



**Caseload Ratio Study:
Final Report to the Ohio Department of Education
September 30, 2013**

Prepared by: Charles H. Carlin, Ph.D., CCC/SLP

Linda Watt, M.A., CCC/SLP

Whitney Fallow, M.A., CFY/SLP

Emily L. Carlin, M.A., CCC/SLP

Shernavaz Vakil, Ed.D.



Table of Contents

Acronyms.....	4
Introduction.....	5
Statement of the Problem.....	7
Methods	9
Results.....	21
LEA 1.....	22
LEA 2.....	28
LEA 3.....	36
LEA 4.....	50
LEA 5.....	58
LEA 6.....	61
LEA 7.....	68
LEA 8.....	76
LEA 9.....	84
LEA 10.....	91
LEA 11.....	103
LEA 12.....	111
LEA 13.....	122
LEA 14.....	134
LEA 15.....	143
LEA 16.....	156
LEA 17.....	163
LEA 18.....	168
LEA 19.....	177
LEA 20.....	184
LEA 21.....	193

Summary of Major Findings.....	201
Summary of Major Implications for Practice	204
Training and Guidance: Operating Standards.....	212
Recommended Language Changes for 3301-51-09.....	218
Proposed Workload Process for Consideration	222
Guidance on Ratio Calculations and Incorporation into a Funding Model	228

Acronyms

ODE: Ohio Department of Education

IEP: Individualized education program

LRE: Least restrictive environment

ESC: Educational service center

SSID: Statewide student identifier system

ASHA: American Speech-Language-Hearing Association

SLP: Speech-language pathologist

IS: Intervention specialist

OT: Occupational therapist

PT: Physical therapist

OTA: Occupational therapy assistant

PTA: Physical therapist assistant

SIS: Student information sheets

IP: Intervention plan

FAPE: Free appropriate public education

LEA: Local education agencies

VOSE: Vocational Specialist

N/A: Not available

RTI: Response to intervention

OGT: Ohio Graduation Test

OAA: Ohio Achievement Assessments

Introduction

The Current Ohio Workload Approach

Although Ohio's caseload ratios have remained unchanged since 1982, a framework exists in the current Ohio Operating Standards that directs local educational agencies (LEAs) to consider the scheduling and time demands of various workload duties when calculating caseload ratios (3301-51-09)(I). After the scheduling and time demands of various workload duties are considered, caseload ratios factor in the student's disability category, school level, maximum age range per instructional period, and the maximum number to be served during an instructional period. The current two prong approach, detailed in Table 1, considers the array of duties of individual preschool and school-age service providers. It further aligns with other best-practice workload recommendations from national and state related service organizations and research (ASHA, 2002; Russ, Chiang, Rylance, and Bongers, 2001).

Table 1 represents the two-prong approach that is spelled out in the Ohio Operating Standards and applies it to speech language pathologists (for illustration purposes).

Table 1. Two-Prong Approach to Determining Ratios for Preschool and School-age Providers in Ohio

Prong 1: Paragraph 3301-51-09 (I) (1) (a-d):

(1) The school district, county board of mental retardation and developmental disabilities (county board of MR/DD), and other educational agencies shall determine ratios for an individual service provider by considering scheduling and time demands of preschool or school-age service providers, including but not limited to the following:

- (a) All areas of service provided to children with and without disabilities, including screening, assessment, consultation, counseling, training, and related duties in the school setting, intervention design, and educational interventions.
- (b) The severity of each eligible child's need, and the level and frequency of services necessary for children to attain IEP goals and objectives.
- (c) Time needed for planning in accordance with paragraph (A)(9) of the rule

3301-35-05 of the Administrative Code.

- (d) Additional time for diagnostic testing and classroom observation; coordination of the program; parent, staff, and agency conferences concerning individual children; staff development activities; and follow-up; and the demands of an itinerant schedule, including the number of buildings, the distance between buildings, and travel.

Prong 2: Paragraph 3301-51-09 (I) (3) (f) on page 167 reads as follows

(3) Related service providers for preschool and school-age children with disabilities shall provide direct services in accordance with the following ratios. Additionally, consideration shall be given to paragraph (I)(1) of this rule. Indirect and direct services shall be provided in accordance with each child's IEP.

- (f) A speech and language pathologist shall provide services to no more than eighty school-age children with disabilities; or no more than fifty school-age children with multiple disabilities, hearing impairments, or orthopedic/other health impairments; or no more than fifty preschool children with disabilities.

Each school district shall provide services at the ratio of one speech and language pathologist per two thousand students as required by paragraph (F) of section 3317.15 of the Revised Code.

Statement of the Problem

Despite the fact that the Ohio Department of Education has mandated a two prong approach to the determination of caseload ratios, this approach is not being utilized in the Ohio public school system. To illustrate this fact, only 12% of Ohio administrators utilized this two prong approach to determine the caseload size for their SLPs (ASHA, 2008). The sole use of student or teacher head counts, disability categories, school level, maximum age range per instructional period, and maximum number to be served during an instructional period to determine caseload size is not in alignment with the Ohio Operating Standards (3301-51-09 (I)(1)(a-d)).

The goal of the Caseload Ratio Study was to obtain data from numerous methods of service delivery, and to analyze that data to discover which method(s) were the most appropriate and allowed for service providers to be the most effective in delivering services to students' with special needs. In order to encourage districts to develop and implement a new approach, funding was available through the Office for Exceptional Children. Any city, local and exempted village school districts, community schools, educational service center, or county board of developmental disabilities were eligible to submit an application. In order to assist with Caseload Ratio Project, the Office for Exceptional Children contracted with Dr. Charles H. Carlin and his research team at The University of Akron to review each local educational agency's (LEA) approach.

As can be seen in Table 2, 21 LEAs across the state of Ohio received funding to participate in the Ohio Department of Education Caseload Ratio Study. The table below shows demographic information about the LEAs. The average daily membership (ADM) and number of students with disabilities (SWD) were reported by the districts.

Table 2. Description of Participating Districts at Time of Initial Grant Funding

LEA	ADM	Number with Disabilities	Region
1.	4155	761	Rural
2.	2100	308	Rural/suburban
3.	1744	273	Rural
4.	171	34	Rural
5.	27727	4089	Rural/suburban
6.	1746	337	Rural
7.	1241	174	Rural
8.	833 ¹	650	Urban
9.	960	306	Rural
10.	1209	220	Rural
11.	2660	495	Rural
12.	471 ²	288 ³	Rural/suburban
13.	215	45	Urban
14.	⁴ See below	≈ 3000 ⁵	Rural/suburban/urban
15.	996	197	Rural
16.	3577	793	Urban
17.	64	46	Rural
18.	305	176	Urban
19.	777	228	Suburban
20.	1505	147	Rural
21.	14600	1700	Suburban

¹Only denotes those served in ESC classrooms

² and ³ For ESC Program students, although the ESC serves all districts in the county with related services

⁴Differs based on the individual district served

⁵Serve approximately 3,000 students with disabilities annually

Methods

Participants in the Study

All the LEAs selected and assigned participants to a group, whether it be an experimental or control group. For various reasons, not every LEA had a control group. After each participant was assigned to a group, their names, occupations, and contact information was submitted to the research team. Two participants did not submit data for independent evaluation, and therefore participant data were not available. Table 3 provides a description of the participants.

Table 3. Description of Participants

LEA	Group(s)*	Ages Served	Providers	n
1.	-	-	-	-
2.	Experimental	School and Preschool	IS	n=14
3.	Both	School age	IS (E) IS (C)	n=5 n=5
4.	Experimental	School age	IS	n=2
5.	-	-	-	-
6.	Experimental	School age	IS	n=6
7.	Experimental	School age	IS OTA PT SLP OT	n=3 n=1 n=1 n=1 n=1
8.	Both	School age and Preschool	SLP (E) SLP (C) OT (E) OT (C) PT (E) PT (C)	n=5 n=3 n=5 n=3 n=1 n=1
9.	Experimental	School age	VOSEs Intervention Specialists	n=2 n=2
10.	Both	School age	IS (E) IS (C)	n=4 n=5
11.	Experimental	School age	IS	n=3
12.	Experimental	School age	OT OTA	n=4 n=3
13.	Experimental	School age	Intervention specialists	n=2
14.	Experimental	School age and Preschool	PT OT	n=10 n=8
15.	Experimental	School age	Intervention Specialists	n=11

16.	Both	School age	IS (E) IS (C) SLP (E) SLP (C)	n=6 n=5 n=1 n=1
17.	Experimental	School age	Intervention Specialists	n=4
18.	Both	School Age	IS (C) IS (E)	n=3 n=4
19.	Experimental	School Age	IS VOSE	n=2 n=3
20.	Control	School Age	IS SLP COTA	n=4 n=1 n=1
21.	Both	School age	IS (c) IS (E)	n=7 n=7

Procedures

For the grant, each LEA developed and implemented their own approach to calculate caseload ratios for target service providers. During the implementation phase, the LEAs participated in the independent evaluation of their approach. Nineteen of the LEAs (90%) participated in some level of independent evaluation of their approach. Training materials, forms, and support were provided in order to ensure the data were collected in a consistent and uniform manner.

Webinar

On January 17, 2012, a webinar was hosted by the University of Akron. Each agency was sent an introductory email, the time of the broadcast and a link to the Elluminate recording by the Office for Exceptional Children. This access placed each agency onto the live broadcast of **Caseload Ratio Study: Evaluation Phase**. Attendance included 100% of the participating LEAs, their contact person and some of the providers, a representative from the Ohio Department of Education and the entire research team from the University of Akron. Following the broadcast, agency representatives were encouraged to direct questions to a designated member of the research team and the Ohio Department of Education representative. Agencies were identified as Round 1 (study for spring 2012) or Round 2 (study for fall 2012, winter 2013). A copy of the

webinar and PowerPoint were provided as well. On January 20, 2012, the LEAs were requested to contact the research team with the following information:

1. The dates for their time study.
2. A list of providers, which was to be documented on Form 1, (see Appendix) with email addresses and occupations.

Each identified provider (identified with a Round 1 or Round 2 agency date) received an email with instructions and links from the University of Akron grant team approximately two weeks prior to their time study. Additional training in the data collection procedures were available and included the recorded January 17, 2012 webinar link, PowerPoint, training documents, examples and an email address to offer individual answers and feedback. A Support Desk number and email address were included in the Time Study Directions Booklet. At the request of any provider, phone conferences were available. Data collection commenced after the webinar training.

Data Collection Instruments

A *Data Collection Manual* was created and it outlined the entire time study process (see Appendix). It had several main sections, including items to be completed before the service provider's time study. It also provided guidance at each step during the data collection process.

The research team developed a *Time Study Worksheet* and the accompanying *Workload Duties Description* as tools for service providers. These tools kept track of the time it took to complete workload duties and provide services and interventions to students on their caseloads. Although the actual worksheet was not required to be returned to the research team, the data from it was entered into an internet-based survey. The worksheet consisted of ten categories of workload duties, and these categories were derived from the existing Operating Standards (3301-51-09) and a review of the literature. The categories and descriptions were as follows:

- *Direct instruction:* Hands-on, face-to-face interactions between the service provider and the student (e.g., therapy, interventions, and specially designed instruction). It does not include diagnostic activities.
- *Consultation with staff:* An indirect service that is conducted on behalf of a student on the service provider's caseload. The student is not present during this activity. The interaction (e.g., face-to-face, phone, email) occurs between the service provider and another individual (but not the parent). It occurs when two or more individuals (e.g., the SLP and teacher) work together to solve a problem related to the student's academic, behavioral, socio-emotional, vocational, functional, or other skills.
- *Other indirect instructions/services/interventions:* Other indirect activities are defined as those activities that are related to the student's IEP or intervention plan (e.g., goals, objectives, LRE, accommodations, modifications, services). These activities are conducted on behalf of a student on the service provider's caseload. The student is not present during this activity. It occurs when the service provider works to create, adapt/modify, troubleshoot, program, maintain, install, or design something that will help the student make progress toward his/her IEP or intervention goals/objectives.
- *Diagnostics:* Time spent on collecting and interpreting data related to the nature and existence of a student's suspected disability, continued eligibility in special education, present levels of academic and functional performance, progress in the curriculum and IEP/intervention goals and objectives, the function of behaviors, health status, etc. This would not include intervention activities (e.g., placement in the resource room to receive intensive phonemic awareness interventions, pullout speech therapy to improve the /r/ sound) that are designed to determine placement into regular education or special education programs.
- *Meetings:* Time spent meeting with parents or other professionals to share information, professionally develop staff, etc. The meeting could be held face-to-face, through phone calls, or via videoconferences.
- *Required Documentation:* Time spent on paperwork that supports compliance with district, state, and federal mandates.

- *Correspondences*: Time spent creating or responding to emails, phone calls, written contacts, etc. This also includes time spent making referrals to other professionals or agencies.
- *Other*: Time spent on activities that are not covered in the previous categories.
- *Contractual Duties*: Time spent on duties that are mandated by your contact or administration (and don't fit into other categories).
- *Contractual Lunch*: Time spent only taking lunch. This would not include the time spent eating and completing other workload duties (i.e., multitasking).

The *Time Study Worksheet* was in an Excel document format and contained built in instructions and examples. The worksheet had popup definitions for each workload category that match the above noted definitions. At the bottom of each column, the worksheet added up the total number minutes that the service provider worked for the given day. At the far right of each row, the worksheet added up the total number of minutes that the service provider spent on a given duty/category. The worksheet then changed the minutes entered to hours. There was also an area on the worksheet which allowed the service provider to document what "other" tasks were completed during the week. Another box on the worksheet allowed the service provider to write down comments on workload duties throughout the week.

After the time study was over, the service providers were asked to complete the *Student Information Sheet*. The service providers indicated how many minutes of interventions/services were actually provided to each student during the week of the time study. If students did not receive their full services/interventions, a justification was requested. Finally, the service providers were asked if they, or a qualified other, made up missed services/interventions. The providers were asked to submit the *Student Information Sheets* within 1 week of the time study.

Accessing the Data Collection Instruments

The data collection instruments were available on a website that was developed and maintained by the research team. The website was password protected, which assured only participants in the grant were able to

access the information. The website contained the following: *Form 2: Student Information Sheet, Time Study Calculator/Worksheet, Workload Duties Description Worksheet, Data Collection Manual, and Evaluation of Implementation PowerPoint.*

Data Collection Process

Selecting the time study week.

Once the LEAs had time to implement their new approach, they were asked to conduct a time study and collect data to evaluate their approach. In order to do so, the district contact person selected a week that their district or school would conduct their time study. They were instructed to select a typical or representative week (i.e., select a five day week that did not have an out of place event, such as a grade level field trip, school assembly, or a shortened school week).

In order to account for the fact that many service providers completed work at home, the time study was to be seven days in length (Sunday through Saturday), twenty-four hours per day. Providers were to count time spent at home, at the educational institution before the start of the school day or after the end of the day, and time spent on the weekends. They were to include any time spent on activities that fell within the ten categories provided on the time study worksheet, no matter what time of day or place they were completed.

Before the time study.

Prior to the start of the time study, the service providers received an email from the research team that contained important data collection instructions, internet links, and other information (e.g., support desk contact). The service providers were also asked to send in coded and redacted copies of their students' IEPs (i.e., only Step 7), 504 accommodation plans, or intervention plans (IP). The service providers identified the students by SSID number or some other identifiable, yet confidential code. No student names, social security numbers, or birth dates were used or collected by the research team. All identifiable student data remained at the LEA level.

Once the research team was aware of the number and type of students on the participants' caseloads, a *Student Information Sheet* was created and distributed back to the participants. Student data were organized by student status (i.e., regular or special education), type of plan (i.e., IEP, IP, or 504 plan), type of services provided (i.e., instructions/services/intervention, case management, or both), LRE, group size, and the total number of minutes of instruction/services/interventions the provider was responsible for during the week of the time study as indicated on the IEP, 504 accommodation plan, or intervention plan.

During the time study.

During the week of the LEA's time study, the service providers were instructed to complete the *Time Study Worksheet* (see Appendix), using either a paper-pencil or Excel spreadsheet format. They were asked to keep track of how much time was spent completing services and duties (e.g., assessment, paperwork, planning) throughout the 7 day time study week. The service providers were to document the time spent on these activities at home, before and after school, and during the contractual work week, rounded to the nearest 5 minute mark.

If a service provider was absent due to illness or a personal day, they were instructed to record data for the same day of the week during the next following work week. This strategy allowed for a full 7 days of data to be provided. For example, if district A chose to conduct the time study during the week of Sunday the 2nd through Saturday the 8th, but a service provider was absent on Monday the 3rd, that service provider would still conduct the time study on Sunday the 2nd, and Tuesday the 4th through Saturday the 8th. They would then conduct the study on Monday the 10th, to make-up for missing the 3rd. The provider did not have to provide this date; they simply had to put the make-up day's information into the day they missed.

After the time study.

