Article

Reading Comprehension Instruction for Adolescents with Learning Disabilities: A Reality Check

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Abstract: Reading comprehension is a significant concern for adolescents with learning disabilities (LD), particularly in secondary schools in the United States (US) where content is taught primarily through textbooks. Surprisingly little is known about the actual reading instruction for students with LD in secondary classrooms. Thus, the purpose of this study was to examine the reading comprehension instruction in US secondary special education classrooms. Eight special education teachers in urban high schools were observed and interviewed. Findings showed that teachers implemented a number of reading comprehension practices, not all were considered "best practice". The most frequently observed practices included reading aloud, questioning, seatwork, activating prior knowledge, and using graphic organizers. Explicit instruction in how and when to use reading comprehension strategies, however, was not observed. This study reveals the extent to which evidence-based reading comprehension practices are not making their way into secondary reading classrooms and offers insight into factors that teachers state as influencing their instruction for students with LD.

1. Introduction

Students with learning disabilities (LD) face an extraordinary set of challenges as they transition to secondary school where content is emphasized and adequate literacy skills are assumed by many content area teachers [1]. In many secondary level content area classrooms in the United States (US), teachers typically expect students to learn the content primarily through the reading of expository text [2]. Given that many students with LD find these expository texts more difficult to comprehend than narrative texts, learning from these content area texts poses a significant challenge for students with LD who already have reading difficulties. With each grade level, students with LD are presented with thicker and more complex text [3] that have readability levels at or above grade level [4]. This in turn leads to an ever-increasing discrepancy between the reading level of the students with LD and the readability of the text [4]. Therefore, students' achievement in secondary classes is greatly impacted, since students' ability to comprehend a range of complex texts is highly correlated with academic success [5]. Compounding the difficulties posed by accessing these texts, students with LD also experience other academic challenges, including: (1) higher rates of absenteeism; (2) lower grade point averages; (3) higher rates of course failure; (4) lower self-esteem; and (5) higher rates of inappropriate behavior all which impact their academic achievement and motivation to excel [6].

In the US, students with LD comprise over 40% of all students receiving special education services [7] with a significant number of adolescents with LD experiencing difficulty comprehending what they need to read in their classes. Research suggests that this difficulty may be due to difficulties in several areas, including: (a) general background knowledge; (b) knowledge of common text structures, such as narrative and expository texts; (c) vocabulary knowledge; (d) reading fluency; and (e) task persistence [8]. An alternative perspective argues that these challenges are more accurately described by inefficiency rather than deficiency, meaning that although students with LD possess the required cognitive tools to process information, they tend to do so very inefficiently [8]. Many students with LD lack the information-processing skills required to comprehend complex text [9]; thus it is theorized that this breakdown occurs during strategic processing and metacognition [4].

Reading comprehension requires the ability to decode words, read fluently, and use active strategies to understand the meaning of printed text [10]. Successful readers monitor their comprehension while they read, allowing them to make connections to prior learning and activate fix-up strategies when their comprehension breaks down [11]. Many students with LD, however, are believed to be inactive readers who may lack the metacognitive skills that their proficient reading peers have [4]. Therefore, most students with LD require academic literacy instruction throughout secondary school to successfully read required texts [12,13] with research showing that when these students are provided with explicit instruction and practice in reading, they can improve their independent reading and comprehension of text [14].

The relationship between reading comprehension and reading disability has been debated for over a century and current research suggests that this relationship is more complex than previously thought [15]. Several models have been proposed to fully explain the construct, including cognitive-processing models, socio-cognitive models, and transactional models. In Rumelhart's [16] cognitive-based model, the interactive model of reading, the reader considers information from several sources simultaneously to construct meaning from text. This model suggests that when information from one source is deficient,

the reader relies on another, stronger source. Lipson and Wixson [17] later extended this model to design the interactive model of reading disability. This model places comprehension at the intersection of text, reader, and context, and argues that the reader is only temporarily affected by the disability, given a specific text, task, or situation. From this perspective, reading difficulties lie in the instructional context rather than within the reader, underscoring the role of the teacher. This model has been validated by others who suggest that "the ability to comprehend written texts is not a static or fixed ability, but rather one that involves a dynamic relationship between the demands of texts and the prior knowledge and goals of the reader" [18] (p. 3).

1.1. Reading Comprehension Instruction

Over the past few decades, a significant number of studies designed to identify evidence-based practices in reading comprehension instruction for students with LD have been published, including literature reviews, research syntheses, and meta-analyses [8,19–25]. This body of work has significantly improved our understanding of the most effective instructional components, as well as techniques for teaching adolescent students with LD to comprehend what they read across content areas [26,27]. In particular, we know that adolescence is not too late to intervene and that older, struggling readers, including those with LD, benefit from interventions [28]. A number of promising practices have been found to be quite effective for students with disabilities in secondary schools [29]. We know that comprehension can in fact be taught, and that vocabulary and comprehension strategy instruction is effective for students [21,23,30]. The ability to determine what strategies to use and when is characteristic of good readers and can help challenging readers [31]. For expository text, high effect sizes have been found for content enhancements and structured cognitive strategies. These tools enable students with LD to compensate for the information-processing challenges they experience.

Some of the most effective content enhancements for content area comprehension have been graphic organizers or semantic feature analyses and mnemonic illustrations [20]. Cognitive strategies have also been very effective for improving reading comprehension for students with LD. A cognitive strategy is a "mental routine or procedure for accomplishing a cognitive goal" [32] (p. 347). Cognitive strategy instruction emphasizes teaching students how to learn rather than mastering content. Although several single strategies such as identifying main ideas or developing main idea sentences through paraphrasing or summarizing have had positive outcomes (mean ES = 2.56, SD = 1.09, *n* = 6), larger effect sizes have been associated with instruction involving multiple strategies [20]. Another effective approach to comprehension instruction is to teach the strategies that "good readers" use [33]. These include: (a) reading words rapidly and accurately; (b) noting the structure and organization of text; (c) monitoring understanding while reading; (d) using summaries; (e) making, checking, revising, and evaluating predictions; (f) integrating prior knowledge with new learning; and (g) making inferences and using visualization [34].

Perhaps the most widely cited approach for improving the reading comprehension for struggling adolescent readers, however, is comprehension instruction that is direct, explicit and strategic [20,28,35–38]. Explicit comprehension instruction includes a direct explanation of the strategy, teacher modeling, guided practice, and independent application [39]. Explicit comprehension strategy instruction teaches

students how to actively monitor their understanding of text during and after reading through questioning and reflecting [40].

