

Observing Typical Practice in Sixth Grade ELA Classes:  
Implications for Practitioners & Researchers

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### Abstract

Little is known about standard literacy instruction that describes the teaching occurring in secondary schools. The purpose of this paper is to publicize findings from an observational study using objective criteria for measuring instructional time, amounts of teacher talk, and directionality of student-talk during consecutive days of instruction in a sixth-grade Language Arts classroom across two schools characterized by different socioeconomic status. Teacher behavior was analyzed for four different teachers in two different school districts using video recordings captured using a video camera at the back of the classroom. The behaviors were examined using the online video coding software, Vosaic Connect. Findings from this descriptive practice are recommendations for general and special educators, pre-service-training professionals, and researchers developing secondary interventions.

*Keywords:* descriptive, observation, typical practice, middle school, intervention design

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## Observing Typical Practice in Sixth Grade ELA Classes: Implications for Practitioners & Researchers

Much of intervention research is designed as a research-based alternative to “typical practice” in which large numbers of students, especially students with disabilities, are found to not respond to initial instruction by general educators. Yet, even after years of emphasis on early literacy skill instruction, little is known about the typical instruction that characterizes secondary schools. Developing a clear understanding of the secondary environment will have several benefits, especially in transitional grade levels (e.g., sixth grade in middle school and ninth grade in high school) where students are most at risk for failure (or dropout). The purpose of this practice paper is to share pilot data from an observation study using objective criteria for measuring instructional time, amounts of teacher-talk, and directionality of student-talk during consecutive days of English Language Arts instruction in dichotomous sixth-grade ELA classrooms. Implications from this descriptive practice are outlines for general and special educators, preservice-training professionals, and researchers developing secondary interventions.

### **Environments Serving Students with Learning Disabilities**

During the 2015-2016 school year, 6.7 million (13%) of all public school students received special education services, and 34% of those students were categorized as having a specific learning disability. The National Center for Educational Statistics (2017) reports that 70% of school age students with learning disabilities spent 80% or more of their time in general education (Tier 1) environments in 2015. Moreover, numbers were similar for other disability categories with 87% of students with speech or language impairments, 65% other health impairments, and 64% of developmental delays spending the majority of their instructional time in the general education setting. Yet, as much as these numbers confirm for us that students with

SLD are being served the majority of the time in general education classrooms, the statistics fail to note important curriculum and structural differences for students with SLD moving from elementary to secondary environments. Critical differences in the two environments, for example in the area of literacy instruction, help to illustrate how service delivery of reading interventions involving multiple educators differs across settings.

### **Literacy Instruction as Example Instructional Practice**

Research from entities such as the Institute of Educational Sciences (IES) has provided extensive funding toward the development of our knowledge base in addressing the reading development, instruction and intervention needs of our student population. Advances have been made in how and when we conduct and apply assessment data (e.g., screening and progress monitoring), our understanding of the role basic linguistic and cognitive processes (e.g., oral language, working memory) play in students' reading performance and the implications for classroom instruction, and approaches to implement and intensify reading instruction (Connor, Alberto, Compton, & O'Connor, 2014). In regards to reading instruction, Connor and colleagues report that decades of IES research center findings have highlighted the importance of some specific practices, such as repeated reading fluency interventions, extensive opportunities to hear and use complex oral language, and the promise of collaborative learning and peer-assisted methodology in enhancing the intensity of instruction.

Most recently, early literacy instruction has been dominated by systemic models of service delivery, such as responsiveness to instruction (RtI) or multi-tiered systems of support (MTSS). Codified in law with the reauthorization of IDEA (2004), the use of student response to instruction as a means for avoiding a wait-to-fail model of schooling and identification of specific learning disabilities has grown in popularity. Though no single model of RtI exists,

common features include (a) using multiple tiers of increasingly intense service delivery, (b) screening students for characteristics of risk, (c) implementing a research-based curriculum, (d) progress monitoring of student performance, and (e) measuring treatment integrity to ensure that instruction and interventions are implemented with fidelity (e.g., Fuchs, Mock, Morgan & Young, 2003; Graner, Faggella-Luby & Fritschmann, 2005). Significant research over the last decade and a half has been dedicated to using this model, primarily in the area of early literacy skill development, as the primary mechanism for service delivery for all students, including students with SLD.