At the conclusion of the time study week, the service providers entered their data into an online survey. The service providers used the *Time Study Worksheet* to assist with the completion of the survey. The service

providers were also asked to provide demographic data and respond to questions about their perceptions of the approach. The survey collected the following data:

- *Service provider information:* This section asked for information about the service provider, including their name, email, title, number of years employed in current position, how many hours they are contracted to work each week, and which grade levels they work with.
- *Time study information:* This section asked service providers to provide information about how much time was spent on each task during their time study week. To complete this section, service providers were encouraged to utilize the *Time Study Worksheet*. Service providers were instructed to fill out time spent on each task in minutes per task.
- *Contractual questions:* These questions focused on parameters addressed in service providers' contracts, including time allotted for lunch, planning, and school duties (i.e., bus and cafeteria duty).
- *Caseload management:* These questions pertained to how the caseload was assigned to the service provider, if the provider felt they could provide services, when they commenced services at the beginning of the school year, and if services are made up if the provider is engaged in another activity.
- *Caseload Size and Age Ranges:* These questions addressed if the providers' caseloads met state requirements regarding size and age range. If the caseload exceeded the state's requirements, service providers were asked if they received permission from the state in the form of a waiver to exceed those limits.

After all the data were entered into the survey and at the end of the school year, the school districts provided student outcome data. Two forms were used to collect data regarding student outcome for the school year; these sheets were referred to as *Form 3* and *Form 4*.

Form 3 was filled out by each service provider. There were two versions of *Form 3*, one for school-aged children and one for preschool-aged children. The service provider was able to access *Form 3* via the

aforementioned website. The provider was asked to provide the following pieces of information for school-aged children:

- Student SSID number
- Student grade level
- Number of months student received services
- Percentage of goals mastered or progressing adequately
- Percentage of statewide diagnostic tests on track
- Percentage of students' core classes passed

The provider was asked to provide the following pieces of information for preschool-aged children:

- Student SSID number
- Number of months student received services
- Percentage of goals mastered or progressing adequately
- *ECO Outcome 1-(Social Emotional)*—Child showed new skills or behaviors since last outcome summary (yes or no)
- *ECO Outcome 2-(General Knowledge)*-- Child showed new skills or behaviors since last outcome summary (yes or no)
- *ECO Outcome 3-(Self-help)*-- Child showed new skills or behaviors since last outcome summary (yes or no)

The providers were asked to send these forms back to the university research team at the conclusion of the 4th quarter.

In an effort to obtain information concerning state mandated testing, the research team developed *Form 4*. A *Form 4* was created and prefilled for each district based on the information obtained by the research team via the Student Information Sheet. The research team sent these to the districts by the beginning of May 2012

and May 2013, depending upon what round the district was in. The team pre-filled in the provider's name, student SSID number, and disability category. Districts were asked to fill out the following pieces of information for each student listed:

- OAA percentage
- OGT percentage

The form was sent to the district contact person, and they were requested to send it back to the research team via email.

Analysis of Data

The research team developed a calculator with the purpose of developing a standardized tool to calculate service provider and student outcome data. This calculator was made to allow the research team to look at four main areas: Student outcome, work and contractual needs, FAPE, and compliance with state set size and age ranges. By looking at these areas, the research team was able to evaluate if the students in the district were making adequate progress, if the service providers were meeting or exceeding their contractual obligations, if the students had access to FAPE, and if the schools were in compliance with state guidelines regarding caseload size and group age ranges.

The research team developed a calculator with the purpose of developing a standardized tool to analyze service provider and student outcome data. This calculator analyzed data in four main areas: Student outcome, work and contractual needs, FAPE, and compliance with state set size and age ranges.

- *Student Outcome Data*: the student outcome section in the calculator obtained information from Form 3 and Form 4, which asked for information regarding OGT, OAA tests, and if students mastered or were progressing adequately for their 4th quarter IEPs and IPs, if statewide diagnostic tests were clearly on track, and what percentage of the student's core academic classes were passed.

- *Work and Contractual Needs*: This information came from data provided by service providers through the time study survey.
- *FAPE*: This information came from the *Student Information Sheet* document that all the service providers in the study provided. The minutes of direct instruction that the service provider was responsible for per student was compared to how many minutes of direct instruction were actually provided.
- *Waiver*: This information was obtained from the time study survey. Providers were presented with tables which explained the age ranges and caseload sizes that were allowable by law. If providers exceeded either of these two allowable ranges, they were asked if they received a waiver from the state which allowed them to do so.

Indicators of Success

By looking at the above mentioned areas, the research team was able to determine if LEAs were successful at achieving indicators related to the following: Student performance and progress, service provider workload, provision of FAPE, and compliance 3301-51-09 of the Ohio Operating Standards. Below are the specific indicators of success that were used as metrics for each of the LEAs.

Student Performance Indicators.

- LEAs met OAA indicator if 75% of students scored at or above the proficient level.
- LEAs met OGT indicator if 75% of students scored at or above the proficient level.
- LEAs met statewide diagnostic indicator if 75% of students scored clearly on track or higher.
- LEAs met passage rate indicator if 80% of students passed core academic classes with a C or better.
- LEAs met goal indicators if 80% of students mastered or made adequate progress on IEP or interventions goals.

Provision of FAPE Indicators.

- LEAs met first FAPE indicator if 80% of students received at least the minimum amount of services (i.e., those services listed on IEP, 504 plans, or intervention plans), when make-up services and student absences were considered.
- LEAs met second FAPE indicator if 90% of service providers believed FAPE could be reasonably provided using the new approach, method, and/or strategies.

Workload Indicators.

- LEAs met the first workload indicator if, on average, the service providers worked a reasonable work week. Realizing that many of the service providers in the study were salaried employees, overtime work was considered significant when it was more than 20% of the total contract hours (i.e., 7 hours was significant for a 35 hour work week). If a service provider worked no more than 20% of the total contract hours, then this workload indicator was met.
- LEAs met the second workload indicator if 75% of service providers received their full lunch.
- LEAs met the third workload indicator if 75% of service providers received their full planning time.

Indicators of Alignment with Operating Standards.

- LEAs met the alignment indicator if there was evidence or a likelihood that the approach considered the scheduling and time demands of 3301-51-09 (I)(1)(a-d).

Results

The following section details the results of the implementation of the alternative caseload ratio approaches that were developed by the LEAs. The various LEA approaches are summarized and the analysis of the accompanying data is provided. In some cases, LEAs did not provide any or complete data for analysis. The LEA approaches were measured against each of the indicators of success.

LEA 1

Background

LEA 1 believed school psychologists faced a caseload ratio problem as Ohio moved from a “traditional test and place model” to a response to intervention (RTI) model. At a time when most school districts implemented RTI, the participant did not feel the current maximum caseload ratios from the Operating Standards (3301-51-09 (3)(g) reflected the work that school psychologist did at the elementary or secondary school levels and 3301-51-09 (I)(i)(a-d) did not take into consideration the time and resources needed for a school psychologist to implement a robust RTI model. To highlight gaps in 3301-51-09 (I)(i)(a-d), LEA 1 detailed several new workload duties that were associated with the design, implementation, and evaluation of an RTI model:

1. Actively participate in a leadership position in the selection, implementation, and oversight of scientifically researched-based interventions and curricula.
2. Meet with teachers to design interventions.
3. Assist teacher with determining appropriate data collection techniques to determine the effectiveness of the intervention.
4. Monitor the fidelity of implementation of these interventions and curricula.
5. Provide test data to teams to help determine appropriate interventions.
6. Provide services to students with social-emotional or behavioral skill deficits.
7. Provide leadership in creating success for all students in a standards-based education setting.

In participating in the Caseload Ratio Study, LEA 1 hoped to achieve the following goals by the end of their study:

1. Determine the time that was needed to design appropriate interventions at various grade levels and/or grade bands.

2. Determine a method to track the time needed to monitor interventions at various grade levels and/or grade bands.
3. Determine a method to conduct fidelity checks (i.e., develop an intervention checklist or walk through format).
4. Determine a method to track time needed for traditional school psychologist services (i.e., testing, report writing, reevaluations).
5. Determine a method to track time needed for intervention services directly provided by the school psychologist (i.e., functional behavioral assessment, behavior intervention planning, cognitive behavior therapy, applied behavior analysis).
6. Develop a method for using this information to determine an effective caseload ratio for school psychologists.
7. Train school psychologists on a variety of scientifically research-based interventions for reading and math and allow opportunities to implement each intervention.

LEA 1 Alternative Approach to Calculating Caseload Ratios

LEA 1 recommended that district and building data be used as an additional component to consider when determining a caseload ratio for a school psychologist. This data might include:

1. Curriculum-based Measures
 - a. Number of students in the intensive and strategic monitor range
 - b. Number of students in the gifted range
 - c. Rates of improvement for all students
2. Number of Reading Improvement and Monitoring Plans
3. Percentage of students passing state level achievement tests
4. Annual Yearly Progress
5. Performance Index (PI)

6. Level of need
7. Number of students with emotional disabilities with
 - a. Drug addiction and/or adjudication of community stakeholders
 - b. Mental health issues
8. Number of identified students per disability category
9. Number of identified gifted/talented students
10. Graduation Rates
11. Attendance Rates
12. Community Resources as impacted by urban versus rural districts

According to LEA 1, the following formula, which considers the above mentioned district and building data, was recommended. LEA 1 developed the formula to offer LEAs a rough estimate of the minimal school psychology personnel that were needed. The formula is scaffolded, which meant calculations started at top and proceeded downward. The following weights were added and then divided by enrollment as described.

Final weighted school district designation

Excellent with distinction	=1
Excellent	=2
Effective	=3
Continuous	=4
Academic improve	=5
Academic watch	=6

Number of charter/private schools

2 or less	=1
3 to 5	=2
6 to 8	=3
9 to 12	=4

Number of preschools classes/itinerate

0 to 5	=1
6 to 12	=2
13 to 20	=3
21 to 28	=4
29 to 34	=5

Percentage of students with disabilities

0 to 5	=1
6 to 10	=2
11 to 16	=3
17 to 21	=4
22 to 26	=5

Percentage of economically disadvantage

0 to 25	=1
26 to 50	=2
51 to 75	=3
76to 100	=4

Percentage of students on RIMP plans

1 to 5	=1
6 to 11	=2
12 to 17	=3
18 to 23	=4
24 to 29	=5
30 to 35	=6
36 to 41	=7
42 to 47	=8
48 to 53	=9

DIVIDED by following number of students enrolled

1000 or less	=8
1001 to 2,000	=7
2,001 to 3,000	=6
3,001 to 4,000	=5
4,001 to 5,000	=4
5,001 to 6,000	=3
6,001 to 7,000	=2
7,001 to 8,000	=1

As applied to LEA 1: $3 + 1 + 2 + 4 + 3 + 7 = 20/4$ equals 5 school psychologists. Please note, this formula was never implemented by LEA 1 and was presented by the district as a hypothetical solution to the school psychologist caseload ratio problem. Interested parties should contact LEA 1 directly for more information about the approach.

LEA 1's Evaluation of Their School Psychologist's Workload

During the duration of the grant, the district experienced a budget crisis that resulted in a significant reduction in force. Buildings lost many resources including guidance counselors, test coordinators, and assistant principals. At the same time class sizes were increased and intervention tutors were reduced at both the elementary and secondary levels. Another factor that affected the work of the school psychologist was the shift from the Ohio Content Standards to the Common Core Curriculum, which necessitated a realignment of the curriculum and time.

LEA 1 conducted a month long time study to quantify how much time the school psychologists spent providing services and completing workload associated with traditional duties (e.g., evaluations, re-evaluations, paperwork) and the implementation of a "robust" RTI model. Three school psychologists participated in the time study, and the included time spent before and after work and on the weekends.

The data showed the three school psychologists devoted 24-36% of their time to RTI related workload duties, and they all worked well beyond their contractual work hours. On average, the three school psychologists worked 47.3 hours in overtime, with a range of 36 hours to 56 hours over their contractual hours. When the school psychologists worked overtime, they primary completed assessments, attended meetings, or wrote reports. On average, administrative tasks (not defined) consumed 15.8 hours a month of the school psychologists' with a range of 10.5 to 22.5 hours.

LEA 1 Recommendations

LEA 1 recommended that ODE consider the following:

- Use district and building data as a component to determine caseload ratios for school psychological services.

LEA 2

Background

LEA 2 participated in the Caseload Ratio Study and collaborated with the local educational service center to develop their approach. Their study began February 2011 school year and concluded in June 2013.

The goal of LEA 2 was to develop “an electronic workload calculator that [limited] ... the workload of intervention specialists based on the intensity (student intensity points, sip) of students they serve during an instructional period”. Further, LEA 2 hoped to have all ISs available to contribute to the education of all students. Lastly, the district wanted to establish a workload-based approach versus a headcount-based approach, and thereby determine an equitable and reasonable workload for service providers. In order to achieve these goals, LEA 2 believed the following barriers needed to be addressed:

1. Service providers who served students with intensive needs were expected to serve more students than they could reasonably manage because they did not reach the maximum caseload ratios.
2. There was little collaboration among service providers if students were not jointly assigned to each service provider’s caseload.
3. Service providers suggested they were unable to support students because they had full caseloads (i.e., using the headcount approach) when in fact, some of the students on the caseload required minimal support or services. In these instances, there was enough time for them to serve more students.
4. For students with disabilities, inappropriate IS caseload ratios likely impacted student achievement and performance on statewide standardized tests.

LEA 2 Alternative Approach

In an attempt to quantify the workload of each IS, LEA 2 conducted time studies to determine how much time was devoted to direct and indirect services and other workload duties. The LEA 2 grant team believed ISs should devote 60% of their time to direct student services. They also believed that the total amount

of time it took to provide direct and indirect services and complete other workload duties should equal “a contract day (i.e., 420 minutes/7 hours or 450 minutes/7.5 hours)”. Upon reviewing their initial time study results, LEA 2 realized the ISs were only providing direct services 30 – 45% of the time. Due to the mismatch between their targeted level of productivity (i.e., 60%) and actual level of productivity rate (i.e., 30-45%), several strategies were implemented in order to ensure ISs worked a sufficient percentage of time on direct student services and maintained manageable caseloads.

1. Implement co-teaching with the IS in the general education classroom.
2. Develop a common definition for direct and indirect instruction and build the caseload ratio model using those definitions.
3. Investigate and rectify any disconnects that exist between the beliefs and expectations of the ISs and the general education teachers.
4. Enlist the support of building administrators in reducing nonessential workload. Principals determined the ISs’ were not being used in a way that made the most of their expertise and therefore, they removed “extra duties” from the ISs’ workload.
5. Devote time in the ISs’ schedule for certain case management activities. The ISs needed time to “support general educators” and “act as the teacher of record in classes where the IS was highly qualified”. These strategies enabled a high school IS, who was highly qualified in Language Arts, to teach a 12th grade English class for any students who needed more differentiation than was possible in a general education 12th grade English class.
6. Among the ISs, share certain workload duties and student services. Although ISs had their “caseload” to keep track of, there was much collaboration, sharing of paperwork and finding a way to meet the individual need of each student, whether they were on an IS’s caseload or not.
7. Equitably assign students to ISs’ caseload based on the amount of direct instruction each student received and how that instruction was delivered (e.g., small group, one on one, total inclusion, etc.) This “approach was designed to support the well-being and/or safety of students and provide FAPE

because it was based on the individual needs of each student”. A weighting system, which was based on types of student services, was developed (see Table 4) to aid in the equitable distribution of students. In practice, ISs who delivered direct services in a small group setting to students who had intense needs would have fewer students on the caseload. Conversely, ISs who provided direct services to students in a “full inclusion” general education setting would have more students on the caseload.

Table 4. Support Levels based on Student Services and Needs

Support Level	Characteristics (based on Student Services)
Regular Education Student	No services required.
Level 1	<20%, consultation.
Level 2	<20%, learning strategies, organizational skills, re-teaching, frontloading.
Level 3	21-60%, targeted skills in language arts, mathematics, written expression, social skills, organization skills; re-teaching; frontloading.
Level 4	>60%, extensive instruction; needs related to health, communication, sensory, and behavior; periodic supervision of paraprofessionals.
Level 5	>60%, extensive instruction; needs related to health, communication, sensory, and behavior; intensive supervision of paraprofessionals.
Behavior	Behavior plan required, staff support, student placed in alternative setting, mental health needs.
Medical	Physical plan, medical plan.
Communication	Assistive technology required, signing, student

	placed in an alternative setting.
--	-----------------------------------

Evaluation of the LEA 2 Approach and Strategies

Participants

LEA 2 had 14 participants in the experimental group of the study, all of whom were ISs. The district conducted their time study the week of October 14, 2012.

Student Outcome Data

Student outcome data were collected in May and June of 2013. At the end of the 4th quarter, school-aged student outcome data showed 93% of the IEP goals were either mastered or adequately progressing and 95% of the students passed their academic core classes. Only 2/14 ISs provided data related to progress on statewide diagnostic tests. Their data showed 67% of the statewide diagnostic tests were clearly on track. Further, 55% of OGT tests were found to be at least proficient level.

For preschool-aged students, 2 ISs provided services to preschool-aged students and reported that 83% of IEP goals were either mastered or adequately progressing. The data also revealed 20% of students showed new socio-emotional skills, 100% showed new general knowledge skills, and 47% showed new self-help skills.