Collectively, this research demonstrates that a variety of individual and multiple strategies and instructional components are highly effective for improving reading comprehension for students with LD. This same research, however, also indicates that it is not the particular strategy or method as much as it is the teacher's use of the practice that makes it effective [22]. It is imperative, therefore, that teachers are knowledgeable about evidence-based reading interventions and implement them "accurately, consistently, and intensively" so as to enhance reading comprehension for students with LD [41] (p. 2).

1.2. Purpose of Study

The experiences of struggling adolescent readers with LD, coupled with what we know about the literacy demands of secondary school, reveal the magnitude of the problem and emphasize the importance of providing intensive, explicit, evidence-based reading comprehension instruction in secondary school classrooms. Despite the reality that the majority of secondary students require some form of reading support [35], reading instruction is not typically provided at the secondary level in the US [36]. In secondary schools, "the responsibility for teaching reading and writing often seems to belong to no one in particular" [42] (p. 15) and instruction generally moves forward regardless of whether or not students have mastered the material [6]. Although reading comprehension instruction can improve students' retention and understanding of the domain-specific information in secondary content-area classrooms [42,43], secondary teachers report that they are not adequately prepared to teach reading instruction at this level [44].

Previous research on reading instruction for students with LD has focused heavily on elementary resource rooms [45]. For decades, the resource room has been the primary setting for special education for students with LD [46]. Observation research has consistently deemed the amount and quality of reading instruction inadequate for the populations served, citing little to no evidence of comprehension or strategy instruction [45]. Researchers have described this scenario as a disconnect between evidence-based reading instruction and what actually happens during reading instruction for students with LD [47]. In light of these results at the elementary level, surprisingly little is known about what reading instruction for students with LD looks like in secondary classrooms. In a synthesis of 21 observational studies on reading instruction [47], only two studies were conducted in secondary classrooms [48,49].

Fortunately, reading research has identified a number of evidence-based reading interventions that have been beneficial for this population. The extent to which these practices have made their way into secondary classrooms, however, remains unclear. Swanson suggested, "As the field continues to identify essential components of reading instruction for students with LD, it will be important to document implementation in classrooms where students with LD are served. In other words, is what has been described in research making its way into classrooms?" [47] (p. 131).

Therefore, a study that extended previous research on reading instruction for students with LD to the secondary level in urban high schools was required. Thus, the purpose of this study was to document the reading comprehension instruction provided in US special education reading classrooms to adolescents with LD and identify the factors that influence instructional decisions. This study was guided by the

following questions: (a) What reading comprehension instruction strategies, practices, and activities do special education teachers implement in special education reading classrooms for students with LD? (b) What factors do special education teachers state as influencing their use of the observed reading comprehension instruction strategies, practices, and activities?

2. Methods Section

2.1. Setting and Participants

The study was conducted in a large, urban school district in the US where almost 90% of the total population was identified as African American and/or Latino. Approximately 13% of the students had IEPs and over 54% of special education students were identified with LD [50]. Purposeful sampling was used to identify secondary schools that met the following criteria: (a) school population reflected the diversity of the district (at least 75% of the population was African American and/or Latino and over 80% was low income; and (b) a neighborhood school (rather than charter schools, magnet schools, or selective enrollment schools). The research occurred at six neighborhood high schools whose overall average student population was 951 (range = 370 to 2350) with an average of 18% of the students having an IEP (SD = 6.2). Across these six sites, 66% of the students were Latino and 30% were African American. The mean dropout rate was 6.7% (SD = 7.6) and the mean graduation rate was 74.4% (SD = 15.0).

All eligible teachers at each school participated in the study, which consisted of eight special education teachers, five of whom were female. All teachers held a Master's degree and a special education teaching certificate. Teachers averaged 10.8 years (SD = 8.3) of teaching experience and 4.4 years (SD = 4.5) teaching a reading course for special education students. None of the participants were certified to teach reading, although one teacher was currently working toward this certification. To maintain participant confidentiality, all teachers have been given a pseudonym. Additional information for each teacher is presented in Table 1.

Table 1. Teacher Demographics.

Teacher	Total years teaching	Years at school	Years teaching reading	School
Angela	12	4	3	A
Cathy	5	4	4	B
Ethan	0.25	0.25	0.25	C
Laura	6	2	4	D
John	26	0.25	5	E
Miguel	16	16	15	E
Rachel	5	2	2	F
Rebecca	16	1	2	F

All eight participants taught a reading class to ninth grade students with IEPs in a separate special education class setting. This reading course was offered as an elective that all ninth grade students (general or special education) in the district could select; however schools could decide on their own to make it a requirement for all students. In many cases, schools offered separate reading classes for general and special education students. Secondary students typically received 250 min of instruction per course

per week in this reading course. Although available information on the details of this course was limited, a district document outlined the fundamental objectives across all grade levels in the core content areas in alignment with the Common Core State Standards for Reading and Language Arts. The learning targets for comprehension stated that "by the end of grade nine, students will: synthesize and analyze information using text features of supplementary text; analyze and explain author's use of specific literary devices to convey meaning in texts; infer the main idea and support with evidence from the text; infer an author's unstated meaning and draw conclusions about the author's purpose; interpret and evaluate text; compare and contrast information from multiple texts; and predict probable future outcomes supported by the text" [51] (p. 13). This document was the only guidance provided to schools and teachers about the course; thus it left each teacher with much flexibility regarding the focus and structure of the course.

2.2. Data Sources

2.2.1. Teacher and Class Profile

The Teacher and Class Profile was designed for this study to gather demographic data including teaching position, years of teaching experience, education history, certification, and disabilities/characteristics of students in the observed class. Additionally, the profile solicited information about the reading course including its purpose, the curriculum, and composition of the class. This form was shared with teachers once they agreed to participate in the study and was collected once prior to the first observation.

2.2.2. Lesson Profile

Teachers completed a Lesson Profile before each of the three scheduled observations. On this profile, teachers were reminded that each observed reading lesson should incorporate activities that include written text. The Lesson Profile called for teachers to identify important elements of the lesson to be observed, including lesson objectives, materials, text type, comprehension instruction practices, strategies and/or activities, and accommodations/modifications. Teachers were asked to submit the profile prior to the observation and the data gathered was used to familiarize the observer to what the lesson would consist of and also served as support for interviews. These were brief in nature and were not analyzed. In addition, due to a variety of circumstance teachers did not always follow the plan activities on the Lesson Profiles. A total of 24 Lesson Profiles were collected during the study.