### **Implementing Literacy Instruction in Changing Environments**

While federal legislation has led to more extensive tracking of students' academic progress, little is monitored regarding the instructional interactions in classrooms and how they influence student learning. As a result, limited information exists in regards to how reform efforts have transformed classroom interactions (Matsumura, et al., 2006). For example, in the middle and secondary years, students are expected to have mastered the fundamentals of reading outlined above and use these skills to learn new content. For those experiencing reading difficulties, more intensive reading support is needed, requiring substantially more instructional time corresponding to the severity of the reading delays. Specifically, these students need extensive amounts of small-group, meaning-focused instruction to achieve grade level reading performance (Connor, et al., 2014).

Yet little is known about the experiences related to reading instruction of students with SLD in secondary settings (Ko & Hughes, 2015), despite the significant challenges these students often face independently comprehending course materials. Ko and Hughes cite the importance of reading comprehension instruction for secondary students in improving their

engagement in content area classrooms and academic retention. Yet, evidence suggests the quality and quantity of reading instruction is inadequate, with study teachers noting they do not have the skills to implement reading strategies and only offering approximately 250 minutes of reading instruction per week in resource settings. It is expected that less time is allocated to strategy instruction in more inclusive setting.

In a similar attempt to capture literacy practices in secondary environments, Resnick, Matsumura, and Junker (2006) observed literacy instruction in urban middle schools and found limited quantity and quality of in class discussion. Teachers rarely built on or extended student contributions, nor did they call for students to expand or provide justification for their positions. While teachers assigned high quality texts, these materials were not used to engage in rich discussion. Teacher queries and student responses were generally brief and only addressed surface-level details. Further, in close to half (40.6%) of the reading comprehension lessons students were only provided procedural directions on the task, with no guidance on how best to engage or successfully complete a task( Matsumura & Junker, 2006).

Such observations harken back to reports on literacy instruction by Durkin (1978) indicating that little comprehension instruction actually takes place in classrooms; instead students are typically assigned and assessed on content, but rarely taught how to comprehend and extend the information engaged (Santa, 2000). Concurring data provided by Donaldson (1995) observed that primary teachers' allocated, on average, only 23% of the literacy instruction block to comprehension. The lack of actual comprehension instruction becomes more critical as students' progress in school and are expected to learn from increasingly more complex texts.

### **Observing Secondary Settings**



There are many ways to observe an environment, one might look for some of the specific literacy practices listed above, or be more in favor of popular tools like the one put forth by as the Danielson Framework (see <https://www.danielsongroup.org/framework/>) . However, these metrics seldom prove to be objective, rather relying on highly individualized and difficult to replicate results across multiple observers. Moreover, without substantial IES or NIH external funding, how can practitioners objectively observe their own practice for highly reliable variables that will clearly indicate how time is spent in secondary classrooms? One solution is to examine specific variables of time using a binary approach to improve data reliability.

For example, binary approaches can be applied to instructional time vs non-instructional time, teacher talk vs student talk, and directionality of student talk (to the teacher vs to peers). More specifically, one might first confirm whether or not time spent in a classroom is instructional in nature, rather than lost time in transitions or unrelated anecdotes. Second, examine what percent of the instructional time is dominated by teacher talk (e.g., sage on stage) in comparison to the instructional time occupied by student voices. Finally, when students are talking, to whom are they focusing a response--teachers (answering or asking questions) or fellow students (in cooperative learning). While many such binary variables exist, existing literature indicates that these variables may be both critical to improving student learning environments and objectively observable as part of improving instruction in areas such as literacy.

### **Key Variables in a Binary Approach**

**Instructional time.** A critical link between time and learning has been established in educational research. This amount of time during the school day scheduled for active teaching to occur is called instructional time (Johns et al., 2008). Instructional time is the portion of

classroom time spent teaching students particular knowledge, concepts, and skills pertaining to school subjects (Cotton, 1989). Conversely, non-instructional time is defined as the amount of time during the school day where active teaching is not occurring or: the difference between the total instructional time and the actual academic learning time. Non-Instruction is best described as the lost instructional time in which the students are not required or expected to be doing any learning (Cotton, 1989). See Table 1 for specific examples and non-examples of instructional time.

