Observation Tool for Instructional Supports and Systems (OTISS)
Introduction and Preparation
National Implementation Research Network
State Implementation and Scaling up of Evidence-based Practices Center
University of North Carolina at Chapel Hill

The **goal** of this document is to support the preparation of observers who can use the Observation Tool for Instructional Supports and Systems (OTISS) as intended. The **purpose** of the Observational Tool for Instructional Supports and Systems (OTISS) is to assess the quality of systems and supports available to help teachers use best practices for instruction. It is to be used when frameworks, approaches, instructional practices do not have specific fidelity measures developed and validated. Specifically, the OTISS is a 10-minute walk through observation of instruction. It is content free and applicable to any grade level and any part of an instructional activity. To maximize the benefit to students, OTISS observations should be frequent (at least 3 times a semester), relevant to the instructional supports, and actionable for improvement planning.

Source data related to items
Hattie (2009) conducted a meta-analysis of over 800 meta-analyses that included over 50,000 studies related to student achievement. It is the most comprehensive report produced to date of "what works" in education. The OTISS is based on a review of Hattie's syntheses of the literature. The book was reviewed and any effective instruction practice related to student achievement was noted. That list was narrowed to those instruction practices that might reasonably be seen during a 10-minute observation of any segment of classroom instruction. This eliminated any non-classroom-based instruction (e.g. tutoring) and any event-related or content-related aspects of instruction (e.g. at the beginning of class …, when a lesson is first introduced …, once multiplication is mastered …).

A first version of the OTISS was developed and usability tested in a few classrooms uncovered problems in interpreting items and conducting observations. Based on concerns regarding interpretation of items and observation processes, the list was narrowed further to focus on readily observable instruction. In addition, wording of items was modified and examples were provided to reinforce intent of each item. This process has continued with additional usability testing in more classrooms with different observers to create operational definitions of the instructional behaviors. OTISS version 7.0 is the product. Revisions have been made in response to ongoing data and learning with the current 7.3 version in use now.

Preparation of Observers
The quality of the tool depends on the quality of observations being conducted. This means observers must be prepared and meet certain criteria **before** they begin using the OTISS. Careful selection, training, coaching, and assessment of observers are essential to reliable and valid data being collected. This process does not need to be cumbersome, but it does need to be completed.

Selection

An OTISS observer should be an educator with skills in observing and noting behaviors that are seen and heard (i.e., collecting evidence), interpreting evidence against a level of performance, and conducting professional conversations with teachers (Danielson, 2012). Observers can be coaches, district, regional, and state leaders, and others. It is recommended that a **Team** of observers be developed at the regional and/or district level. This training will be provided to regional and district teams by NIRN staff and/or State Transformation Specialists in Active SISEP States. State, regional, and district leadership can select team members to be trained by NIRN staff to develop capacity as OTISS trainers in a state. This capacity will support the use of OTISS observation data to improve supports for teachers in all schools in a district.

Training

Preparation of OTISS observers is accomplished by completing the steps outlined below through a series of trainings with NIRN (usually 2-3).

During training we will:

1. **Learn about OTISS**: History, purpose, and research conducted. Then we will become familiar with the 7 items that are to be scored.
   ● Focus is on the 7 items and their operational definitions.
   ● Practice examples associated with each item provided in training illustrate the operational definition for each of the items.
      o Practice examples provided in training are *not* intended to be an exhaustive list.
      o Practice examples are intended to provide some guidance for what to look and listen for during classroom instruction.
2. The NIRN/SISEP team and your team will **use OTISS to score instruction on practice scenarios and videos** provided by NIRN. Written scenarios are used as a means to develop initial knowledge and clarity of OTISS items' operational definitions. Practice videos of classroom instruction follow the scenarios. First, a video is scored individually without consultation from team members. Next, teams discuss scores they assigned to each item. The process will be repeated for each video.

   When viewing videos, participants will record responses and comments regarding OTISS items. Watching a video a second or third time to confirm or modify obtained ratings may be needed by an individual and/or team. Some participants also find it helpful to review a video focusing on one item at a time during which time he or she looks for multiple examples of a single item. This process can be repeated for each additional item of OTISS. We expect it will take 3-5 video practices before an observer becomes minimally proficient in the observation process. A goal is to reach inter-observer agreement (IOA; 85% inter-observer agreement); however, we have learned that obtaining IOA while watching videos is more difficult than from observing live instruction. As a result, we strive to obtain IOA from videos but do not let a lack of IOA hinder from moving to observing live instruction to practice using OTISS to obtain IOA.

   ● It is important for observers to practice completing observations prior to "using them to collect data" in a school setting.
   ● Practice observations help the observer know and understand the OTISS items.
      o This allows an observer's attention to focus on teacher-student interactions in the classroom and not on trying to recall an item to observe.
      o Links to publicly available videos of instruction for practice are provided by NIRN.

3. Upon completing the practice sessions with NIRN, you will **conduct at least two co-observations** with a skilled observer. A co-observation occurs when two observers *simultaneously* conduct an observation (i.e.

they are in the classroom at the same time) and *independently* score each item (i.e. there is no discussion prior to rating each item). The two sets of scores then are compared and agreement is assessed. Anything less than 85% agreement (6 or 7 identical scores for the 7 items) on scoring is cause for increased coaching and more frequent co-observations to improve agreement among observers.

The **OTISS should not be used for data collection until OTISS training and preparation have been completed and an acceptable level of inter-observer agreement (IOA of 85%) has been achieved**. Invalid and unreliable observations are useless and can be harmful.

Coaching
The value of a Team is that they help one another. Walk through observations, even ones as simple as the OTISS, require skillful behavior on the part of the observer. It is recommended that, if possible, a newly trained observer shadow a skilled observer for several co-observations to experience the process and get advice on the craft of conducting observations. This process will be helpful even when all members of a team are learning to use OTISS with fidelity.