Provision of FAPE

The participants in the study provided data related to the provision of FAPE and interventions. The 14 intervention specialists in the experimental group provided services to 241 students with and without disabilities. The data showed 85 students (35%) received the exact amount of special education services as specified on their IEP and 100 students (42%) received more special education services than were stated on their IEPs. The data also showed that 56 students (23%) received less minutes than were stated on their IEPs. Fewer services were provided to 16 of those students (29%) because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 56 students who missed services,

41 (73%) received “make-up” services. In total, 94% of students with disabilities or intervention plans had their IEP or intervention plan minutes met, when make-up services were considered.

Analysis of Workload

The service providers were asked to conduct a time study to quantify their workload. They were also asked to complete a survey about certain aspects of their employment contract. During the time study week, 71% of ISs worked more hours than were indicated in their contract. On average, they worked 6.48 hours in overtime, with a range of 5.33 hours under to 27.25 hours over the number of hours indicated on their employment contract. In addition to providing data about the number of hours worked, the results showed 71% of ISs took their fully allotted lunch and 64% of ISs took their full amount of planning time.

State Waivers

The service providers were asked to provide data regarding waivers for exceeding maximum caseload ratios or acceptable age ranges. LEA 2 that one IS (7%) exceeded the age range within a group but there was no waiver granted to exceed the age range. Additionally, one IS (7%) exceeded the acceptable caseload size but no state waiver was issued to allow the district to exceed the acceptable caseload size. It was important to note that the data on waivers were self-reported by the service providers, and not verified by the researcher.

Stakeholder Perceptions

Limited stakeholder perception data were obtained. After the time study, ISs were asked if they could reasonably provide FAPE using LEA 2’s approach and strategies. Out of the 14 ISs who responded, 9 (64%) stated that they felt that they could reasonably provide FAPE to their students.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it appeared as though the LEA 2 approach and strategies likely aligned with the Operating Standards (3301-51-09). In developing their rubric,

strategies, and approach (i.e., time for service plus workload duties should equal contractual hours), LEA 2 was able to incorporate several components of 3301-51-09 (I)(1)(a-d). They considered the scheduling and time demands that were associated with the following: direct and indirect student services to students with and without disabilities (i.e., screening, assessment, consultation, counseling, educational interventions, diagnostic testing, and classroom observation), student LRE and needs (e.g., behavior, communication, assistive technology), related school duties, and “other workload duties.” Although “other workload duties” were not delimited, there was nothing to suggest that other activities from 3301-51-09 (I)(1)(a-d) could not be included. Finally, LEA 2 also included supervision as a workload duty, which was not an activity that was specifically mentioned in 3301-51-09 (I)(1)(a-d).

Conclusions

Upon reviewing the student outcome data that were associated with the implementation phase of the approach and strategies, four success indicators were met. First, the majority of preschool and school-aged students mastered or made adequate progress on their goals by the end of the school year. Second, the majority of school-aged students passed core academic classes. Next, a majority of students received FAPE when student absences and make-up services were considered. Finally, the majority of full-time ISs worked less than one day extra a week.

Although FAPE was provided to most of the students, over a third of ISs provided extra services, which may have signaled not enough services were initially listed on IEP or intervention plans. Upon reviewing data related to workload, an insufficient percentage of ISs received their full lunch or planning time. There was a sizeable range found when the number of hours worked were analyzed. Finally, over a third of ISs in the study did not believe FAPE could be provided using the LEA 2 approach and strategies.

Finally, the LEA 2 approach and strategies were not fully effective at calculating caseload ratios. First, an insufficient number of service providers believed the approach could be used to provide FAPE and there was notable variability in the number of hours worked during the time study week. Second, the implementation of

the LEA 2 approach and strategies included a small sample size, which only included ISs. The sample size and the sole use of ISs significantly limited the generalizability of results to other LEAs and service providers. Last, no control group participated in the evaluation of the approach and strategies, and therefore comparisons could not be made.

In conclusion, although the data showed the approach and strategies were not fully effective as designed, they held potential for ODE if adjustments were made. First and foremost, if all IEP and intervention services were documented, then the equitable distribution of students could occur and the weights could be applied. Once accurate student weights were assigned, additional time study data could be collected and used to determine if service providers were assigned appropriate caseload ratios.

Implications for Practice

1. A time study approach was used to quantify how much time ISs worked and determine how much time was spent on services and other workload duties. The time study process was formalized and implemented consistently across the district.
2. LEA 2 developed a simple method for calculating caseload ratios: Time for services plus time for workload duties should equal the total number of hours in a service provider's work week.
3. Principals reassigned workload duties in order to focus the ISs' time on service delivery.
4. When students were available for instruction and services, ISs were expected to devote at least 60% of their time to student services.
5. Students were served across providers and workload was shared.
6. LEA 2 acknowledged ISs needed time to supervise paraprofessionals, and the amount of supervision was tied to students' needs.
7. In order to ensure services were maximized and delivered in the LRE, co-teaching was used by the ISs in the general education classroom.

8. Principals investigated and rectified any disconnects that existed between the beliefs and expectations of the ISs and the general education teachers.
9. Time was built into the ISs' schedule for certain case management activities. The ISs needed time to "support general educators" and "act as the teacher of record in classes where the IS was highly qualified".
10. The ISs shared certain workload duties and student services.
11. Based on data, LEA 2 attempted to equitably assign students to ISs' caseload based on the amount of direct instruction each student received and how that instruction was delivered (e.g., small group, one on one, total inclusion, etc.).

Recommendations from the District

LEA 2 recommends that:

1. The Ohio Department of Education consider a productivity approach (i.e., determine the percentage of time an intervention specialist should spend per day on direct instruction). Additionally, students should be weighted based on an established rubric rather than simply utilizing a head count.

LEA 3

Background

LEA 3 participated in the Caseload Ratio Study during the 2010-2011 and 2011-2012 school years. LEA 3 described itself as a small rural district in a financially hard hit area with a very mobile special education population (i.e., mobility rate was near 20% in 2010). They believed they needed to make their “caseload ratios more flexible to meet the needs of a constantly changing population.” They planned to create a “workload / weighted” formula that utilized well-trained paraprofessionals who could take over some workload activities from the intervention specialists. LEA 3 believed caseload ratios should factor in the student’s severity of disability (e.g., three students with a reading learning disability may equal the full time equivalent of one cognitively disabled student), LRE, and “specially designed instruction requirements.”

LEA 3 had the following goals in mind when they developed their caseload ratio approach:

1. Provide the most appropriate services to students who needed intervention services for less than 20% of the day. Often these students needed a resource room period to allow for extended time on assignments and tests, to provide accommodations and modifications, and to re-teach or reemphasize information from academic classes. They wanted the services to be designed by a certified IS but implemented by well-trained classified staff person.
2. Provide more intensive services for students who spent the majority of their day with an IS. ISs who provided services to students in a modified or co-taught classroom needed to have lower caseload ratios than students who received services and accommodations in a regular education setting.
3. Provide students who spent their entire day in an un-graded intensive intervention classroom with the support they needed to meet academic and behavior goals, deal with sensory diets, ensure mobility, and provide medical care.
4. Create a caseload ratio formula that weighted students differently based on their needs, level of paraprofessional services, and associated workload.

LEA 3 Alternative Approach

LEA 3 developed an alternative caseload ratio formula. LEA 3 considered a Full Time Equivalency (FTE) for ISs to be equal to 25 students. The formula was: $(\# \text{ Level A} \times .5) + (\# \text{ Level B} \times 1) + (\# \text{ Level C} \times 1.5) + (\# \text{ Level D} \times 2) + (\# \text{ Level E} \times 3) = \leq 25$.

Students would be weighted according to the amount of specially designed instruction or related services (i.e., calculated in time) they required (see below). A student with autism who needed a “full time unit” and a personal aide might be a Weighted Level E, while a student with Asperger’s syndrome who just needed specially designed instruction for math needs and a behavior plan might only be a Weighted Level B. A student’s “weight” was determined by their need. An IS could have 8 (Weighted Level E) students and be at their maximum caseload ratio, but could have 25 (Weighted Level B) not exceed the maximum of 25. Each student’s weight would be determined by his or her IEP team.

Weighting System with Level Descriptors

Level A - .05 FTE weight: Consultation services from a service provider and services provided outside of the general education setting < 10% of time.

Goals –Organizational, medical, or behavioral goals. No academic goals needed.

Specialized Instruction –Services with nurse (if goals were medically-related), services with mental health counselor, or consultation between the intervention specialist and classroom teacher (if goals were organizational in nature).

Service Delivery- All regular education classes.

Assessments – Regular with accommodations (e.g., small group, breaks).

Level B.- 1 FTE weight: Consultation services from IS and services outside of the general education setting 10-20% of time.

Goals -Academic goals in either math or reading.

Specialized Instruction –Regular content with learning strategies, organizational skills, and frontloading related to goals.

Service Delivery -Intervention classes taught by regular classroom teacher with paraprofessional assistance and consultation with IS, resource room available for additional assistance.

Assessments – Regular with accommodations (e.g., extended time, student read aloud, small group).

Level C – 1.5 FTE weight: Specially designed instruction, to include co-teaching, from IS and services provided outside of the general education setting <21-50% of the time.

Goals -Targeted skills in language arts and math.

Specialized Instruction- Moderate re-teaching and remediation of regular content with emphasis on targeted goals.

Service Delivery -One-on-one or small group tutoring, co-teaching classes with IS and regular education teacher, remedial classes at high school, resource room available for additional assistance.

Assessments – Regular with accommodations (e.g., reader, scribe).

Level D – 2 FTE weight: Specially designed instruction from IS and services provided outside of the general education setting <50-80% of the time.

Goals – All academic areas due to cognitive delays, possible communication and/or physical goals included.

Specialized Instruction – Modified curriculum with intense re-teaching and remediation on goals.

Service Delivery -Special education with pull-out class for math and reading taught by IS with paraprofessional assistance, small class setting that moves at a slower pace, curriculum designed around

'super' indicators, intervention classes when not in special education classes, possible assistive technology, resource room available.

Assessments- Modified assessments with accommodations.

Level E – 3 FTE weight: Intensive supervision by IS and services provided outside of the general education setting > 80%.

Goals - Academic, communication, and physical.

Specialized Instruction - Explicit instruction on modified curriculum with emphasis on life skills.

Service Delivery – Multiple disabilities classroom for all academics, related services, health or sensory services, MH classroom paraprofessional or personal aide, assistive technology.

Assessments - Alternate assessment.

Level F- 0.3 (for SLPs only) – (# Level F x.3) ≤ 25. Speech language services.

Goals -Speech goals for students with communication needs served by the SLP.

Service Delivery - Small group, 1:1, classroom-based, or speech resource room for services.

Definition of Terms

Resource Room- A daily study hall manned every period by an IS and/or paraprofessional. Students in high school may be assigned to the resource room daily or they may have the option of leaving regular class to go receive assistance with accommodations.

Intervention Class – A regular education class taught by regular education teacher in weekly consultation with IS. A paraprofessional is assigned to help any special education students in the class. All grade level indicators are covered.

Co-Teaching Class- Class which is a mix of regular education and special education students co-taught by an IS and a regular education specialist. Both teachers are in class daily. Class covered all grade level indicators but uses differentiated instructional practices.

Special Education Class- Small Group class taught by IS for IEP or intervention students. This class moved at a slower rate and primarily covered the ‘super’ indicators.

MH Class-Multi-Handicap Class with IS with moderate to severe certification. All MH classes must have a classroom paraprofessional. This class had a modified curriculum that focused on life skills.

Tutoring – option 1). One-on-one or small group with IS, paraprofessional, or ProjectMore volunteer for 20-30 minutes a day; option 2.) Multi-media on-line tutorials (Scholastic ReadAbout, SFA Team Alphie, or Study Island) with oversight in lab by paraprofessional or IS.

Time Requirements

IS: All ISs must spend at least 75% of their day in specialized direct instruction. This can be whole group, small group, or individual. It can involve technology. It can be in a co-teaching class, special education class, resource room, or tutoring. The other 25% of their time can be spent in planning, paperwork, data collection / analysis, correspondence with parents, meetings, or consultation. This can be done during a planning period, consultation/observation period, or within a resource room.

Paraprofessionals: All paraprofessionals must spend at least 90% of their day in specialized direct instruction or monitoring of special needs students. This can be as a tutor, teaching assistant, or duty monitor.

Therapists: All related service therapists assigned to the district must spend at least 75% of their time in direct service to students. The other 25% can be spent writing reports, filling out Medicaid, or consulting with teachers. Related service personnel do not need to attend meetings unless requested by the IEP team (Exception would be speech only students).

Evaluation of LEA 3 Alternative Approach

LEA 3 had 5 participants in the experimental group portion of the study and 4 participants in the control group portion of the study; all participants were intervention specialists. The district conducted their time study during the week of February 27, 2012.

Student Outcome Data

Student outcome data were collected in May or June of 2012 and can be seen in Table 5. At the end of the 4th quarter, the student outcome data for the experimental IS participants showed that 87% of the IEP goals were either mastered or adequately progressing and 99% of students' academic core classes were passed. Further, 80% of OAA tests were at least proficient. There were no data from the experimental group to indicate if statewide diagnostic tests were clearly on track or if OGT tests were at least proficient.

For the control group ISs, at the end of the 4th quarter, the student outcome data showed that 80% of the IEP goals were either mastered or adequately progressing and 97% of students' academic core classes were passed. Further, 57% of 2011-2012 statewide diagnostic tests were clearly on-track and 44% of OGT tests were at least proficient. There were no data from the control group to indicate if OAA tests were at least proficient.

Table 5. Student Outcome

Condition	Progress on Goals	Core Classes	OAA	OGT	Diagnostic Tests
Experimental	87%	99%	80%	N/A	N/A
Control	80%	97%	N/A	44%	57%

Provision of FAPE

Data were collected as it pertained to the provision of FAPE, and these data can be seen in Table 6. The ISs in the experimental group provided services to 78 students with and without disabilities. The data showed 47 students (60%) received the exact amount of special education services as specified on their IEP. It was further found that 31 students (40%) received more special education services than were stated on their IEPs. In total, all 78 students (100%) with disabilities or intervention plans had their IEP minutes met.

The 4 ISs in the control group provided services to 63 students with disabilities or intervention plans. The data showed 44 (70%) students received the exact amount of special education services as specified on their IEPs. It was further found that 9 (14%) students received more special education services than were stated on their IEPs. The data also showed that 10 students (16%) received less minutes than were stated on their IEPs. Fewer services were provided to the 10 students (100%) because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 10 students who missed services, 9 (90%) received “make-up” services.

Table 6. Provision of FAPE

Condition	Number of Students	Less Services	Exact Amount Services	More Services
Experimental	78	0%	60%	40%
Control	63	*16%	70%	14%

Analysis of Workload

Data were collected regarding the service providers’ workload and contractual parameters and these data are reflected in Table 7. During the time study week, it was found that 100% of ISs in the experimental group worked before and after school and on the weekend, which caused them to work more hours than were

indicated in their contract. They worked an average of 6.17 hours over the number of hours indicated in their contract, with a range of .41 hours over through 15.33 hours over. The workload survey data showed 60% of ISs took their fully allotted lunch or planning time.

During the time study week, the 75% of the ISs in the control group worked more hours than were indicated in their contract. They worked an average of 4.68 hours over the number of hours indicated in their contract, with a range of working 5.92 hours less than the amount of time specified in their contract to working 11.95 hours over the amount of time indicated in their contract. The workload survey data also showed that only 50% of control group intervention specialists took their fully allotted lunch and 75% took their full planning time.

Table 7. Analysis of Workload

Condition	Worked Beyond Contracted Hours	Average Hours Worked	Range of Hours Worked	Took Full Lunch	Took Full Planning Time
Experimental	100%	+6.17	+.41 to +15.33	60%	60%
Control	75%	+4.68	-5.92 to + 11.95	50%	75%

Although none of the ISs in the experimental group explained why they worked beyond their employment contract, several workload management strategies were provided. The strategies appeared to be used for ISs in the district.

1. ISs were paid to attend IEP meetings before or after work and provide home instruction (e.g., \$25 per hour).
2. ISs were also given two extra paid workdays to complete paperwork (i.e., write IEPs) and a substitute teacher was hired to cover services. The ISs could also opt to get paid extra to write IEPs after school.
3. All IEP meetings were held on two full days, the ISs were released to attend those meetings, and a substitute teacher was hired to cover services.
4. The “planning and testing days” were scheduled far enough in advance and two IS substitute teachers were hired to cover services.
5. ISs received a 40 minute common planning time daily where they worked on co-teaching plans or consulted with teachers. They were also given a 45 minute individual planning time.
6. Technology was used for data collection and analysis. An aide was used to scan, enter, analyze, and run reports for all teachers.
7. There was a focused intervention period for students who were below grade level.
8. The schedule was adjusted so aides rather than teachers were used to cover all duties (e.g., lunch).
9. Each IS was given an iPad for student data analysis and review.

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their group size or acceptable age ranges. LEA 3 reported that no service providers in the experimental group of intervention specialists exceeded any group size or age range. In the control group, one IS (25%) exceeded the age range within a group and did not have a waiver granting them permission to exceed the stated range. Another IS (25%) exceeded the acceptable caseload size and received a waiver to exceed the acceptable caseload size. It was important to note that the data on waivers was self-reported by the service providers, and not verified by the researcher.