Specific rates of instructional time have been difficult to confirm in the existing literature as it is seldom an isolated variable. For example, several teams of researchers have notes that instruction time, as measured primarily by student time on task is approximately 50% of less of class time (e.g., Cotton, 1989; Gettinger & Seibert, 2002; Yair, 2000). However, these teams were interested in student engagement rates and note in their findings that rates of engagement during instructional time range fluctuate from 50% to 90%. Others have reported critical differences between types of learners with high achieving students typically engaged for 25% more time than low achievers (e.g., Kauchak & Eggen, 1993).

**Teacher talk.** A critical element in considering verbal interactions is whether the interaction is teacher initiated or student initiated. Teacher initiated interactions constitute the bulk of verbal interactions in most classrooms and can take many forms. Teacher talk refers to the verbal interactions between a teacher and a student, or group of students, and is usually intended to facilitate learning, though that is not always the case (e.g., Kwon, Elicker, & Kontos, 2011). As one would expect, there is great variability in the actual amount of teacher talk across classrooms. The standard amount of teacher talk per lesson is summarized in Flander's Law of  $\frac{2}{3}$  that states, "two-thirds of instruction is occupied by teacher's talk, of which two-thirds is direct

influence,” (i.e., instruction, question asking, giving directions, or justifying authority, p. 33-34, 1970). Interestingly, while now dated, Flanders hallmark study of the Flanders’ Interaction Analysis Categories (FIAC; Flanders, 1970; 1974) framework has been replicated so consistently in the late 70s and early 80s that it prompted some to note that regarding observational data, it was the lone necessary citation (e.g., Hudgins & Edelman, 1986).

Having such a large percentage of conversation that originates with the teacher often results in dialogue that is one-dimensional, mostly provides factual information, and rarely results in rich, meaningful dialogue (e.g., Piccolo, et al., 2008). One might conclude that by playing such a central role in controlling the discussions, teachers shortchange their students of richer learning opportunities (e.g., Okolo, et al., 2007). It can also be concluded that unless education policies give a high priority to supporting teachers in transforming teaching in schools to promote productive, interactive learning, students will not be able to acquire the knowledge and skills they need within a modern knowledge society (Sahlberg and Boce, 2010).

**Student talk.** Student initiated interactions may arise from individual student questions about the material and take the form of either prompted or unprompted opportunities by the teacher. Moreover, student talk may reflect a range of in-depth student thinking from closed-answer responses in which material shared by the teacher is simply repeated, or more higher-order thinking requiring students to hypothesize, explore, debate, and synthesize (Barnes, 2010). Initiation is the key construct as when students are talking (usually observed as a small percentage), it is not usually initiated by students but rather in response to a teacher probe (Sharp, 2008). For example, in a study by Sahlberg and Boce (2010) seventy percent of verbal interactions included teacher talk with less than 30 seconds of student-initiated talk per 45-minute lesson (less than 5% of talk time; Sahlberg & Boce 2010). This small percentage is not

representative of the opportunities students require to not only to hear what the teacher is teaching, but actually converse and articulate their own understanding of the content being presented (e.g., Piccolo, et al., 2008). As long as teacher talk makes up most of the verbal interaction in teaching and student-initiated talk is confined to small amounts of time, the opportunities for productive learning are limited or non-existent (Sahlberg and Boce, 2010).

Therefore, the purpose of this pilot study was to conduct a more recent examination on how instructional time is spent in secondary classrooms today, specifically English Language Arts, and confirm if the seminal literature on the matter still holds true. The following research questions will be used to guide our investigation:

1. What percent of time do sixth-grade ELA teachers spend in instructional time ?  
What is the actual amount of time?
2. What percent of instructional time do sixth-grade ELA teachers spend in Teacher Talk vs Student Talk?
3. What percent of time do sixth-grade ELA student spend in conversation with Student to Teacher Talk vs Student to Student Talk?

## **Methods**

### **Setting**

This observational study of typical education practice took place in two public middle schools in the Northeastern United States. Observations took place during three consecutive days of typical instruction in middle school English Language Arts classes. Class time was characterized by prose readings and short writing assignments with a specific focus on fiction associated with grade-level expectations as established in the Common Core State Standards (e.g., *Number the Stars* by Lois Lowry and *Wringer* by Jerry Spinelli).

The schools in this study were sorted by DRGs or district reference groups. A district reference group is defined as a classification system in which districts that have public school students with similar socioeconomic status (SES) and need are grouped together (Prowda, 2006). Grouping similar districts together is useful in order to make legitimate comparisons among districts. Schools chosen represented the highest (C) and lowest (G) thirds of DRGs in an attempt to show difference between environments. Classrooms were coded C601, C602, G601 and G602.

