EVAULATION IN THE MASTER SCHEDULING CONTEXT

Purpose and Benefits of a Master Schedule Evaluation:
An evaluation can determine the effectiveness of the master schedule process and product. It can both help to strengthen the master schedule and enable the school to do an even better job of accomplishing its scheduling objectives. Additionally, a quality evaluation helps assure all stakeholders that the Master Scheduling Team is doing the best possible job of developing a master schedule that meets the needs of students and learning and follows an open and equitable process.

Typically, a master scheduling evaluation design includes both process evaluation (which addresses the how, the consistency with the stated work plan and effectiveness of activities/ strategies) AND summative evaluation (which addresses the product/s, results, the degree to which you have achieved your stated results.)

In addition, process evaluation (assessment along the way) helps us make mid-course corrections as you learn what activities and strategies are working and which need to be rethought or refined. Through a quality evaluation process, key stakeholders participate in a cycle of continuous improvement.   Also, as a result of a comprehensive evaluation, you can better share your master scheduling results with others.

MASTER SCHEDULE THEORY OF ACTION:
Behind every master schedule process is a "theory of action" --- a set of beliefs, held by those who implement and guide the process, about how the means lead to the ends. Determining the relationship between your expected outcomes and the process itself and understanding what is important to assess and why are the first steps in preparing your evaluation.

To develop your **THEORY OF ACTION**, you should think of the following elements, which all programs contain:

Inputs	All those resources assembled before the master scheduling process begins (or during ongoing implementation), such as constituency, staff, materials, facilities, and equipment.
Throughputs	Methods of the process that employ/use the resources.
Outputs	immediate results for the constituency that are effects of the throughput process.
Impacts	longer-term benefits to the constituency and/or school

MASTER SCHEDULE GOALS AND OBJECTIVES
You should develop clear goals and objectives for the master schedule process and product. These should be reviewed, and possibly updated, each year as part of a cycle of continuous improvement.

A **GOAL** is a broad-based statement of the ultimate result of the master scheduling process and product (a result that is sometimes unreachable in the short term). Goals are global, visionary statements. According to Webster's Dictionary, a goal is "the end toward which effort is directed."

Example: To assure that every student is perfectly scheduled into the pathway/ academy/SLC classes he/she requested and that all Pathways/Academies/SLCs have pathway/academy/SLC-pure classes that reflect the diversity of the school as a whole taught by a Pathway/Academy/ SLC team of teachers who share a common prep period.
    To assure that all stakeholders have input to and value the master schedule process and product.

An **OBJECTIVE** is a measurable, quantifiable, time-specific result that the organization/ school/district will accomplish by implementing the project/program. Objectives are measurable benchmarks or milestones, often in steps that lead up to the goals. An objective is defined in terms of outcomes/ results and is much more narrowly defined than a goal. According to Webster's Dictionary an objective is "observable and verifiable.

Examples:
By February 28, 2020, 100% of the continuing students will successfully complete their individual online course registrations.

By September 30, 2020, 100% of the Pathways/Academies/SLCs will reflect the ethnic and gender diversity of the school as well as reflect a range of student achievement levels as measured by test scores and grades.

By September 30, 2020, 100% of the teachers on each of the pathway/academy/SLC teams will share a common team preparation period and be provided a minimum of 10 additional hours a month for team collaboration.

Objectives clearly identify the constituency/the population being served.   Objectives are realistic and capable of being accomplished within the given time frame

TIPS FOR WRITING GREAT GOALS and OBJECTIVES:

- Goals and objectives should *tie directly to the need statement*. (and to evaluation)
- Keep the dictionary definitions in mind. A GOAL is the END to which one attains.
- A goal is where your constituents (students/target population) and/or your organization will be when you're done
- Objectives help keep goals realistic; they are measurable, attainable, time-specific. When you write your objectives, describe them in terms of major benchmarks/milestones/checkpoints
- When planning your objectives, remember that achieving your goals and objectives may take longer than anticipated. Be thoughtful and practical about how long it will take to successfully complete each objective.
- Determine how you are going to measure the change you are projecting in your objective.   If you find you have no way to measure change, you probably need to rethink the objective.   HINT: One easy way to ensure you are writing a good objective is to use infinitives/ verbs that suggest a purpose   *To reduce   To increase   To decrease … To expand…*
- Pay attention to distinction between objectives and methods/activities/strategies.
  > For example, starting a new tutoring program is a method/ activity. Increasing the number of students who successfully pass the High School Exit Exam by 10 percent in the 2009-2010 school year is an objective because it describes a result.