2.2.3. Reading Comprehension Instruction Fieldnotes Template

Each teacher was observed three times teaching a lesson to the same class of students. The observations (n = 24) were scheduled ahead of time and lasted for a period, averaging 47 minutes (range = 35–65 min, SD = 7.2). The template was used to describe the instruction during each observation and encompassed both descriptive and reflective fieldnotes to document specific reading comprehension strategies, practices, and activities. Reading comprehension strategies are "specific procedures that guide students to become aware of how well they are comprehending" as they read written text [52]. For example, students may be taught how to generate and answer questions as they

read as a way to monitor whether they comprehend the text. Reading comprehension practices and activities describe ways that teachers and/or students engage with text that may promote students' comprehension. The observer took continuous notes during the period of all the instruction that was happening in the class, paying particular attention to comprehension instruction, but noting any type of instruction. The template was divided into five-minute segments, which allowed the observer to note what instruction was occurring during each segment [53]. A silent timer was used as a prompt for the observer to move into the next section of the template after five minutes, which helped organized the notes into five-minute blocks.

Prior to starting the study, the researchers piloted the template during two separate reading lessons with ninth grade special education teachers. These observations served to establish interobserver agreement. Interobserver agreement was calculated by summing the number of agreements (when both observers recorded the presence/absence of instructional behaviors) and dividing them by the total number of agreements and disagreements. The average interobserver agreement for the pilot was 88% (range = 81%–95%). After each observation, the researchers compared fieldnotes to verify that the same practices were observed and recorded. In the event that the fieldnotes differed, observers discussed the differences and reached a consensus about how to best describe the instruction. Notes were adjusted accordingly.

2.2.4. Interview Guide

The researchers conducted three audio-recorded interviews with each teacher, one following each lesson observation and asked questions related to the instruction that was observed. The mean length of the interviews was 22 minutes (range = 8 to 40 min, SD = 8.6). Using the interview guide approach [54], topics were identified in advance of the interview and aligned to the variables of interest in the research questions (*i.e.*, factors that influenced the comprehension instructional practices, strategies, and activities used in lesson). This approach was selected as it provided the interviewer with flexibility to explore a set of topics and was appropriate for illuminating particular situations observed during each lesson. Questions emerged from a review of literature on effective reading comprehension instruction practices for students with LD as well as a review of observational research on reading instruction in special education resource rooms. These questions were designed to elicit information about the factors that special education teachers identified as influencing their instructional decisions during the observed reading class.

Prior to the study, several special educators reviewed the interview guides to ensure that all items were open-ended and structured to elicit meanings and perspectives from the participants' points of view. Then the interviews were piloted with three special education teachers to refine the questions and check procedures. The interviews consisted of 11 prompts to guide the conversation about lesson that was observed. These ranged from obtaining teachers' perceptions of the lesson (e.g., How do you think this lesson went? Why? Do you think the students learned what you wanted them to learn? How do you know?) to more specific that focused on the instruction (e.g., What reading comprehension strategies did you teach during this lesson?; Were the reading strategies effective? How do you know? Tell me about why you decided to do [identify a specific strategy, practice or activity observed]). Although the interview guides had predetermined prompts, to the most extent possible, the researchers worked to

"listen actively and …move the interview forward as much as possible by building on what the participant has begun to share" [55] (p. 81).

2.3. Procedure

All data were collected over a two-month period during the fall semester with each teacher observed no more than once per week. After consenting to participate in the study, teachers were asked to identify the reading class to observe and shared the weekly schedule for that class. Participants then completed the Teacher and Class Profile for the selected reading class. Lesson observations were scheduled as agreed upon by the researcher and the teacher. Once scheduled, participants completed their Lesson Profiles prior to the observation. Each teacher was observed teaching the same reading class to the same group of students for the duration of the study.

On the day of the observation, the researcher entered the classroom during the passing period before the lesson and located a nondescript seat near the back of the room. The researcher collected data on the instruction that occurred during the observed lessons using the Reading Comprehension Instruction Fieldnotes Template. Once the lesson began, the time was recorded and a five-minute interval recording system was activated. Both descriptive and reflective fieldnotes were recorded to describe events as they unfolded in the classroom. The descriptive fieldnotes included descriptions of the classroom, teacher, students, and all instructional activities during the lesson. Because comprehension instruction was the focus of this study, direct quotations from the teacher regarding reading comprehension strategies, practices, and activities were also recorded. Descriptive fieldnotes were written to clearly describe the type of instruction that took place during each five-minute segment. The reflective fieldnotes included any personal feelings or reactions that arose during the observation, as well as any insights or interpretations about what was happening.

To further investigate the reading comprehension practices, teachers participated in an interview with the researcher following each observation. The purpose of the interview was to better understand teachers' instructional practices and decision making with regard to reading comprehension and the specific needs of their students with LD. During this time, teachers had an opportunity to illuminate the factors that influenced their instructional decisions to implement the observed reading comprehension instruction strategies, practices, and activities. All interviews were audio recorded to facilitate active listening and were later transcribed for data analysis. As compensation for participating in the study, teachers received $50, as well as a $200 store gift card for instructional materials upon completion of the final interview.

2.4. Data Analysis

In analyzing qualitative data, the researcher must examine, categorize, synthesize, conceptualize, search for patterns, and integrate the data with existing theories or form new theories [56]. Data analysis was guided by the work of Miles and Huberman [57] (p. 10) in which analysis consists of "three concurrent flows of activity: (1) data reduction; (2) data display; and (3) conclusion drawing/verification". During the first flow, codes were developed from the initial data. In the second flow, the information was organized into a visual display and conclusions can be drawn about patterns and themes across the data. Finally, in the third flow, the original data were reviewed in an effort to

confirm or deny any theories, assertions or hunches that emerged during the process. Once the observation fieldnotes and interview audiotapes were transcribed, they were immediately imported into NVivo 9 and the process of initial coding began.

Member checking, the process of sharing data with participants to confirm if a description is complete and realistic [58] or that they are being accurately represented [59], were conducted. These checks can be formal or informal. In this study, the fieldnotes collected during the observation were summarized and shared with each teacher during the follow up interview. At this time, teachers were asked to confirm that the strategies, practices, and activities were accurately described. Similarly, at the end of each interview, participants were asked to confirm or amend any statements given during the interview. When provided with these opportunities, all teachers agreed with the accuracy of both the observation and interview data collected.

Because of the descriptive nature of this study, a theoretical framework was required to capture the multiple dimensions of reading comprehension instruction. Reading comprehension is an active and purposeful process that can be taught through explicit teaching and modeling of the strategies that good readers use. Data analysis occurred throughout the process of data collection and a coding system was developed to most effectively describe the reading comprehension instruction that emerged; regardless if the instruction aligned with best practices. Although these codes emerged from the data, many of the descriptions were modified from previous work [40,52,60,61].