### **Participants**

Two teachers were selected for observation from the highest DRG, as well as two from the lowest. These four teachers were all sixth grade teachers certified in English/Language Arts. The teacher's class sizes ranged from 21-26 academically diverse students. Including students with specific learning disabilities (e.g., dyslexia, dysgraphia), as well as, students at-risk for disability identification. The average number of students receiving special education services per class was 5-6. See Table 2 for classroom demographics.

### **Procedures**

**Video procedures.** Before filming, IRB was obtained from the university and principal permission was secured prior to contact and ultimately consent from participating teachers was acquired. The video camera was placed out of student's way and view to make them feel comfortable throughout the filming process. The video footage of each teacher and class period was captured by a pair of graduate assistants. Filming started and ended with the school bell. Each teacher wore a microphone around their neck or a clip attached to a sweater or necklace to aid in hearing the teacher's talk during the coding process. GAs were instructed to use wide angle shots to capture as much of the context of the classroom as possible. When appropriate, teachers were tracked by the camera as they moved throughout the classroom. The video footage

is of three consecutive days of instruction, which was a challenge due to changing school schedules. However, the total number of days from the first to third video ranged from 3-5 actual school days because of (e.g., snow days, field trips, assemblies, and districtwide standardized tests.)

**Coding procedures.** The coding process began by first importing all twelve videos (2 DRGS, 2 teachers from each school, and three days of instruction) into the online coding program Vosaic Connect, which is a “...cloud based video analysis platform that lets you capture, discover, markup, annotate, review, and share...” video footage from anywhere (see *vosaic.com*). The goal of the study was to objectively determine how time during class was being spent. To further analyze how time was spent, a hierarchy of three pairs of variables was established. Therefore, a binary approach was taken, meaning either instruction was occurring and academic learning could be taking place (instructional time), or no instruction was occurring and no academic learning was taking place (non-instructional time). Instructional time was inclusive of activities such as, giving directions, lecturing, writing/reading workshop and read alouds. While, non-instructional time was comprised of such activities as transitions, assessment and redirecting behavior.

When instructional time was happening, of consideration was who was doing the talking (teacher or student) and who was the talk directed toward (teacher or student). If the teacher was talking, the talk had to be directed back at the students. Teacher talk (TT) was operationalized as the teacher’s relevant and academic talk directed and intended to be heard by his or her students, while the student is listening and receiving the talk. Examples of teacher talk from this study include the teachers asking comprehension questions after reading a passage or giving directions, such as “turn to page 23 in your books,” and reading a class novel aloud to students. If a student

was talking, the talk could either be directed to the teacher or to a fellow student. Student to teacher (StT) talk was defined as the student's relevant and academic talk being directed and intended to be heard by the teacher, while the teacher is listening, receiving and acknowledging the talk. Examples of StT talk from this study include students responding to teacher questions like "What is the difference between a concentration camp and a work camp?," students asking clarifying questions, such as "Where do we put the paper when we're done?" and students reading a passage aloud when prompted by the teacher. While student-to-student (StS) talk was defined as, the student's relevant and academic talk being directed and intended to be heard by his or her peers, but it was prompted by the teacher and it's purpose acknowledged after the fact. The examples of StS talk that were observed mainly occurred when cooperative learning was instructed.

### **Interobserver Agreement**

Training to establish IOA lasted approximately 2 months. A third graduate assistant who did not record the video was used, and she started out by watching the video coding process. The GA then progressed to independently coding small segments at a time, her work was reviewed and questions answered for agreement on a unique set of videos. The video segments were increased in length until the GA progressed to completing full video coding. Again, the GA's work was reviewed and questions asked along the way. All disagreements were examined during training, and if disagreement persisted the project's second author made decision. A coding manual was created to establish clearly defined examples and non-examples for each term that was coded. Once IOA was above 90%, the GA independently coded four of the twelve videos (33%) not yet viewed to establish inter-observer agreement. IOA calculations were made for all videos by  $(\text{intervals of agreement} / \text{total intervals}) * 100$ .

**Data Analysis**

After all videos were coded, they were downloaded from Vosaic Connect into another program, Studio Code (see [studiocode.code.org](http://studiocode.code.org)), where the videos were prepared to undergo analysis after being exported to Excel. The analysis and descriptives for each research question are reported below in the results section.