OBJECTIVES follow common acronymic advice: "Keep them "S-I-M-P-L-E." Your Objectives should be:

- ➢ **Specific** – *indicate precisely what you intend to change through project.*
- ➢ **Immediate** – *indicate time frame during which problem will be addressed*
- ➢ **Measurable** – *indicate what you would accept as proof of project success.*
- ➢ **Practical** – *indicate how each objective is real solution to real problem*
- ➢ **Logical** – *indicate how each objective systematically contributes to achieving your overall goal(s).*
- ➢ **Evaluable** – *indicate how much change has to occur for project to be effective*

NOTE: Each of your objectives should meet at least several of these criteria. For example, given goal of "improving quality of the master schedule results," an objective might be for the "Master Schedule Team to reduce the number of requested class changes (specific) (practical) (logical) during the next 12 months (immediate) by 15 percent (evaluable) as documented by registrar

records and a summative report of the data from the records of class changes maintained by school counselors (Measurable)."

Organizations conduct evaluations in order to:
Find out whether the process (or program or product) did what was expected;

Determine if methods specified were used and objectives were met;

Determine if an impact was made on the need identified;

Obtain feedback from their target group and others;

Maintain some control over the project/process;

Make adjustments during program/process to help its success.

When preparing the evaluation of your master schedule process and product, ask yourself:
- What is the purpose of your evaluation? How will the findings be used?

- What will you know after the evaluation that you do not know now?

- What will you do after the evaluation that you cannot do now for lack of information? What use will you make of the results?

- How will you know if you have succeeded with your master schedule process and product? How will you prove your objectives are met?

- For each objective, how will you define and measure success? (Determine types and sources of evidence needed)

EVALUATION IN THE MASTER SCHEDULE CONTEXT
THERE ARE MANY METHODS OF EVALUATION.   These include:
QUANTITATIVE METHODS *--- translate experience into units that can be counted, compared, measured, and manipulated statistically (descriptive statistics --- averages, means, percentiles, frequency distribution, etc.; inferential statistics --- sign tests, simple linear regression, and chi-square, etc.)*

QUALITATIVE METHODS *--- rooted in direct contact with people involved in a program. (Interviews (group and/or individual), focus groups, direct or field observation, review of certain documents)*

NOTE: OFTEN A MIX OF QUANTITATIVE and QUALITATIVE METHODS YIELDS THE BEST RESULTS.

Formative or Process Evaluation *(relates to process objectives, provides an assessment of the procedures used in master schedule planning, gathering of necessary data (student course selection, course tallies, etc.), master schedule building/consturction, and adjustment of the master schedule as needed; can be used as feedback*

information during building process to determine whether changes are warranted/course corrections, etc.);

Summative or Outcome Evaluation *(relates to master schedule objectives, determines impact or accomplishments of the resulting master schedule);*

The Evaluation will involve considerations of the assessment tools/data collection methods being used.

The Evaluation should link to objectives and methodology. If objectives are measurable and methods/strategies/activities time specific, it will be easy to prepare a good data collection plan and develop a strong evaluation of the master scheduling process and product.

OUTLINE FOR AN EVALUATION PLAN:
Identify evaluation purpose and questions:
Describe evaluation design;
Identify what will be measured;
Describe data collection plan (type of data, source of data, data collection procedures, timetable),
Identify sampling plan,
Discuss data analysis, techniques,
Highlight protection of human subjects (when appropriate),
Explain staffing and management plans for evaluation,
and
Identify audience/s and reporting procedures.

EVALUATION REVIEW QUESTIONS:
Does the evaluation focus on assessing projected results?