Although sensitizing concepts gleaned from the research framed this study, it quickly became clear that applying deductive "best practice" codes would restrict the data being collected, particularly because teachers were identifying and using practices and activities as comprehension instruction that may not be typically considered in the literature as comprehension instruction (independent seatwork, student and teacher read aloud). Therefore, descriptive coding was used to best capture not only reading comprehension strategies, but also comprehension practices and activities as they emerged, both within and across teachers, as the primary goal of descriptive coding is to help the reader "see what you saw", "know what you know", and "understand what you think you yourself have understood" [62] (p. 412). Descriptive coding was also applied to the transcribed interviews to capture influential factors as they emerged from the data. The data were analyzed using both within-case and cross-cases analysis.

The full fieldnotes were read and a coding scheme based on the strategies, practices, and activities related to reading comprehension as identified in the literature and by the teachers themselves was developed. All the observation field notes were reviewed, but data were only coded if it focused in some way to reading comprehension instruction as identified by researcher or the teacher. Given that a particular strategy, practice, or activity could range in duration during a class period, only one code identifying the category of comprehension instruction was assigned to each instructional strategy, practice, or activity observed during each five-minute segment, with the exception of questioning. Therefore in any given five minute block, one or multiple codes could be assigned depending on what was happening during that time. However, a particular code could only be used once during each time block. All eight teachers commonly implemented teacher-generated questions and questions were additionally coded by type—recall or inference; thus each question asked was coded individually. Once all observation data were coded, each five-minute segment was reviewed to identify if reading comprehension instruction was present and if present what types of reading comprehension strategies, practices or activities were implemented during that segment [53]. Interrater reliability data were

collected on 25% of the observations and interviews. Interrater agreement for the observation data was 91% (range = 78%–100%) and for the interview data was 88% (range = 79%–100%).

3. Results

3.1. The Reading Classroom

Over the course of two months, a total of 1120 minutes of reading instruction were observed across eight self-contained special education reading classrooms in six urban high schools. Class periods averaged 47 minutes (range = 35–65 min, SD = 7.2), classes had an average of 7.5 students with disabilities (range = 5–14 students, SD = 2.9), and no general education students were enrolled in the class. Seventy percent of the 60 students were male, 63% ($n = 38$) of the students were African American, 32% ($n = 19$) were Latino, and 5% ($n = 3$) were white. In the observed classrooms, 90% ($n = 54$) of the students were identified with LD (M = 7, SD = 3.2) with the remaining students being identified having other disabilities. As identified by teachers, the reading abilities for students in the observed ninth grade classes ranged from non-readers to fifth grade level (see Table 2 for additional class demographics).

Table 2. Classroom Demographics.

Teacher	Class Size	Male	LD	Black	Latino	White
Angela	6	3	4	6	0	0
Cathy	7	6	7	1	6	0
Ethan	5	4	4	1	4	0
Laura	6	5	6	1	2	3
John	6	1	6	1	5	0
Miguel	7	6	7	6	1	0
Rachel	14	11	14	14	0	0
Rebecca	9	6	6	8	1	0

The classroom environments in which the observations were conducted also varied. Five of the eight classrooms were smaller in size than typical classrooms found in the schools. In four of the eight classrooms, students sat around one large table during instruction. In another three classrooms, students sat in traditional student desks. In the remaining class, students sat at small tables in groups of three to four. Three of the teachers taught only separate special education classes and taught in the same room all day. These three classrooms were decorated with classroom expectations, reading posters, and anchor charts and had small classroom libraries that students could select books from. The remaining five teachers, however, taught both special education and co-taught classes and moved from room to room throughout the school. Consequently, these five teachers shared their reading classrooms with other teachers. This shared space was evident in the variety of posters and student work that adorned the walls, representing several content areas, including reading, math, social studies, and science.

3.1.1. Purpose of Reading Class

All eight teachers taught the same ninth grade reading course. When teachers were asked to identify the purpose of this reading course, however, responses varied significantly. Three stated the primary

focus as improving reading skills and strategies, and another three teachers identified improving students' reading fluency. One teacher indicated that the course was intended to "master the college readiness standards" and another stated that the purpose of the course was to "provide modified reading and writing instruction". Teachers also identified other purposes, including increasing students' reading vocabulary, strengthening students' metacognitive skills, and improving their grammar. Only one teacher additionally stated that the purpose of the reading course was to improve reading comprehension.

3.1.2. Lesson Objectives

Just as teachers identified different purposes for the reading class, lesson objectives also varied. A total of 52 lesson objectives were identified for the 24 observations. Teachers identified a single objective for nine of the lessons and multiple objectives were identified for the remaining 15 lessons. Of the 52 objectives, 73% ($n = 38$) were related to assisting students improve their comprehension of reading material. Of these objectives related to reading comprehension, the most frequently identified were vocabulary development ($n = 6$), identifying supporting details ($n = 6$), character development ($n = 5$), and identifying the main idea ($n = 5$). Additional comprehension objectives were devoted to previewing the text, making predictions, identifying the purpose, sequencing events, determining the cause and effect, and identifying question types. The remaining 14 objectives did not relate to comprehension instruction and instead focused on grammar, fluency, and writing.

Two teachers maintained the same lesson objectives throughout the study. John, for example, identified the following objectives for all three lessons, stating that his students would be able to: "gain appreciable reading fluency and comprehension, gain appreciable vocabulary knowledge, and gain insight on particular details in passages". Miguel also identified the same objectives for all three of his lessons, stating that his students would be able to: "identify the main idea of a passage, identify supporting details of a passage, and have a better understanding of meanings of words". Similarly, Ethan identified the same objective for his last two lessons, stating that his students would be able to "determine cause and effect and extract the main idea from a fictional passage". All other teachers, however, identified different objectives for each lesson.