**Descriptive Context**

DRG C classroom C601 was characterized by an average class length of 43.44 minutes. Students were seated in rows, but some desks were pushed together in these rows creating groups of 2 to 4 students, while some desks stand alone. The teacher's desk was placed at the front of the room facing the students. The room included two whiteboards, one at the front and one on the side wall. The other sidewall was comprised of windows. There were motivational, content and school specific posters present (e.g, a poster taped to the whiteboard with the schools values and expectations), as well as an American flag and a small bookshelf filled with books (n=50). An overhead projector was frequently used for classwork. No student work can be seen on display in the video.

DRG G classroom C602 was characterized by an average class length of 44.15 minutes. Students were seated in table groups of four for the majority of their learning. The teacher's desk was positioned at the back of the room. There was a whiteboard at the front of the room, as well as an American flag and mounted TV. The sidewall opposite the door was filled with windows. There were many bookshelves with student appropriate books (n=200), as well as posters encouraging reading. The teacher has a horseshoe-shaped table at the back of the room, as well. No student work on display can be seen in the video.



DRG G classroom G601 was characterized by having class lengths averaging 46.76 minutes. Students were seated in a horseshoe with vertical rows in the middle. The teacher's desk was off to the side in the room. There was a chalkboard, as well as a whiteboard, on the front wall with miscellaneous papers taped to the sides of the chalkboard and a SMART board mounted over it in the center. There was also a small window, American flag and TV monitor present. A projector was mounted on the ceiling facing the SMART board. No student work or books can be seen in the video.

DRG classroom G602 was characterized by having class lengths averaging 50.42 minutes. Students were seated in table groups of four students facing each other. The teacher's desk was off to the side of the room. There was a chalkboard, as well as a whiteboard, on the front wall with a SMART board mounted in the center. As well as, student work, anchor charts and calendars displayed around the classroom. There was a wall of large windows on one side and an American flag and TV monitor were also present. A projector and screen were mounted on the ceiling. No student books can be seen in the video.

## **Results**

### **IOA**

The IOA results were as follows: Instructional time: 99.4% (range 98.9%-99.7%), TtS: 96.3% (93.5%-98%), StT: 98.3% (97.7%-98.8%) and StS 100%. There were several ways we could capture IOA, but we were most concerned with giving credit to ensure it was agreed upon in both observing the phenomena and when it was not occurring. For example that scorers agreed when instructional time was observed (both coded for instructional time) and when no instruction was occurring (both did not code anything).

### **Research Questions**

Research question one asked: “What percent of time do sixth-grade ELA teachers spend in instructional time? What is the actual amount of time?” We found that instructional time ranged from 78-81% across groups. Average instructional time was nominally in favor of DRG G, or the lower socioeconomic school.

The second research question stated “What percent of instructional time do sixth-grade ELA teachers spend in Teacher Talk vs Student Talk?” This question looked to compare the percentage of time ELA teachers spend in teacher talk vs. student talk. The findings from the four teachers observed during the course of this study showed TT ranged from 60% or 29 minutes (DRG G) to 69% or 30 minutes (DRG C) of instructional time.

Alternatively, ST ranged from 33% or 16 minutes (DRG G) to 24% 10.5 minutes (DRG C) of instructional time. Additionally, StT across DRGs averaged 3.5 (DRG C) to 4.4 (DRG G) seconds per utterance. The data revealed that instances were short and closely matched existing literature in which student utterances were brief and the result of teacher prompts.

The final research question examined, “What percent of time do sixth-grade ELA student spend in conversation with StT Talk vs StS Talk?” Across all teachers, the average time spent in peer verbal interaction was 8% or 3.45 seconds, with no differences across DRGs.

### **Discussion**

The purpose of this pilot investigation was to capture the day-to-day reality of ELA instruction in middle school classrooms. Even with certain limitations documented above, there are several important implications for the field to consider as we deliver and design instruction (or interventions) for use with middle school students. In general, it was observed in our pilot study that although, the overall amount of instructional time was above Flander’s Law in terms of maximizing time in instruction (a critical component of academic learning time), Durkins’

seminal findings of the lack of reading comprehension instruction continue. Even after 30 years of literacy research generating a set of best practices, such as use of cognitive strategy instruction, priming student background knowledge, or teaching morphemes to help students sound out multisyllabic words, there was little explicit reading instruction. As reported, study classrooms were rich in literacy activities, including use of oral reading to the class and independent reading, but failed to include demonstration, modeling, or ability level practice with reading strategies. Given the importance of the changing literacy environment as a student with LD moves from elementary school, which is focused on literacy skill acquisition, to middle school, where literacy skill application and learning from content area texts is the concentration, this is likely an essential area for further study.

