Exploring the Effectiveness of a Case Management Model

Abigail Salat

Follow this and additional works at: https://ecommons.luc.edu/luc_diss

Part of the Education Commons

Recommended Citation

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License. Copyright © 2020 Abigail Salat
EXPLORING THE EFFECTIVENESS OF A CASE MANAGEMENT MODEL

A DOCTORAL RESEARCH PROJECT SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL OF EDUCATION
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF EDUCATION

PROGRAM IN SCHOOL PSYCHOLOGY

BY

ABBY H. SALAT

CHICAGO, ILLINOIS
AUGUST 2020
ACKNOWLEDGEMENTS

This doctoral research project would not have been possible without the support and encouragement of many individuals in both my professional and personal lives. I would like to thank my parents who continued to remind me of my goal from a young age to become “Dr. Abby”. To the husband, Brian, who has been by my side encouraging me to keep working and not give up all while completing your own graduate school. Thank you for listening to me, and never complaining about my countless hours spent at Foxtrot on Southport.

I would like to thank my committee, Dr. Amy Nelson-Christensen, Dr. Lynne Golomb, and Dr. Jennifer Sterpin. Thank you for sharing your knowledge and experience with me. I know that my project would not be the same had it not been for all of your positive input, encouragement, and expertise. I would like to especially thank my chair, Dr. Amy Nelson-Christensen for your positively, stellar feedback, and encouragement through the entire process.

I finally would like to thank my school district for allowing me the opportunity to “dig deeper” into our building and data, my colleagues (especially my fellow school psychologists and social workers) for your amazing support, positivity, and (much needed) comic relief daily, and my friends/family who have supported me as I have gone through this process.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS........................................................................................................... iii

LIST OF TABLES ...................................................................................................................... vi

LIST OF FIGURES ................................................................................................................... vii

ABSTRACT ................................................................................................................................. ix

CHAPTER

I. INTRODUCTION ........................................................................................................ 1
   Special Education Service Delivery and the CM Model .............................................. 3
   Gaps in Current Literature .................................................................................... 4
   Context of the Proposed Study .............................................................................. 5
   Research Questions ................................................................................................. 6

II. LITERATURE REVIEW ................................................................................................. 8
   How the Law Impacts the Role of Special Education Teachers ............................. 8
      Co-Teaching ....................................................................................................... 9
      Delivering Evidence-Based Intervention .......................................................... 10
      Writing Individual Education Plans and Corresponding Paperwork ............. 11
   Special Education Teacher Stress ......................................................................... 12
   Current Models of Service Delivery ........................................................................ 14
      Speech-Language Pathologist Model (3:1) ........................................................ 15
      School Psychologist Service Delivery ................................................................ 16
   Re-conceptualizing Special Education Service Delivery ...................................... 18
   Summary and Goal of the Proposed Study ............................................................. 20

III. METHODOLOGY ......................................................................................................... 22
   Setting ......................................................................................................................... 22
   Participants ............................................................................................................... 23
      Special Education Teachers ............................................................................... 23
      Students with IEPs ............................................................................................... 24
   Measures .................................................................................................................... 24
      Time Study ......................................................................................................... 24
      IEP Review Checklist .......................................................................................... 24
      Teacher Perception Survey .................................................................................. 25
   Research Design ...................................................................................................... 26
      Action Research ................................................................................................. 26
      Author Connection ............................................................................................. 27
   Procedures ................................................................................................................ 28
      IEP Review ......................................................................................................... 28
LIST OF TABLES

Table                                                                 Page
1. Results of Independent T-Test Comparison of IEP Checklist Before  Implementation of CM to After .............................................................. 58
2. Results of Independent T-Test Comparison of Time Study Before  Implementation of CM to After ........................................................................61
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perception of Model: Moving to the CM Model was Right Approach to</td>
<td>33</td>
</tr>
<tr>
<td>Support Students</td>
<td></td>
</tr>
<tr>
<td>2. Perception of Model: Interest in Changing Role in Future</td>
<td>34</td>
</tr>
<tr>
<td>3. Perception of the Model: Prefer Traditional Service Delivery</td>
<td>34</td>
</tr>
<tr>
<td>4. Perception of the Model: I Enjoy Current Role in CM</td>
<td>35</td>
</tr>
<tr>
<td>5. Faculty Perception of Model: Dislike Minimal Crossover of Roles*</td>
<td>35</td>
</tr>
<tr>
<td>6. Faculty Perception of Model: Would Not Choose CM Again*</td>
<td>36</td>
</tr>
<tr>
<td>7. Faculty Perception of Model: Stay In Same Role Within CM</td>
<td>36</td>
</tr>
<tr>
<td>8. Faculty Perception of Model: Students Know Whom to Access</td>
<td>37</td>
</tr>
<tr>
<td>9. Workload Feasibility: Complete All Job Requirements During Day</td>
<td>38</td>
</tr>
<tr>
<td>10. Workload Feasibility: Time Spent in Meetings</td>
<td>39</td>
</tr>
<tr>
<td>12. Workload Feasibility: Ability to Get Data</td>
<td>40</td>
</tr>
<tr>
<td>14. Workload Feasibility: Less Time with Colleagues*</td>
<td>41</td>
</tr>
<tr>
<td>15. Workload Feasibility: Not Enough Time to Plan with Colleagues*</td>
<td>41</td>
</tr>
<tr>
<td>16. Workload Feasibility: Use Time to Collaborate</td>
<td>42</td>
</tr>
<tr>
<td>17. Workload Feasibility: Collaborate with Colleagues About Student Data</td>
<td>42</td>
</tr>
<tr>
<td>18. Workload Feasibility: Meaningfully Contribute to Problem-Solving</td>
<td>43</td>
</tr>
</tbody>
</table>
19. Workload Feasibility: Attend Reasonable Number of Meetings ................................ 43
20. Supporting Students: Analyze Student Progress for Decision-Making ..................... 45
21. Supporting Students: Spend More Time with Students........................................... 46
22. Supporting Students: Differentiation of Instruction ................................................. 46
23. Supporting Students: Students Know Whom to Access ........................................... 47
25. Supporting Students: Not Able to Work with Students on What Need* ...................... 48
26. Supporting Students: Feel Like Know and Understand Students .............................. 48
27. Supporting Students: Feel Like Know Instructional Need of Students ....................... 49
28. Supporting Students: Don’t Feel Differentiate Effectively* ....................................... 49
29. Supporting Students: Supporting Students in Way Feel Pride ................................ 50
30. Supporting Students: Data Available for Goal Updates ............................................. 50
31. Supporting Students: Accurately Speak to Present Levels ......................................... 51
ABSTRACT

IDEA requires special education students receive a free and appropriate education with specialized instruction in K-12 schools. While guidance related to what students are legally entitle to is readily available, little to no guidance related to how systems within schools can best support teachers is available. Special Education teachers are noted to have more difficult, demanding, and stressful roles within schools, which can lead to higher levels of burnout (Bettini et al., 2017). The Case Management model is one manner of service delivery, which allows for special education teachers to specialize in one aspect of the broader role: co-teaching, providing interventions, writing IEPs.

This study rooted in action research aims to provide an initial evaluation of how the Case Management modality of service delivery is being implemented in a medium-sized high school. Data related to improvement of legal defensiveness of IEPs, teacher perceptions, and how time was being spent throughout the day was collected. Results suggest that IEPs significantly increased in thoroughness and accuracy in all areas assessed except for “parent communication.” Teacher perception data suggests that teachers feel that they are supporting students, and have positive associations with the CM model. However, teacher perception related to workload feasibility and stress suggests that teachers continue to feel high levels of paperwork, and need for additional support in classrooms. Areas of focus for School X are discussed further along with suggestions for analysis of other system level components.
CHAPTER I
INTRODUCTION

The Individuals with Disabilities Education Act (IDEA) is a federal law that ensures all students with disabilities are able to receive a free appropriate public education (U.S. Department of Education, n.d.). If a child’s needs are suspected to exceed general education resources, a school-based team conducts a comprehensive evaluation to determine if specialized instruction, intervention and/or related services are needed for the child to make progress (Klose, 2010). When a child is found eligible, special educators are charged with expertise in a variety of instructional strategies to meet the needs of diverse learners (Mamlin, 2012). Mamlin states that providing service to students with special education needs is complex and requires a great deal of extra time and resources: special educators may be the primary teacher, teach alongside general educator teachers (co-teach), supervise paraprofessionals, consult with other teachers, advocate for students to have their learning needs met, along with writing individual education plans (IEP).

In the Fall of 2017, School X moved towards a Case Management (CM) model for meeting the needs of students in order to ensure quality service delivery for this extra vulnerable population and fulfill their obligations under federal law. During the 2017-18 school year, staff and related service providers formed a committee to determine if the Special Education Department at School X should initiate a new model for special
education service delivery. The committee disseminated a time study to special education faculty to determine how faculty were engaging in time during the work day; results suggested that faculty were spending more time engaging in paperwork and/or consulting than working directly with students, which was in opposition to department goals. Given that faculty time spent during the day was not representative with departmental values, the committee determined that exploration of different models of service delivery was warranted. Several area schools had recently initiated the CM Model, and reported that teachers having a “specialty,” eliminating the number of roles for each teacher, and increasing the amount of time that teachers were able to directly work with students to improve student outcomes proved as an attractive option for School X to consider for implementation.

Based on the work from the committee, School X determined to move forward with the CM Model. The model is currently in the second year of implementation, and to date, there has been no analysis to measure if the new model has been implemented with fidelity or whether the intended outcomes have been met.

Given that schools are systems, and starting new initiatives requires an understanding of systems change. Senge (2012) noted that “change starts small and grows organically…sustained learning requires personal commitment…organization learning takes place through multiple layers of leadership….challenges are a natural part of organizational learning” (pp. 321-323). This suggests that any systemic change within an existing system requires significant time and thought put into truly understanding the impact throughout system subcomponents. Given the implementation of a new model of
service delivery, a strategic analysis of current systems practices and understanding of challenges is necessary in order to determine the effectiveness of change.

**Special Education Service Delivery and the CM Model**

While federal legislation outlines requirements for the education of students with disabilities, there are not explicit criteria for how to provide services that maximize student growth and staff capacity. The Office of Special Education and Rehabilitative Services (OSERS), a division of the U.S. Department of Education, recommends that students in special education have access to an “in-school case manager,” who is described as an adult who is regularly available to the student to help navigate school (Edgar & Vadasy, 1990). However, based on student progress, this support can be faded (Edgar & Vadasy, 1990). Common terms associated with CM are defined in the following section.

Common terms as defined by Edgar and Vadasy (1990):

*IEP.* A plan which describes a student with a disability under IDEA’s present levels of performance, measurable annual goals, accommodations, plans for transition, identified minutes/placement for receiving special education supports, and a statement of how the disability adversely impacts the student’s progress.

*Educational Needs.* Areas of deficit (or areas for growth) identified in an evaluation for special education. These educational needs drive areas for IEP goals, accommodations, and related services.

*Case Management Model (CM).* A special education service delivery model where special education teachers “specialize” in one role within description of special educator.
The following common terms, within the present study, detail specific roles for faculty that were defined by School X’s implementation of CM.

*Case Manager (IEP Writer).* A special education teacher whose role within the CM model is to write annual IEPs and complete required paperwork for students in special education. This includes quarterly goal updates, and tasks associated with implementing the IEP.