Stakeholder Perceptions

Of the 5 ISs in the experimental group, 4 (80%) indicated that they could reasonably provide services using this approach. Of the 4 ISs in the control group, 3 (75%) indicated that they could reasonably provide services to their students using this approach. No other stakeholder perceptions were shared by LEA 3.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it does not appear as though the new LEA 3 approach fully aligned with all facets of the Operating Standards (3301-51-09). It appeared as though their approach and workload strategies (e.g., stipends, use of substitute teachers) considered the following: Assessment, consultation, counseling, training, related duties, intervention design, educational interventions, the level and frequency of services on the IEP, coordination of the program, conferences, demands of an itinerant schedule, and diagnostic testing. Although not specifically stated, classroom observations were likely considered as well under assessment and diagnostic testing duties. They also considered the time spent on the supervision and training of paraprofessionals. It was not clear how service providers were afforded time for staff development and follow-up.

Although LEA 3's alternative caseload ratio approach aligned with the majority of workload duties in 3301-51-09 (I)(1)(a-d), it did not extend these to SLPs or other related service providers. First, it only considered directly related services, and not indirect (e.g., consultation). Second, when the Level F SLP formula was used, the caseload maximums for all disability categories exceeded the limits every case (3301-51-09)(I)(3-4). If the Level F formula was applied (i.e., the number of Level F students would be multiplied by .3 and not exceed 25), the caseload maximum would be 82-83 students, regardless of severity, LRE, or associated workload duties.

Finally, LEA 3 utilized their paraprofessionals for "specialized direct instruction," "re-teaching", and as "tutors". Despite the fact that they were trained by the ISs, it appeared as though the use of paraprofessionals

fell outside of their scope of practice (3319.888 of the Ohio Revised Code and 3301-51-09 (H)(2)(b)(iii) of the Ohio Operating Standards) and blended with the role of the interventions specialist.

Conclusions

The implementation of the LEA 3 approach and strategies included a small sample size, which only included ISs. The sample size and the sole use of ISs significantly limited the generalizability of results to other LEAs and service providers.

When considering student outcome data, the experimental group reported that 87% of IEP goals were either mastered or adequately progressing compared to 80% in the control group. Almost all of the students who received services from the experimental and control group ISs passed core academic classes. No comparisons could be made regarding performance on OAA, OGT, and statewide diagnostic tests.

When considering data related to FAPE, both the experimental and control group approaches ensured that the majority of students received their IEP or intervention plan services. More ISs in the experimental group provided extra services to students when compared to the control group, and these additional services may have contributed to the differences in IEP or intervention goal performance. Despite the fact that services were provided to most students and many IEP and intervention goals were mastered or adequately progressing, one service provider in each condition felt that FAPE could not be reasonably provided using either of the approaches.

When considering workload factors, the ISs in the experimental group worked an average of 1.5 hours more than the control group and 40% did not take a lunch or planning period. One full-timer in the control group was even able to provide services and complete workload duties in almost 4/5 days.

Finally, the formula for calculating related service provider caseload ratios did not fully align with the Operating Standards. For SLPs particularly, the formula put caseload maximums above current limits across all disability categories and did not factor in workload duties. The Level F formula only considered direct services.

Additionally, the use of paraprofessionals did not appear to align with their scope of practice and seemed to overlap with ISs whenever tutoring, specially designed instruction, and re-teaching were provided. Although the data showed the approach was not effective as designed and should not be adopted in its entirety by the Ohio Department of Education, some successes were realized. Several implications for practice emerged.

Implications for Practice

1. LEA 3 devoted 75% of their ISs' and related service providers' time to the provision of special education and related services. They also ensured 90% of the paraprofessionals' time was devoted to student services or school duties. These commitments to student services aligned with workload expectations that were found in the health care industry (e.g., nursing homes, skilled nursing facilities, hospitals). In these medical facilities, SLPs, PTs, OTs and therapy assistants were required to maintain some percentage of productivity (i.e., 75-90% depending on the setting). Productivity was measured by calculating the amount of time spent engaged in billable services (e.g., evaluations, direct services) divided by the overall time worked. Billable services were those workload duties that could be charged to a third party payer (e.g., Medicaid) for reimbursement. Certain "non-billable" duties (e.g., completion of paperwork, scheduling, photocopying, cafeteria monitor) were assigned to other staff members in order to maximize the service providers' time and focus their efforts on direct services or evaluations. In order to ensure that service providers' time was maximized, LEAs can allocate a similar percentage of time for direct and indirect service provision. Workload duties that did not require the specific expertise of the service provider should be considered for reassignment to another individual (e.g., secretarial staff, paraprofessional, assistant principal, volunteer).
2. They used trained volunteers to provide services to students in order to devote ISs' and paraprofessionals' time to students with more complex needs. Two meta-analyses have found well-trained volunteers can be used to provide interventions to student with reading and writing needs (Elbaum, Vaughn, Hughes, & Moody, 2000; Ritter, Barnett, Denny, & Albin, 2009).

3. ISs were paid to attend IEP meetings before or after work and provide home instruction (e.g., \$25 per hour). The use of stipends allowed ISs to use more of their school day for services and other workload duties.
4. IS were also given two extra paid workdays to complete paperwork (i.e., write IEPs) and a substitute teacher was hired to cover services. The ISs could also opt to get paid extra to write IEPs after school. The use of paid work days or stipends allowed ISs to use more of their time for services and other workload duties. Qualified substitutes also ensured students received specially designed instruction.
5. All IEP meetings were held on two full days, the ISs were released to attend those meetings, and a substitute teacher was hired to cover services. Additionally, the “planning and testing days” were scheduled far enough in advance and two IS substitute teachers were hired to cover services.
6. ISs received a 40 minute common planning time daily where they worked on co-teaching plans or consulted with teachers. They were also given a 45 minute individual planning time. These planning times allowed service providers the opportunity to develop individualized lessons that met the needs of the students on the caseload.
7. Technology was used for data collection and analysis. Each IS was given an iPad for student data analysis and review. An aide was then used to scan, enter, analyze, and run reports for all teachers.
8. There was a focused intervention period for students who were below grade level.

Recommendations from the District

LEA 3 recommended that ODE:

1. Base caseloads on student needs, not disability categories. Use a FTE (full time equivalence) weighted formula.
2. Include or utilize intervention aides in the formula and train them and allow them to do tutorial, technology, and data collection tasks as well as contractual duties so teachers can concentrate on teaching.
3. Utilize technology.

LEA 4

Background

LEA 4 participated in the Caseload Ratio Study during the 2010-2011 and 2011-2012 school years. According to LEA 4, they provided a standards-based curriculum through an online format that was delivered in a classroom setting on campus. The online nature of the curriculum allowed for students to engage in learning experiences that were differentiated to their abilities and educational needs. Students were also able to work one-on-one with a certified teacher in each content area. Students with disabilities received instruction much the same way as their non-identified peers, but with additional support by an IS. ISs provide direct support to students in areas that were listed on the IEP in both the general education classroom and resource room as needed. ISs were also required to provide consultative support to general education teachers in the design and implementation of instruction to all students in the classroom.

The purpose of the LEA 4 was as follows: “[They] were a new special education team and [they] wanted to reorganize and update the department, show that [they were] on target about service students, show accountability to the students and integrity to the job, and show growth with our special education students.”

LEA 4 Alternative Approach

Prior to the start of the LEA 4 study, “times to work with students were not highly detailed, established, maintained and communicated to all.” With these issues in mind, LEA 4 adapted the North Carolina Model, which was originally intended to apply to related service providers, so that it could be used with intervention specialists.

At the end of their study, LEA 4 used the following formula:

1. Weekly IEP contact hours for LEA 4 were calculated.
2. The total number of IEP contact hours was multiplied by a factor of 1.7 to determine service hours needed to effectively provide services to students at LEA 4.
3. The service hours were divided by 37.5, which equaled 1 full-time IS equivalent.

4. The resulting number was the full-time equivalent IS that was needed for LEA 4.
5. Using LEA 4's formula, one full-time IS equivalent could deliver services and complete associated workload duties to about 20-22 students, depending on their severity and the "evaluation load and travel."

Evaluation of LEA 4 Alternative Approach

Participants

The LEA 4 approach was designed to determine full-time IS equivalents. With this intent in mind, LEA 4 selected 2 ISs to participate in the experimental group (i.e., those who used the LEA 4 alternative caseload ratio approach that was based off the North Carolina model). LEA 4 did provide data for other part-time related service providers (e.g., SLP, PT, PTA, and OT), but those data were not complete and could not be obtained.

Student Outcome Data

The participants in the study provided data related to their students' IEP and intervention progress, grades, and group standardized test scores. At the end of the 4th quarter (May through June, 2012), data from the IS experimental group showed 69% of the IEP or intervention goals were either mastered or adequately progressing and 73% of students passed their core academic core classes. During the year that the LEA 4 alternative caseload approach was implemented, 51% of OAA tests and 66% of OGT tests were at least proficient and 33% of statewide diagnostic tests were clearly on track.

Provision of FAPE

The two ISs provided data that related to the provision of FAPE and interventions for students on their caseload. The data showed services were provided to 28 students with and without disabilities. From that amount, 20 students (71%) received more services than were originally listed on their IEPs or intervention plans and 8 students (29%) received less minutes than were stated on their IEPs. Fewer services were provided to 7 of those students because they were absent from school or attending an alternative school sponsored activity

(e.g., assemblies, field trips). Of the 8 students who missed services, 7 (88%) received make-up services. When make-up services were considered, 96% of students received services or interventions as specified on their IEPs or intervention plans.

Analysis of Workload

The service providers were asked to conduct a time study to quantify their workload and complete a survey regarding certain elements of their employment contract. The district conducted their time study during the weeks of February 5, 2012 and February 20, 2012. They also completed the workload survey at that time. During the time study week, the data showed both ISs took their full lunch and planning time. One IS worked 5.67 hours more than were indicated in the employment contract, while the other worked 18.41 hours less than were indicated in the contract.

Additionally, LEA 4 was asked to share the workload data that they collected throughout the implementation of their approach and then determine if their ISS' daily work duties equaled a full-time IS equivalent (FTE), more than a FTE, or less than a FTE. After analyzing their workload data, LEA 4 shared:

The ISs recorded their work in their logs daily. We found that our daily work duties were more than a FTE. If we did not meet the North Carolina Model during the week, it was because we were involved with paperwork and/or meetings throughout the week. We make up the time during the previous week (planned) or in the next week. The students start asking for us when we are not in their scheduled classes. This system becomes a check and balance during the school year. We check in and work with students during a normal school week, and when we are not there as scheduled, the students come and check in with us. Overall, the hours do not surprise us. We are a small school, with staff that wears many hats and works over 40 hours/week.

Stakeholder Perceptions

Respondents to the LEA 4 Stakeholder Survey identified several positive aspects of the LEA 4 alternative caseload ratio approach. The majority of respondents believed special education and intervention

students completed more assignments and they thought these students were better prepared to take OAA and OGT tests. Although the students were believed to be more prepared to take these tests, only 51% students who took the OAA and 66% of students who took the OGTs were at least proficient during the year the alternative caseload approach was implemented.

In parent, staff, and administrative surveys that were administered by LEA 4, several negative perceptions emerged about the newly developed alternative caseload approach. First, the majority of survey respondents believed ISs were not providing enough high quality time with students and increases in students' knowledge and test scores were not noticed. When survey respondents were asked how to improve IS services, the majority thought more IS consistency and time was needed, the ISs needed to spend more time in the classroom, and ISs needed to vary their schedule.

At the end of the time study, both ISs were asked to complete a survey. The results of the survey showed the ISs were divided on whether services could be reasonably provided using this approach. Only one of the ISs believed FAPE could be reasonably provided using the adapted North Carolina approach that was developed by LEA 4.

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their group size limits or had students who were outside of the acceptable age ranges. LEA 4 reported that no intervention specialists in the experimental group exceeded any age range. It was reported that no intervention specialists had a caseload which exceeded the acceptable size.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it does not appear as though the LEA 4 approach fully aligned with 3301-51-09 of the Operating Standards. It appeared as though the approach considered time for assessment, consultation, intervention design, educational interventions, the level and

frequency of services on the IEP, planning time, and diagnostic testing. Their approach was not designed to consider the demands of an itinerant schedule because there was only one building involved. There was no evidence to show how the approach considered the scheduling and time demands for the following: Screenings, counseling, classroom observations, and coordination of the program. Although the LEA 4 approach did not factor in time for training, conferences, and staff development and follow-up, LEA 4 did offer service providers the opportunity to complete these activities during professional leaves or on days that the students were working independently at home. LEA 4 also scheduled student counseling sessions and parent or staff conferences before or after school hours.

Conclusions

Several methodological limitations prevented the LEA 4 approach from being fully evaluated. First, the evaluation of the approach included a small sample size (i.e., two ISs). Second, there was no control group available, which prevented comparisons from being made. Third, ISs were the only service providers who provided full-time employment data. Therefore, the absence of the control group, small sample size, and sole use of ISs significantly limited inferences about the effectiveness of the approach as well as the generalizability of results.

Within the area of student outcome data, the results did not appear to support the effectiveness of the LEA 4 alternative caseload ratio approach. Thirty-one percent of students did not master or make adequate progress on their IEP and intervention goals and 27% did not pass core academic classes. Only 51% of students who took the OAAs and 66% of students who took the OGT tests were at least proficient at the end of the study. An even fewer number of students (33%) were found to be clearly on track on after taking the statewide diagnostic tests.

Second, stakeholder perceptions about the effectiveness of the approach were predominantly negative. One of the two ISs who implemented the LEA 4 caseload ratio approach did not believe it could be used to provide FAPE to students. The majority of respondents to the LEA 4 Stakeholder Survey believed students

needed more high-quality time with IS even though 71% of the students received more services than were originally listed on their IEPs or intervention plans.

Finally, the analysis of workload data showed a large variation in the number of hours worked during the time study week. One IS worked 5.67 hours more than were indicated in the employment contract, while the other worked 18.41 hours less than were indicated in the contract. Despite this variation, anecdotal information from LEA 4 indicated their service providers typically work beyond a 40 hour work week. Although the data showed the approach was not effective as designed and should not be adopted in its entirety by the Ohio Department of Education, some successes were realized. Several implications for practice emerged.

Implications for Practice

Although the limited data that were available for analysis did not indicate that the LEA 4 approach was effective or aligned with 3301-51-09 of the Operating Standards, several implications for practice were drawn from the implementation and evaluation of the LEA 4 alternative caseload ratio approach.

1. LEA 4 provided release time or offered professional development days to service providers so that they could attend a professional development event, participate in a staff meeting, or meet with parents and co-workers.
2. Service providers used time outside of the school day (i.e., times when the students were not in attendance and not available for services) to complete various workload duties.
 - a. During the work week, the LEA allocated consistent and dedicated time before or after school for parent conferences or teacher and staff collaborative planning.
 - b. LEA 4 provided stipends for participation in meetings that occurred before or after school or during lunch and planning times.
 - c. LEA 4 hired qualified substitutes to cover service providers while service providers attended parent conferences, participate in intervention meetings, complete paperwork (e.g., write IEPs or evaluation team reports), or conduct screenings or evaluations.

3. On days when students were at home (i.e., work at home days), LEA 4 allowed time for service providers to complete various workload duties.
 - a. LEA 4 scheduled time or days into the school calendar when students were released early so that the service providers could engage in various workload duties (e.g., common planning, professional development, data analysis). These “early release days” are not without some controversy, and therefore interested LEAs should work with stakeholders, to include parents and community members, in order to determine if this strategy is a viable one.

Recommendations from LEA 4

Teachers from the LEA 4 recommended:

1. There should be more distinction between grade levels and number of students the ISs should have on their caseloads.
2. The caseload ratios should consider grade levels. Since the core curriculum is changing, there are more students served by ISs at a younger age level than older age level. More time is spent with these younger students than with the older students.
3. Since ODE does not recommend any specific data collection sources, it would be beneficial if ODE or a State Support Team would hold some testing resources in reserve so that they can be borrowed. Given the costs of some assessment material, schools cannot afford to purchase materials necessary for assessments, especially as it is related to the common core.
4. The ODE should specify the roles of teachers in the classroom. It is very difficult to walk into another teacher’s classroom and define what exactly needs to be done, completed, or worked on in the classroom.
5. Lesson plans are a must for all participants in the classroom so each knows their role in the children’s education. Lesson plans need to be a combined effort between regular education teachers, special

education teachers, classroom aides and volunteers. If ODE could mandate this, it would be a first step on how inclusion should be initiated, maintained, and improved upon.

6. Student time should be flexible but specific enough with students to meet their needs. Although it is listed on the IEPs, certain aspects on classroom lessons are not needed by all IEP students.
7. It would help to have the documentation easier to maintain so that time with students would have a better flow. Although, ODE does not have documentation on this, it would be helpful to see various formats we could utilize.

LEA 5

Background

LEA 5 initially planned to develop a caseload ratio formula for ISs, SLPs, OTs, PTs, and school psychologists. At the end of the study, they focused solely on OTs, PTs, and SLPs.

LEA 5 Alternative Caseload Ratio Approach

They initially intended to develop a “mathematical method of determining workload by creating an electronic tool (workload calculator) that calculated individual service providers’ workload based on the time it took to serve the students according to the intensity of their needs.” The calculator was designed to consider the following workload duties: Services, documentation, screenings, evaluations, IEP and ETR data collection, meetings, Medicaid billing, travel, consultation, planning, professional development, and additional responsibilities.

