Assessment and Design Strategies for Improving Student Learning:
Utilizing Data with Technology Tools for Instructional Decisions

Tentative Workshop Outline

Workshop Description:

As the gap between low and high achieving students continues to grow and the implementation of high-stakes accountability systems becomes the norm, the need for data to guide classroom decisions becomes increasingly important. Unfortunately, many practicing educators have little or no experience in using **data systematically to inform decisions about classroom teaching**. The density and range of available information contributes to the arduous task of effectively analyzing and applying assessment results to decisions about day to day instruction.

Data can be used not only to evaluate and track student performance but also to assess instructional effectiveness and various other factors that influence student learning. This course will address some of the common questions that educators have about data driven school improvement. What types of data should be collected? How might teachers collect data effectively with current technology applications? How might teachers use data for school improvement? What steps should schools take to improve their use of data?

This session will explore systemic improvement strategies to curriculum planning, assessment, and instruction through utilizing data and data analysis via technology tools. Content is designed to assist educators in identifying and using data that are most effective in assisting improvement of student achievement and system efficacy **integrated with the aid of technology applications**. Educators will locate, access, retrieve, evaluate, and archive information pertaining to their school's, as well as their individual classroom **assessment scores, state content standards, and performance assessment tasks**. Continuum of workshop sessions will allow participants to design, test, and revise curriculum projects and assessment tools for use in your own classroom based on their classroom data.

*Course content helps educators address ISTE NETS*S and MTTS Standard IV and INTASC Principles 1 & 7, NCATE framework 2, UMCP Conceptual Framework 3,4 6,7. Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.*

IV.A. Teachers apply technology in assessing student learning of subject matter using a variety of assessment techniques.
IV.B. Teachers use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize

student learning.
IV.C. Teachers apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

Course Objectives:

Emphasis will be placed on building skills and confidence in participants' abilities to:

1. locate, explore and analyze state (MSDE) and other available data (i.e., MD Tech Inventory, Pew Internet and Life Project , and the National Educational Goals Panel; (follow up)
2. utilize "state" (MSDE) and national content standards and benchmarks;
3. investigate and apply specific technology tools (e.g., Excel) for organizing the data available on a district, school, and classroom level;
4. explore processes that facilitate the use of data in driving instruction;
5. explore common curriculum, assessment, and instruction practices that (a) promote and (b) may interfere with the cultivation of student understanding;
6. examine a continuum of methods for appropriately assessing the degree of student understanding; and
7. investigate approaches to curriculum and instruction designed to engage student's in inquiry and promote student learning.

Course Goals:

1. To understand the role of data, feedback and assessment in understanding;
2. To understand how to promote thinking, understanding, and academic achievement through the use of assessment tools and curriculum design techniques;
3. To understand how to monitor students' understandings through a variety of means and to adjust instruction accordingly; and
4. To appreciate and capitalize on the opportunities and challenges afforded by alternative forms of assessment

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Date TBD

Agenda

Pre-Workshop Quick Pre-Profile survey (on-line)

Time — Welcome and Introductions [PPT]- Davina Pruitt-Mentle
Program Overview
Objectives, Goals, and Outcomes

Pre-Profile a similar pre-assessment profile will be developed for this cohort
http://cgi.umd.edu/survey/display?edtechoutreach/HarfordExcelQuiz
Data Connections Overview
Working Towards Improving Student Achievement
Using State, Local School System and School Data

Organizational Goal/s: The Big Picture
School Data Analysis

Time — Overview of School Data: "Surface Snapshot"
Mock School Data Analysis (Group Activity):WebQuest
Debriefing of school data analysis exercise
What Possibilities Technology Affords

Time — Making the Connections: Having the Right Tools
Excel Overview and potential
Excel Basics- Exercises

- Sum, Min, Max, Average
- Graphing/STDEV/Variance/CondForm
- Simple Case studies (Tilly,JoJo)

Time — Break

Time — Excel Basics- Exercises

- Grade book and formatting
- Case Study Filtering

Excel Moving Beyond Basics- Exercises

- Case Studies: LOOKUP

After Lunch Preview

Time Lunch

Time Catch Up if Needed
Advanced Features with Excel (exercises)

- Combining worksheets
- Connecting assessments with standards
  - Within Excel
  - What's available through MSDE
- Sorting-one and multiple columns (possible)
- Pivot Tables (possible)
- Converting Access to Excel
- Working with your data

Time Closure and Debriefing
How to Access Quick Post-Profile survey (on-line) a similar post assessment profile instrument will be developed for this cohort

- **http://cgi.umd.edu/survey/display?edtechoutreach/HarfordExcelPost**

How to Access Materials www.edtechoutreach.umd.edu
Follow-Up Session