*Interventionist.* A special education teacher whose role within the CM model is to provide evidence-based intervention to students during their assigned resource period. This teacher implements intervention, monitors progress, and communicates with teachers and professionals on each student’s IEP team.

*Co-Teacher.* A special education teacher whose role within the CM model is to teach alongside a general education teacher. This includes differentiation within the classroom, assisting with accommodations/modifications of students with IEPS in the classroom, working on student goals within the IEP in relevant areas.

**Gaps in Current Literature**

The current observational trends in districts geographically close to School X in modifying service delivery suggest that the CM model may be an attractive choice to many school districts, which underlines the importance of determining if it is positively impacting staff and student outcomes. However, to date, researchers have not fully investigated service delivery modalities, particularly the CM model. As such, literature is limited in providing considerations for possible improvements, issues, or difficulties associated with this model and whether or not it achieves more efficient and higher quality service delivery, as it claims. Nonetheless, current discourse that exists indicates
areas for future problem solving and consideration. Prior to implementing the CM model at School X, some faculty expressed concern related to implementing CM supposing that because Case Managers are not working with students daily there is a higher likelihood of holes in communication between the Case Manager, Interventionist, and Co-Teacher; this could lead to students “slipping through the cracks” without a systematized method for communication and student progress review.

**Context of the Proposed Study**

This study takes place in a medium sized suburban high school, which initiated the Model during the 2018-19 school year. In years prior, the district utilized a more traditional special education service delivery model where the case manager was each special education student’s “point-person” to problem-solve daily occurrences, responsible for writing their IEP, provider of specific interventions, and also co-taught courses. Through conversations at department meetings, faculty were feeling that they were wearing “too many hats”, unable to engage in any of their roles with integrity, and student outcomes were suffering.

The School X Special Education Department provides services for approximately 14% of students in the building. The special education department, comprised of 16 faculty members, historically had students divided evenly amongst the department (between 7 to 30 students per faculty member depending on the number of resource periods assigned). Each individual Special Education faculty member was responsible for IEP writing, daily problem-solving/communication, and providing interventions for their 13 students; additionally, faculty were responsible for co-teaching general education classes to provide special education support to targeted students.
The current CM Model utilizes two Generalist Case Managers to specialize in IEP writing instead of each faculty member writing IEPs for their identified students within their individual caseloads. As such, each Case Manager currently is carrying a caseload of approximately 75 students. Since two Case Managers are IEP writing, the department selected 2.8 faculty members to serve as Interventionists, and exclusively teach Learning Strategies; these faculty provide targeted interventions to students based on identified needs with each IEP. The remaining 11 faculty members are co-teaching within the classroom and providing differentiation for students in their classes. It is notable that School X determined the self-contained Multi-needs teacher would continue their role unchanged due to the specialization and needs within the classroom.

The purpose of the proposed study is to explore the fidelity of implementation of School X’s CM system and to conduct preliminary analyses of its intended outcomes. Stakeholders will benefit in the district (particularly administration, related service providers, and the special education department), by helping to set priorities for change, serve as a roadmap for future goals and growth, and identify areas of need for changes within the system and for students/staff. Additionally, this analysis may benefit other schools that are considering changing service delivery by outlining critical factors for success and needs when engaging in a significant redesign of service delivery within special education.

**Research Questions**

1. Is the district implementing the case management model as intended with fidelity?

2. What is the impact of the case management approach in the district?
a. Are IEPs increasing in consistency of alignment between student needs/goals?

b. Has data based decision-making improved for student placement and resource decisions?

c. Is specializing teacher roles and co-teaching leading to teachers spending more time with students?
CHAPTER II
LITERATURE REVIEW

How the Law Impacts the Role of Special Education Teachers

Perhaps one of the most unique aspects in the role of special education teachers is the inherent legal reality that governs special education. As compared to general education teachers whose responsibilities include providing appropriate curriculum and instruction, special educators have the added legal responsibilities of creating, implementing, and monitoring student progress via a student’s Individual Education Plan (IEP). Effective and legal IEP development requires Special Education teachers to be able to describe a student, his or her current level of educational performance, write goals, describe services required in order to achieve goals, describe the amount of time the student will not participate in the general education curriculum, explain assessment participation, and describe how goal progress will be communicated to parents (Gibb & Dyches, 2000). It is noted that beyond helping to create the IEP, special education teachers have the responsibility for working directly or indirectly with the student to carry out the IEP (Office of Special Education and Rehabilitative Services, 2000).

As outlined by federal legislation, Special Education Teachers must engage in a variety of roles to meet both the needs of students and the requirements outlined by the law. IDEA (2004) is a federal law designed to protect individuals with disabilities ages from 3-21, and outlines a plan that is developed, reviewed, and revised at least annually.
(20 U.S.C. §§ 300.320 -300.324), and that must include a series of statements to describe the child, how the disability adversely impacts their progression in the general education environment, how the team will strengthen skills to hopefully reduce the amount of special education services required in the future, and the types of support required in order to achieve the projected growth (20 U.S.C. 1414(d)(1)(A), (d)(6))[71 FR 46753, Aug. 14, 2006, as amended at 72 FR 61307, Oct. 30, 2007]). Special Education Teachers must engage in co-teaching/differentiating instruction, delivering evidence-based interventions, along with writing IEPs for each student and completing required legally defensible paperwork. In addition to the aforementioned traditional duties, special educators are also expected to collaborate with general education teachers within a Multi-Tiered System of Support while simultaneously individualizing specialized instruction for the students with greatest needs, despite limited training for these dynamic roles (Shepherd, Fowler, McCormick, Wilson, & Morgan, 2016). Given the increased focus on student gains, focus on evidence-based practices, integration of technology, and increased data-based decision making, efforts should be made to ensure that teacher expectations adjust accordingly and a clear role definition ensues (Shepherd et. al, 2016; Leko & Smith, 2010).

Co-Teaching

Emphasis from administrators often falls on compliance and whether or not students have achieved IEP goals, an often-overlooked invaluable role for special education teachers is the area of co-teaching. Co-teaching, or a special education teacher teaching alongside a general education teacher, supports students in a more inclusive environment. Research suggests that special education students enrolling in a co-taught
class experience higher gains on several general outcome measures than students receiving only resource/pull-out support (Williams, 2012).

With research supporting the academic benefits of students’ needs’ being met in general education classrooms, it is important that special education teachers are given the tools necessary to appropriately support students. Successful teams of general education and special education teachers need time and resources to establish roles/responsibilities, build a strong relationship as a teaching pair, active and ongoing communication, co-planning time to allow for designing quality lessons, and the ability to identify needed resources (Brown, Howarter, & Morgan, 2013). Further, research emphasizes the importance of co-teaching pairs to have the time to feel comfortable with classroom content in order to ensure they are appropriately supporting students from a team-based approach (Brown et al., 2013). With this in mind, it is important to additionally note that administrators at the middle and high school level were found to advocate more for co-teaching models as compared to resource/pull-out (Williams, 2012), which suggests that special education teachers’ ability to advocate for resources within their building to establish co-teaching practices will likely be positively regarded.

**Delivering Evidence-Based Intervention**

IDEA (2004) mandates that students with disabilities be provided with academic and behavioral evidence-based instructional practices (20 U.S.C. § 1414[b][6][B], 20 U.S.C. § 7801 [37]). Despite this legal directive, special education teachers note a lack of understanding of what constitutes evidence-based practices along with difficulty locating research-driven programming that can meet specific student’s needs (Freeman & Sugai, 2013). Often, students with disabilities have demonstrated lack of response to previous
intervention efforts, which require more intensive and individualized interventions to be
delivered uniquely by special education teachers (Fuchs & Fuchs, 2015). Further, these
intensified interventions require special education teachers to be consistently monitoring
data to help ensure that the selected intervention continues to be appropriate for each
student’s specific needs (Lemons, Sinclair, Gesel, Danielson, & Gandhi, 2019). Research
suggests that supporting special education teachers to deliver evidence-based intervention
that is data-driven can lead to special education teachers improving behavioral and
academic outcomes of students receiving support and services through special education
(Lemons et al., 2019).

**Writing Individual Education Plans and Corresponding Paperwork**

Special education teachers have historically noted that paperwork is
“overwhelming, redundant, and intimidating” (Billingsley, Pyechea, Smith-Davis,
Murray, & Hendricks, 1995), and teachers report a “desire to spend more time providing
direct instructional services to students and less time coordinating…. Serving essentially
as case managers of students’ schedules and programs” (Morvant, Gersten, Gillman,
Keating, & Blake, 1995). Paperwork completion continues to emerge as a significant
factor related to feelings of stress and role ambiguity. Results from one of the largest
initial studies in 2002 related to special education teacher paperwork completion
suggested that paperwork disproportionately impacts special educators, and special
education teachers spend equal amounts of time preparing for lessons as they did
completing paperwork (U.S. Department of Special Education Programs, 2011). A
follow-up study indicated that despite increases in technology for special education
paperwork, the time needed to complete paperwork is still commensurate to conditions
from 2002 (Paperwork in Special Education, 2011). Despite easier access to paperwork completion via technology, data reporting does not appear to impact the cost-benefit of paperwork and data collection compared to student performance improvement (U.S. Department of Special Education Programs, 2011).

The majority of Special Education teachers were noted to spend between 0-20 hours on paperwork for annual and re-evaluations for students on their caseload (Carlson, Chen, Schroll, & Klein, 2002). Teachers reported that paperwork and administrative duties generally interfered with their job as a teacher (p. 9). Between writing IEPs, reviewing existing data, managing behavior logs, and transition planning, teachers reported spending at least 15 hours per month on average managing these tasks; the majority of teachers reported feeling that they should spend additional time on paperwork, while simultaneously noting that time spent on paperwork negatively impacted the amount of time they were able to devote to teaching (Carlson et. al., 2002). Current research suggests that Special Education teacher duties related to paperwork should be limited to fewer than four hours per week, unless teaching responsibilities are reduced proportionately (Carlson et. al., 2002).

**Special Education Teacher Stress**

Researchers indicate that the role of special education teachers is more difficult, demanding, and stressful as compared to general education teachers (Bettini et al., 2017). Special education teachers report that caseload size, variable roles needed (e.g., paperwork, co-teaching, intervention), and pressure related to student growth leads to feelings of stress, which was noted to adversely interfere with work quality (Cancio et al.,
When special education teachers are expected to fulfill numerous roles, there is an increased likelihood of exhaustion and burnout (Bettini et al., 2017).

According to Dewey et al. (2017), there was a consistent demand for additional special education teachers between 1975 and 2005; however a notable decrease in special education teacher employment was observed between 2005-2012 (p. 315). The U.S. Department of Education (2015) additionally reports that in nearly every state, special education teacher positions are identified as positions in critical shortage.

Researchers have identified several reasons for the current shortages of special education teachers, including historic fund reallocation that initially reduced special education teacher positions, which in turn reduced demand (Dewey et al., 2013). It is noted that the number of teachers entering the field of special education is equivalent to the number of teachers leaving the field (Boe, 2006); as such, the increase in students with disabilities, such as Autism, is being met with fewer qualified special educators to fill positions (Dewey et al., 2017). As such, shortages can ultimately contribute to the stress experienced by special educators, which can contribute to teacher burn-out.

