Fidelity

Fidelity of implementation is defined as the accurate and consistent application of an agreed upon procedure. There are several interchangeable terms related to fidelity of implementation that include: "procedural fidelity", "procedural integrity", "treatment integrity", and "treatment fidelity". The terms all refer to the same idea: that something has been accomplished according to a predetermined plan. In order for an outcome to be attributed to a plan, it is necessary to know if the plan was implemented at all, and then implemented as planned on a consistent basis. When plans, methods, or programs are implemented as planned, outcomes and data are established as being reliable and valid. In order for schools to establish accountability for student outcomes, it is critical to evaluate and document fidelity of implementation.

A phenomenon associated with implementation of any plan, program, assessment, or treatment is "drift", or the unintentional subtle changes to a plan over time. We tend to streamline processes as they become more familiar to us so that, over time, a process or plan may not even resemble the original. Although we think we are implementing the process, we may not accurately or consistently be doing so. Without fidelity checks, decisions can be based on data that is no longer reliable as an outcome of the process. To ensure valid and reliable data upon which to base educational decisions at the individual and system level, fidelity checks are absolutely essential. The continued full implementation of the RTI process, of prevention and intervention activities, and of assessment is dependent upon adherence to the plan, implementation fidelity.

Fidelity of implementation is functionally related to the extent to which what is being implemented is acceptable by those implementing a plan. For example, if only 30% of the school staff understand and accept the RTI process as one that will increase learning, support teaching and instruction, and decrease student failure, then the chances of RTI being implemented as a collaborative effort are very limited. The building principal and the 30% of staff could plan for RTI components and ask all staff to implement it, as well as interventions, but it is very likely that the 70% from whom there is no "buy in" for the process will not adhere to implementing consistently over time. Thus, from a fidelity standpoint, it is not advisable to begin an RTI process unless your whole staff have an understanding of the process and the majority (at least 70%) agree that it will improve upon student chances for success.

How is Fidelity/Integrity Measured?

A number of strategies that range from direct to indirect approaches are available for monitoring fidelity/integrity:

> **direct observation** - usually by outside person who uses a checklist to evaluate whether specific procedures are being used as planned or trained. An example is when a principal observes teachers as part of an evaluation.

> **behavior rating scales** – usually a self-report whereby the person reports on a rating scale how often and how accurately a procedure is done.

self-reporting strategies - usually a checklist that lists all components that the person checks off as each component is implemented.

permanent products - documents generated by the process that can be collected and reviewed; for example in assessment, the testing protocol and scoring is collected and a certain number of the protocols are checked for correct scoring.

manualized interventions, assessments – an implementation manual that is explicit by defining and listing steps in an intervention, assessment, or other plan. Many times the manual provides a specific script of what to say. Generally, the more specific the manual, the greater the potential for fidelity of implementation.

In the RTI process, four activities are assessed on an ongoing basis to document fidelity:

- The RTI process implementation fidelity
- Prevention fidelity (Tier 1, Core Instruction or Positive Behavior Supports)
- Intervention fidelity (small group and individual)
- Assessment fidelity

RTI Process Implementation Fidelity

It is critical that the RTI process is routinely assessed for fidelity. This applies not only to the initial implementation period, but also as the process is institutionalized and maintained over time because of "drift".

Fidelity of implementation of the RTI process is necessary in order to allow school staff and parents to:

- trust the system and the data
- understand accountability
- clearly articulate roles and responsibilities
- use feedback from parents
- evaluate continuous improvement
- document student improvement

Implementing the RTI process with fidelity means to:

- effectively define an instructional tool for remediation
- tie intervention to a **specific** area of weakness
- determine timelines
- accurately and consistently identify students for tiers
- accurately measure skills in area of concern
- use integrity in data collection
- collect the right data for decision-making purposes
- deliver assurance
- achieve desired outcomes

Which RTI process procedures are monitored for fidelity of implementation?

- use of evidence-based core instruction and intervention
- use of a 3-tier system of instructional supports
- linking intervention to targeted skills
- RTI Steering Team process; regularly schedule meetings
- collaborative team(s) process; using problem solving steps
- consistent use of instructional blocks
- scheduled assessments, administered and scored accurately
- aggregation and review of assessment data
- system to inform and include parents
- ongoing professional development
- documentation of processes via appropriate paperwork

Strategies to document RTI Implementation fidelity include all of those mentioned in the previous section. An example of how to document the collaborative team process is through use of an "RTI Intervention Plan" form that, when followed, adheres to the problem solving method and results in evidence-based intervention planning and outcome evaluation. An example of such of form can be found in Appendix C, form "RTI Team Intervention Plan". Documentation of adherence to the group process is demonstrated by use of the problem solving method.