At the end of their study, they developed a method for determining caseload ratios that was based on the percentage of time it took to complete the work. To determine caseloads based on percentage of time for the related service providers, LEA 5 used the following formula:

1. LEA 5 started with the current headcount of 50 students and determined 110 minutes to be 1 full-time equivalent (FTE).
2. $50 \text{ FTE students} \times 110 \text{ minutes} = 5,500 \text{ direct service minutes}$.
3. Related service providers worked 8400 minutes per month (7hrs per day x 5 days per week x 4 weeks per month x 60 minutes per hour =8400 minutes).
4. $5500 \text{ minutes} = \text{about } 65\% \text{ of } 8400$.

Using 65% of time worked allowed each related service provider's caseload to be determined by student need. It allowed students to be serviced according to the intensity of their individual need instead of each student counting as 1/50th of a caseload.

In order to determine the percentage of time each related service provider should work, a “% pie chart” (see Figure 1) was created based on time study data. Upon reviewing those data, LEA 5 identified the “important work” and agreed on 4 simple terms to identify each category of the “important work”:

Figure 1. Percentage of Time Devoted to each Workload Category



Direct-65% IEP and intervention minutes, evaluations, and documentation of services provided.

Planning-11% scheduling students, planning for interventions and creating materials

Meetings-12% IEP, ETR, intervention, consultation and professional development

Report Writing- 12% documentation of progress, IEP and ETR input.

Evaluation of Alternative Caseload Approach

Initially, nine service providers agreed to participate in the independent evaluation of their approach and some incomplete data were provided for independent analysis. After a staff change, LEA 5 then believed that an

independent evaluation of their approach was not warranted or appropriate. The following email communication explained their rationale:

Email communication from LEA 5 on 1/18/2013: Our request for proposal (RFP) focused more on adult outcomes than student outcomes. I think that's where the confusion lies and why we're struggling with the need/requirement for us to collect student outcome data. I'm not sure that collecting student performance data on kids AT THIS POINT in our work would give you any data of significance. There were no changes to the service delivery in our work with students. We have not implemented an "intervention" or a change in practice that would demonstrate a change in data from baseline to now. I do believe that collecting baseline data prior to the end of this school year on students, shifting the service delivery model to reflect a direct service model more closely aligned to our "pie" (as our data indicated) vs. using staff as we do now, and then collecting student performance data at the end of next year makes total sense and we could plan for that. But at this point, nothing has changed in our work with students. We were only studying the work of the service providers as indicated in RFP and final report. I have had some subsequent communication with related service personnel who believed their data was collected and submitted as required so many of them no longer have those data. Everyone I've talked with has indicated that based on the RFP that was submitted, the evaluation data (while specific to adults vs. kids) were included in the final report. The outcome of our study also included the workload calculator which has been sent to you along with reports.

Stakeholder Perceptions

LEA 5 created a phone and email list of parent and community volunteers who agreed to electronically receive, read, and respond to ideas. The general reaction was parents had not thought about "caseloads." Certain service providers could see the value of basing their caseload ratios on the time needed to complete workload duties instead of using a headcount method. A workload approach focused on the important work

they did and were trained to do, and this focus was “exciting and a relief for them.” Additionally, LEA 5 realized how much time service providers were spending at meetings and completing Medicaid billing.

Conclusions

The district did not participate in the independent evaluation of their study as indicated in the original RFP, therefore no analyses or conclusions could be made.

Recommendations from LEA 5

LEA 5 recommended that ODE consider the following:

1. The work of agency personnel must be defined. Currently, staff members work very hard to complete required work that does not directly impact student learning.
2. Agencies should be able to share the tools they have created.

LEA 6

Background

LEA 6 participated in the Caseload Ratio Study during the 2010-2011 through the 2012-2013 school years. LEA 6 wanted to “meet or exceed the needs of all students by maximizing expertise and time of the IS and related service personnel.” Across the LEA 6, minimal collaboration occurred among service providers and there was an inequitable distribution of students on caseloads. LEA 6 collaborated with their local educational service center on this project.

LEA 6 Alternative Approach

LEA 6 believed that their numeric system (rubric) method (represented in Table 8) provided a more equitable means to determine caseloads. Instead of determining caseloads based on a headcount approach, LEA 6 felt that the caseload ratios should be based on students’ needs and services. The rubric system awarded 0-2 points for a variety of categories (see the key in Table 9 for the ratings by students’ needs and services) in order to determine a numeric score. Additional information from scales, assessments, accommodations, and modifications could also be considered in calculating the numeric scores. Students with higher needs yielded a higher numeric value. The students’ corresponding numeric scores were considered as the students were equitably distributed among the service providers’ caseloads. When considering workload duties, LEA 6 believed that the ISs should be able to complete all of their required duties within the school day.

Table 8. LEA 6 Student Services Rubric

Area/Service	0*	1**	2***	Total	Additional information:
Reading					
Math					
Writing					
Behavior					

Attendance					
Related Services					
Attention					
Medical Supports					
Instructional Model					

*0=On grade level, no concerns

**1=2-3 grade levels below, consultation services, attendance concerns

***2=4 + grade levels below, behavior plan, significant attendance concerns

Table 9. Key for Rating Students' Needs and Services

Student Need/ Service	0	1	2	Data source
Reading	On grade level	2-3 grade levels below expected	4 or more grade levels below expected	Designated probes
Math	On grade level	2-3 grade levels below expected	4 or more grade levels below expected	Designated probes
Writing	On grade level	2-3 grade levels below expected	4 or more grade levels below expected	Designated probes
Behavior	No concerns	Consultation	Behavior plan	Data and progress monitoring
Attendance	No concerns or 95% attendance	Slight concern or 90% attendance	Significant concern or $\leq 80\%$	Attendance records
Attention	Typical performance	Slight concern or borderline 85-70	Significant concern or $\leq 70\%$	ADDES-3 data
Instructional model	Typical classroom or mainstream	Inclusion with at least 2 class	Small group instruction or self-contained	IEP data
Medical issues	No concerns	Medical needs	Nurse available or necessary	Medical report data
Related services	No services	Consultation or minimal services	Significant needs or services > 1 time a week	IEP data

Evaluation of LEA 6 Alternative Approach

Participants

LEA 6 had 6 participants in the experimental group of the study, all of whom were ISs. The district conducted their time study during the week of March 17, 2013.

Student Outcome Data

The participants in the study provided data related to their students' IEP and intervention progress, grades, and group standardized test scores. At the end of the 4th quarter (May and June, 2013), data from the ISs showed 66% of the IEP or intervention plan goals were either mastered or adequately progressing and 78% of students passed their core classes. The district did not provide a complete set of standardized testing data for analysis.

Provision of FAPE

Data were collected as it pertained to the provision of FAPE. The six ISs provided services to 96 students with disabilities or intervention plans. The data showed 26 students (27%) received the exact amount of special education services and 66 students (69%) received more special education services than were stated on the IEPs and intervention plans. The data also showed four students (4%) received less minutes than were stated on their IEPs and all those services were made-up.

Analysis of Workload

The service providers were asked to conduct a time study to quantify their workload. They were also asked to complete a survey about certain aspects of their employment contract. During the time study week, 100% of ISs worked more hours than were indicated in their employment contract. On average, they worked 15.5 hours in overtime, with a range of 7.4 hours to 41.3 hours in overtime work. The survey data also showed 83% of ISs took their fully allotted lunch and 50% took their full planning time. Finally, LEA 6 reported that ISs who implemented the new approach “continued to report that most time was spent outside the classroom (whether at home or school) for writing IEP’s/transition plans and for completing progress monitoring.”

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their group size or acceptable age ranges. Survey data showed one IS exceeded the allowable age range during an instructional period and no state waiver was obtained. Additionally, three ISs stated that they exceeded the acceptable caseload size and received a state waiver to do so. It was important to note that the data on waivers was self-reported by the service providers, and not verified by the researcher.

Stakeholder Perceptions

Two of the ISs (33%) felt that they could reasonably provide FAPE to their students on their caseload. LEA 6 shared the following perceptions:

One IS noted that she ended up working with students who were not on her assigned caseload. For example, an IS who had an assigned caseload consisting of grade 6 students may end up teaching grade 5 and grade 6 students in the subject area of math. A high school IS noted that he had one student on his assigned caseload that he hardly ever saw, because another IS was responsible for teaching the students assigned to a resource room for specific subject areas. Another high school IS concurred that there were students on her assigned list whom she rarely saw. As far as duties and the time component, there was not enough time in the school day to complete all of the assigned tasks of an IS such as teaching students, writing IEP's, monitoring students' progress, writing lesson plans, implementing accommodations and modifications, making materials for students, grading assignments, collaborating with colleagues, staying in contact with parents, etc.

Alignment with the Operating Standards (3301-51-09)

Based on the data provided, reports, correspondences, and proposal, it did not appear as though the LEA 6 approach fully aligned with each of the workload duties that were spelled out in the Operating Standards 3301-51-09 (I)(1)(a-d). Their approach considered the scheduling and time demands that were associated with the following: screening, assessment, consultation, training, level and frequency of services on IEPs, planning

time (and intervention design), diagnostic testing, classroom observations, coordination of the program, conferences, and staff development. It did not appear as though their approach considered the scheduling and time demands associated with counseling students, related school duties, and the demands of an itinerant schedule.

Conclusions

Several methodological limitations prevented the LEA 6 approach from being fully evaluated. First, the evaluation of the approach included a small sample size (i.e., six ISs). Second, there was no control group available, which prevented comparisons from being made. Third, ISs were the only service providers who provided full-time employment data. Therefore, the absence of the control group, small sample size, and sole use of ISs significantly limited inferences about the effectiveness of the approach as well as the generalizability of results.

Overall, the data suggested that the LEA 6 approach was not effective at calculating caseload ratios for ISs. The approach was not associated with positive student outcomes or perceptions. The ISs in the study did not have enough time during their workweek to complete all their workload duties. Finally, the LEA 6 approach did not align with the Operating Standards. Although the data showed the approach was not effective as designed and should not be adopted in its entirety by the Ohio Department of Education, some successes were realized. Several implications for practice emerged.

Implications for Practice

The following implications for practice emerged from a review of the LEA 6 data.

1. The school district believed that ISs should be able to complete all of their required duties within the school day.
2. LEA 6 utilized time studies in order to quantify workload, and they planned to continue to consider these and other data when future caseload ratios were calculated.

3. The district considered students' needs and services when calculating caseload ratios.

Recommendations from LEA 6

LEA 6 recommended that ODE implement the following:

1. According to LEA 6, it was imperative that ISs had more time to provide direct services to students and had sufficient time within the school day to complete high-priority tasks such as progress monitoring, IEP writing, ETR reporting, and parent contacts. Rubric scores needed to be in place at the end of the school year so that teacher caseloads could be in place in the future.

LEA 7

Background

LEA 7 participated in the Caseload Ratio Study during the 2011-2012 and 2012-2013 school years. LEA 7 believed the following:

There was a need to determine the most efficient and effective models for service delivery for ISs and related services providers in order to provide quality interventions to students so that they can benefit from the general curriculum.

For ISs, caseload and workload issues were impacted by service delivery models, such as co-teaching, and supports for general education teachers who used differentiated instruction and RTI. Similarly, the caseload and workload of related service providers were affected by the service delivery models used (i.e., direct and indirect services), time needed for scheduling services, and travel and transitions that were made between classrooms, buildings, and districts.

LEA 7 Alternative Approach

In the appendices, the instructional user's manual for LEA 7 can be found. LEA 7 developed an approach that could be used for both ISs and related services providers, which took into account the intensity of students' needs as well as various workload factors. Their approach used a team to conduct a structured review of students and calculate rubric scores in order to determine service providers' caseload ratios. Figures 2 and 3 reflect four quarters of evaluation data that were collected by LEA 7 after the implementation of their alternative caseload ratio approach. There were a total of seven indicators of success, and LEA 7 met or surpassed 5 (71%) of these. As can be seen in Figures 2 and 3, they failed to achieve two of their success indicators: 90% of students who receive IS services and 90% of students who receive related services will master their IEP goals by the end of the school year.

Figure 2. LEA 7 Evaluation Data for Intervention Specialists

Internal System Evaluation Report Period: 2012-2013		PROGRAM: Classroom Interventions						
		June	Oct	Jan	Mar	May		
		<u>GOAL EXPECTANCIES</u>	<u>Baseline</u>	<u>1ST. QTR.</u>	<u>2ND. QTR.</u>	<u>3RD. QTR.</u>	<u>4TH. QTR.</u>	<u>YEAR END</u>
<u>PRIMARY MEASURES</u>		<u>Goal</u>						
EFFECTIVENESS	Percent of Students who met their IEP goal expectations (80%) each grading period.	90%	0%	26%	36%	63%	78%	56%
	Threshold changed to 66% after baseline.							
EFFICIENCY								
PERSON SERVED SATISFACTION	80% of students on the mid-year survey will rate the effectiveness of the services provided as Good or above (3/4 "Yes" responses)	80%			82%		82%	
STAKEHOLDER SATISFACTION	80% of Stakeholders (teachers) will rate satisfaction as Good or better. (3/4 "Yes" responses)	80%			100%		100%	
NAME & TITLE OF PERSON COMPLETING REPORT: Marie McCumber, IS DATE: 6/27/13								
<u>1st Quarter:</u>								
Due to the fact that the majority of students only have 3 goals, reaching an 80% threshold is unrealistic and doesn't yield enough information. Therefore the team agreed to change the threshold to 66% for the 2nd quarter and beyond.								
<u>2nd Quarter:</u>								
There was no place to write the teacher name on either the student or teacher satisfaction forms. This information will be added to future satisfaction forms. Clarification needs to be made for the stakeholders completing the surveys. Many teachers were unaware of how to fill out the survey. Some filled out the survey for the individual student, some filled out one survey for all the intervention specialists they worked with (as opposed to completing a survey for each). For the next cycle a letter will be formed to go to all teachers for a more clear understanding of how to complete the process of evaluation.								
<u>3rd Quarter:</u>								
<u>4th Quarter/Year End Summary:</u>								

Figure 3. LEA 7 Evaluation Data for Related Service Providers

Internal System Evaluation Report Period: 2012-2013				June	Oct	Jan	Mar	May	
PROGRAM: Related Services									
		GOAL EXPECTANCIES	Baseline	1ST. QTR.	2ND. QTR.	3RD. QTR.	4TH. QTR.	YEAR END	
	PRIMARY MEASURES	Goal							
EFFECTIVENESS	Percent of Students who made progress toward IEP goals each grading period.	90%	86%	93%	79%	97%	79%	97%	
EFFICIENCY	Increase the monthly average contact hours of related service providers by 5% per year.	5%	12.88	16.43	19.96	17.8	16.2	26% increase	
PERSON SERVED SATISFACTION	80% of students on the mid-year survey will rate the effectiveness of the services provided as Good or above (3/4 "Yes" responses).	80%			81%		82%		
STAKEHOLDER SATISFACTION	80% of stakeholders (teachers) will rate satisfaction as Good or higher. (3/4 "Yes" responses)	80%			100%		86%		
NAME & TITLE OF PERSON COMPLETING REPORT: Marie McCumber, IS DATE: 06/27/13									
1st Quarter:									
2nd Quarter:									
Incomplete data for "Person Served Satisfaction": No student surveys were submitted by the Physical Therapist or the Physical Therapist Assistant. Incomplete data for "Stakeholder Satisfaction": No surveys returned from Occupational Therapist or Occupational Therapist Assistant. Data was obtained from the surveys that were returned. At the time of the report, contact hours for the month of January were still unavailable, therefore, contact hours are calculated for November and December.									
3rd Quarter:									
4th Quarter/Year End Summary:									

Evaluation of the LEA 7 Alternative Approach

LEA 7 had 7 participants, all of whom were in the experimental group. Due to the size of the district, no control group was available. There was one SLP, PT, OT, and OTA and three ISs in the study. The district conducted their time study during the week of October 21-28, 2012.

Student Outcome Data

Student outcome data were collected in May or June of 2013. At the end of the 4th quarter, the student outcome data for the experimental ISs showed 87% of the IEP goals were either mastered or adequately progressing. At the end of the 4th quarter, the student outcome data from the SLP, OT, OTA, and PT showed 89% of the IEP goals were either mastered or adequately progressing. LEA 7 did not provide any other student outcome data for analysis.

Provision of FAPE

The participants in the study provided data related to the provision of FAPE. As can be seen in Table 8, 96% of students received at least the minimum amount of related services and 83% of students received at least the minimum amount of IS services when student absences and make-up services were considered. Twenty-one percent of the students received more IS services than were indicated on their IEP.

Table 8. Provision of FAPE

Experimental	Number of Students	Less Services	Exact Amount Services	More Services
IS (n=3)	42	55%	24%	21%
SLP (n=1)	35	63%	31%	6%
PT (n=1)	10	40%*	60%	NA
OTA (n=1)	12	8%	92%	NA
OT (n=1)	2	NA	100%	NA

*Less services were provided due to student absences

Analysis of Workload

The participants in the study were asked to conduct a time study to quantify their workload. They were also asked to complete a survey about certain aspects of their employment contract. The data from the time study and survey are reflected in Table 9. The ISs worked an average of 7.55 hours in overtime, which was

significantly over their contractual work hours. The related service providers appeared to work a reasonable number of hours during the time study week. Although 85% of the service providers took a full lunch, only 29% received their full planning time.