Special education teachers are also noted to work under intensified conditions compared to general education teachers due to the nature and intricacies of the students and families with whom they work (Hillel, 2015). Many Special Education teachers note caseloads, lack of respect within the building, and lack of administrative support can exacerbate the high amounts of stress and multiple responsibilities that special education teachers must exercise, particularly in their first years of practice (Haggeman & Casey, 2018).
These findings have been consistent for several decades, as teachers have noted inadequate time to complete work, manage level of workload, and differences in expectations/goals between administration and staff (Morvant et al., 1995). Further, sentiments of “role overload and design” have been closely associated with special education teachers leaving their jobs and/or the field of education (Billingsley, 2004). Special education teachers’ level of stress and difficulty maintaining duties within their role adversely impact their overall job satisfaction and effectiveness with students (Billingsly, 2004).

Special education teachers’ feelings of stress have been found to negatively impact motivation and experiencing job satisfaction compared to general education teachers (Major, 2012). Despite efforts to decrease stress, it is notable that enduring high levels of stress for extended periods of time leads to emotional exhaustion, which is closely associated with teacher burnout and lower student outcomes (Maslach, 2003). Research suggests that special educators are at a higher risk for burn out due to individual, classroom, school, and district level variables (Brunsting, Sreckovic, & Lane, 2014). Specifically, experience, role conflict and ambiguity, and administrative support were found to be particularly noteworthy topics (Brunsting et al., 2014).

**Current Models of Service Delivery**

Teachers and related service professions (i.e., speech language pathologists, school psychologists) have attempted to address teacher burn out and stress, along with improvement of service delivery for special education students, through adapting service delivery models. These models require a re-conceptualization of how to best meet student
need while also considering realities facing professionals working in school systems or systems working with students and families.

**Speech-Language Pathologist Model (3:1)**

Other disciplines within systems of specialized service delivery have begun to diversify service delivery practices. For example, some Speech-Language Pathologists (SLP) recently initiated a new service delivery model in various districts due to the “increasingly complex caseload, and recent reforms requiring special education services to align with general education goals” (American Speech-Language Hearing Association, n.d.). In the 3:1 model, school-based SLPs engage in traditional service delivery for three weeks out of the month, but set aside one week a month to engage in meaningful consultation that often was not occurring in the traditional service delivery model. The American Speech and Hearing Association (ASHA) supports this service delivery as the goal is to allow for increased collaboration with general education teachers in order to support skill generalization beyond the 1:1 or group pull-out work with the SLP (ASHA, n.d.).

In his study of the 3:1 model, Garfinkel (2018) conducted a study of SLPs’ perceptions in a large school. Garfinkel found that, according to SLP perceptions, the 3:1 model better supported student needs, increased SLP’s work efficiency, and expanded SLP roles within the school building. To gather perception data, Garfunkel asked SLPs in the district to complete online surveys and engage in semi-structured interviews to examine perceptions of their roles within the 3:1 model. Results suggest that SLPs felt that their service delivery was more meaningfully connected to student context, diversified, and efficient compared to the traditional model. Further, Garfinkel’s results
School Psychologist Service Delivery

The National Association of School Psychologists (NASP) published the Model for Comprehensive and Integrated School Psychological Services (2010) in order to allow practicing School Psychologists the opportunity to reflect on services, and define the myriad of duties that School Psychologists engage in their roles. Unlike ASHA, which outlines service delivery modalities, NASP’s intention was to articulate what duties and basic competencies every School Psychologist has in order to ensure that roles are dynamic in nature. NASP notes that within graduate training programs, a series of 10 Domains of practice are emphasized to ensure that School Psychologists are able to more accurately define roles within their jobs, and to ensure that they are able to practice within their training. NASP’s position on clearly defining the role of a School Psychologist in the current era mirrors what Shepherd and others (2016) noted was much needed in the field of Special Education, as the lack of clear role definition can lead to unprepared special education teacher candidates entering a field with significant role ambiguity. This can in turn adversely impact job satisfaction and attrition amongst Special Education teachers.

Multi-tiered systems of support. One of the ways that school psychologists support effective implementation of special education services is by advocating for and maintaining preventative systems of prevention and intervention, such as Multi-Tiered Systems of Support (MTSS). MTSS is heavily supported in current research to meet student needs, and is defined as “the practice of providing high quality instruction and
interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals, and applying child response data to important educational decisions” (Batsche et al., 2006, p. 3). This practice involves a variety of supports that meet a multitude of student needs (Barnes & Harlacher, 2008). Due to the dynamic and limited-time nature of interventions within MTSS, supports are designed to meet a variety of student needs and require flexibility in service delivery in order to ensure that the intensity and frequency of interventions can help mediate skills deficits. School psychologists have been urged to help lead schools in developing and implementing MTSS practices in order to intervene early and effectively address skill gaps (Loss, 2018). Ideally, MTSS is designed to reduce inappropriate referrals for special education, which in turn allows for more resources and time to be devoted to preventative practices in general education as compared to evaluating children.

**Early intervention.** Similar to the intervention theory and coordination in MTSS, Early Intervention provides additional support and instruction for children ages 0-3 via service coordinators through an Individual Family Service Plan. The goal in Early Intervention is to monitor services provided to families to ensure individual child and family needs are met in a comprehensive and collaborative manner; this is greatly impacted by the abilities, knowledge, and relationship of families with the individual service coordinators (Childress, Nichols, & Schnurr, 2019). In a recent study conducted by Childress et al., current service coordinators report that there is a great need to balance workload, which is suggested to best be met by either decreasing the number of families serviced by each coordinator or decreasing the expected workload of service coordinators in the current system.
Re-Conceptualizing Special Education Service Delivery

In order to re-conceptualize student needs, special education teachers will require training in consulting, coaching, collaborating, and providing interventions in a comprehensive manner that support a school wide model (Simonsen et al., 2010). Additionally, training and development of current special education teachers is needed to ensure that they are comfortable with a more dynamic role of teaching within a system of teaching, providing interventions, collaborating, and ensuring legal compliance to align with the type of role that is now being expected of all special education professionals. Major (2012) argues that special education teachers and administrators should consider dynamically designing special educators’ jobs for motivation, involving empowerment of special education educators to adapt their jobs, which ultimately will positively impact services for students.

OSERS recommends that students in special education should have access to an “in-school case manager” who is defined as a knowledgeable adult who is regularly available for students to navigate school (Edgar & Vadsay, 1990). Further, case managers are recommended to be assigned to all students in special education at first, but contact can decrease or be eliminated if the student is progressing (Edgar & Vadsay, 1990). Federal regulations via OSERS assert that case management for special education students should be viewed as a variety of supports for students and families that should be monitored and revisited often; this process is often too complex for any one individual to manage, which begs for a major restructuring within the current educational system to account for curriculum, instructional, and support services required for student success (Edgar & Vadsay, 1990).
While Edgar and Vadsay’s (1990) recommendations were outlined nearly three decades ago, the same issues still plague schools today. The U.S. Department of Education recently outlined a similar “case management” structure to support students who were at risk of not graduating high school. Students identified as “at-risk” were assigned an adult at school to monitor progress, services, and follow-up with students as needed to help improve educational and future outcomes (U.S. Department of Education, 2017). This brief suggests that the key components outlined by Edgar and Vadsay (1990) help students with disabilities achieve to comparable levels as non-disabled peers and continues to be applicable and appropriate for a variety of students. The complexity of schooling often requires a coordinator or “case-manager” to be a point person for at-risk students.

Review of literature suggests that there has not been a systematic study of service delivery for special education and how it can be re-conceptualized given the well-documented stress, burnout, and legal compliance, in accordance with the dynamic nature of the role of a special education teacher. Further, despite significant research related to the intricacies of the role of a special education teacher, no research related to how to best deliver services, particularly at the high school level exists.¹ This suggests that there is a significant gap in the literature indicating how service delivery in special education can best be structured.

One possible solution to this is to re-conceptualize service delivery by implementing the CM Model. This strategy allows for special education teachers to “specialize” in one area of service delivery: Co-teaching, delivering evidence-based intervention, or IEP writing. The CM Model allows for teachers to decrease stress by managing the number of duties for which they are responsible and decreases the amount of paperwork and administrative duties required of Interventionists and Co-Teachers. Analysis of components of effective IEP writing and legal compliance does not suggest that the person writing the IEP needs regular contact with each student on his or her caseload; rather, special education teachers providing instruction can inform how the IEP is written rather than each Special Education teacher within a department independently writing plans for each student. However, the literature and systems level analysis suggests that there is not a clear definition of what amount of time is feasible for Case Managers to spend on writing effective and accurate IEPS, and attending meetings. As the CM model is currently already in implementation in several high schools in the geographical area of School X, analysis of effectiveness and feasibility is warranted due to the lack of research in the area of types of service delivery for special education services.

Summary and Goal of the Proposed Study

Overall, OSERS asserts that Case Management can meet the needs of students who are receiving special education services. While OSERS defines a case management approach, no research currently exists related to the impact of implementing a case management model within schools. The proposed study intends to provide an initial
evaluation of the impact of School X’s implementation of the CM model on IEP writing, time allocation, and staff perceptions of the CM model.
CHAPTER III
METHODOLOGY

Setting

The present study took place at School X, a medium-sized suburban high school with an enrollment of approximately 1,600 students. The high school currently provides special education services for approximately 14% of students, which has decreased considerably from the 2015-16 school year where approximately 18% of students were eligible for special education. Racially and ethnically, 89% of students at the high school identify as White while 4% identify as Latino, 3% Asian, 2% Multiracial, and 1% African-American. Socio-economically, 2.9% of students qualify for Free or Reduced Lunch and 0.5% are identified as having Limited English Proficiency.

School X currently serves 195 students who receive special education support at the high school level using the CM model and employs 15 staff members as special education faculty. Historically, students were evenly divided amongst faculty within the department and each faculty member was responsible for IEP writing, daily problem-solving, communication, and providing interventions for their students along with co-teaching.

The current CM model is only being implemented with students outside of the Educational Life Skills classroom and the Transition Program for students ages 18-22; these students continue to utilize a teacher as a case manager due to the intricacies
involved with student needs. For all other students in the current CM model, two General Case Managers each write and oversee IEP development and implementation for approximately 75 students each. The remaining staff is divided into Interventionists (three teachers) and Co-Teachers (10 teachers). Currently, the Interventionists are responsible for ensuring delivery of evidence-based interventions during assigned resource time, while co-teachers are differentiating within the general education classroom setting. This will be the second full-year of implementation of the CM model at this particular high school.

Participants

Special Education Teachers

A total of 16 special education teachers in the department are currently participating in the CM model (all special education teachers with the exception of the Educational Life Skills teacher and Transition teachers) will be asked to participate in the proposed study. Specifically, two case managers/IEP writers, three interventionists, ten co-teachers, and one “other” (Behavior Specialist) were included in the formal measures for analysis.

Of the 16 special education teachers participating in the CM Model, eight completed the Teacher Perception Survey (four co-teachers, two Interventionists, one Case Manager/IEP Writer, and one identified as “other”). For the re-administration of the time-study in February 2020, nine special educators completed the momentary sampling: two Interventionists, four co-teachers, two case managers/IEP writers, and one “other”.

Students with IEPs

All students at School X who are being supported by the CM model and have a current IEP will be eligible to have their IEP reviewed by the researcher. There are 156 students at School X who currently have an IEP for a primary eligibility of: Specific Learning Disability (70), Emotional Disability (27), Other Health Impairment (36), Autism (16), Intellectual Disability (3), and Hearing Impairment (2).