### **Implications for Practice**

**General Educators.** More specifically, the current investigations surface implications for specific groups to consider, including practicing general education and special education teachers, academics preparing preservice educators, and researchers developing interventions to improve student response to instruction. First, studies such as this help general educators to reflect on their practice. For example, teachers might consider how much time they are actually spending engaged in instruction with students, how much cooperative learning they are using, or how often students are able to provide rich and deep answers to thoughtful questions requiring utterances of longer than ten seconds. More specifically, teachers might first consider how much time they are losing for transitions during a typical class period, as estimates of allocated time for instruction is not always the actual amount of learning time students experience. Pilot data in this study indicates that even with 80% of time engaged in instruction, there is still nine to ten

minutes of lost time each day. During the course of a 180 day school year this can mean as many as 36 lost days of instruction in 45 minute classes.

A second consideration for general educators, especially those trained in a constructivist paradigm, is to reflect on how important it is for instructional time to include student voices. Generally, teachers indicate a preference for student engagement through vocal participation, but pilot data in our study demonstrates that sixty to seventy percent of time was spent with teacher talk and only eight percent of time (approximately 3 minutes per class) involved student talk. Further, through use of video coding like that demonstrated in this article, teachers might be able to reflect on what it would mean if (a) cooperative learning happens only for excessive periods of time (20+ min) without short Think-Pair-Share like opportunities, or (b) ping-pong guided instruction in which student responses average approximately 4 seconds in length due to the most common interactions being short, low-level cognitive responses to factual questions passes from teacher to student and back to teacher.

Finally, as indicated previously, given the desire for students to develop independent skills, teachers may reflect on how much their pedagogical practice varies from day to day. For example, using the Explicit Instruction framework outlined in Archer and Hughes (2011), one might simply consider the changes in teacher talk to student talk as a teacher mediates instruction through the I Do, We Do, You Do framework. Clearly, changes over time could be expected in the level of student talk.

**Special Educators.** Similarly, this pilot data may have important implications for special educators. Drawing from the framework for special educators as interventionists set by Simonsen and colleagues (2010), special educators observing Tier 1 classrooms are well positioned to provide professional development, consult as peer coaches, and collaborate with general

educators. First, special educators are uniquely positioned to have both deep knowledge of the characteristics of students with SLD but also the pedagogical practices that will help them be successful. Working from this background knowledge, special educators might offer professional development in (a) ways to minimize transitions, (b) increase mediated instruction over consecutive days of instruction, or (c) models of collaborative learning that increase student-student on-task talk.

A second area of support is to consult as a peer coach, including offering performance feedback. Special educators might provide a safe, peer-level opportunity for collaborative reflection on practice by (a) pre-conferencing around goals and expectations (asking teachers to first estimate their own tendencies towards amounts of instructional time, teacher talk and student talk), (b) facilitate or actually video record the lesson, (c) co-view the lesson together, examining desired variables, (d) provide a set of self-reflection questions for the teacher to react to when analyzing the data from the video, and (e) co-construct a goal oriented plan for moving forward to maximize time in instruction and balance between student and teacher talk.

The third area special educators might serve as interventionists in is to collaborate on screening students for risk and areas of strength. Large amounts of classroom time spent with a teacher talking and minimal student-student engagement may be artifacts of general education teachers continued teaching to the middle--asking and answering questions as a ping-pong approach to instruction that only provides surface level engagement. Instead, special educators could help teachers to screen students for risk, but also areas of strength, so that flexible and pre-established cooperative learning groups might be used more efficiently to navigate the allocated time in instruction with more balanced approach to each.

**Pre-service Educators.** A critical element of training preservice teachers, especially those certified for upper elementary school (grades 4-6) includes helping pre-service teachers to understand the structural challenges students will experience in middle school, such as switching classes, having multiple teachers, and an emphasis that shifts in terms of literacy from early skills for reading to application of skills to acquiring content knowledge. Further, when observing practice, pre-service educators can fill the same roles as the special educator by playing the role of a professional developer during formal course work or internships, or a consultant by providing coaching and performance feedback in objective areas. Further, pre-service educators can begin to instill in early career teachers the importance of learning how to implement an objective, data-driven process to inform self-reflection (rather than the adolescent navel gazing or self-critical unhealthy critique that is so common) as preservice teachers become professionals.