Table 9. Analysis of Workload

Profession	Hours Contracted to work	Worked Beyond Contracted Hours	Average Hours Worked	Range of Hours Worked	Took Full Lunch	Took Full Planning Time
IS (n=3)	37.5	100%	45.05	+3.87 to +9.87 hours	100%	33%
SLP (n=1)	22.5	0%	19.41	19.41	0%	0%
PT (n=1)	5	0%	1.33	1.33	100%	0%
OTA (n=1)	7	100%	8.28	8.28	100%	100%
OT (n=1)	7	100%	7.33	7.33	100%	0%

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their caseload size or exceeded acceptable age ranges. LEA 7 reported that the SLP and 1 IS exceeded the acceptable age ranges; neither received a waiver to do so. One IS exceeded the acceptable caseload size and did not report receiving a waiver. The data on state waivers, age ranges, and caseload maximums were reported by the service providers and not verified by the researcher.

Stakeholder Perceptions

Data from the stakeholders were analyzed to determine their perceptions of the LEA 7 approach. As can be seen in Figures 2 and 3, teacher and student satisfaction surveys found high satisfaction rates with services. Additionally, the service providers in the experimental group were asked if they felt that they could reasonably provide services to the students on their caseload given their current caseload size and workload duties. The PT, all three ISs, OT, and OTA all indicated that they felt they could reasonably provide services to their caseload. Despite working 3.08 hours less than the number of hours in the employment contract, the SLP was the only service member who indicated that FAPE could not reasonably provide to students on the caseload.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, the LEA 7 approach aligned with 3301-51-09 (I)(1)(a-d) of the Operating Standards. Although no state waivers were granted (3301-51-09(K)), two service providers exceeded the acceptable age ranges per instructional periods and one service provider exceeded the acceptable caseload size. It was important to note that the data on waivers was self-reported by the service providers, and not verified by the researcher.

Conclusions

Several positive outcomes were associated with the LEA 7 approach. First, the approach ensured at least 80% of students mastered or made adequate progress on IEP and intervention goals. Second, the majority of students received FAPE when student absences and make-up services were considered. Third, the approach was positively regarded by a majority of service providers, teachers, and students. Next, the majority of service providers were able to take a full lunch. Finally, the approach considered all the workload duties that were listed in 3301-51-09 (I)(1)(a-d).

The LEA 7 study suffered from two methodological limitations. First, no control group data were available, and therefore full comparisons between the LEA 7 and control groups could not be made. Second, the sample size was small (n=7). Additionally, one important indicator of success was not fully achieved despite

several district workload strategies (e.g., stipends for attending meetings before or after work). More specifically, two service providers (i.e., ISs) worked on average one full day in overtime, which suggested 29% of service providers were not assigned a reasonable number of workload duties and students on the caseload.

When the advantages and disadvantage were considered together, it appeared as though the LEA 7 approach produced many positive results. It had the potential to be adjusted, which would allow excess workload and students to be redistributed to other staff. Therefore, ODE should investigate whether the LEA 7, with some adjustment, can be applied to other service providers and LEAs. Many elements of the LEA 7 approach appeared to hold promise for ODE if further research produced similar results. Finally, several implications for practice emerged for consideration.

Implications for Practice

Despite the fact that the LEA 7 approach was not found to be fully effective at calculating caseload ratios, several important implications for practice were realized.

1. LEA 7 used a structured team-based process and data on student services and needs to calculate caseload ratios for individual service providers. If the direct and indirect services on IEPs and intervention plans reflected FAPE, this approach would consider the severity and needs of the student. In order for these data to be meaningful to school district teams, each IEP and intervention plan should reflect all the direct and indirect services that students required in order for FAPE to be provided.
2. When teams of district stakeholders calculated caseload ratios, the scheduling and time demands that were associated with various workload duties could be considered more fully (e.g., consultation with regular education teachers, co-planning lessons, co-teaching, meeting participation, compliance paperwork, correspondences, school duties, etc.). Additionally, the rubric score will have more validity when calculated by a team of stakeholders. When outlier rubric scores occurred, team discussions could ensue and the final rubric score could be determined by team consensus.

3. The LEA 7 approach seemed to be designed to be flexible enough to be used across all special education and related service providers.
4. The scheduling and time demands that were associated with interventions were considered in the new approach.
5. Service providers were paid to complete documentation at home up to a certain amount of hours, attend meetings before or after work hours, and compensated for attendance at parent-teacher conferences.

Recommendations from LEA 7

LEA 7 recommended that ODE consider the following:

1. The Ohio Department of Education should adopt a rubric based system that school districts can use to establish caseloads within acceptable ranges. Ranges have the potential to be more responsive to the unique needs of each school district.
2. Because the Caseload Target Ranges are numerically created from the intensity of the student population, those ranges could be adjusted over time as the demographics of the students with disabilities population changes. It could also be adjusted to reflect differing demographics across various school districts of service.
3. District personnel can adjust caseloads based on available staffing for each service area. The data can also be used to determine areas of need and appropriateness of assignments for paraprofessionals.
4. The Ohio Department of Education could develop a set of standards to set up their own caseload system with some allowances for district individualities, similar to the concept of a new teacher evaluation system. The Iowa Department of Education prepared a set of standards to which each school district had to adhere, but each district then developed their own caseload guidelines.

LEA 8

Background

Prior to their involvement in the Caseload Ratio Study, the LEA 8 department chair and related services staff determined their own caseloads and service delivery schedules. At the time of the study, the LEA 8 served 26 districts across three counties and provided an array of related services to these school districts. Scheduling staff was challenging because there was no systemic or objective process for determining related service providers, service delivery locations, caseloads, or schedules. OT assignments were initially determined using block scheduling with a full-time therapist scheduled to cover 8-10 classrooms. PT caseloads were more difficult to project as the number of students receiving services per classroom varied. PTs were assigned students based on geographic location, travel, and number of students needing service.

Grant funds were awarded in November 2010 and the new approach to calculating caseload ratios was implemented during the 2011-12 school year. Early in the grant cycle, LEA 8 worked with a third party evaluator to identify data gaps and focus on the following:

1. How much time providers spent delivering direct services to students?
2. How much time was spent on non-therapy activities?
3. How many minutes of service were identified per students IEPs?
4. How many minutes of service were delivered?
5. How much progress or mastery of IEP goals students made?

The LEA 8 technology department collected utilization rates from the billing database which contained service delivery logs.

The purpose of the grant was to develop a system to determine caseloads and then schedule and deploy related service providers to school districts in the most efficient manner. Concerns focused on increasing the

utilization of related service providers and improve outcomes for students, while improving the efficiency of service delivery.

LEA 8 Alternative Approach

During the 2011-12 school year, the LEA 8 utilized the North Carolina Model to determine caseload ratios for SLPs, PTs, and OTs. The model was designed to determine FTE need and allocation of service delivery. The FTE considered IEP minutes and time for various workload duties such as IEP meetings, evaluations, documentation, consultation, communication with staff and families, and travel. Upon employing the North Carolina model, one FTE was expected to provide 20-22 hours of direct service time each week (IEP contact hours), depending on the severity of the students served, evaluation load, and distance between sites. LEA 8 made some minor adjustments to the model to account for students with more intensive needs and the amount of travel time. In addition, the team developed /adapted decision making tools such as a Severity Rating Scale for Speech and Motor to assist with caseload decisions based on the intensity/severity of the child's needs.

Evaluation of the LEA 8 Approach

LEA 8 had 11 participants in the experimental and 7 participants in the control group portion of the study. There were 5 SLPs, 5 OTs, and 1 PT in the experimental group and 3 SLPs, 3 OTs, and 1 PT in the control group. The district conducted their time study during the week of April 23, 2012.

Student Outcome Data

Data related to IEP progress were collected in May and June of 2012. As can be seen in Table 10, there were no differences observed between the related service providers in the experimental and control groups when IEP progress was considered. It appeared as though positive IEP gains were associated with both approaches. No data were provided on other student outcome measures.

Table 10. Student Outcome Data

Conditions	N	Mastered or Adequate Progress on Goals	
		Preschool	School-age
		Experimental SLPs	5
Control SLPs	3	94%	94%
Experimental OTs	5	98%	97%
Control OTs	3	94%	93%
Experimental PT	1	95%	97%
Control PT	1	89%	100%

Provision of FAPE

Data were collected as it pertained to the provision of FAPE and interventions. As can be seen in Table 11, service providers were asked to document the amount of services they provided to students relative to what was on the students' IEPs and intervention plans. The majority of service providers in the experimental and control groups provided fewer services because the students on the caseload were either absent or attending alternative school sponsored activities (e.g., field trips, assemblies). Most of the students who missed SLP, OT, and PT services received make-up services, which indicated that both the experimental and control groups were effective at providing FAPE and interventions.

Table 11. Provision of FAPE

Conditions	Number of Students	Less Services-Student Absent or	Less Services-Service Provider Absent or Unavailable	Exact Amount Services	More Services

		Attending			
Experimental SLPs	134	16%	1%	63%	19%
Control SLPs	120	3%	7%	73%	17%
Experimental OTs	181	11%	1%	75%	12%
Control OTs	90	10%	1%	41%	48%
Experimental PT	52	10%	0%	85%	6%
Control PT	31	3%	35%	26%	36%

Analysis of Workload

Data were collected regarding the service providers' workload and contractual parameters. As can be seen in Table 12, all service providers in the study worked more hours than were indicated on their employment contract. The SLPs and OTs in the experimental groups worked a significant number of hours in overtime during the time study week. Additionally, the SLPs and OTs in the experimental groups worked more hours during the time study week when compared to their counterparts in the control groups. The PT in the experimental group worked fewer hours than the PT in the control group. No data were submitted to indicate if the service providers took a full lunch or planning period.

Table 12. Analysis of Workload

Conditions	Hours	Worked Beyond	Average Hours	Range of Hours
	Contracted to work	Contracted Hours	Worked	Worked
Experimental SLPs	37.5	100%	49	+1.75 - +31.53

Control SLPs	37.5	100%	44.86	+4.9 – +8.58
Experimental OTs	37.5	100%	46	+2.5 – +14.75
Control OTs	37.5	100%	39.8	+1 – + 3.25
Experimental PT	37.5	100%	41.25	+ 3.75
Control PT	37.5	100%	44	+6.5

State Waivers

The service providers were asked if they were over their caseload size or exceeded acceptable age ranges during instructional periods. The LEA 8 reported that no service providers in the experimental or control groups exceeded any age ranges. None of the experimental or control group SLPs and OTs and the control PT exceed the maximum caseload size. The PT in the experimental group exceeded the maximum caseload size and received a state waiver to do so.

Stakeholder Perceptions

In the experimental group, 1 SLP (20%), 2 OTs (40%) and the PT in the experimental group indicated that FAPE could not be reasonably provided using the LEA 8 approach. In the control group, all 3 SLPs, 3 OTs, and 1 PT (100%) indicated that they could reasonably provide FAPE using the traditional approach to calculating caseload ratios. Only 64% of the service providers in the experimental approach believed that FAPE could be reasonably provided using the new LEA 8 approach.

LEA 8 administered a survey to 285 parents of children who received related services and there was a 34% response rate. It appeared as though the parents held positive perceptions of the new LEA 8 approach. The majority of parents (92%) felt a part of the IEP team and 94% believed their parental information was included in the IEP. The majority of parents were satisfied with the amount (68%) and quality (83%) of related services their child received. The majority of parents (72%) were satisfied with the communication they received about their child's IEP progress. Finally, the majority of parents (76%) were satisfied with their child's IEP progress.

Alignment with the Operating Standards

Based on the data provided, reports, correspondences, and proposal, it did not appear as though LEA 8's approach fully aligned with the Operating Standards (3301-51-09). The approach and strategies considered the following workload duties: Assessments, consultation, counseling, diagnostic testing, and the demand of an itinerant schedule. There was no or limited evidence to show that the LEA 8 approach considered the following: Screenings, related school duties, educational interventions, level and frequency of services, planning time, classroom observations, coordination of the program, and staff development. It was also unclear if their approach considered the scheduling and time demands that were associated with supervising assistants.

Conclusion

The implementation of the LEA 8 approach and strategies included a small sample size which only included related service providers. The sample size and sole use of related service providers significantly limited the generalizability of results to other LEAs and service providers. Additionally, there were incomplete data submitted (e.g., lunch, planning time, group standardized test results), which prevented the experimental approach from being fully evaluated.

There were positive gains in IEP progress that were associated with both the new and traditional approaches to calculating caseloads, and the majority of students were provided FAPE, when make-up services were considered. Despite these positive student outcomes, 36% of the service providers in the experimental

approach did not believe FAPE could be reasonably provided. Additionally, the SLPs and OTs in the experimental group worked a significant number of hours in overtime and more than the control group during the time study week. Finally, the LEA 8's approach did not appear to fully align with the Operating Standards (3301-51-09).

In conclusion, the LEA 8 approach was not entirely effective at calculating caseload ratios, and therefore should not be adopted in its entirety by ODE. Nonetheless, several implications for practice emerged from their study.

Implications for Practice

Several implications for practice emerged from the data.

1. When calculating caseload ratios, data from student progress reports can be considered. If students fail to make adequate progress, the service providers' workload and caseload size should be evaluated in order to determine any impact.
2. LEA 8 used time studies to quantify an array of workload duties, and they considered these data when calculating caseload ratios. The time study data were entered into a centralized data-base and analyzed.
3. When developing and implementing an approach to calculating caseload ratios, parents' perceptions of services were considered and valued.
4. The district used a web-based staffing program to optimize staffing and scheduling for related service personnel.

Recommendations from LEA 8

LEA 8 shared several recommendations that were derived from the initial external evaluation with the third party group analysis. The recommendations were:

1. Standardize the way providers from each related service document the amount of time and frequency on IEPs;

2. Develop effective, appropriate ways to indicate service intensity and include this in IEP documentation;
3. Collect detailed provider scheduling information that includes not only building assignments but also exact scheduled service time, consult time and documentation time for each student on their caseload.

In addition to the above, the LEA 8 grant team recommended to:

1. Standardize the process of scheduling of related services providers;
2. Move from caseload to workload when determining number of students per provider;
3. Develop effective, appropriate ways to indicate non- therapy services on the IEP;
4. Develop common language among service providers regarding documentation of direct service vs. non - therapy time.

LEA 9

Background

In the past at LEA 9, the caseload ratios for ISs and VOSEs exceeded the maximum number (per LEA 9). At the beginning of the project in 2010, the VOSEs completed all of the IEP paperwork and ISs mainly provided direct services to approximately 65 students each day. Students received direct services from the IS in the regular education classroom or other settings. All of these services took place in a LEA 9 for students in the 11th and 12th grades

The purposes of the LEA 9 approach were as follows:

1. Alleviate IEP paperwork from the VOSE's workload.
2. Decrease the numbers of students who receive direct services in more restrictive settings.
3. Allow students more access to the regular education curriculum.
4. Ensure all special education service providers who provide services contribute to the IEP process.

LEA 9 Career-Technical Program Placement Model and Strategies

After reviewing many different service delivery models across Ohio, LEA 9 created a career-technical program placement model (see Table 13) that was used for placement decisions. Students were assigned to academic classes in the following settings: General education classroom, co-taught general education classroom, or a direct instruction classroom with the IS. The placements were discussed at IEP meetings based on IEP progress reports, classroom-based measures, and evaluation team reports. The VOSEs were used to provide supplemental support to students in the regular curriculum with the assistance of the paraprofessionals. The VOSEs also consulted with general education teachers to provide needed accommodations and/or modifications.

Table 13. LEA 9 Career-Technical Program Placements

Specific content area taught	Periods of Direct Instruction	Total students per period	Number of students receiving direct instruction	Co Teaching or Academic Assist period (based on need)	IEP caseload
Jr. English	4	10-12	40-50	2	
Science	4	10-12	40-50	2	
Math	4	10-12	40-50	2	
Sr. English	4	10-12	40-50	2	
Social Studies	5	10-12	50	1	
Supplemental Services/Vose and aides				Supplemental and consultation, based on need.	50-60 students Max. of 50-direct services.
Self-contained Unit.	6	12	24	none	

LEA 9 believed their placement model provided students with a “much better opportunity to access the regular curriculum for academic classes”. The placements allowed more time for the ISs to co-teach and the VOSEs to provide supplemental services. The emphasis on inclusion allowed LEA 9 the ability to “offer an extra period of co-teaching for the junior and senior English classes because of 1 less period of direct instruction.”

Over time, the LEA 9 Career-Technical Program Placement Model and the accompanying workload strategies became more of a “shared” caseload between VOSEs and ISs. The VOSEs were the “case managers” of the IEP and they provided academic support to students and teachers, monitored progress, and provided transitional services for current and incoming students to the career center. The ISs primarily co-taught and provided direct services throughout the day and contributed more to the IEP process by providing the present levels of academic and functional performance and goals/objectives. Additionally, one IS was assigned 2 “academic assist classes” to help those students who consistently failed to turn in assignments.