Measures

Time Study

In October 2017, all special education teachers in the department completed a time study (see Appendix A) to better understand where teachers in the department spent their time every hour throughout the school day. The time study utilized a momentary time sampling method, which asked teachers to select from a preselected set of activities (e.g., working directly with students, consulting with families, in meetings, etc.) every hour on the hour from 7:45 am-3:20 pm. Data was compiled and placed into categories defined as: paperwork/meeting preparation, consultation, direct work with student, meetings. The same time study given in October 2017 was re-administered by district administration to staff within the special education department in February 2020 in order to compare time allocations before and after full implementation of the CM model.

IEP Review Checklist

Gibb and Dyches (2000) published formal guidelines for the essential components of legally defensible IEPs. These guidelines were expanded for the current study in order to operationally define each of the essential components in order to quantitatively compare IEPs before and after the implementation of the CM model. Each component
was given three possible scores based on analysis of the IEP document; scores for each component are assessed with a 0 (not evident), 1 (partially evident), or 2 (evident) based on the comprehensiveness of data. This checklist was utilized in order to evaluate IEPs for the present study. Refer to Appendix B for the IEP Review Checklist.

**Teacher Perception Survey**

Given that the CM model is in its second year of implementation and systems change requires time (Noell, 2008), a better understanding of staff perception is important to understand in addition to examining changes in use of time. This author created a teacher perception survey in order to help guide prioritization for future goals within the department. The teacher perception survey is an online survey that was administered via Survey Monkey for participants to respond to a series of questions in an effort to examine overall perception of implementing the Case Management Model. The survey included a series 4-point Likert Scale questions along with open-ended responses. Survey participants were asked to respond to questions related to their role within the department by answering that they “strongly agree,” “agree,” “do not agree,” “strongly do not agree.” Given the variability of faculty role within the CM Model, faculty could respond with “N/A” if a particular question did not specifically related to their role. After responding to Likert-scale questions, participants had the option to respond to seven open-ended questions related to their experience of implementing the CM model. The final component of the survey allowed participants to optionally indicate their role within the CM model.

The survey contained 32 Likert-scale questions, and seven open-respond questions. It was designed to take approximately 20 minutes to complete. Examples of
questions include: “I think moving to the CM model was the right decision,” “I am able to spend more time differentiating instruction for students,” and “I am able to use data to make recommendations for students.” Respondents will be asked to rate on a scale of 1 to 4, with 1 meaning strongly disagree and 4 meaning Strongly Agree, their degree of agreement with each statement. A full copy of the Teacher Perception Survey is located in Appendix C.

Research Design

Action Research

It is important to note that the present study is rooted in action research, which is different than a traditional research study in education. Action research can be defined as school personnel acting as researchers by examining existing practices within systems in order to evaluate and effect change (Efron & Ravid, 2013); action research is not necessarily concerned with replication, as so much of the results and design are entirely context specific. If readers are considering whether or not the CM model is appropriate for their setting, it is important to evaluate reasons for changing service delivery, essential components, readiness for systems change, and critical factors in order to appropriately gauge whether CM is appropriate for their particular context. The proposed study design is participatory action research, which will utilize a mixed methods design.

The current study design is participatory action research, which utilizes a case study design to allow for an understanding of complex phenomena. This particular methodology helps explain presumed causal links between implementing the case management model that would be too complex for traditional strategies (Johnson & Christensen, 2017).
Data analysis methodology is mixed-methods to allow for qualitative and quantitative data collection from the teacher perception survey and time study/IEP review, respectively. The reasoning for this was to allow for quantitative comparison of data from before the implementation of the Case Management Model to after the implementation of the Case Management Model. Additionally, qualitative data collected from the survey was analyzed for themes to determine similarities and differences in perceptions across the department (R1), and to better qualify data collected from the time study and IEP review (R2). Threats to validity include maturation, history, and selection. This is accounted for by strategically selecting IEPs from the previous three years to serve as the most accurate representation of current IEP writing along with the same time study administered to allow for a pre-post comparison to help explain differences. Reflexivity with committee members will be used to help ensure validity for survey theme interpretation.

Author Connection

Given that action research relies on the author being an active participant within the context of the research, it is important to acknowledge the relationship between the author of the study and the study’s overall context. The author of this paper is a practicing School Psychologist at School X. One of the key job responsibilities of a school psychologist is to work closely with special education staff, students, and families in order to conduct re-evaluations for students receiving special education services. As such, principles to help minimize potential bias within analysis of structure of the study were given careful consideration.
Procedures

IEP Review

The researcher utilized secondary data by reviewing existing annual review IEPs written before implementation of the case management model (2017-18) and after the case management model (2018-19, 2019-20) in order to measure the impact of CM on IEP writing (e.g., legal defensiveness and alignment between needs and goal areas). The 2017-18 school year was strategically selected due to being the most recent year prior to implementing the CM model with heavy administrative emphasis on IEP writing and legal compliance within the special education department. A total of 79 IEPs from the 2017-18 school year (50% of total IEPs prior to implementation of CM) and a total of 75 IEPs from the 2018-19 and 2019-20 were randomly selected for review. See random selection procedure below for details related to how IEPs were selected.

Random selection procedure. To begin, the author randomly selected 50% of IEPs from the 2017-18 school year, which corresponds to 79 IEPs. School X maintains a Case Management Spreadsheet that lists all students at School X who are eligible for special education services. The author utilized a filter to remove any student who would not be participating in the CM Model. Once students who would be included in the CM model were listed, the author used a random number generator to randomly select 79 numbers. Each randomly selected number corresponded to a row within the spreadsheet. For instance, if the number 32 were randomly selected, the student who was located in row 32 after filtering would be included for the review. Then, the author will utilize the same procedure to randomly select 25% of IEPs from the 2018-19 school year and 25% of the 2019-20 school year (for a total of 75 IEPs).
Student IEPs had an equal chance of being selected for each school year within the analysis which allowed for an overall evaluation of how the system of CM has impacted IEP writing as compared to how individual student IEPs have changed over time. To ensure that IEPs from the 2018-19 and 2019-20 are accurately attributed to the correct school year, the author reviewed the annual review date to ensure it corresponded to the 2018-19 or 2019-20 school year. If the random number generation did not correspond to a student IEP that was written yet (e.g., the IEP annual review date for the 2019-20 school year has not occurred yet), then the author generated another number that corresponded to students in the spreadsheet until a student whose annual review has already occurred is selected.

**Coding reliability.** To ensure reliability in coding on the IEP Checklist, the author enlisted a second coder to verify the coding of the first 10 students on the selected list. Peer review is often utilized to help enhance trustworthiness of qualitative components of action research studies. In this method, another person is recruited to help ensure that the researcher’s analysis of interpretation of data is consistent and credible (Efron & Ravid, 2013). The researcher recruited another coder, another school psychologist, to evaluate the researcher’s coding, analysis, and interpretation of applying the IEP Checklist review. Following the first ten dually-coded IEP, the author coded the remaining 50% of IEPs from the 2017-18 school year. If questions arose related to a score for a particular component of a student’s IEP, the researcher flagged that IEP to allow for discussion alongside the peer coder upon completion.
Administration of Time Study

As noted in the instruments section, a time study was completed in October 2019 and February 2020 to analyze how time was being spent within the special education department via a Google Form. The author of this study asked for permission from district administration to use the preexisting data collected in 2019 and 2020 for current study to look for any significant differences in time allocations.

Administration of Teacher Perception Survey

The author of the present study emailed current Case Managers/IEP writers, Interventionists, and Co-Teachers to request participation in the needs assessment via Survey Monkey Survey. Participants were directed to questions that correspond to their role within the CM model. Responses were required to advance to the subsequent question within the survey to ensure that participants responded to the entirety of the survey. Survey responses were collected for a seven-day period following the invitation to participate to allow for an increased response rate. Responses from Likert scale questions were compiled to summarize overall faculty perception, and open-ended responses were compiled to allow for theme analysis through open coding. In order to ensure accuracy of interpretation and results, the author used a second coder to help analyze emerging themes.

Reflexivity

Reflexivity requires an action researcher be aware that their own perspectives may influence decisions and actions during the process of participatory action research (Efron & Ravid, 2013). For the present study, it is important to note and acknowledge that the author is a school psychologist who is working at School X. In order to minimize
subjectivity, the researcher will engage in consistent self-reflection throughout the duration of the process and rely on peer review and consultation from committee members to ensure validity of current results.

**Data Analysis**

In order to evaluate the IEP checklist, t-tests were utilized in order to compare the sum of each component of the IEP checklist from the before implementation of the CM model to after implementation of the CM model. For the time studies, the frequency of each activity (*paperwork/meeting preparation, consultation, direct work with students, meetings*) were averaged based on responses provided by respondents from the momentary time sampling. These data points from each study were used to generate descriptive statistics to illustrate how time is being spent, and how it changed. Additionally, data from the time study was compared using a t-test to see if a significant change has occurred. To analyze the teacher perception survey, the author engaged in a theme analysis from open-ended responses to define current perceptions of the CM model among staff. Given there was no prior research related to perceptions of the CM model, the author utilized an inductive approach to categorize data, along with a semantic method to examine explicit content revealed by participants. The author read through responses in order to be more familiar with content, and began creating larger themes described in the data (e.g., time management, positive impression) to describe larger ideas generated by survey respondents that were not captured in the likert-scale responses. In order to analyze Likert-scale responses from the teacher perception survey, the author utilized descriptive statistics to analyze the average responses from the department.
CHAPTER IV
RESULTS

For the present study, a teacher survey to assess perception of the implementation of the CM model, an IEP analysis of robustness of IEP writing before and after implementation of the CM Model, and a time study were conducted to answer the research questions shared in Chapter I. The results will be explained by question in the current section below.

Is the District Implementing the CM Model as Intended with Fidelity?

As stated, the first research question was to analyze whether or not the district was implementing the CM model as intended with fidelity. In order to answer this question, a teacher perception survey was conducted and the data from the survey was analyzed using SPSS to calculate descriptive statistics for each question. Then, open-ended responses were analyzed for themes. The author compiled responses to determine what larger themes emerged from participant responses. Respondent answers were grouped based on larger ideas/themes to help describe perceptions shared within the department. In order to better understand whether or not the district was implementing the CM model as intended with fidelity, the teacher perception survey was analyzed for positive and negative impressions related to teachers’ overall perceptions of the CM model, workload feasibility/stress level, and ability to support students. Therefore, fidelity was based on staff perception.
Close-Ended Survey Questions

A teacher perception survey was given to all faculty currently participating in the CM model; a total of 8 teachers representing all roles with the current CM model participated (four co-teachers, one Case Manager, one “other”, and two Interventionists), which yielded a 53% response rate. All responses were coded using a scale from 1 (strongly disagree) to 4 (strongly agree). Note that any question with an “*” indicates that responses were reverse coded due to the negative wording within the question, as such responses were coded using a scale from 1 (strongly agree) to 4 (strongly disagree).

See Figures 1-9 for the distribution of responses across questions related to perceptions of the CM model; Figures 10-22 for distribution of responses across questions related to workload feasibility; and Figures 23-34 for distribution of responses across questions related to supporting students.

![Figure 1. Perception of Model: Moving to the CM Model was Right Approach to Support Students](image-url)

Note: Figure 1 describes faculty responses to the question “I think moving to the CM model was the right approach to support students.”
Figure 2. Perception of Model: Interest in Changing Role in Future

Figure 3. Perception of the Model: Prefer Traditional Service Delivery

Note: Figure 2 describes faculty responses to the question “In the future I would be interested in changing my role within the Case Management Model.”