During each observation, notations were made to indicate if the instruction included at least one strategy, practice, and/or activity to assist students in meeting the lesson objectives outlined by the teacher. In all the lessons there was a part of the instruction that appeared to focus on at least one the identified lesson objectives. For example, Angela identified the following objective for her first lesson: "Students will be able to use dialogue to identify character traits". During this lesson, students read a short passage, selected a character, and highlighted their character's dialogue. They then selected and analyzed four quotes to determine the best trait to describe their character. In nine of the lessons, although the objectives were worded "students will be able to", instruction was primarily teacher-centered and students did not actively engage in the strategies, practices, and/or activities related to the lesson objective. For example, five objectives stated that students would be able to identify the main idea of a passage. However, students were never observed being taught how to identify the main idea, nor were they explicitly asked to identify the main idea. Instead, teachers summarized reading sections for their students or asked students to recall facts directly from the text. Similarly, six objectives stated that students would be able to increase their vocabulary. However, instruction during these lessons

predominantly consisted of student read aloud. When students stumbled over a word, the teacher stated the correct pronunciation and occasionally provided students with a brief verbal definition or example. Students were not instructed to interact with these vocabulary words beyond listening. Two of the lesson objectives identified in the Lesson Profiles were not incorporated into classroom instruction: one objective related to exploring the author's purpose and the other related to comparing and contrasting characters. In general, it was noted that the stated objectives of a lesson and the practices, activities, or strategies implemented in class showed no relationship to each other with teachers typically using very general practices, such as reading aloud, for a variety of objectives.

3.1.3. Texts

The types of texts read during these lessons also varied. Texts included novels (e.g., House on Mango Street, Call of the Wild), plays and screenplays (e.g., Romeo and Juliet), short stories (e.g., "Thank You, Ma'am"), graphic novels (e.g., Manga Shakespeare: Romeo and Juliet), magazines for adolescent readers (e.g., Reading Advantage Motions Magazine), and reading passages from standardized tests (e.g., ACT). Of the 24 lessons, narrative texts only were read in 17 and expository texts only were read in three. In two of the lessons, both narrative and expository texts were read. The remaining two lessons focused exclusively on grammar and the text in use was related to the grammar activity. In one lesson students were provided with worksheets; in the other students were given a printed copy of a PowerPoint presentation.

3.2. Reading Comprehension Instruction

Although all the comprehension instruction observed did not represent "best practices", if teachers indicated it as a means they used to enhance students' comprehension it was classified as a comprehension practice or activity, regardless of quality of instruction. Thus, reading comprehension instruction strategies, practices, and activities were observed being implemented at least once during 83% of the five-minute segments across lessons. Teachers were observed using 13 different types of reading comprehension strategies, practices, and activities including reading aloud, questioning, and activating prior knowledge. During the remaining 17% of the segments, however, reading comprehension instruction was not observed. Instead, this class time was devoted to transitioning, behavior management, and non-comprehension related assignments. All observed practices fit into these 13 categories with no other comprehension practices observed. Table 3 presents a breakdown of the frequency of each reading comprehension strategy, practice, and activity. These percentages reflect the frequency of each category of the total reading comprehension instruction observed during the 161 segments across all 21 lessons in which comprehension instruction was implemented. The most frequent activity or practice observed was reading text aloud (14% students reading; 12% teacher reading) was and comprised 26% of the total comprehension instructional practices observed. Independent seatwork (16%) were also common practices in these classrooms, which indicated that 42% of the comprehension practices and activities observed where not necessarily typically evidence-based comprehension instruction. The practice of questioning (13%) and activating prior knowledge represented 10% of the reading comprehension instruction were the next common practices. Other practices observed included

using graphic organizers, summarizing, and annotating. A description and classroom examples of these categories follow.

Table 3. Reading Comprehension Instruction Categories.

Categories	Description	Frequency Observed
Activating prior knowledge	Teacher instructs students to draw on their own experience or knowledge of a topic/situation.	10%
Annotating	Teacher instructs students to actively engage with written text while reading by underlining, highlighting, circling, and taking notes.	5%
Graphic organizers	Teacher instructs students to organize concepts from text into a graphic representation.	9%
Independent seatwork	Teacher provides students with reading comprehension passages and/or worksheets to complete independently.	16%
Predicting	Teacher instructs students to make predictions about what will happen in the text or to determine the accuracy of the predictions made.	3%
Previewing	Teacher instructs students to preview the text features before reading (includes previewing text features such as titles, headings, pictures, captions as well as vocabulary).	4%
Question types	Teacher instructs students on how to identify different question types.	1%
Questioning	Teacher generates questions during or after reading specifically related to the content of text.	13%
Setting a purpose	Teacher sets a purpose for reading the text.	3%
Story structure	Teacher provides instruction on plot, sequencing, characters, and events.	3%
Student read aloud	Teacher instructs students to read the text aloud (one at a time).	14%
Summarizing	Teacher summarizes passages or identifies the most important concepts or events in a text.	7%
Teacher read aloud	Teacher reads the text aloud.	12%

3.2.1. Reading Aloud

Reading text aloud represented 26% of the comprehension instruction observed, making it the practice that was observed the most during comprehension instruction. Both the teacher and students were observed reading aloud. Student read aloud accounted for 14% of the comprehension instruction observed. Six teachers used the practice and individually selected students to read aloud in 11 of the 21 lessons. During student read aloud, all students and the teacher had access to the same text, and one student read aloud to the whole class while other students either followed along in the text or engaged in other non-instructional activities including sleeping, talking with each other, and doing work for other classes, often times with their books closed. Students read aloud until the teacher selected another reader or interrupted the reader to ask questions or to summarize the text.

Teachers also participated in reading aloud, accounting for 12% of the reading comprehension instruction observed. This practice was observed in 17 lessons and all eight teachers were observed reading aloud at least once. Most of the time, both teachers and students had the text in front of them. However, during three observations, only the teacher had access to the text. Additionally, while teachers read text aloud, students were not typically accountable for participating in the lessons and engaged in the same behaviors as when students read aloud. Rachel, for example, spent 15 minutes of one lesson reading aloud the first chapter of Schooled to the whole class. Her students did not have access to the text while she read and were instructed only to listen to the story. While Rachel read aloud, four students had their heads on their desks. After she finished reading the chapter, students were prompted to record three things they liked or disliked. Similarly, Miguel concluded two of his lessons by reading a chapter aloud from Freedom: Credos from the Road. During this time, Miguel was the only one with a book and his students were asked to just listen as he read aloud.

3.2.2. Independent Seatwork

Another commonly observed reading comprehension practice was for teachers to assign independent reading comprehension seatwork. Independent seatwork represented 16% of the reading comprehension instruction; it was assigned by five teachers and observed in 12 lessons. Independent seatwork described the practice of providing students with reading comprehension passages and/or worksheets to complete independently. Some of these assignments asked students questions about the text, and included open-ended and multiple-choice questions. Rebecca, John, and Miguel assigned independent seatwork in all three of their lessons. John's students, for example, completed a worksheet following a read aloud of Call of the Wild and "Thank You, Ma'am", in which students were asked to write about the concern, audience, purpose, tone, main idea, and supporting details. Another form of independent seatwork was observed in Ethan's class where students worked independently on computers. They accessed the Achieve 3000 program and completed a pre-assessment, read a short passage about Dred Scott, and answered several multiple-choice questions about the passage. Additionally, students were prompted to provide a written response and complete a word search. During this lesson, Ethan circulated the classroom and assisted students as needed. Although this program is designed to provide students with differentiated passages based on their reading level, all five students were provided with the same passage and the same questions.