Evaluation of LEA 9 Career-Technical Program Placement Model and Strategies

Two ISs and two VOSEs participated in the evaluation of the LEA 9 Career-Technical Program Placement Model and strategies. The district conducted their time study during the week of March 5, 2012.

Student Outcome Data

Student outcome data were collected in May or June of 2012. At the end of the 4th quarter, the student outcome data for the experimental ISs showed that 51% of the IEP goals were either mastered or adequately progressing and 96% of students' academic core classes were passed. For the experimental VOSE group, the end of the 4th quarter student outcome data showed that 97% of the IEP goals were either mastered or adequately progressing and 97% of students' academic core classes were passed.

Provision of FAPE

Data were collected as it pertained to the provision of FAPE. The 2 ISs in the experimental group provided services to 130 students with disabilities. The data showed 109 students (84%) received the exact amount and 2 students (2%) received more special education services than were indicated on their IEPs. In total, 111 (85%) students had their IEP minutes met. The data also showed that 19 students (15%) received less minutes than were stated on their IEPs because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 19 students who missed services, 19 (100%) received "make-up" services.

The 2 VOSEs in the experimental group provided services to 103 students with disabilities or intervention plans. The data showed 78 (76%) students received the exact amount and 23 (22%) students received more special education services than were stated on their IEPs. In total, 101 (98%) students had their IEP minutes met. The data also showed that 2 students (2%) received less minutes than were stated on their IEPs because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 2 students who missed services, both received "make-up" services.

Analysis of Workload

Data were collected regarding the service providers' workload and contractual parameters. During the time study week, both ISs worked more hours than were indicated in their contract. The ISs worked an average

of 15.29 hours over the number of hours indicated in their contract, with one working 11 hours in overtime and the other working 19.58 hours in overtime. The survey data showed both ISs took their fully allotted lunch and planning time.

During the time study week, both VOSEs worked more hours than were indicated in their contract. The VOSEs worked an average of 2.67 hours over the number of hours indicated in their contract, with one working .33 hours in overtime and the other working 5 hours in overtime. The survey data also showed both VOSEs took their fully allotted lunch but neither took their full planning time.

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their group size or acceptable age ranges. LEA 9 reported that neither IS exceeded any age range but both exceed the maximum caseload ratio. Only 1 IS reported that a state waiver was obtained for exceeding the caseload ratio. Neither VOSE exceeded the acceptable age ranges but one did exceed the maximum caseload ratio. A state waiver to exceed the caseload ratio was not obtained.

Stakeholder Perceptions

Despite the fact that both ISs worked many hours in overtime, both believed they could reasonably provide FAPE to their students. The VOSEs also believed they could provide FAPE using the LEA 9 model and strategies. LEA 9 reported the following:

Students now have significantly more access to the regular education curriculum due to the increased number of co-teaching classes. IEP present levels and goals are much more meaningful since the IS in that classroom is collecting the baseline data and creating the goals. The model used appears to be effective for the majority of students at the career center, but may need to be adjusted each year to meet the needs of students. Not only did students pass their classes but the career center is retaining most students for a 2nd year. Parents are satisfied with the services they receive at our school.

Alignment with the Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it did not appear as though LEA 9's Career-Technical Program Placement Model and strategies aligned with the Operating Standards (3301-51-09). It did not appear as though the model and strategies considered the time and scheduling demands that were associated with various workload duties (e.g., IEP participation, services). This conclusion was based on the fact that the workload analyses showed both ISs and on VOSE worked many hours in overtime.

Conclusion

Several indicators were met after the implementation of the LEA 9 Career-Technical Program Placement Model and strategies. First, the majority of students who received services from ISs and VOSEs passed their core academic classes. Second, almost all the students on the VOSE caseload mastered or made adequate progress with IEP goals. Third, all of students who received IS and VOSE services were provided FAPE. Fourth, recall that one of the goals of the LEA 9 study was to reduce the amount of IEP paperwork for VOSEs. The time study data showed the VOSEs worked fewer total hours during the time study week when compared to the ISs. Fifth, both ISs and VOSEs took their fully allotted lunch and both ISs took their full planning time. Sixth, LEA 9 retained more students for a second year after implementing their approach. Seventh, parent satisfaction with IS and VOSE services was strong. Finally, the students at LEA 9 had more access to the regular education curriculum due to the increased number of co-teaching classes.

Several disadvantages were associated with the implementation of the LEA 9 approach. First, it did not appear as though all the service providers were assigned an appropriate caseload ratio or a reasonable number of workload duties as the ISs and one VOSE worked many hours in overtime. Second, while the ISs' efforts ensured that the majority of students received FAPE and passed core academic courses, only half of their students mastered or made adequate progress on their IEP goals. Finally, the LEA 9 model and strategies were not fully aligned with the Operating Standards. Three of the service providers exceeded their maximum caseload ratios but only two received a state waiver to do so. The workload for three of the service providers did not seem to be calculated in accordance with 3301-51-09 (I)(1)(a-d), and it caused them to work well

beyond their contractual hours (i.e., 5 to 19.58 hours over). With these disadvantages in mind, the benefits did not seem to outweigh the negatives, and therefore the LEA 9 approach and strategies should not be adopted in their entirety by ODE.

Implications for Practice

Several implications can be drawn from the implementation of the LEA 9 Career-Technical Program Placement Model and strategies.

1. LEA 9 analyzed the workload of each service provider and determined that the VOSEs spent a considerable amount of time on IEP related duties. Time studies were used to determine how much time service providers devoted to each workload duty and certain duties were redistributed among staff. After workload duties were redistributed, it would be beneficial to conduct another time study to confirm that service providers have been assigned appropriate caseload ratios and a manageable number of workload duties.
2. LEA 9 coordinated the efforts of ISs, VOSEs, and paraprofessionals in order to educate students with disabilities in a regular education setting. The VOSEs also used consultation to ensure regular education teachers were able to implement accommodations and modifications in the regular education classroom. These focused efforts were associated with most of the students passing their core academic classes. Collaboration, consultation, and coordinated services could also be used so that students have access to the regular education setting, curricula, and non-disabled peers.
3. The ISs co-taught in the regular education classroom, and most of the students with disabilities passed these academic courses. Equal attention should be placed on targeting IEP goals in the regular education setting in order to ensure students also mastered or made adequate progress.

Recommendations from the School

The LEA 9 staff recommended:

1. An evaluation of the number of special education staff that is required for the special education student population and level of disability in a career-technical setting. The traditional model of an IS working with 24 students per day and a caseload is not an efficient model due to the focus on a career-technical program.
2. Evaluation of the increased academic expectations for students in the career-technical center. Staffing for special education is not consistent. Some schools have VOSE's with over 100 students per caseload, while other schools are using only ISs.
3. A caseload ratio study for career centers.

LEA 10

Background

LEA 10 participated in the Caseload Ratio Study during the 2010-2011 and 2011-2012 school years. LEA 10 developed an aligned special education caseload and workload model, which used a three prong approach to determine IS caseloads.

LEA 10 Alternative Approach

Prong 1-Student Weighting based on LRE and Services

First, LEA 10 identified the students' LREs and corresponding EMIS codes. In order to break down the LRE percentage ranges, they determined that one-eighth of a 360-minute school day was 45 minutes. Students with mild needs were able to be served 45 minutes or less each day, which translated to less than 12.5% of their day outside of the general education classroom. Students with moderate needs were able to be served between 45 minutes and 89 minutes per day, which meant that these students spent anywhere from 12.5% to 25% of their day outside of the general education classroom. Students with moderate to intensive needs received between 90 minutes and 270 minutes of services per day outside of the general education classroom. Finally, students with intensive needs spend more than 270 minutes a day outside of the general education classroom, which totaled more than 75% of their day. Table 14 illustrates the rubric that was developed and the levels and weights that were assigned based on the students' LRE and services.

Table 14. Caseload Rubric

Level	Minutes*	Weight	Least Restrictive Environment (LRE)
Level 1	45 minutes or less	.25	Mild Out of classroom <12% of day
Level 2	45-89 minutes	.50	Moderate Out of classroom 12.5%-25% of day

Level 3	90-270 minutes	1.5	Moderate-Intensive Out of classroom 26%- <75% of day
Level 4	270 minutes +	2.0	Intensive Out of classroom 75%-100%

*Caseload minutes per day include any time spent directly with students through direct instruction.

An IS's caseload size was determined by using the most intensive students as a reference point.

Currently under 3301-51-09 of the Operating Standards, an IS cannot have more than 8 students with multiple disabilities in a classroom. Based on LEA 10's weighted formula, the students with the most intense needs were weighted as 2.0 and consequently, an IS could not have a caseload with more than 16 weighted points (i.e., 8 Level 4 students x 2.0 = 16). These 16 points could be achieved by combining students from all four needs groups, or by grouping students based on their need level (I, II, III, IV).

Prong 2-Workload Determination

In order to determine the workload that was associated with each student (level), a workload rubric was developed (see Table 15 and companion explanation). LEA 10 determined the total number of workload points that was allowed for each caseload was 225 points. This point total corresponded with a maximum caseload ratio limit of 8 Level IV students. The new model emphasized student needs over traditional staffing allocations and norms. The caseloads were set and then workloads were planned to optimize student growth with necessary resources. The staff had integrated technology, especially tablets, to more efficiently meet students' needs and provide virtual, and often simultaneous, reinforcement for identified areas of specially designed instruction. Technology was also used to complete various workload duties (e.g., documentation, evaluation, and collaboration).

Table 15 Workload Rubric**

Workload Rubric

Teacher: _____

Student: _____

	Curriculum	IEP Goals	Specially Designed Instruction	Joint planning and consultation	Paraprofessional Support	Assistive Technology	FBA/BIP
One Point	Student is functioning in the general education curriculum at a level similar to peers	Student has IEP goals instructed by another teacher or service provider.	Student requires no specially designed instruction	Joint planning typical for that provided for all students	Individual support needed similar to peers	Assistive technology use is similar to peers	Student requires no FBA or BIP
Two Points	Student requires limited modifications to the general curriculum	Student has 1-2 IEP goals.	25% or less of instruction is specially designed and/or delivered by special education personnel	Special education teachers conduct joint planning with 1 general education teacher or paraprofessionals over the course of each month	Additional individual support from an adult is needed for 25% or less of the school day	Assistive technology requires limited teacher-provided individualization and/or training for the student	Requires limited time assessment, planning, data collection and communication with others (not more than 2 hours per month)
Three Points	Student requires significant modifications to the general curriculum	Student has 3 IEP goals.	26-75% or less of instruction is specially designed and/or delivered by special education personnel	Special education teachers conduct joint planning with 2 to 3 general education teachers or paraprofessionals over the course of each month	Additional individual support from an adult is needed for 26% to 75% of the school day	Assistive technology requires extensive teacher-provided individualization and/or training for the student	Requires 2 to 4 hours monthly for assessing, planning, data collection and communication with others
Four Points	Significant adaptation to grade level curriculum requires specialized instructional strategies. Alternate assessment is used to measure progress	Student has 4 or more IEP goals.	76 to 100% of instruction is specially designed and/or delivered by special education personnel	Special education teachers conduct joint planning with more than 3 general education teachers or paraprofessionals over the course of each month	Additional individual support from an adult is needed from 76% to 100% of the school day	Assistive tech requires extensive teacher-provided individualization and/or training for the student- Significant maintenance and/or upgrades for continued effective use are anticipated	Requires more than 4 hours for assessing, planning, data collection and communication with others

Point Total: _____

**The workload rubric should be used alongside this caseload model. Using the workload rubric, a caseload should not exceed 225 workload points.

Workload Determination: A Companion Explanation to Workload Rubric

Caseloads will be tentatively set in the spring for the following year. Caseloads may be modified based on summer registration and actual fall enrollments. Caseloads will be reviewed at least twice during the school year by individual district special education teachers with their building principal and/or special education coordinator.

In determining teacher caseloads, the school district would use the following values to assign points to the programs of each eligible individual receiving an instructional program in the district. A teacher may be assigned a caseload with no more than _____ (value determined using the rubric) total points. This

caseload limit may be exceeded by no more than 10% for a period of no more than six weeks, if doing so does not prevent the affected teacher's ability to provide the services and supports specified in his or her students' IEPs.

Curriculum

One Point: Student is functioning in the general education curriculum at a level similar to peers.

Two Points: Student requires limited modifications to the general curriculum.

Three Points: Student requires significant modifications to the general curriculum.

Four Points: Significant adaptation to grade level curriculum requires specialized instructional strategies.

Alternate assessment is used to measure progress.

IEP Goals

One Point: Student has IEP goals instructed by another teacher or service provider.

Two Points: Student has 1-2 IEP goals.

Three Points: Student has 3 IEP goals.

Four Points: Student has 4 or more IEP goals.

Specially Designed Instruction

One Point: Student requires no specially designed instruction.

Two Points: 25% or less of instruction is specially designed and/or delivered by special education personnel.

Three Points: 26-75% or less of instruction is specially designed and/or delivered by special education personnel.

Four Points: 76 to 100% of instruction is specially designed and/or delivered by special education

Personnel.

Joint planning and consultation

One Point: Joint planning typical for that provided for all students.

Two Points: Special education teachers conduct joint planning with 1 general education teacher or paraprofessionals over the course of each month.

Three Points: Special education teachers conduct joint planning with 2 to 3 general education teachers or paraprofessionals over the course of each month.

Four Points: Special education teachers conduct joint planning with more than 3 general education teachers or paraprofessionals over the course of each month.

Paraprofessional Support

One Point: Individual support needed similar to peers.

Two Points: Additional individual support from an adult is needed for 25% or less of the school day.

Three Points: Additional individual support from an adult is needed for 26% to 75% of the school day.

Four Points: Additional individual support from an adult is needed from 76% to 100% of the school day.

Assistive Technology

One Point: Assistive technology use is similar to peers.

Two Points: Assistive technology requires limited teacher-provided individualization and/or training for the student.

Three Points: Assistive technology requires extensive teacher-provided individualization and/or training for the student.

Four Points: Assistive technology requires extensive teacher-provided individualization and/or training for the student. Significant maintenance and/or upgrades for continued effective use are anticipated.

Functional behavioral assessments/Behavior intervention plans

One Point: Student requires no FBA or BIP.

Two Points: Requires limited time assessment, planning, data collection and communication with others (not more than 2 hours per month).

Three Points: Requires 2 to 4 hours monthly for assessing, planning, data collection and communication with others.

Four Points: Requires more than 4 hours for assessing, planning, data collection and communication with others.

Prong 3-Workload Strategies

The staff utilized data from various sources (e.g., progress reports, evaluation team reports, STAR reports, Fast ForWord data, work samples) to evaluate and inform program management. The ISs used tablet and laptop technology to track and monitor data efficiently. Additionally, the LEA 10 team committed 80% of ISs' contractual day to the provision of direct instruction, specially designed instruction, collaboration with staff, and services that were student-focused.

Evaluation of the LEA 10 Approach

Initially, LEA 10 had 5 IS participants in the experimental and 5 participants in the control groups. One participant in the control portion of the study had to be dropped due to problems with data and one participant

in the experimental group did not submit complete data. The district conducted their time study between October 22 and November 11, 2012.

Student Outcome Data

Student outcome data were collected in May or June of 2013. At the end of the 4th quarter, the student outcome data for the experimental IS group showed that 87% of the IEP goals were either mastered or adequately progressing and 99% of students passed core classes. Further, 80% of OAA tests were at least proficient. There was no data from the experimental group to indicate if statewide diagnostic tests were clearly on track or if OGT tests were at least proficient.

For the ISs in the control group, the student outcome data showed 80% of the IEP goals were either mastered or adequately progressing and 97% of students' academic core classes were passed. Further, 57% of 2011-2012 statewide diagnostic tests were clearly on-track and 44% of OGT tests were at least proficient. There was no data from the control group to indicate if OAA tests were at least proficient.

Analysis of Workload

Data were collected regarding the service providers' workload and contractual parameters. Time study data showed 75% of ISs in the experimental group (n=4) worked more hours than were indicated in their contract. The experimental group of ISs worked an average of 7.75 hours in overtime with a range of .78 hours under through 14.16 hours over the hours in the employment contract. Survey data showed 50% of ISs in the experimental group took their fully allotted lunch and planning time.

During the time study week, 20% of the ISs in the control group (n=5) worked more hours than were indicated in their contract. The ISs in the control group worked an average of 3.7 hours under the number of hours indicated in their contract, with a range of 8.5 hours less to 1.8 hours over. The survey data also showed that 100% of control group ISs took their fully allotted lunch and 80% took their full planning time.

Provision of FAPE

Data were collected as it pertained to the provision of FAPE. The 4 ISs in the experimental group provided services to 64 students with disabilities or intervention plans. The data showed 26 students (42%) received the exact amount of special education services as specified on their IEP while 20 students (31%) received more. The data also showed 18 (28%) students received fewer minutes than were indicated on their IEP, one was due to a student absence. Of the 18 students who received fewer services, 17 (94%) received “make-up” services.

The 4 ISs in the control group provided services to 32 students with disabilities or intervention plans. The data showed 14 (44%) students received the exact amount of special education services as specified on their IEP while 12 (38%) students received more. The data also showed that 6 students (19%) received fewer minutes than were stated on their IEPs, and 2 students received less because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 6 students who missed services, 0 (0%) received “make-up” services.