Note: Figure 3 describes faculty responses to the question, “I prefer a more traditional service delivery model for special education services.”
Note: Figure 4 describes faculty responses to the question, “I enjoy my current role within the Case Management Model.”

**Figure 4.** Perception of the Model: I Enjoy Current Role in CM

Note: Figure 5 describes faculty responses to the question, “I do not like how each special education teacher has a ‘specialty’ and has minimal crossover across roles.” This was reverse coded due to negative wording.

**Figure 5.** Faculty Perception of Model: Dislike Minimal Crossover of Roles*
Note: Figure 6 describes faculty responses to the question, “I would not choose the Case Management Model again if we were to change our service delivery model.” This was reverse coded due to negative wording.

Figure 6. Faculty Perception of Model: Would Not Choose CM Again*

Note: Figure 7 describes faculty responses to the question, “I would like to stay in the same role in the Case Management Model.”

Figure 7. Faculty Perception of Model: Stay In Same Role Within CM
37

Figure 8. Faculty Perception of Model: Students Know Whom to Access

Teacher perception related to CM. Results of teacher perception questions related to overall perception of the CM model suggest overall positive responses. Of faculty who responded to the survey, 100% either strongly agreed or agreed that moving to the CM model was the right choice to support students (see Figure 1), 87.5% report either strongly disagreed or disagreed with a preference for a traditional service delivery model (see Figure 2), and 87.5% either strongly agreed or agreed that they enjoy and would like to stay in their current role within the model (see Figure 7). Further, 87.5% indicated that they either strongly disagreed or disagreed that they would not choose the CM model again (see Figure 6). A total of 87.5% of respondents reported that they either strongly disagreed or disagreed with a dislike for the minimal crossover between roles (see Figure 5), and that students overall know who to access on their teams (see Figure 8).
Average responses across questions related to overall perception of CM model suggested that faculty “agreed” (average response 3.5) that moving to the CM model was the right choice, “agreed” (average response 3.57) that they enjoy their current role within CM, “disagreed” preferring a traditional service delivery model (average response 3.29), and “agreed” that they would like to stay in the same role within the CM model (average response 3.13). When asked if they would not choose the CM model again, faculty “disagreed” on average (average response 3.43), and on average “disagreed” when asked if they were interested in changing roles within the CM model (average response 2.17). Respondents indicated they “agreed” students knew whom to access on their teams (average response 3.13), and they “agreed” to disliking the minimal crossover between roles due to teacher specialization (average response 3.25).

Note: Figure 9 describes faculty responses to the question, “I am able to complete all of my job requirements during the school day.”

Figure 9. Workload Feasibility: Complete All Job Requirements During Day
Note: Figure 10 describes faculty responses to the question, “I spend too much time in meetings that I am unable to complete job responsibilities.”

Figure 10. Workload Feasibility: Time Spent in Meetings

Note: Figure 11 describes faculty responses to the question, “I spend more time working from home in the Case Management Model than I did before our school implemented it.”

Figure 11. Workload Feasibility: Time Spent Working from Home
Figure 12 describes faculty responses to the question, “I am consistently able to get data from my colleagues to plan instruction and/or prepare for IEP meetings.”

Figure 12. Workload Feasibility: Ability to Get Data

Note: Figure 13 describes faculty responses to the question, “I spend less time than I did before completing paperwork.”

Figure 13. Workload Feasibility: Spend Less Time Completing Paperwork
Figure 14 describes faculty responses to the question, “I have less time with my colleagues using the Case Management Model as compared to the old service delivery model.” This question was reverse coded due to negative wording of the question.

**Figure 14. Workload Feasibility: Less Time with Colleagues***

Note: Figure 15 describes responses to the question, “I don’t have enough time to meaningfully plan with my colleagues.” This question was reverse coded due to the negative wording of the question.

**Figure 15. Workload Feasibility: Not Enough Time to Plan with Colleagues***
Figure 16 describes faculty responses to the question, “I use my plan time to collaborate with colleagues.”

**Figure 16. Workload Feasibility: Use Time to Collaborate**

Figure 17 describes faculty responses to the question “I collaborate with colleagues about student data to inform interventions, instruction, or student planning.”

**Figure 17. Workload Feasibility: Collaborate with Colleagues About Student Data**
Figure 18. Workload Feasibility: Meaningfully Contribute to Problem-Solving

Figure 19. Workload Feasibility: Attend Reasonable Number of Meetings

Note: Figure 18 describes faculty responses to the question, “Because of my schedule, I am able to attend and meaningfully contribute to problem-solving meetings for student I work with.”

Note: Figure 19 describes faculty responses to the question, “I attend a reasonable number of meetings each week.”
Teacher perception related to workload feasibility and stress. For questions targeting current workload feasibility levels and stress levels, teachers overall reported more negative perceptions. A total of 25% of respondents “agreed” they could complete job responsibilities during the school day (see Figure 9) and spent too much time in meetings leading to difficulty completing job responsibilities (see Figure 10) as compared to 75% who either disagreed or strongly disagreed (see Figure 9, Figure 10, and Figure 19); 50% either strongly agreed or agreed that they spent more time working from home using the CM model (see Figure 11), complete less paperwork (see Figure 12 and Figure 13), and consistently get data from colleagues for planning/instruction since implementing the CM model (see Figure 14). A total of 100% of respondents “strongly agreed” or “agreed” that they used plan time to collaborate with colleagues (see Figure 16), and 62.5% report the ability to communicate with members of student teams (see Figure 18). However, despite all faculty reporting using plan time to collaborate, 62.5% either “strongly agreed” or “agreed” reported not having enough time to do so (see Figure 15 and Figure 17).

Average responses across respondents suggests faculty “disagreed” when asked if they could complete all job requirements during the school day (average response 2.13), “agreed” they spent more time working from home in CM model (average response 2.5), “disagreed” they attend a reasonable number of meetings per week (average response 2.86), “agreed” that time in meetings lead to an inability to complete job responsibilities (average response 2.17), and “disagreed” that they spent less time completing paperwork than before (average response 2.63). Respondents on average reported they “agreed” to having less time with colleagues in the CM model (average response 2.86), “agreed” to
not having enough time to collaborate with colleagues (average response 2.75), “agreed” to doing too much that leads to not having time to communicate with members of students team (average response 2.17), “disagreed” that they were able to attend and meaningfully contribute to problem-solving meetings for students with whom they work (average response 2.88), and “disagreed” that they were able to consistently get data from colleagues to inform instruction (average response 2.5). Despite the negative perceptions related to workload feasibility and stress levels, respondents indicated on average that they “agreed” to using plan time to collaborate (average response 3.38), and used collaboration about student data to inform interventions, instruction, or student planning (average response 3.13).

Note: Figure 20 describes faculty responses to the question, “I regularly analyze student progress data to make decisions.”

*Figure 20. Supporting Students: Analyze Student Progress for Decision-Making*
Note: Figure 21 describes faculty responses to the question, “I am able to spend more time with students than before.”

*Figure 21. Supporting Students: Spend More Time with Students*

Note: Figure 22 describes faculty responses to the question, “I can use data to differentiate instruction more with the Case Management Model as compared to our old model.”

*Figure 22. Supporting Students: Differentiation of Instruction*
Note: Figure 23 describes faculty responses to the question, “My students know whom they can access on their team.”

**Figure 23.** Supporting Students: Students Know Whom to Access

Note: Figure 24 describes faculty responses to the question, “Students receive interventions aligned to IEP goals more so now compared to before implementing the Case Management Model.”

**Figure 24.** Supporting Students: Students Receive Aligned Interventions
Figure 25 describes faculty responses to the question, “I am not able to work with students on what they really need.” This question is reverse coded due to the negative wording of the question.

Figure 25. Supporting Students: Not Able to Work with Students on What Need*

Note: Figure 26 describes faculty responses to the question, “I feel like I know and understand the intricacies of students for whom I provide support.”

Figure 26. Supporting Students: Feel Like Know and Understand Students
Note: Figure 27 describes faculty responses to the question, “I feel like I know students instructional need for whom I am responsible more now than before implementing the Case Management Model.”

Figure 27. Supporting Students: Feel Like Know Instructional Need of Students

Note: Figure 28 describes faculty responses to the question, “I don’t feel that I can differentiate effectively.” This question was reverse coded due to negative question wording.

Figure 28. Supporting Students: Don’t Feel Differentiate Effectively*
Note: Figure 29 describes faculty responses to the question, “I am able to spend time at work supporting special education students in a way that makes me feel proud.”

Figure 29. Supporting Students: Supporting Students in Way Feel Pride

Note: Figure 30 describes faculty responses to the question, “I readily have data for goal updates that I can provide to complete goal updates.”

Figure 30. Supporting Students: Data Available for Goal Updates
Note: Figure 31 describes faculty responses to the question, “I can accurately speak to student present levels when asked for feedback.”

*Figure 31. Supporting Students: Accurately Speak to Present Levels*

**Supporting students.** For questions targeting special education faculty perceptions related to supporting students, teachers reported feeling that they understand students they work with. A total of 87.5% of respondents indicated they “strongly agreed” or “agreed” they can accurately speak to present levels (see Figure 31), 75% reported they “strongly disagreed” or “disagreed” that they don’t feel they can differentiate effectively (see Figure 28), 87.5% either “strongly agreed” or “agreed” they readily have data to provide for goal updates (see Figure 31), 87.5% reported they “strongly agreed” or “agreed” they understand intricacies of students they support (see Figure 26), 100% reported they “strongly agreed” or “agreed” they regularly analyze data to make decisions (see Figure 21). However, fewer teachers reported feeling that the CM model allowed for better knowledge of student instructional need (62.5% “strongly agreed” or “agreed”; 25% “disagreed”) (see Figure 27), and the ability to spend more
time with students (75% “strongly agreed” or “agreed” they spend more time with students, 25% “disagreed” or “strongly disagreed,” see Figure 21).

Average responses across respondents indicated that faculty “agreed” they regularly analyzed student progress data to make decisions (average response 3.13), “agreed” students receive interventions aligned to IEP goals more so now compared to before implementing the CM model (average response 3.5), “agreed” they can use data to differentiate instruction more with the CM model (average response 3.14), “agreed” they regularly have data for goal updates (average response 3.13), “agreed” they can accurately speak to present levels when asked for feedback (average response 3.17), and “agreed” they are able to spend time supporting special education students in a way that makes them feel proud (average response 3.43). On average, faculty reported they “agreed” they understand the intricacies of students whom they provide supports (average response 3.57), “agreed” students know who they can access on their teams (average response 3.13), “disagreed” they were not able to work with student on what they really need (average response 2.88), and “disagreed” when asked if they felt they could not differentiate effectively (average response 3.14). Despite positive impressions related to supporting students, respondents on average reported they “disagreed” they were able to spend more time with students than before (average response 2.86), “disagreed” they feel like they know students instructional need more so now than before implementing the CM model (average response 2.86).

**Open-Ended Survey Questions**

In order to engage in a theme analysis, open-ended responses were compiled and the author became familiarized with data via a semantic method to examine explicit
content through an inductive approach. After becoming familiar with data, the author generated larger themes to categorize responses, which are outlined below. A total of six respondents completed the targeted open-ended questions, while one respondent provided additional comments that were included in the analysis.