**Researchers Developing Interventions.** In the current era of RtI/MTSS, some have argued that interventions developed to improve student outcomes are impossible to implement with fidelity. On occasion, it can be true that interventions are poorly designed to fit the reality of the middle school classroom. That is, if we approach teachers, who are already wary of researcher “outsider” perspective, with a set of interventions that are too long or require dramatic shifts in how time is spent, we risk design failure at the onset that will inevitably prohibit any hopes of “scaling” up. Consider the following example related to our pilot data: With 45-minute classes but only 36 minutes on average of actual instructional time, interventions of longer than 30 minutes will be difficult to complete consistently. Further, with teacher pushback on scripted curriculums, a 30 minute script will statistically need each of the 36 minutes available (30 min x 1.2 for lost time). Further, given that as students get older the more difficult it is to remediate

deficiencies, 30 minute interventions will likely not be sufficient thus requiring some kind of structural change in schools to create an opening for longer instructional periods that can both provide necessary skill development and count for school credit. Additionally, with StS interactions averaging 3 minutes per day, well designed interventions with longer blocks of collaborative learning may be unwelcome resulting in limited levels of fidelity.

### **Current Limitations**

There are several limitations in the design of this pilot study. First, data collection occurred in a limited number of classrooms over consecutive days. While others (e.g., Swanson & Vaughn, 2010) have captured data over three days, it is usually set over an extended period of time (weeks or months). In our investigation, the focus was on teacher behavior in a brief period of time to note how or if changes in pedagogical components change over a short period of time. It is possible the intervals were too short and data collection would benefit from extending data to five days or more with samples throughout the year. Moreover, the volunteer teachers for this study represented a convenience sample of volunteers who may have been disproportionately good at the desired teaching behaviors, not reflecting the overall norms of the larger body of teachers in their DRGs. Second, teachers were not specifically told what variables we were looking for. This was an attempt to capture the naturalistic setting during data collection. However, knowing that the camera in general and ongoing recording specifically can impact individual behavior, teachers may have altered their behavior. This is a second reason why data was collected over consecutive days to help teachers (and students) feel more comfortable with the equipment. A third limitation in the current study was the binary approach to data coding. While the coding of the three variables (e.g., Instructional Time vs Non Instructional Time) was highly reliable it may have only captured a small amount of what was happening in the

classroom. A more descriptive model of coding might be able to focus more on quality of instruction over quantity. As an example, much of the instructional time included extended periods of time with teachers merely reading out loud to middle school students (also sustained silent reading and long periods of unsupervised independent work). Inclusion of such behaviors may have inflated some of the overall levels of instructional time, yet as questionable for students as it was, it was not accompanied with any self-regulatory or strategy instruction nor student products to judge efficacy.

In conclusion, this study presents a promising source of reliable data for describing secondary English Language Arts classrooms. Students of all learning abilities are entitled to the best education possible, but in the current education system questions are raised about how time is being spent and whether or not practices align with those that benefit students with SLD. Large shifts in the amount of opportunities students have to talk, ask deeper level questions and interact with their peers likely need to increase. All teachers have the ability to make the shift from heavy amounts of TT, to giving students the power to take charge of their own learning.



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Table 1. Examples and Non-examples of Instructional Time

<b>Instruction</b>	<b>Non-Instruction</b>
<ul style="list-style-type: none"> <li>• Giving directions</li> <li>• Lecture</li> <li>• Teaching a lesson</li> <li>• Guided reading</li> <li>• Teacher demonstration</li> <li>• Teacher to student feedback</li> <li>• Presentation</li> <li>• Reviewing</li> <li>• Mini lessons</li> <li>• Correcting</li> <li>• Guided discussion</li> <li>• Writing/reading workshop</li> <li>• Reading aloud</li> <li>• Independent work during instructional time</li> <li>• Independent silent reading</li> <li>• Student demonstration</li> <li>• Cooperative learning</li> <li>• Watching a video with instructional content</li> <li>• Clarifying</li> </ul>	<ul style="list-style-type: none"> <li>• Transitions</li> <li>• Brain break</li> <li>• Assessment</li> <li>• Tests</li> <li>• Quizzes</li> <li>• Recess</li> <li>• Morning introduction</li> <li>• Personal anecdotes/stories</li> <li>• Projects</li> <li>• Performance</li> <li>• Talk not related to instruction</li> <li>• Behavior/redirecting</li> <li>• Announcements</li> <li>• Teacher to teacher talk</li> <li>• Off topic comments</li> <li>• Miscellaneous classroom business EX: taking roll, collecting field trip money and passing out papers</li> </ul>