The function of independent seatwork appeared to be a means of checking students' comprehension of what was read. However, this practice was typically observed toward the end of the lesson and often finished when the bell rang, signaling the end of class. Teachers either collected the worksheets or asked students to place their work in their binders. Rebecca was the only teacher who asked her students to share out after completing independent seatwork: "Ok. Let's stop here. Look at your responses. Discuss with your group mates what you have. Share your responses. You can even look back in the book."

3.2.3. Questioning

Teacher questioning was another common practice that was naturally integrated into both teacher read aloud and student read aloud. Questioning described teacher-generated questions that were asked during or after reading and that related specifically to the content of the text being read. Questioning

represented 13% of the reading comprehension instruction. Similar to teacher read aloud, the practice of questioning was used by all eight teachers and observed in 16 lessons. Of these questions, 57% were devoted to recall. Recall questions were low-level and asked students to recall factual and literal information directly from the text. All eight teachers asked recall questions. Students were often asked recall questions while the teacher or students were reading aloud such as "Who is this about?" "What time of day is it?" and "What happened at the end?" Similarly, questions prompting students to recall information were also asked after reading. John, for example, asked the following recall questions after reading Last of the Mohicans: "What year did this story take place?" "Who are Chingacook and Uncas?" and "What is the nation that the Indians are fighting?"

The remaining 43% of the questioning required students to make inferences. Seven teachers were observed asking students to make inferences and this practice occurred during 11 lessons. Inference questions observed were higher-level questions that asked students to draw conclusions by relating textual evidence to the reader's prior knowledge. Examples of inference questions asked included "How do you think the boys feel about the flashlight?" "What does this tell us about the character's interests?" and "What do you think is important to her?" Angela devoted the majority of her first lesson to asking students to make inferences about characters. During this lesson, students read a scene from the screenplay of "The Breakfast Club". After selecting a character and highlighting all of their lines from the dialogue, students selected four quotes and were prompted to identify character traits to describe each quote. Throughout the lesson, Angela asked her students questions such as "What does this statement tell us about Andrew?" "Why would he say this to Bender?" and "What can we infer about him using all of those big vocabulary words?"

3.2.4. Activating Prior Knowledge

In addition to questioning, all teachers implemented strategies, practices, and activities to activate students' prior knowledge. The practice of activating prior knowledge accounted for 10% of the reading comprehension instruction observed. This practice occurred when the teacher instructed students to draw on their own experience or knowledge of a topic or situation. Activities designed to activate students' prior knowledge were implemented at the beginning of lessons and were often labeled as a "Bell Ringer" or "Do Now". These activities were typically short (5–10 minutes in length) and prompted students to relate current learning to what they already know. Sometimes teachers activated students' prior knowledge by having them recall previously learned material. Examples of these prompts included "What do we know so far about [topic]?" "What did you think of the story yesterday?" "What was the most important event in chapter 16?" At other times, teachers engaged students in the lesson by having them make a personal connection with what they were reading. For example, before starting a new book in the Bluford series, Rachel held the book up and asked, "How many of you have read this book?" "What do you know about these books?" and "How do you think these characters are like us?"

3.2.5. Graphic Organizers

The use of graphic organizers comprised 9% of the reading comprehension instruction observed. Graphic organizers were used by four of the teachers and observed in seven lessons. During these lessons, students were given an average of 20 minutes to complete their graphic organizers. Graphic

organizers assisted students in organizing concepts from text into a graphic representation. A total of six different graphic organizers were used. Types of graphic organizers used included T-charts, plot diagrams, character charts, and prediction charts. In three of the lessons, the graphic organizers used were pre-made and students completed them before, during, and after reading. In the only lesson in which an activity focused on vocabulary, Cathy instructed her students to complete a graphic organizer on their own titled "Building Vocabulary: Predictions" from the Reading Advantage Student Journal. This organizer required students to select vocabulary words, predict definitions, and identify how the words were actually used in the text. In the remaining four lessons, the teacher instructed students to create their own graphic organizer. Angela, for example, provided her students with a large sheet of construction paper and guided them through the process of folding it to make six squares and writing the following labels in each of the squares: character traits, speech, thoughts, effect on others, actions, and looks. In pairs, students sorted quotes from specific characters into each of the categories. Finally, students used the information that they had organized to identify character traits. Ethan was the only teacher whose students were observed using the same graphic organizer across two lessons.

3.2.6. Summarizing

Summarizing was another reading comprehension practice implemented by seven of the teachers and observed in 13 lessons. This practice represented 7% of the reading comprehension instruction. Summarizing occurred when the teacher provided students with a verbal overview of a reading passage or identified the most important concepts or events in a text. Students were not explicitly asked to provide a summary of the text. However, teachers regularly summarized the text for students during reading with interjections such as "Ok. Here's what happened…" and "What he's saying is this…" During Ethan's first observation, he spent part of the lesson playing To Kill a Mockingbird on audio, stopping it seven times to summarize the scene or highlight important events for students, including identifying new characters, explaining what Atticus is afraid of, describing why Atticus told his children not to worry, and summarizing Scout's concern that a mob will hurt her father.

3.2.7. Annotating

Four teachers engaged students in the strategy of annotating text. This practice accounted for 5% of the reading comprehension instruction and was observed in six lessons. Annotating described when the teacher instructed students to actively engage with written text while reading by underlining, highlighting, circling, and taking notes. This process was used to encourage students to monitor their own comprehension as they read. All annotating occurred during student or teacher read aloud.

3.2.8. Other Reading Comprehension Instruction Observed

Other types of reading comprehension instruction were observed in the study. This instruction included strategies, practices, and activities that focused on previewing, predicting, story structure, setting a purpose, and question types. Together, these other types of instruction accounted for 14% of the reading comprehension observed with no category representing more than 4% of the instruction.

3.3. Factors that Influence Reading Comprehension Instruction

After each of the 24 lesson observations, teachers participated in an interview with the researcher to describe the factors that influenced their implementation of reading comprehension instruction. In reflecting on their lessons and elaborating on their instructional practices, teachers identified multiple factors that influenced their use of reading comprehension instruction. Specifically, teachers identified student, school, and personal influences (see Table 4). Not surprisingly, all teachers identified students' present level of performance as influencing their instruction. Teachers emphasized the importance of meeting students where they are at and delivering instruction at their students' level. Additionally, most teachers discussed the need to engage their students with instruction that was interesting and relevant to their lives.