When asked, If another district were considering this model I would recommend ..., respondents indicated they are generally supportive of this model but they should make sure that there are systems in place to support implementation. For instance, one respondent stated, “finding a way to make more room on the calendar for collaboration and problem solving” while another respondent suggested “having a clear line of communication for the different issue or issues that may arise with a particular student or students.” Another respondent suggested they would recommend the model but “additional case managers and co-teachers are needed to sustain the model.” One respondent additionally suggested that other districts should “take into consideration how much time a few of the students actually take when considering number,” in reference to how many students each role within the model is responsible for. Responses to this question suggest an overall need to improve systems, particularly related to communication and feasibility of the current allocation of responsibilities related to particular roles within the CM model.

When asked, How can we improve the CM model?, respondents reported analyzing role responsibilities to ensure that no particular role within CM was overburdened, and a need for additional faculty to fill roles. Suggestions for this include “taking some of the clerical duties away from the case manager,” “more teachers and staff to fill all the support needs in academic classroom,” and “more support for certain
roles.” One respondent further identified improving communication systems within the CM model, by clarifying “who [to] direct[ly] contact…for different issues that may arise with particular students.” Responses to this question suggest an overall need to analyze workload capacity and feasibility to ensure that no particular component of the CM model becomes overburdened. Particular themes that emerged include work distribution among roles in the CM system overall, along with a need for additional support in the classroom and for case managers.

Participants were asked to identify strengths within the CM model. Specific strengths identified include an improvement in IEPs, improvement in job performance, and the ability to more meaningfully engage in data collection/analysis. One respondent indicated that “IEPs are legally compliant (as much as possible), while another indicated that “IEPs are written with integrity.” Related to job performance, one respondent indicated that “we have all gotten better at our one individual role.” Another respondent suggested “the specialization opportunity is excellent and has great potential when it is followed.” One respondent noted that faculty have been able to be more “student-centric” and have been able to meaningful[ly] engage [in] specialized intent.” Further, one respondent indicated that “being able to be a specialist allows for me to be and feel well informed on specific topics.” Two respondents specifically spoke to the CM model provides a system that allows teachers to improve data-based decision making. One respondent indicated “teachers have more time to focus on students and collecting meaningful data,” while another noted that they were “quickly … see results of data collection or plan implementation.” Themes that emerged specifically related to strengths
of the CM model pertain specifically to increased knowledge and ability to meet student needs due to specialization and improvements in IEP documentation.

Respondents were given an opportunity to provide general feedback related to perceptions of the CM Model. Respondents emphasized the importance of conceptualizing current perceptions within the schema of systems change. For example, one respondent noted

I like our ‘new’ model much better. . . I think we need to remember two year ago there were complaints about our other model . . . so we switched it. Now there are just as many complaints. I know we can improve in areas of this model; however, there is no perfect universal solution. We must focus on what is best for our students, and just improving workloads/systems.

Overall theme analysis of open-ended responses suggests that teachers perceive the move to CM as positive. Teachers report the streamlining responsibilities and overall communication will help the model improve. Additionally, teachers perceive that additional staff are needed to help improve outcomes for students and teachers alike. Teachers report that they would recommend the CM model to other schools, and have seen an improvement in IEP writing as a result.

**What is the Impact of the CM Approach in the District?**

As discussed in Chapter I, this question was divided into three sub-questions in order to comprehensively investigate the impact the CM model is having in the district. Results will be analyzed further within each sub-question.
Are IEPs Increasing in Consistency of Alignment between Student Needs/Goals?

As previously described, a total of 137 IEPs (79 from the 2017-18 school year, and 58 from the 2018-19 and 2019-20 school year) were reviewed to assess consistency of alignment between student needs/goals, and amount of data-based decision making occurring during annual reviews. In order to answer this question, independent t-tests were run using SPSS to compare means between each subcomponent of the IEP checklist before implementing the CM model to after implementing the CM Model. The two subcomponents that specifically speak to alignment between student needs and goals are contained within the Annual Goals and Special Education Services components of the IEP checklist. A pre-post comparison indicates a statistically significant increase in alignments of annual goals and special education services [Annual Goals (Pre CM: \( M = 1.39, SD = 0.66 \); Post CM: \( M = 1.62, SD = 0.48 \), \( t(135)=2.20, p = 0.029 \)], Special Education Services [Pre CM: \( M = 1.34, SD = 0.71 \); Post CM: \( M = 1.64, SD = 0.55 \), \( t (135)=2.63, p = 0.009 \)]. Results suggest that implementing the CM model has led to improvements in increased consistency of alignments between student needs and associated goals.

Has Data-Based Decision Making Improved for Student Placement and Resource Decisions?

As described above, independent t-tests were run using SPSS to compare means between subcomponents of the IEP checklist before implementing the CM model to after implementing the CM model. Refer to Table 1 for results from the independent t-test comparing IEPs before to after implementing the CM model. Specific subcomponents related to data-based decision making within the IEP checklist include Describe the Student, Present Levels of Performance, Special Education Services, Not Participate in
General Education, Assessment Participation, Parent Communication, and the Overall IEP. Analyses indicate statistically significant improvements in all areas within the IEP checklist except for Parent Communication from before implementation of the CM model ($M=1.39$, $SD=0.56$) than after implementing the CM model ($M=1.26$, $SD=.60$), $t(135)=1.32$, $p=.187$.

Specifically, the IEP checklist analysis suggests a statistically significant increase in the IEPs Describe the Student (Pre CM: $M=1.20$, $SD=.54$, $t=8.13$; Post CM: $M=1.86$, $SD=.34$, $t(135)=8.13$, $p>.001$), Present Levels of Performance (Pre CM: $M=1.25$, $SD=.66$; Post CM: $M=1.90$, $SD=.30$, $t(135)=6.89$, $p>.001$), Annual Goals (Pre CM: $M=1.39$, $SD=.66$; Post CM: $M=1.62$, $SD=.48$, $t(135)=2.20$, $p =.029$), Special Education Services (Pre CM: $M =1.34$, $SD = .71$; Post CM: $M =1.64$, $SD = .55$, $t (135)=2.63$, $p =.009$), Not Participate in the General Education Curriculum (Pre CM: $M =1.15$, $SD = .57$; Post CM: $M =1.47$, $SD = .50$, $t (135)=3.30$, $p =.001$), and Assessment Participation (Pre CM: $M =1.39$, $SD = .51$; Post CM: $M =1.60$, $SD = .49$, $t (135)=2.40$, $p =.017$) from before implementation of the CM model to after implementation of the CM model.

Further, there was a statistically significant increase in the overall accuracy of IEPs from before implementing the CM model ($M=9.13$, $SD =2.43$) to after implementing the CM model ($M=11.39$, $SD =1.39$) (Total Accuracy $t(135)=6.22$, $p<.001$). Therefore, the current data suggests that implementation of the CM model lead to an increase in data-based decision making for placement and resource decisions.
Table 1

*Results of Independent T-Test Comparison of IEP Checklist Before Implementation of CM to After*

<table>
<thead>
<tr>
<th>IEP Checklist Independent T-Test Results</th>
<th>Condition &amp; Participants</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>p Value ***=Statistically significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the Student</td>
<td>Pre-CM (N=79)</td>
<td>1.20</td>
<td>.540</td>
<td>p &gt;.001***</td>
</tr>
<tr>
<td></td>
<td>CM (N=58)</td>
<td>1.86</td>
<td>.343</td>
<td></td>
</tr>
<tr>
<td>Present Level of Performance</td>
<td>Pre-CM (N=79)</td>
<td>1.25</td>
<td>.669</td>
<td>P &gt;.001***</td>
</tr>
<tr>
<td></td>
<td>CM (N=58)</td>
<td>1.90</td>
<td>.307</td>
<td></td>
</tr>
<tr>
<td>Annual Goals</td>
<td>Pre-CM (N=79)</td>
<td>1.39</td>
<td>.668</td>
<td>p=.029***</td>
</tr>
<tr>
<td></td>
<td>CM (N=58)</td>
<td>1.62</td>
<td>.489</td>
<td></td>
</tr>
<tr>
<td>Special Education Services</td>
<td>Pre-CM (N=79)</td>
<td>1.34</td>
<td>.714</td>
<td>p=.009***</td>
</tr>
<tr>
<td></td>
<td>CM (N=58)</td>
<td>1.64</td>
<td>.552</td>
<td></td>
</tr>
<tr>
<td>Not Participate General Education</td>
<td>Pre-CM (N=79)</td>
<td>1.15</td>
<td>.579</td>
<td>p=.001***</td>
</tr>
<tr>
<td></td>
<td>CM (N=58)</td>
<td>1.47</td>
<td>.503</td>
<td></td>
</tr>
<tr>
<td>Assessment Participation</td>
<td>Pre-CM (N=79)</td>
<td>1.39</td>
<td>.517</td>
<td>p=.017***</td>
</tr>
<tr>
<td></td>
<td>CM (N=58)</td>
<td>1.60</td>
<td>.493</td>
<td></td>
</tr>
<tr>
<td>Parent Communication</td>
<td>Pre-CM (N=79)</td>
<td>1.39</td>
<td>.564</td>
<td>p=.187</td>
</tr>
<tr>
<td></td>
<td>CM (N=58)</td>
<td>1.26</td>
<td>.609</td>
<td></td>
</tr>
<tr>
<td>Total (Overall IEP Accuracy)</td>
<td>Pre-CM (N=79)</td>
<td>9.13</td>
<td>2.43</td>
<td>p&gt;.001***</td>
</tr>
<tr>
<td></td>
<td>CM (N=58)</td>
<td>11.34</td>
<td>1.39</td>
<td></td>
</tr>
</tbody>
</table>
Is Specializing in Teacher Roles and Co-Teaching Leading to Teachers Spending More Time with Students?

In order to assess whether or not specializing teachers’ roles has led to teachers spending more time with students, hourly data from the momentary time sampling completed in October 2017 and February 2020 was entered into SPSS to calculate and compare differences in means between the initial time study (October 2017) and the most recent time study (February 2020). Results are illustrated below in Table 2. A total of 9 teachers completed the time study in 2020, as compared to a total of 14 who completed the time study in 2017. Each special education teacher who participated in the time sampling had time spent in each category summed in order to calculate average time spent in each category alone. Then, an independent samples t-test was run in order to determine whether there was a statistically significant difference between how faculty time was spent prior to implementing CM to after implementing CM.