Table 2. Student Demographic Data Table

DRG	G601	G602	C601	C602
Total number of students	26	23	23	21
High achievers (above grade level reading level)	5	6	8	13
At risk students	3	3	5	8
Students with disabilities	1 with SLD	6 students, ADD or ADHD, 4 students in 504	4 students with SLD or ADHD 2 students with 504	7 students with disabilities
Gender	M: 13 F: 13	M: 12 F: 11	M: 11 F: 12	M: 10 F: 11
Ethnicity	White:26 Hispanic: 0 African American: 0 Asian American: 0	White:18 Hispanic: 2 African American: 3 Asian American: 0	White:19 Hispanic: 0 African American: 2 Asian American: 2	White:20 Hispanic: 0 African American: 1 Asian American: 0
ELL	0	0	1	0

Table 3. Instructional Time Table

DRG	High	Low	Other
C601	91.4%	63.2%	63.4%
C602	91.0%	76.8%	80.2%
G601	90.6%	71.2%	78.2%
G602	87.1%	78.1%	81.2%
% Average Instructional Time DRG C		77.7%	
% Average Instructional Time DRG G		81.1%	

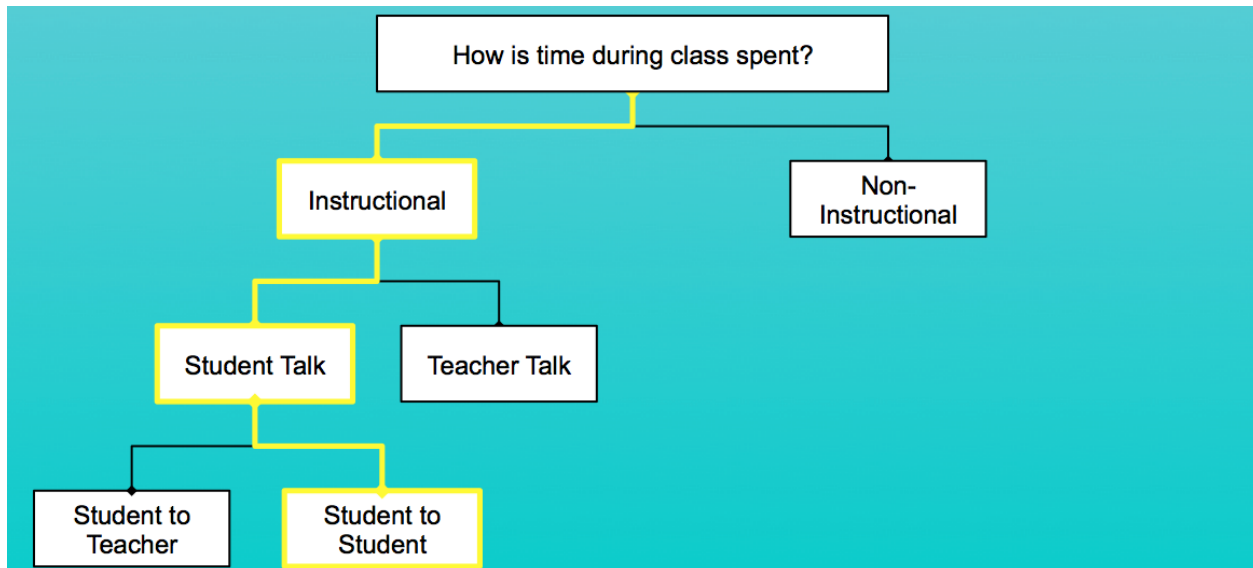


Figure 1



*Figure 1. Editing frame from the Vosaic online coding system showing four levels of coding and the questioning screen for IOA.*

Figure 2



*Figure 2. Pictorial representation of binary coding relationships observed in this study. Yellow track indicates hypothesis of preferred learning arrangements.*