Table 4. Factors that Influence Instruction.

Category	Code	Description of Code
Personal	Experience	Teachers base instructional decisions on something previously observed or implemented.
	Interests	Teachers state that their own personal preference or interest drives their instruction.
	Preparation	Teachers explain their level of preparation to teach the reading course.
	Defining reading comprehension instruction	Teachers discuss their own definition or description of what reading comprehension instruction is or includes.
School	Alignment to general education	Teachers identify access or alignment to the general education curriculum or classroom.
	Collaboration	Teachers work or plan with other special or general educators.
	Directives	Teachers describe policies or procedures mandated by a department or by administration.
	Learning standards	Teachers state that instruction is driven by state or national learning standards.
	Test preparation	Teachers identify the importance of preparing students for an assessment (formative or summative).
Student	Engagement	Teachers describe the importance of what students are interested in and can relate to or what will hold their attention.
	IEPs	Teachers discuss the importance of student IEPs in planning and implementing instruction.
	Present level of performance	Teachers describe their knowledge and understanding of her students' strengths (what they can do) and unique needs (academic, social, emotional, learning style, *etc.*).

Data collected from these interviews reveal much about the factors that special education teachers identified as influencing their implementation of reading comprehension instruction. Both similarities and differences emerged as teachers described theses influences. However, all eight teachers identified

at least one personal, school, and student-related factor that influenced their instructional decisions. A common thread across all eight teachers was the important role that students' present level of performance had on the instruction they implemented. Teachers spoke about meeting student needs and providing students with opportunities to be successful. Additionally, teachers discussed the importance of ensuring that their instruction was relevant and engaging to students. Many teachers also reported that their instruction was heavily influenced by test preparation and national learning standards. Similarly, alignment to general education was another factor identified by several special education teachers.

Teacher understanding of reading comprehension instruction varied and responses suggested that teachers may not truly understand the importance of explicit reading comprehension instruction for their students with LD who struggle with reading. Teachers did, however, report mixed levels of preparation to teach reading, and many expressed a desire for additional professional development to better prepare them to provide their students with effective reading instruction. In summary, these personal, school, and student-related factors were often interrelated and underscore the complexity of reading comprehension instruction in urban special education classrooms.

4. Discussion

As noted previously, a large number of adolescents with LD experience difficulty comprehending what they read, particularly in US secondary schools where much of the content is learned by reading complex texts [63]. However, previous observation studies on reading instruction for students with LD have focused heavily at the elementary level [64] and surprisingly little is known about what reading comprehension instruction for students with LD looks like in US urban high schools. Thus, the purpose of this study was to describe and understand the reality of reading comprehension instruction in secondary special education reading classrooms for ninth grade students with LD.

Results from classroom observations conducted in this study indicate that special education teachers identified and implemented a number of reading comprehension strategies, practices, and activities—although not all were typically considered "best practices" for reading comprehension. The most frequently observed practices included student and teacher read aloud and independent seatwork which indicated that although teachers believed that large amount of class time was devoted to comprehension instruction in reality they were not providing evidenced based comprehension instruction. This is not surprising, since secondary teachers often will try to make instruction less difficult for students with LD by implementing these types of activities [65]. Teachers in the study were observed using more effective instructional practices such as questioning, activating prior knowledge, and using graphic organizers with some frequency [19]. Teachers also exposed students to several reading comprehension strategies such as summarizing, annotating, and previewing, but explicit instruction in how and when to use reading comprehension strategies was not observed nor did they provide students with opportunities to practice using the strategies independently. Additionally, findings from teacher interviews reveal that a wide variety of student, school, and personal factors influenced their instruction, including their students' abilities and needs, test preparation, and personal interests. In general, the quality of the reading comprehension instruction not only varied across teachers, but also was inconsistent across each of the lessons from an individual teacher.

These findings were very similar to those found in elementary settings, where elementary teachers were also not observed providing this explicit instruction or using complex strategies [65]. This is particularly alarming, as students with LD are unlikely to infer the strategies required for comprehension [66]. A "never assume" approach has been suggested when working with students with LD [67]. In fact, it has been advised, "readers who are not explicitly taught these procedures are unlikely to learn, develop, or use them spontaneously" [41]. Therefore, it is important that teachers provide explicit instruction in reading comprehension strategies and provide many opportunities to apply these strategies under the guidance of their teachers [68]. Additionally, despite the positive effects of targeted instruction for small groups of students and the wide range of reading abilities present in these classrooms, instruction was predominantly teacher-centered and the most common grouping structure observed was whole group instruction, which comprised two-thirds of the grouping practices used during observed lessons. Instruction was largely undifferentiated, and all students were expected to read the same text, respond to the same questions, and participate in the same activities.

Reading text aloud during reading comprehension instruction was a critical aspect of all the classes observed with most teachers to quickly identify it as a common comprehension practices used in their class. All teachers either read the written text aloud to their students or had students take turns reading it aloud with many teachers incorporating both into their lessons. During read aloud activities, the entire class was always involved, and all students were responsible for the same text. The practice of having students read aloud typically lasted for about half of the class period when incorporated into the lesson. When students read aloud, they often read for pages at a time and many students demonstrated significant difficulty with decoding and word recognition indicating that the text read was not at their instructional reading level. In light of what is known about the relationship between decoding and reading comprehension, this procedure likely interfered with the ability to comprehend the text for both the reader and for his/her classmates who were listening to the reading [69]. In addition to students reading aloud, teachers also frequently read aloud to the class. During this time, students were typically not actively engaged in any reading activities other than possibly listening. Instead, student expectations during read aloud were often unclear and students were observed engaging in other activities, including sleeping, talking and working on other assignments.

Research suggests that teacher read aloud can be a component of reading comprehension instruction for older struggling readers as it provides students with access to text that they may not be able to read independently and allows them to engage in a text experience with a more proficient reader [70]. However, for students with LD, the instructional practice of reading aloud by itself is not sufficient for improving reading comprehension and should never replace systematic, explicit instruction in comprehension strategy use [38]. Read alouds should be interactive, such that while text is read aloud, teachers should model and explain specific mental processes used to monitor comprehension and students should have multiple opportunities to practice the strategies modeled on their own with materials that they can manage independently [71].