Results from the time study do not suggest a statistically significant change from 2017 to 2020 given the change to the CM model. Refer to Table 2 for an illustration of results. Specifically, there was not a significant increase in time spent in direct instruction [Post CM: \( M = 2.11, SD = 1.83 \); Pre CM: \( M = 3.35, SD = 1.59 \), \( t (23) = 1.72 \), \( p = .099 \)], consultation/collaboration [Post CM: \( M = 1.33, SD = 1.32 \); Pre CM: \( M = 1.07, SD = 1.32 \), \( t (23) = .46, p = .694 \)], attending IEP meetings [Post CM: \( M = .67, SD = 1.00 \); Pre CM: \( M = .57, SD = .93 \), \( t (23) = .232, p = .822 \)], completing paperwork [Post CM: \( M = 1.33, SD = 1.87 \); Pre CM: \( M = .92, SD = 1.14 \), \( t (23) = .64, p = .524 \)], instructional preparation [Post CM: \( M = .33, SD = .71 \); Pre CM: \( M = .71, SD = 1.26 \), \( t (23) = -.82, p = .422 \)], staff development [Post CM: \( M = .11, SD = .33 \); Pre CM: \( M = 0, SD = 0 \), \( t (23) = 1.21, p = .238 \)],
parent/outside provider consultation [Post CM: $M = 0, SD = 0$; Pre CM: $M = .07, SD = .26, t (23)=1.72, p=.435$], working with support staff [Post CM: $M = 0, SD = 0$; Pre CM: $M = .14, SD = .36, t (23)=-1.17, p=.255$], or other activities not otherwise described [Post CM: $M = .55, SD = .52$; Pre CM: $M = .21, SD = .57, t (23)=1.42, p=.168$]. While not significant at the .05 level, there was an increase in time spent for Direct Instruction from 2017 to 2020 [Post CM: $M = 2.11, SD = 1.83$; Pre CM: $M = 3.35, SD = 1.59, t (23)=1.72, p=.099$]. Overall, time study results do not suggest that implementation of the Case Management Model led to faculty spending more time with students compared to the traditional model that was in place during 2017.
Table 2

Results of Independent T-Test Comparison of Time Study Before Implementation of CM to After

<table>
<thead>
<tr>
<th>Time Study</th>
<th>Year (# Participants)</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Instruction</td>
<td>2020 (N=9)</td>
<td>2.11</td>
<td>1.83</td>
<td>.099</td>
</tr>
<tr>
<td></td>
<td>2017 (N=14)</td>
<td>3.35</td>
<td>1.59</td>
<td></td>
</tr>
<tr>
<td>Consultation/Collaboration</td>
<td>2020 (N=9)</td>
<td>1.33</td>
<td>1.32</td>
<td>.649</td>
</tr>
<tr>
<td></td>
<td>2017 (N=14)</td>
<td>1.07</td>
<td>1.32</td>
<td></td>
</tr>
<tr>
<td>Attending IEP Meetings</td>
<td>2020 (N=9)</td>
<td>.67</td>
<td>1.00</td>
<td>.822</td>
</tr>
<tr>
<td></td>
<td>2017 (N=14)</td>
<td>.57</td>
<td>.937</td>
<td></td>
</tr>
<tr>
<td>Paperwork</td>
<td>2020 (N=9)</td>
<td>1.33</td>
<td>1.87</td>
<td>.524</td>
</tr>
<tr>
<td></td>
<td>2017 (N=14)</td>
<td>.92</td>
<td>1.14</td>
<td></td>
</tr>
<tr>
<td>Instructional Preparation</td>
<td>2020 (N=9)</td>
<td>.33</td>
<td>.70</td>
<td>.422</td>
</tr>
<tr>
<td></td>
<td>2017 (N=14)</td>
<td>.71</td>
<td>1.26</td>
<td></td>
</tr>
<tr>
<td>Staff Development</td>
<td>2020 (N=9)</td>
<td>.11</td>
<td>.33</td>
<td>.238</td>
</tr>
<tr>
<td></td>
<td>2017 (N=14)</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Parent/Outside Provider Consultation</td>
<td>2020 (N=9)</td>
<td>0</td>
<td>0</td>
<td>.435</td>
</tr>
<tr>
<td></td>
<td>2017 (N=14)</td>
<td>.07</td>
<td>.26</td>
<td></td>
</tr>
<tr>
<td>Working with Support Staff</td>
<td>2020 (N=9)</td>
<td>0</td>
<td>0</td>
<td>.255</td>
</tr>
<tr>
<td></td>
<td>2017 (N=14)</td>
<td>.14</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>2020 (N=9)</td>
<td>.55</td>
<td>.52</td>
<td>.168</td>
</tr>
<tr>
<td></td>
<td>2017 (N=14)</td>
<td>.21</td>
<td>.57</td>
<td></td>
</tr>
</tbody>
</table>
Summary

Overall, results suggest that the CM model is being implemented with mixed integrity. Results related to teachers’ perceptions of the CM model suggest several strengths, and the majority of faculty are content with their current role within the larger CM model. Some teachers report dissatisfaction related to minimal role crossover; however, the majority of teachers report a desire to stay in the same role (i.e., Case Manager, Co-Teacher, Interventionist, Other). Despite changing the overall system, 25% of surveyed faculty reported difficulty completing all job requirements during the school day, 50% reported spending more time at home working in the CM model, and 50% reported completing less paperwork. Faculty reported overall positive perceptions related to feeling like they understood students. Theme analysis of open-ended responses indicated that streamlining responsibilities and communication could help the model improve. While faculty feel that additional teachers are needed to support needs across roles, they report that IEPs have improved and would still recommend the CM model to other schools considering its implementation.

Results suggest a statistically significant increase in the consistency of alignment between student needs and goals, along with improved data-based decision making for student placement and resource decisions. Analysis of IEPs suggests that the overall accuracy has improved to a statistically significant degree. The only area within the IEPs that did not improve was documentation of parental concerns. Analysis of how faculty time is currently being spent in the CM model as compared to the traditional model did not suggest a statistically significant change. The implications of results will be discussed in the following chapter.
CHAPTER V
DISCUSSION

Practical Implications

Results of the current study have many practice implications for the Special Education Department at School X. Analysis of IEP data indicated that significant improvements in overall quality was observed, likely as a direct result of implementing the CM model. The CM model allowed teachers to have the ability to specialize in one component of the overall role of “special education teacher,” as compared to the traditional model of special education service delivery which required high levels of competency across co-teaching, legally defensible IEP writing, and supporting students. This is consistent with previous research suggesting that role conflict and ambiguity adversely impact special education teacher job satisfaction (Brunsting et al., 2014), as the CM model helps to reduce role ambiguity by allowing teachers to specialize in a particular component of the role of special education teacher. The CM model allows case managers to reduce caseloads (Carlson et al., 2002) while additionally allowing for the necessary increase of time and care to be devoted to co-teaching pairing (Williams, 2012), which are both noted as necessary for effective practice. By allowing case managers to solely focus on managing the document of the IEP, it likely allowed for significant focus and improvement related to quality of paperwork completion, data-based decision making, and student-centered focus.
While significant improvements were observed in nearly all components of the IEP document, the one area that did not improve was parent communication. Specifically, a lack of data and/or responsiveness to parent concerns were not noted explicitly within documentation. This is likely due to the CM model not having an explicit focus on communication, specifically communication with families. IEP Writers within the department may consider focusing on direct strategies to improve documentation of parent concerns within IEPs moving forward. Given the significant improvements in all other areas of the IEP accuracy over the past two years, IEP writers can likely set forth goals within the role to ensure that the IEP document is actively reflecting this area quickly.

Data from the Teacher Perception survey indicates that faculty within the special education department have mixed views of the Case Management model. Research related to systems change suggests that adequate buy-in and belief that improvements are being seen is essential to systematically change systems (Senge, 2012). Given that faculty representing all components of the CM model completed the survey, it is reasonable to assert that the department sees several benefits of specializing teacher roles. Teachers reported a general desire to maintain the same role within the larger CM system, feel that IEPs have improved, and would recommend other schools considering switching to this model. However, themes related to stress emerged as continuing to impact the special education teachers in general. For example, 25% of faculty reported difficulty completing job requirements during the day, and 50% indicated that they spend more time working from home in the CM model as compared to traditional service delivery and completing similar levels of paperwork.
One particular area that emerged as an area for improvement is improving communication systems and workload feasibility. Existing research suggests that paperwork and clerical duties interfere with special education teacher’s ability to effectively engage in job duties (U.S. Department of Education, 2011). Preliminary results from the teacher perception survey and time study indicate that teachers at School X perceive that they continue to complete similar amount of paperwork in the current model (CM) as they did in the previous model- regardless of role within CM. Possible explanations for these findings include that regardless of role, all faculty with the CM model are needing to document and communicate information related to student progress in a different manner than they did previously. It could be that the new communication procedures may be taking more time given that now more than just one individual is managing information related to a particular student, that faculty are now documenting student progress more than before, or that communication and collaboration in the CM model is cumbersome and requires additional support. Given the research findings that paperwork can lead to increased burnout, it may be worthwhile for the Special Education Department at School X to further investigate what in particular is contributing to feelings of continued paperwork burden to better understand why staff are perceiving similar levels of paperwork completion. Additionally, staff note continued difficulty-completing work during school hours and report a need for additional staffing. Given that increased job responsibilities can contribute to burnout (Maslach, 2003), this may be important for further investigation to support department wellbeing to ensure that there is workload feasibility for all roles within the larger CM model of service delivery.
A final area of practical implication could be further investigation of the results of the time study. Again, only 8 teachers completed the time study. However, results suggest that there was no difference in how time was spent prior to implementation of CM to after implementation of CM, which only somewhat matched teacher perception. Teacher perception survey results indicated that 75% of faculty either strongly agreed or agreed that they were able to spend more time with students. Possible reasoning for differences in anecdotal perception to time study results could be explained by which faculty participated in the time study vs. the teacher perception survey, the time of day teachers completed the time study (i.e., did not capture times they were spending with students during the second administration of the time study), or that teachers in general are feeling they are spending more time with students than they actually are. This would appear to be in contrast with previous research suggesting that decreasing role demands on the special education teacher allow for resources related to improving teaching practices to support students (Williams, 2012). Additional administrations of the time study may help better capture how time is being spent in the current model to better compare the impact of the CM model in how faculty are spending time during the day to see if there is a greater difference. Further, more regular administration of the time study on a more regular basis may better attribute time allocation over time and help to better understand the impact of the CM model at School X.

Limitations

Perhaps the biggest limitation of the current study is that not all faculty participated in qualitative and quantitative components. The survey and time study had a 53% response rate; while the current results outline a strong preliminary analysis, further
investigation with a larger percentage of faculty participation will help to further refine the impact of the CM model at School X. It is possible that there was selection bias of faculty within the department who elected to engage in the surveys (time study, teacher perception), which may not be representative of all department members. Additionally, the time study only included hourly data from 8 faculty in the special education department. More data is likely needed to meaningfully draw conclusions related to how time is being spent in the CM model.

The quantitative component of the study has limitations. For the Teacher Perception Survey and Time Study, the sample sizes were relatively small. Given smaller sample sizes, the statistical analyses may have been impacted. Additionally, the IEP Checklist included a large data set, which inherently has a possibility for errors. The researcher took all necessary precautions to minimize errors (including enlisting a second coder, not drawing larger conclusions on small sample sizes), there is always a possibility for Type I (false positive) and Type II (false negative) errors.

**Future Research**

Given that the present study is the first of its kind to analyze special education service delivery and the CM model at a high school level, additional research is needed. In particular at School X, the special education department is encouraged to continue analyzing the CM model annually to chart systems change over time. Particular areas emphasized within present results suggest the special education department prioritizing increasing collaboration time within the school day, and how to better understand workloads for all members of the CM model. A particular area for future research should further analyze how collaboration and communication is occurring in the day, and if there
is a need to either create additional time built into the workday or enhance existing systems to support teachers with CM. Given the feedback that teachers perceive that the current workload demands require additional time outside of the day or additionally staffing, future research should focus on how time is being spent within each role and differences in perceptions across roles within CM to see if anything should shift. The process of continuous reflection and problem-solving within the greater CM model will allow for areas of prioritization for future growth, and celebration of improvements. As one teacher noted in the Teacher Perception Survey:

I think we need to remember two years ago there were complaints about our other model…so we switched it. Now there are just as many complaints. I know we can improve in areas of this model; however, there is no one perfect universal solution. We must focus on what is best for our students, and just improving workloads/systems.

