Jennifer Lambert, Research Consultant for the State Charter School Board, gave administration and board members a course she had presented at the UAPCS conference in June entitled “Understanding and Using Data.”

Jennifer introduced the topic by saying that data is about looking at what you have in a different way and using it better. Jennifer explained the importance of context when using data, and used the example of comparing state assessment data. The 2013 CRT and 2014 SAGE proficiency rates are incomparable in many elements of the data because the tests are very different. Jennifer cited the example of “The Phantom Collapse of Student Achievement in New York”. New York saw drops in proficiencies when proficiency benchmarks changed, although the test remained the same. In-house tests may have a very different proficiency and range than other tests. Jennifer typically asks for good outside comparables. Obtaining good baseline data is extremely important.

When looking at data, always ask the question WHY? Be aware that everyone comes in with certain assumptions, asking why helps with root cause analysis. Ask why at least five times. The board should be careful about asking all the whys in open and public meetings. This belongs more in subcommittee where the time and research can be conducted. When analyzing data, do not be afraid to say “I don’t know” as long as it’s followed up with “Let’s find out why...”

Jennifer discussed the principle of correlation, and urged care and caution when looking at correlated elements. Always remember that correlation is not causation. Education data can be especially tricky when looking at correlation. Always consider the other factors that may be involved as well. Jennifer used examples of teachers and low test scores (many other factors may be correlated than just teaching practices) and student subgroups who perform at lower proficiencies. Jennifer highlighted the importance of not making assumptions, rather ask “why” and look at the context.

When analyzing data, place particular emphasis on the school’s mission and vision.

Jennifer also discussed data analysis tools, including:

- Disaggregation: separating data into its component parts

- Triangulation: Incorporating data from multiple sources to identify trends, patterns or gaps

- Graphs and Tables: Must take care to determine the medium that tells the story best

Measuring Growth:
Simple Growth - subtraction using pretest/post test scores.

- SGP: Student Growth Percentile
Describes the relative growth a student made compared to other students with the same achievement history (academic peers). Academic peers are not an actual set of students, but are constructed using all the state’s data. (Within a test they have to have at least 3000 students to take the test to make it reliable.) SGPs can be tricky at student and teacher level. There is a ceiling effect with higher achievers. One disadvantage is that SGPs cannot be used with anything other than state assessments.

-Value Add Models: Use statistical models to isolate the value added to student learning. It uses past scores like SGP, but also looks at other factors outside of the teacher’s control, such as students’ prior characteristics and circumstances. It cannot really be done at the school level.

In conclusion, Jennifer encouraged the group not to give up, even when analyzing data might be frustrating or time-consuming. She cited the example from the book Better by Atoll Gawande. It was only because the medical teams took the time, despite the chaos and their fatigue, to fill to their logs describing the injuries and their outcomes... They input more than 75 different pieces of information on every casualty - all so they later analyze it.

They understood that such vigilance over the details of their own performance offered the only chance to do better.

Adjourn