Teacher and student read alouds were typically embedded with teacher-generated questions about the reading. Questions were typically posed to the whole group and asked students to recall information from or make inferences about the text. This instructional combination mirrors previous studies in elementary reading rooms, which found that reading comprehension was primarily delivered through teacher or student read alouds and that comprehension was primarily assessed through factual

questioning initiated by the teacher [72,73]. Consistent with these findings, a majority of the teacher-generated questions were straightforward, prompting students to recall information directly from the text [72]. In addition to recall-type questions, some teachers also asked students questions that prompted them to draw inferences by relating textual evidence to the reader's prior knowledge. Inference-type questions were regularly asked by one teacher and only occasionally by others. The ability to generate inferences is important to text comprehension as it allows the reader to integrate what they already know with what they read, and secondary students with LD have demonstrated improvements in reading comprehension and the ability to answer inference-type questions after receiving inference strategy instruction [74].

Several studies investigating the effects of questioning on reading comprehension have produced positive results for students with LD [21–23]. A critical component of effective questioning for comprehension; however, includes assisting students in becoming independent at self-questioning while reading. This includes teaching students how to generate and answer their own questions about text and providing students with strategies for what to do when they cannot answer a question [19]. Although teachers asked students a number of text-based questions, teachers did not provide students with instruction on how to generate their own questions or what to do if they could not answer teacher-generated questions. Often times, students were asked questions that they did not correctly answer and teachers responded by either ignoring the answer and resuming instruction or simply supplying students with the correct answer. The only example of strategy instruction related to questioning was observed in Angela's class when she taught students how to distinguish between questions that could be answered based on information in the text and questions that required prior knowledge or inference. In light of the prevalence of predominantly recall-type teacher questioning, coupled with the observed difficulty that many students displayed responding to these questions, it was especially concerning that not once did students receive instruction on how to generate their own questions about the text or how to activate a fix up strategy when they could not demonstrate comprehension. These findings mirror an earlier study in which secondary special educators had developed a routine of reading the text, finding the answer, explaining the answer, and telling students what to write down [48].

4.1. A Reality Check

Researches and policy makers frequently ask if research is making its way into classrooms. With mandates to use scientifically, evidence-based instruction, coupled with what we know about the reading profiles of students with LD and the key components of effective reading instruction, one would expect to see high quality, "specially designed", evidence-based comprehension instruction in special education reading classrooms. Unfortunately, based on these results for this small group of teachers, the answer is no. Special education was designed to provide students with "specific, direct, individualized, intense, remedial instruction" [75] (p. 178). Although these teachers certainly had the best intentions of meeting their students' individual needs, a common thread across all classrooms in this study was teacher-centered, undifferentiated instruction delivered to the whole group. Reading comprehension instruction was primarily devoted to reading aloud, questioning, and independent seatwork. And although many of the active reading strategies used by good readers (e.g., summarizing, questioning, previewing,

predicting, *etc.*) were observed, students were not explicitly taught how and when to use these strategies. Given the characteristics of students with LD, namely their poor information processing and generalization skills, it is likely that students in the present study will have difficulty independently demonstrating the reading comprehension strategies, practices, and activities without considerable teacher support. Collectively, these findings illustrate the discrepancy between research and practice in these high school classroom.

4.2. Implications for Practice and Research

It is widely documented that the classroom teacher is the most powerful factor in determining student learning [52,76,77] and effective reading instruction is dependent on teachers' content knowledge, collaboration with others, and opportunities to make instructional decisions and reflect on their instruction [78]. Consequently, improved comprehension for students with LD requires strategy instruction and teacher preparation on how, when, and why to implement the strategies [6,22]. Improved teacher preparation to meet the needs of students with disabilities has been an ongoing call that has remained relatively unanswered [79]. In light of the well-documented research to practice gap [80], however, it is critical that future secondary teachers receive professional development to meet the diverse needs of students of varying levels of reading achievement. Additionally, effective teacher education programs recognize that over time, teachers will become increasingly knowledgeable and skilled as their own expertise develops [81]. Therefore, ongoing support is crucial and research suggests that instructional coaching has been effective for increasing both preservice and inservice teachers' fidelity of implementing evidence-based practices [82]. The critical components of coaching include group-training sessions, follow up observations, and specific feedback including observation data, self-evaluation, and modeling. Furthermore, teachers must also have sustained opportunities to apply their new learning to their planning and instruction.

Given some of the challenges inherent in US urban secondary schools, specifically size and bureaucracy coupled with highly diverse student populations [83], these findings also have important implications for schools and administrators. It is critical that school administrators collaborate with special educators to share the instructional decision-making. Teachers need a curriculum that is aligned with assessments and teachers need the time and training to plan and teach that curriculum [84]. Using Feiman-Nemser's [85] framework of the "continuum of teacher learning", it is imperative that administrators recognize the various levels of support that teachers need throughout their careers and differentiate training to meet these various individual needs. For example, findings from this study suggest that teachers may benefit from professional development focused on a variety of topics, including assessment, thinking aloud, questioning, instructional planning, selecting texts, grouping, and pacing. Additionally, administrators must assume a more active role in monitoring the delivery of special education services to ensure that instruction is individualized and driven by student data.

5. Conclusions

The present study offered a rare glimpse into the reality of reading comprehension instruction for US adolescents with LD in special education settings and also presents compelling evidence of the need for advocacy on their behalf. The reading classrooms observed in this study is their reality. Typically,

students do not have a voice in who teaches them, what they are taught, how they are taught, and where they are taught. Critics have long argued against the special education resource room, indicating that it consistently provides lower quality, less engaging instruction and condemn students to a lifetime of low groups. Therefore, it is essential that schools more closely monitor that students with disabilities are placed in the least restrictive environment for reading instruction and ensure that their needs are met, regardless of the setting. Furthermore, students must be provided with opportunities that increase the instructional intensity they receive through small groups or one-on-one instruction.

Moreover, it is critical that special education teachers have opportunities to develop their own knowledge, skills and use of time to effectively deliver evidence-based reading comprehension instruction, opportunities to reflect on their own instructional practices with colleagues, and student data to drive their instruction decisions. It is key that future research continue to focus on understanding the reading comprehension profiles of adolescents with LD to better match instruction with student needs. Specifically, this may provide educators with a better understanding of the level of intensity and explicitness required for effective comprehension instruction. Additionally, more observation research is needed on the types of instruction provided to adolescents with LD in secondary schools. Observation research should focus on instruction implemented by both general and special education teachers across multiple settings. Thus, the field needs to continue monitoring the extent that evidence-based practices are implemented in high school classrooms and determine ways to enhance this instruction.

Author Contributions

Tiffany Ko initiated the research and was responsible for data collection. Tiffany Ko and Marie Tejero Hughes jointly analyzed and discussed the results, shaped the direction of the research, and drafted the submission.

Conflicts of Interest

The authors declare no conflict of interest.

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