Finally, the preset study emphasizes how the CM model impacts teachers within the special education department. One area for future focus and research would be to analyze the impact of the CM model in relation to students and families, related service providers, and general education teachers. Ideas for future focus could look specifically at how changing to the CM model has impacted family and student perception of special education, and communication to help frame future directives. Given that the CM model operates more broadly within the context of School X, perceptions related to the model, communication methods, workload feasibility, and impact felt by general education teachers and related service providers can help frame the broader impact of how CM has been implemented within the existing systems at School X. Better understanding of how
the CM model is impacting all members within the greater system of School X will allow for more authentic and holistic understanding of how CM is a viable modality for special education service delivery. This type of understanding can additionally help inform other schools considering the move to CM from a traditional service delivery model, and provide contextual feedback of the perception of impact.
APPENDIX A

TIME STUDY RESULTS
## Time Study: Fall 2017 Special Education Staff Time Study Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Average Per Day</th>
<th>Sum of Time</th>
<th>Average Time Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Instruction</td>
<td>98</td>
<td>4.90</td>
<td>49.00</td>
<td>2.45</td>
</tr>
<tr>
<td>Consultation Services/Collaboration</td>
<td>31</td>
<td>2.21</td>
<td>15.50</td>
<td>1.11</td>
</tr>
<tr>
<td>Attending IEP/MDC/Other Meetings</td>
<td>25</td>
<td>4.17</td>
<td>12.50</td>
<td>2.08</td>
</tr>
<tr>
<td>Paperwork and Reporting</td>
<td>39</td>
<td>3.25</td>
<td>19.50</td>
<td>1.63</td>
</tr>
<tr>
<td>Instructional Preparation</td>
<td>10</td>
<td>1.25</td>
<td>5.00</td>
<td>0.63</td>
</tr>
<tr>
<td>Staff development/training</td>
<td>3</td>
<td>0.75</td>
<td>1.50</td>
<td>0.38</td>
</tr>
<tr>
<td>Parent/private provider communication</td>
<td>9</td>
<td>0.75</td>
<td>4.50</td>
<td>0.38</td>
</tr>
<tr>
<td>Working with teaching assistants, job coaches, etc.</td>
<td>1</td>
<td>0.50</td>
<td>0.50</td>
<td>0.25</td>
</tr>
<tr>
<td>Other responsibilities</td>
<td>9</td>
<td>1.50</td>
<td>4.50</td>
<td>0.75</td>
</tr>
<tr>
<td>Category 10: Other</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.0</td>
</tr>
</tbody>
</table>
## Time Study: Winter 2020 Special Education Staff Time Study Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Average Per Day</th>
<th>Sum of Time</th>
<th>Average Time Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Instruction</td>
<td>26</td>
<td>2.17</td>
<td>13.00</td>
<td>1.08</td>
</tr>
<tr>
<td>Consultation Services/Collaboration</td>
<td>17</td>
<td>2.83</td>
<td>8.50</td>
<td>1.42</td>
</tr>
<tr>
<td>Attending IEP/MDC/Other Meetings</td>
<td>9</td>
<td>1.13</td>
<td>4.50</td>
<td>0.56</td>
</tr>
<tr>
<td>Paperwork and Reporting</td>
<td>17</td>
<td>2.13</td>
<td>8.50</td>
<td>1.06</td>
</tr>
<tr>
<td>Instructional Preparation</td>
<td>4</td>
<td>1.00</td>
<td>2.00</td>
<td>0.50</td>
</tr>
<tr>
<td>Staff development/training</td>
<td>1</td>
<td>0.50</td>
<td>0.50</td>
<td>0.25</td>
</tr>
<tr>
<td>Parent/private provider communication</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Working with teaching assistants, job coaches, etc.</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Other responsibilities</td>
<td>6</td>
<td>1.50</td>
<td>3.00</td>
<td>0.75</td>
</tr>
<tr>
<td>Category 10: Other</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
APPENDIX B

IEP CHECKLIST
<table>
<thead>
<tr>
<th><strong>IEP Component</strong></th>
<th><strong>Rating</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the student</td>
<td>0 (does not explicitly list strengths and needs)</td>
</tr>
<tr>
<td></td>
<td>1 (lists strengths and needs from parent and teacher perspective, but no data included)</td>
</tr>
<tr>
<td></td>
<td>2 (describes and includes data about students strengths and needs from teacher, student, and parent perspective)</td>
</tr>
<tr>
<td>Describe the student's present level of educational performance;</td>
<td>0 (present levels include verbatim teacher feedback that does not explicitly relate to strengths/needs, does not explicitly state progress on last annual goals, does not include data from each academic and functional area of need)</td>
</tr>
<tr>
<td></td>
<td>1 (present levels include verbatim teacher feedback and 1 data point)</td>
</tr>
<tr>
<td></td>
<td>2 (present levels include synthesized teacher feedback directly related to students strengths/needs and at least 2 data points for each academic and functional area of need)</td>
</tr>
<tr>
<td>Write the student's annual goals along with benchmarks or short-term objectives</td>
<td>0 (annual goal has measureable quarterly benchmarks but is not specific, goals are not directly related to last evaluation or present levels)</td>
</tr>
<tr>
<td></td>
<td>1 (annual goal is specific and has measureable quarterly benchmarks, goals are aligned to needs identified from last evaluation OR present levels)</td>
</tr>
<tr>
<td></td>
<td>2 (each annual goal contains baseline data, specific and measureable benchmarks with quarterly benchmarks, and each goal is aligned to an educational need directly from last re-evaluation)</td>
</tr>
<tr>
<td>Describe the special education and related services needed to achieve the goals</td>
<td>0 (adverse effects do not clearly link why student has special education and related services related to goals; minutes, supplemental aids, services are not clearly listed)</td>
</tr>
<tr>
<td></td>
<td>1 (adverse effects can somewhat be mapped to goals. Supplemental aids services are somewhat aligned with minutes/goals)</td>
</tr>
<tr>
<td></td>
<td>2 (adverse effects can be entirely directly mapped to goals. Supplemental aids services are aligned with minutes/goals)</td>
</tr>
<tr>
<td>Describe the extent to which the student will not participate in the general curriculum</td>
<td>0 (IEP does not articulate special education minutes outside general education)</td>
</tr>
<tr>
<td></td>
<td>1 (IEP articulates potential harmful effects that are somewhat related to IEP goals)</td>
</tr>
<tr>
<td></td>
<td>2 (IEP clearly articulates specific harmful effects directly related to identified needs)</td>
</tr>
<tr>
<td>Explain the student's participation in statewide and classroom assessments</td>
<td>0 (IEP does not specify assessment participation and does not list accommodations)</td>
</tr>
<tr>
<td></td>
<td>1 (IEP indicates accommodations for class and state assessments they will participate in, same accommodations listed for both class and state)</td>
</tr>
<tr>
<td></td>
<td>2 (IEP indicates accommodations for class and state assessments they will participate in, differentiation of accommodations listed for both class and state)</td>
</tr>
<tr>
<td>Describe ways that the student's parents will be regularly informed of progress toward goals.</td>
<td>0 (IEP does not clearly articulate goal progress, does not list parent concerns)</td>
</tr>
<tr>
<td></td>
<td>1 (IEP articulates goal progress update communication but not general progress information; parent concerns noted)</td>
</tr>
<tr>
<td></td>
<td>2 (IEP articulates frequency of parent contact and goal progress updates; parent concerns are noted and how they will be responded to is articulated)</td>
</tr>
</tbody>
</table>
APPENDIX C

TEACHER PERCEPTION SURVEY
School X Special Education Faculty:
Please respond to the following questions by selecting one of the following:

**Strongly Agree, Agree, Do Not Agree, Strongly Do Not Agree, Not Applicable**

I think moving to the Case Management Model was the right approach to support students.

In this future I would be interested in changing my role within the Case Management Model.

I prefer a more traditional service delivery model for special education services.

I have less time with my colleagues using the Case Management Model as compared to the old service delivery model.

I enjoy my current role within the Case Management Model.

I am able to spend time at work supporting special education students in a way that makes me feel proud.

I do not like how each special education teacher has a “specialty” and has minimal crossover across roles.

I feel like I know and understand the intricacies of students for whom I provide support.

I would not choose the Case Management Model again if we were to change our service delivery model.

I would like to stay in the same role in the Case Management Model.

I am able to complete all of my job requirements during the school day.

I am consistently able to get data from my colleagues to plan instruction and/or prepare for IEP meetings.

I readily have data for goal updates that I can provide to complete goal updates.

I spend too much time in meetings that I am unable to complete job responsibilities.

Because of my schedule, I am able to attend and meaningfully contribute to problem-solving meets for students I work with.
I send more time working from home in the Case Management Model than I did before our school implemented it.

I attend a reasonable number of meetings each week.

I spend less time than I did before completing paperwork.

I don’t feel that I can differentiate effectively.

I can accurately speak to student present levels when asked for feedback.

I am often unsure of whom to speak with when I have a concern about a student.

I can use data to differentiate instruction more with the Case Management Model as compared to our old model.

I collaborate with colleagues about student data to inform interventions, instruction, or student planning.

I am doing too much that I don’t have time to communicate with members of my students team.

I don’t have enough time to meaningfully plan with my colleagues.

I use my plan time to collaborate with colleagues.

I feel like I know students instruction need for whom I am responsible more now than before implementing the Case Management Model.

I am not able to work with students on what they really need.

Students receive interventions aligned to IEP goals more so now compared to before implementing the Case Management Model.

I regularly analyze student progress data to make decisions.

I am able to spend more time with students than before.

My students know who they can access on their team.
Please respond to the following open ended questions with as much information as you feel comfortable sharing.

I wish the Case Management Model took into consideration: _________

If another district was considering this model I would recommend: _______

How can we improve the Case Management Model? ________________

Some strengths of the Case Management Model are? ________________

Additional comments/feedback: ________________________

If you are comfortable indicated what your role is within the Case Management Model, please select below:

- Case Manager
- Learning Strategies Teacher
- Co-Teacher
- Other
REFERENCE LIST


VITA

Abigail (Abby) Salat is the daughter of Kelly Bradley and Jim Henning. Abby lives in the Roscoe Village neighborhood of Chicago with her husband, Brian, cavapoo Rory, and her soon-to-be-born son, Connor.

She was raised in Glenview, Illinois. Abby graduated from Saint Mary’s College where in 2013 she graduated with a Bachelor of Arts degree in Psychology with minors in Math and Women/Gender Studies. Abby then attended Loyola University Chicago where she graduated with a Masters in Educational Psychology in 2014, followed by an Educational Specialist Degree in School Psychology in 2016. Abby began her career as a School Psychologist in Naperville District 203, and has been practicing in Lake Forest High School District 115 for the past three years. Her professional interests include enhancing system-level support, family-school collaboration, and school-wide consultation.

When she is not at work or school Abby enjoys cooking, walking around her neighborhood, exploring new restaurants in Chicago, and taking Pilates classes with her family.
DOCTORAL RESEARCH PROJECT COMMITTEE

The Doctoral Research Project submitted by Abby H. Salat has been read and approved by the following committee:

Amy Christensen-Nelson  
Clinical Assistant Professor, School of Education  
Loyola University Chicago

Lynne Golomb, Ed.D.  
Clinical Assistant Professor, School of Education  
Loyola University Chicago

Jennifer Sterpin, Ed.D.  
Adjunct Professor, School of Education  
Loyola University Chicago