Does evaluation assess efficiency of master scheduling process methods?

Does evaluation describe who will be evaluated and/or what will be measured? (Also, when measurements will occur?)

Does evaluation state what information will be collected in the evaluation process?

Does evaluation state who will be responsible for making the assessments?

Does evaluation describe how information and conclusions will be used to improve the master schedule process and product?

KEY QUESTIONS TO ANSWER:
Do you clearly identify the purpose of your evaluation and audiences to be served by its results?

Demonstrate that an appropriate evaluation procedure is included for every project objective?

Provide general organizational plan or model for evaluation?

Demonstrate that scope of evaluation is appropriate?

Demonstrate extent to which the master schedule process is practical, evident, and focused on results?

Describe information that will be needed to complete evaluation, potential sources for this information, and instruments that will be used for its collection?

Clearly summarize any evaluation reports to be provided and generally describe their content and timing?

A Sampling of Useful Websites:

A sample evaluation plan   (TB Support Program, Department of Health and Human Service, Lull County, 2004)
http://www.cdc.gov/tb/programs/**evaluation**/guide/docs/a_**sample_plan**.doc

A sample evaluation plan template (includes some definitions as well):
http://www.cahiim.org/files/Program%20Plan%20definitions%20and%20sample.pdf

Chapter 5 – Developing an Evaluation Plan, U.S> Department of Housing and Urban Development, 1997
https://www.bja.gov/evaluation/guide/documents/developing_an_evalu.htm

W.K. Kellogg Foundation Evaluation Handbook (very useful resource) (logic model)
 http://www.wkkf.org/knowledge-center/resources/2006/02/WK-Kellogg-Foundation-Evaluation-Handbook.aspx

Evaluation Audiences and Stakeholders:
Who should know your evaluation results?
Why and when should they know them?
> Depends…. How you share information internally, as well as with your various "publics." Your knowledge of who has a vested interest in the success of your master scheduling process and product will impact your evaluation plans from the beginning

What to Measure: What questions should an evaluation answer?

Choosing the Right Evaluation Design:
Consider the variables of data collection; Baseline data, qualitative vs. quantitative methods; Measurement techniques, such as observations, interviews, surveys, samplings, focus groups, case studies, records, ratings, etc.
Golden rules of evaluation including validity, reliability, and objectivity.

How to Report Evaluation Findings
Develop plan for a credible evaluation report in which you describe activities, data and findings, and state whether the master schedule process and product achieved the desired goal/s.

TASK: IDENTIFYING PROCESS/PRODUCT ELEMENTS (toward an evaluation design)
1) What are the inputs for your master scheduling process/product?
   (All those resources that are assembled before the master scheduling process begins as well as resources and information assembled at various stages in the master scheduling process? (Such as constituency (students and teachers), staff, materials, facilities and equipment)

2) What are the throughputs? (Methods of the process that employs/use the resources)

3) What are the outputs of your program? (Outputs are the immediate results for your constituency (students and teachers) that are effects of the throughput process.) (THE RESULTING MASTER SHEDULE)

4) What are the outcomes? (Effects of the process and product on learning and teaching AND on students and teachers? On each pathway/academy/SLC? On the school as a whole?)

5) What are the impacts? (Long term benefits to constituency/society – students, teachers, pathways/academies/SLCs, the school, the district, the community?)

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TASK: EVALUATION PLANNING QUESTIONS

1. What questions will your evaluation activities seek to answer?

2. What are the specific evaluation plans and time frame? (Formative? Summative? Both?)

3. What kinds of data will be collected? At what points? When? By whom? Using what strategies or instruments? In what form? Using what comparison group or baseline, if any? What methods of analysis?

4. If you intend to use your use findings from focus groups of stakeholders as part of your evaluation, how will this/these focus group/s be formed?

5. What procedures will you use to determine whether the master schedule process was implemented as planned? That the final master schedule met its objectives? How will you prove that master schedule process and product objectives are met?

6. Who will conduct the evaluation? (The master scheduling team? Other? Both?)

7. Who will receive the evaluation report/s?