

Data Literacies/Standards/Concepts Planning

Introduction: Finding the right data to use	Data Comprehension: What do the data show?	Data Interpretation: Why might this be?	Data Use: How should we respond?	Question Posing: Figuring out questions that will generate useful data
Indicators: AdvancED 5.1 The system establishes and maintains a clearly defined and comprehensive student assessment system.	Indicators: 5.2 Professional and support staff continuously collect, analyze and apply learning from a range of data sources, including comparison and trend data about student learning, instruction, program evaluation, and organizational conditions that support learning.	Indicators: 5.3 Professional and support staff are trained in the evaluation, interpretation and use of data	Indicators: 5.4 The school system engages in a continuous process to determine verifiable improvement in student learning including readiness for and success at the next level.	Indicators: 5.5 System and school leaders monitor and communicate comprehensive information about student learning, school performance and the achievement of system and school improvement goals to stakeholders.
Frameworks: Appendix J Documenting and Using Results	Comparison and trend data		designing, implementing and evaluating CIP	
Individualized multi level data driven decision making at all levels including district, building, grade, classroom, and individual student.	Systemic and sytematic review of data sources		define improvement cut scores	
	Multiple Levels of Analysis Levels 6-10 (gender & grade % FRL & assessment over time) & SPED & ELL		NePAS metric baseline	
	cohort over time, program over time			
	Drill down to the item level to gain a deeper understanding of performance		design a good survey Formulate hypotheses about students' learning needs and instructional strategies. Modify instructional practice according to the data collected Focus on all students, not just "bubble students"	
Competencies Define: comprehensive assessment system for your district Data Location - What data do you have and where is it located? What other data do you have or need to gather? Multiple Measures of Data (Bernhardt, P. 21) Introduce: Multiple Levels of Analysis (Bernhardt, P. 22-27)	Competencies What data has meaning to take action on? Excel •Pivot Tables •Pivot Charts •Formulas Merging files?	Competencies proper use of information literacy & data visualization scaling, bias, What can you compare? Comparing NWEA & NeSA	Competencies	Competencies Data Visualization Define and recognize good research vs best practice Define and structure program evaluation
Activities: Participants will define comprehensive assessment Participants will list the types of data they have Participants will identify other data needed to gather. Understand NSSRS - Student and Staff Verification and Validation Reports -as a source of data and for multi factor analysis, including longitudinal Understand the use of DRS for multi factor analysis, including longitudinal	Activities:	Activities:	Activities:	Activities:
Vocabulary for Data Literacy (used for Pre-test & Post-Test)	Vocabulary for Data Literacy (used for Pre-test & Post-Test)	Vocabulary for Data Literacy (used for Pre-test & Post-Test)	Vocabulary for Data Literacy (used for Pre-test & Post-Test)	Vocabulary for Data Literacy (used for Pre-test & Post-Test)
Systemic	Systematic	Systematic	Systematic	Systematic
Systematic	Comparison and Trend Data (Context & Time)	Summative	Measurement	Measurement
Qualitative Evaluation	Inferential	Formative	•Nominal/Categorical	•Nominal/Categorical
Quantitative Evaluation	Comprehensive	Student Performance (Goals)	•Numerical	•Numerical
Multiple Measures of Data: Demographics, Perceptions (Perceptual), Student Learning (Student Performance), School Processes (Program)	Longitudinal	Learning Opportunity (Goals)	•Ordinal	•Ordinal
Reliability	Cohort	Multiple Levels of Analysis (Bernhardt, P. 22-27)	•Interval •Ratio	•Interval •Ratio
Bias-Free comprehensive (balanced) student assessment system	Baseline Data Post-Intervention Data		Student Performance (Goals) Learning Opportunity (Goals)	significance theories of change
norm referenced	Multiple Levels of Analysis (Bernhardt, P. 22-27)			
criterion referenced	sum		Reliability	
standardized	count		Bias-Free	
local assessment	average		validity	
summative	medium		fidelity of implementation	
formative	mean		sustainability	
consistency measurement (?)	mode		replication	
validity	dependent variable			
cohort data	independent variable			
program data				
longitudinal data				
sample data				
census data				
Instructional Resources: Continuous Improvement (P-I-E-I for Focused Improvement - Bernhardt, P. 14)(Plan, Implement, Evaluate, Improve) Multiple Measures of Data (Bernhardt, P. 21) Multiple Levels of Analysis (Bernhardt, P. 22-27)	Instructional Resources: Data Use Guide Book ?	Instructional Resources: Data Use Guide Book	Instructional Resources:	Instructional Resources: