields and screens for staff and students.
<a href="#">Direct Database Export (DDE)</a>	Exports information from database directly.
<a href="#">End-of-year process</a>	Closes out and archives student records at end of year.
<a href="#">Export Historical Grades</a>	Exports historical grades for current school year.
<a href="#">Import Report Template</a>	Imports a report from another system.
<a href="#">Permanently Store Grades</a>	Changes current grades into historical grades.
<a href="#">Photo Management</a>	Import and/or delete student and teacher pictures.

# Let's do some Examples

See Handout - DDE Elementary Examples ONE

## One Explanation:



In the example it lists the termID of 2600 for 2016-2017. Adjust your termID based on your searches.

IE for 2017-2018 termID =2700  
and for 2018-2019 the termID =2800

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# Cont'd

DDE Elem Example Attendance  
DDE Elem Example Trending



*You Too!!*

*Can Discover New Things!!*

Thank you to Alberta PSUG! All the Districts that work together. And each of you for your part in your school's successes!!



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