Another example of ways to support and monitor fidelity of the RTI process is through use of a school-wide instructional map. A "map" for each grade is created that lists the Tier 1 Core, Tier 2 Strategic, and the Tier 3 Intensive levels of instruction, assessment, instructors, and timeline for each grade level. The grade-level map is reviewed and revised on an annual basis, and should be updated if anything changes during the course of the year. The "map", when completed as intended, assists in identifying areas to be addressed, documents evidence-based instruction/intervention, and serves as a guide to what to do. The "map" enables implementation of the RTI process, even if whole new staff entered the school the following year! Please see Appendix D to see a "CSI Map" and a completed grade level "CSI Map" as an example. (CSI = Core, Strategic, Intensive).

Prevention Fidelity

Prevention activities are those that are implemented at Tier 1, universally to all students in the school. Prevention activities include all core subject curriculum, using best practices in instructional delivery, establishing a positive social/behavioral climate in accordance with the Montana Behavioral Initiative (MBI) that incorporates universal positive behavior supports, character education, and so forth. These are considered prevention activities because when implemented with integrity, that is as planned, there is sufficient evidence that there will be positive results for the vast majority of students. The key here is "when implemented with integrity" because all the evidence in the world of effectiveness of any particular program is worthless if the program is not implemented as intended. Therefore, schools utilize methods to document implementation fidelity of preventative, core, universally provided programs. An example of an integrity checklist evaluating instructional delivery that can be used by an observer, typically a principal in a supervisory capacity, can be viewed in Appendix E.

Core reading and math programs typically provide the sequence of teaching concepts. This information can be converted into a treatment integrity checklist that teachers can use to make sure they are utilizing each component of the curriculum in the intended manner. Various ways to document integrity of core program implementation include using peer observers (teachers observe teachers), principal observation, reading or math specialist observation, etc. The extent to which positive behavioral supports have been implemented universally can be evaluated using the School Evaluation Tool (SET). If positive behavior supports have been implemented as planned, students know school rules and these rules are highly visible on the school campus, teachers know how to consistently use consequences for student inappropriate behavior, administrators have a crisis plan in place and all staff are trained, parents are informed about school expectations for behavior. The SET evaluates integrity of implementation.

Intervention Fidelity

Implementation fidelity of academic and behavioral interventions is essential to establishing the reliability of a student's response to intervention. It is necessary to document that intervention proceeded as planned in order to attribute student outcomes to the intervention. We cannot know for certain that a student has a poor response to intervention unless we can document that the intervention was implemented, and implemented as planned.

Here is an example of intervention integrity from the medical model perspective. A person wants to lose weight and goes to a physician who makes intervention recommendations for reducing weight. The intervention may include a nutrition plan that uses foods the person likes in limited portions. Also included are recommendations for frequent small meals during the day, limit eating to between the breakfast hour and 7 PM in the evening, weight and flexibility training exercises, and fat burning cardio exercise 5 days per week. The goal is to lose 2 pounds per week, a total of 12 pounds in 6 weeks. At the end of 6 weeks, the person returns to the physician and when weighed, has only lost 5 pounds. The physician asks if the person used all the recommendations to which the person may respond that they did because the total caloric intake for the day did not exceed the recommendation. In fact, the person often skipped breakfast and ate meals in larger portion, later in the day and into the night. In addition, the person did not exercise at all. The intervention was not implemented as planned, therefore, the person did not reach the intended, reasonable goal. However, the intervention was not at fault; the implementation of the intervention resulted in a poor response. Had the person adhered to the doctor's plan and only lost 5 pounds, then the doctor would need to look at other reasons (e.g. hormone imbalance) why the person had such a poor response.

When interventions are targeted to build specific skills that match student needs, we also need to make sure that the intervention is implemented with integrity. Manualized interventions, permanent products produced as a result of interventions, and observation checklists are ways to document intervention fidelity. An example is the use of evidence-based reciprocal-peer tutoring (RPT) for increasing math fact fluency. RPT tutoring worksheets are a permanent product that is the result of the correct implementation of this method. If intervention is implemented with fidelity, there will be a certain number of math tutoring RPT worksheets generated each time groups meet. Random checks counting worksheets and evaluating worksheet content is a fidelity check. Some interventions are highly scripted, or are considered "manualized treatment". An

example in reading interventions is "Road to the Code" or "Sound Partners" in which the same components are used in every lesson and much of the intervention is scripted. Teachers or tutors can use a checklist as a cue to include every component consistently. This same checklist can be used for observation. For an example, see Appendix F.

The data collected that documents intervention implementation fidelity is used as part of the outcome evaluation in determining the effectiveness of intervention. A student's response to intervention can only be considered as reliable data when intervention is documented as having been implemented as planned.

Assessment Fidelity

Data generated by assessments can only be as reliable as the extent to which the assessments are implemented in a consistent and standardized way. Again, without measuring the fidelity of assessment implementation, student responses cannot be evaluated with any reliability. Student test results depend upon assessments being implemented and scored correctly. Ways to check integrity of assessment implementation include assessor checklists, outside observation, and random checks of scoring accuracy. Of course, initial training for an assessment tool should include practice to competency in administering the assessment. Periodic "booster sessions" where assessors are retrained on assessments are an important way to prevent "drift" in the way assessments are implemented and scored. Most assessments include administration checklists that can be used for integrity checks.