Fidelity
Observations can drift over time. OTISS schedules may grow lax with missed appointments. Observers may be distracted or develop idiosyncratic definitions of the items. To counter these natural tendencies, it is required that Team members conduct **co-observations** for IOA **for at least 10% of the OTISS administrations**. More frequent co-observations are recommended for new observers. The OTISS team with NIRN training support should review co-observation data and results regularly to determine additional necessary supports.

Leadership and Facilitative Administration
Reliable and valid observations of any kind require support from leadership and staff. It is up to district, regional, and state leadership to ensure that the Team of observers has adequate preparation and time for the OTISS administrations. It is recommended that district, regional, and state leaders review OTISS and discuss it with principals and representatives of teacher associations in the district. The goal is to review the relevance of OTISS to improving supports for teachers and, ultimately, student outcomes and gain stakeholder support for the process.

Support of principals will be required to introduce OTISS to teachers, to set up visits to classrooms, and provide information to teachers before and after observations. While the focus of the OTISS is on improving district and school supports for teacher instruction, each teacher who participates in an observation should, *unless otherwise agreed upon*, receive his/her individual scores *within a day* of the observation. The Building Implementation Team (including the principal) and district leadership can utilize aggregated data for all teachers in a school to improve supports for instruction and student outcomes.

Preparation for Observation
1. Introduce the OTISS to the building principal, describe its purpose, and share a copy of the instrument.
   - It is important to note that the OTISS is an **assessment of** the supports available and accessible to teachers so they may continue to improve instruction, which is the desired result of the **observation of** teacher instruction. This is an important distinction and may help avoid any confusion with teacher accountability assessments.
   - Based on implementation science, OTISS information is designed to provide feedback to professional development and administrative staff regarding the usefulness of their supports for teacher instruction (e.g. training, coaching, facilitative administration, constructive uses of data).

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- Because teachers are granting us permission to use this process, we want to be very respectful. It is important to discuss with the principal and staff that each teacher will determine if his or her results (without the teacher's name) will be shared with the principal.
2. If permission is secured from the principal, introduce OTISS to teachers. If the principal is hesitant, thank the principal and move on to the next school.
   - If the principal gives permission, arrange a meeting with teacher(s) with principal support. The meeting can be individual or in a group (their choice) during which the observer or principal introduces the OTISS instrument and purpose (the same information previously given to the principal) to the team.
3. Given teacher approval, arrange a time to visit the classroom for the 10-minute observation.
   - Arrange a time for a post-observation de-brief with the teacher (15 minutes) or determine a system through which a teacher can reach out to discuss his or her observation. This can occur the day of the observation or the day after.
   - It is important to verify "Lead Teacher" for observation purposes in co-teaching classrooms or classrooms with multiple adults present
   - Ask teachers to tell the students about your visit to the classroom.
   - Ask teachers how you should enter the classroom and if you may move around the room or if a specific routine (e.g., location) is preferred
     - The observer will need to be able to see all students and teacher interactions with students.
   - Ask teachers for permission to share the results with the principal. If more than one teacher in a school is being observed you can emphasize this point and note that their name or class will not be associated with the results. If the teacher does not agree, be sure to respect that decision.

Conduct the Observation
Visit the classroom at the appointed time.
1. Enter the classroom as prescribed by the teacher.
2. Settle into the spot or routine determined by the teacher.
3. Glance at your watch and begin the 10-minute observation.
4. At the end of the 10 minutes, quietly exit the classroom
5. Immediately score each OTISS item and make notes regarding the observed instruction
6. Enter data into identified system or website.

After the Observation
Within one day of the observation, meet with each teacher individually to review the observation (about 15 minutes) or follow the protocol you set up the teachers. Follow the following guidelines when sharing information about your observation with teachers.
1. Give the teacher a copy of her/his completed OTISS rating page.
2. Use sincere praise to describe the positive behavior that was observed
   - State 1 or 2 examples of engagement in an OTISS item tied to specific literal description of the teacher behavior (e.g., I saw you provide prompt and accurate feedback to students when you….). Do not make interpretative or judgment statements of the behavior. (e.g., By doing this, you...).
   - This is not a time for corrective feedback, so make the feedback from the observation **all positive all of the time. Focus only on those items rated Fully in Place or Partially in Place.**
   - At a minimum, sincerely thank the teacher for agreeing to participate and arranging for the visit to the classroom.

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3. Ask the teacher to comment on the process so we can learn how to improve OTISS administration process. What might we do to provide a better introduction? Might there be a better way to enter and exit the classroom? Take notes and thank the teacher for the help.
4. After meeting with each of the teachers, meet with the principal to review the results and process.
   - Respect the teacher's decision regarding sharing information with the principal.
   - This is **not a time for corrective feedback**, so make the **information about teachers all positive all the time.**
   - Quickly review how OTISS information for all teachers in all schools in a district might be used to inform district and school supports for teacher instruction (e.g. enhance coaching or facilitative administration).
5. Ask the principal to comment on the process so we can learn how to improve the OTISS administration process. What might we do to provide a better introduction? Might there be a better way to explain OTISS to principals and teachers? Take notes and thank the principal for the time and effort he/she put into arranging your visit.

Conclusion

Teachers interacting with students is "where education happens." The OTISS is a simple observation of a few key aspects of effective instruction (Hattie, 2009). It does not include all aspects of effective instruction and it does not attend to the content of instruction. Instead, it looks for indicators of effective instruction. OTISS is designed to be practical so it can be conducted frequently (weekly or monthly) to monitor progress of efforts to support teachers.

Contacts for Additional Support

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