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their group size or acceptable age ranges. LEA 10 reported that no service providers in the experimental group or control group of intervention specialists exceeded any group size or age range.

Stakeholder Perceptions

All of the ISs in the experimental group believed they could reasonably provide services to the students on their caseload using the new LEA 10 approach. Only 60% of the ISs in the control group believed the same using the districts traditional approach. One of the ISs shared the following about her ability to provide FAPE: “I provide, on average, more services than I write in my IEPs. I serve students cross categorically and it is difficult to provide an intense level of service to each one given their broad needs.”

LEA 10 also sent out surveys to families and staff members in order to understand their perceptions of the new approach for calculating caseload ratios. Feedback from the surveys was minimal, and those who responded indicated that they were satisfied with the LEA 10 approach. Some respondents even stated that they would like to learn more about special education rules, regulations, and procedures.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it appeared as though LEA 10's approach did not fully align with the Operating Standards (3301-51-09). The approach and strategies considered the following workload duties: Screenings, assessment, consultation, intervention design, educational interventions, level and frequency of services, planning time, diagnostic testing, and coordination of the program. Although not directly addressed, counseling and classroom observations likely were considered under other workload duties (i.e., observations fell under assessment and counseling fell under interventions). LEA 10 considered the scheduling and time demands that were associated with supervising and training paraprofessionals. There was no or limited evidence to show that the approach and strategies considered the following: School related duties, conferences, staff development, training, and the demands of an itinerant schedule.

Conclusions

LEA 10's approach could not be fully evaluated for several reasons. First, the evaluation of their approach included a small sample size which only included ISs. The sample size and sole use of ISs significantly limited the generalizability of results to other LEAs and service providers. There were also incomplete data submitted, which prevented a full analysis of student outcomes.

Although several methodological limitations were present, the implementation of the LEA 10 three pronged approach was associated with several positive outcomes. First, the experimental group outperformed the control group on two student outcome measures and managed to ensure the majority of students mastered or

made adequate progress on IEP and intervention goals and passed core classes. Second, the experimental group outperformed the control group by ensuring nearly all the students on the caseload were provided at least the minimum amount of IEP and intervention services. Third, all the ISs in the experimental group believed they could reasonably provide FAPE using the LEA 10 approach. Only 60% of the ISs in the control group shared the same belief.

Finally, despite the positive outcomes that were associated with the LEA 10 approach, the approach did not fully align with all the duties detailed in Operating Standards (3301-51-09)(I)(1)(a-d) and it did not ensure the majority of service providers worked a reasonable work week. When compared to the control group, the experimental group worked more hours per week and fewer ISs received a full lunch and their planning time. Further, 75% of the service providers in the control group worked less than 37.5 hours during the time study week.

In conclusion, given the flexibility that was built into their three prong approach provided, the LEA 10 approach held potential for ODE. First, LEA 10's approach could be adjusted to ensure alignment Operating Standards (3301-51-09)(I)(1)(a-d). Second, students or excess workload from the experimental group could have been redistributed to other staff once the time study data were considered. Therefore, ODE should investigate whether the LEA 10, with some adjustment, can be applied to other service providers and LEAs. Many elements of the LEA 10 approach appeared to hold promise for ODE if further research produced similar results. Finally, several implications for practice emerged for consideration.

Implications for Practice

1. In calculating caseload ratios, LEA 10's three prong approach considered students' needs as it related to the type, level, frequency, and location of services.
2. LEA 10 considered workload duties that were associated with implementing accommodations and modifications, targeting IEP goals, providing specially designed instruction, co-planning and consulting,

supervising paraprofessionals, implementing assistive technology, and conducting functional behavioral assessments and implementing behavior intervention plans.

3. LEA 10 implemented several workload strategies to focus their ISs' time on direct services. Technology was utilized to aid in data collection and analysis. They also clustered students together so workload could overlap.
4. The ISs in the study analyzed progress data from various sources to ensure students mastered or made adequate progress toward IEP and intervention goals and passed core classes. If students made less than expected progress, a team of individuals met to modify the IEP or intervention plan. Student progress and needs drove staff allocations and caseload sizes.
5. The district committed 80% of their ISs time to direct instruction, specially designed instruction, services, and collaboration with staff.

Recommendations from LEA 10

The recommendations to consider from LEA 10 are:

1. Upcoming changes to the Operating Standards must take into account the intensity of student needs in service delivery. Disability categories do not adequately define a student's level of service delivery need. Service workloads based on current categories are prescriptive and discriminatory in nature, and presume a level of competence for students. A more appropriate workload model of service delivery needs to emphasize intensity of student needs based on a continuum of services aligned with current legislation and directional shifts of educating in least restrictive environment. It should be noted the ODE's current partnership with Dr. Frattura exemplifies this approach of "meeting the needs of students of all abilities."
2. Education has changed greatly in the past decade, but caseload/workload governing rules have not. It is time for these ratios to change, emphasizing Kathy Shelby's efforts to give students the very best.

She sought to highlight the two-prong approach to service delivery, though most focused on caseload for sake of making sense of EMIS funding in this process not numbers driven.

3. Current funding does not align with a needs based system approach. This further needs to be explored by ODE. Perhaps a partnership could be reached, as has been evident in the collaboration with the early initiatives process. It is imperative that caseload and workload ratios be changed for our service providers. Service providers need to be better able to provide students with disabilities the opportunity to reduce the achievement gap in math and reading.

LEA 11

Background

LEA 11 participated in the Caseload Ratio Study in collaboration with their local educational service center during the 2010-2011 and 2011-2012 school years. The goal of their study was to have “all [ISs] available to efficiently and equally contribute to the education of all students based on the intensity of the [students’] needs”. The purposes of their study were to address the following issues:

1. ISs who served students with intense needs were expected to serve more students than they can reasonably manage.
2. ISs suggested that they were unable to support any additional students because they had a full caseload (headcount), even though some of the students on their caseload required minimal support or only needed consultative services. A point system could eliminate this concern and provide equality of services by each IS.
3. ISs were bound by caseload (headcount) numbers that did not assist in meeting the needs of all students or assist in raising student achievement. A point system could improve the efficiency of ISs.

LEA 11 Alternative Approach

LEA 11 implemented a point system, called the Fulltime Equivalency (FTE) Model, which was based on a model by the Oklahoma State Department of Education. A point value was assigned to each student based on his or her needs. Students who needed the least amount of services or intervention received a .025, while students who needed the most services or intervention received a .1. Various other point deductions or additions could be made based on the student’s needs. Table 16 represents the LEA 11 rubric, which contains the complete breakdown of points (Oklahoma State Department of Education, 2007).

Table 16. FTE Model Rubric

LEVELS RUBRIC / FTE POINTS	
Level 1 support / .0250	
>20%	Behavior
Regular Class Instruction	
Full-time	
Staff consultation	.0100/Plan is required
	.0100/Sensory
	.0150/ED staff support
Level 2 support / .0400	.0200/Alternative Setting
>20%	.0250/Mental Health
Regular Class Instruction	
Full-time w/ pull-out	
Co-teaching or	Medical
Collaboration	
Level 3 support / .0500	.0100 / TBI
	.0100/OT - Occupational Therapy
	.0100/PT - Physical Therapy
21% - 60%	.0150/Physical Plan
Special class	.0150/Medical Plan
Part-time	.0200/Crisis Plan
Targeted skills for	
LA, M, W, Social	
Level 4 support / .0670	Communication

<60% - <90%	.0100/Speech Therapy
Special Class	.0100 /AT required
Full-time	.0150/Signing
Extensive Modified Instruction	.0200/Alternative Setting
Level 5 support / .1000	
<90%	
Special Class	1:1 Assistant
Full-time	Subtract -.0200
Explicit Modified Instruction in Special Classroom	

According to LEA 11, students who were determined to need the least amount of support (.025 points) typically checked in with the IS and used the building resource room. Additionally, these students typically received their IEP modifications and accommodations in the general education classroom. Students who needed the most amount of support (.1 point) were usually placed in an IS’s classroom more than 90% of their day. Additional points would be assigned to a student based on certain “intensity of needs” (e.g., behavioral), related services (e.g., interpreter services), or 1:1 paraprofessional assistance. No IS was to have a caseload of students that exceeded a total score of 1.0 FTE.

A time study revealed additional time was needed for the ISs to schedule meetings and participate in the IEP process (e.g. setting up meetings, phone calls, data gathering). The LEA 11 decided to allow 1.5 hours for each initial and 1 hour for each annual review IEP meeting. LEA 11

also determined that 65% of the IS's time should be devoted to direct, specially designed instruction and 35% of the IS's time should be devoted to "all meeting and parent communication."

Evaluation of the LEA 11 Alternative Approach

There were 3 IS who were involved in the evaluation of the LEA 11 approach. No control group was available.

Student Outcome Data

The participants in the LEA 11 study provided limited data related to student performance on group standardized tests (n=44). OAA and OGT data were collected during the 2010-2011 school year. The data showed 64% of OAA tests and 49% of OGT test scores were at least proficient during the year the LEA 11 approach was implemented. Due to the low student performance on these tests, the FTE Model did not enable the district to meet the annual measurable objectives (AMO), which contributed to LEA 11 abandoning the approach. The district provided the following analysis of their student outcome data:

The results of the program were not as the district had hoped. The district made AYP in the special education students sub group in both areas of reading or math, however tenth grade special education students did not make AYP in both areas. This was also the case in the second year of the study. Changes were made to create an opportunity for all of the "most needed" students to have a separate English and math class to re-teach and modify subject matter from the general education program of study. All special education students were placed in a "study skills" class with an interventionist to make sure the students were meeting both the goals of their IEP and experiencing success in the general curriculum. This has been intensified on the secondary level this year to help the students pass the OGT.

Provision of FAPE and Interventions

Anecdotal data from LEA 11 showed that IEP minutes were not met for some students who were “less needy” (i.e., those students who had the lowest points on the FTE Model rubric). The FTE Model could not guarantee FAPE were provided to all students.

Analysis of Workload

Due to staffing and other issues, the district did not conduct the time study that was intended to independently evaluate the effectiveness of the approach. Instead, LEA 11 developed a separate time study process which was completed during the 2010-2011 school year. The data from this LEA 11 time study could not be used to independently evaluate their approach because it did not include the time ISS’ spent completing workload duties that occurred before and after school and on weekends.

State Waivers

Data on state waivers were not provided by the district.

Stakeholder Perceptions

According to LEA 11, “parent and other stakeholder input will be collected through open meetings held quarterly.” The following was LEA 11 analysis of the parent stakeholder survey:

Parent input was asked for through a survey that was mailed home to all parents of students in the special education program; this number in the first year of the study was approximately 400 families. Ninety-nine surveys were returned. More results were returned from the primary and elementary grade levels than from the secondary level. This is a typical trend in our school district for both special education and non-special education student and parents.

The results of the parent survey were overwhelmingly positive about individual teachers as well as the way in which their students were receiving their education and services.

No other stakeholder perceptions were provided for consideration.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it appeared that the LEA 11 FTE Model aligned with the majority of the workload duties listed in 3301-51-09 of the Operating Standards. The approach considered time for screening, assessment, consultation, counseling, intervention design, educational interventions, level and frequency of services on the IEP, planning time, diagnostic testing, coordination of the program, conferences, and demands of an itinerant schedule. There was some evidence to suggest the FTE Model indirectly considered the scheduling and time demands that were associated with classroom observations, which could be considered part of the assessment process. Although not part of 3301-51-09, the FTE Model also considered the time and scheduling demands associated with supervising paraprofessionals. There was no evidence provided to show how the approach considered training and staff development activities and follow-up.

Conclusion

A full evaluation of the FTE Model was not possible because limited data were provided by the LEA 11. Per LEA 11, the approach was positively perceived by a majority of parents with children in the primary and elementary grades. Additionally, the approach demonstrated alignment with almost all of the elements of 3301-51-09 (I)(1)(a-d) of the Operating Standards.

Despite the fact that the FTE Model was not fully evaluated by the research team, anecdotal information from the district suggested the approach was not effective at improving student outcomes

and providing FAPE to students with disabilities, especially students who had fewer academic and functional needs. The approach was abandoned by the school district due to its ineffectiveness. Due to the lack of data and anecdotal information from the district, the LEA 11 approach was not found to be effective at calculating caseload ratios. With all these data in mind, the LEA 11 approach should not be adopted by ODE. Nonetheless, several implications for practice emerged.

Implications for Practice

1. The FTE Model considered the time and scheduling demands associated with the supervision of paraprofessionals. These supervisory duties consumed the ISs' time, especially when the paraprofessionals worked with students with the most significant needs. Future revisions to 3301-51-09 of the Ohio Operating Standards should include the scheduling and time demands associated with supervising paraprofessionals.
2. Much like another LEA participating in the study, LEA 11 devoted 65% of their ISs' time to provide direct specially designed instruction. This similar commitment to student services also aligned with workload expectations that were found in the health care industry (e.g., nursing homes, skilled nursing facilities, hospitals) and focused service providers' time on activities requiring their expertise.
3. Through their analysis of the time study data, LEA 11 determined that 1.5 hours were needed to be set aside in the schedule so that ISs could participate in the initial IEP process (e.g., collect data, collaborate write IEPs, schedule meetings, correspond, and attend parent meetings). For annual reviews, 1 hour needed to be reserved in the schedule for similar activities. These times could be used by other districts as they attempt to quantify and allocate time in the schedule for ISs to participate in the IEP process.

Recommendations from LEA 11

LEA 11 did not provide recommendations for ODE to consider.

LEA 12

Background

LEA 12 participated in the Caseload Ratio Study during the 2010-2011, 2011-2012, and 2012-2013 school years. Prior to the 2010-2011 school year, LEA 12 hired additional OTs and added service days based on the number of students who qualified for service. There were no consistent criteria for eligibility for and dismissal from services, so students stayed on the caseloads for several years while new students were added. Additionally, there was no systematic process in place for assigning OTs and OTAs to school districts. Initially, a master schedule was made that assigned separate supervision times to each district but it became a challenge to adhere to that schedule and document supervision as caseloads grew.

The initial purpose of the study was to implement the North Carolina Model and find a better way to schedule people to accommodate the caseloads and associated workload. Given the high caseloads, LEA 12 realized more students were being seen in groups, more paperwork was done at home, and the quality of services declined.

LEA 12 Alternative Approach

In light of increasing caseload ratios and workload, LEA 12 enacted the following strategies during their participation in the Caseload Ratio Study:

1. Initially, LEA 12 implemented the North Carolina Model but later modified the model when staffing changed, budgets were cut, and persistent vacancies occurred. The model is reflected below in Table 17, and it assumed a 37.5 hour work week, 2.5 hours for lunch, and 1 hour for other workload duties. It was designed to ensure that preset percentages of the service provider's time were devoted to the following:

- a. Lunch.
- b. Direct services, which included direct student services (treatment), assessments, and evaluations.
- c. Documentation, which included completing progress reports, daily notes, Medicaid billing and other compliance paperwork, caseload documentation, home-school correspondences, writing IEPs, emailing, other parent contacts, ordering equipment, and making referrals to other professionals.
- d. IEP meetings, which included IEP meetings and other parent conferences.
- e. Planning, which included student planning, collaboration with the teacher, planning and preparation, planning group and individual services, setting up the room, and tearing down equipment at the end of sessions.

Table 17. LEA 12 Application of the North Carolina Model

<u>% of Time</u>	<u>Hourly Equivalent</u>		<u>Workload Activity</u>
53%	18.55 hours	for	Direct services/ assessment
30%	10.5 hours	for	Documentation
10%	3.5 hours	for	Planning
7%	2.45 hours	for	IEP Meeting
6%	2.5 hours	for	Lunch
.3%	1 hour	for	Other
	37.50 Total		

- 2. LEA 12 educated the special education supervisors and parents on the continuum of service delivery models for related services. At initial IEPs, when the IEP team recommended services, the progression from direct to indirect services and the dismissal process were explained.
- 3. A dismissal process was created that used the North Carolina Model and a skill set checklist that was created to assist with skill maintenance after services ended.

4. The teachers, parents, ISs, paraprofessionals, special education supervisors and school psychologists contributed to the referral process. As a result, these stakeholders engaged in structured discussions about the importance of appropriate referrals and how to recognize a potential disability from lack of practice.
5. Clear guidelines for eligibility and dismissal were created.
6. An OT and OTA were scheduled at the same building in order to ensure supervision could happen seamlessly and allow for sufficient time, optimal services, and accurate student progress monitoring. LEA 12 resolved to assign no more than 2 OTAs to each OT and pair them together at their buildings so that they had time within the day to communicate with each other. LEA 12 also encouraged OTA and OT pairs to use technology to improve communications, (i.e. text, email, video model).
7. LEA 12 planned to have shorter, more frequent meetings with related service providers in order to bring them together at the ESC office to trouble shoot problems more quickly.

Evaluation of the LEA 12 Alternative Approach and Strategies

LEA 12 had 7 participants in an experimental group: 4 were OTs and 3 were OTAs. No control group was available. Not every service provider in the study submitted complete data for analysis.

Student Outcome Data

For the experimental group, student outcome data were collected in May or June of 2013. For the control group, only student outcome data were collected and these data were submitted in December 2012. The data from the experimental and control groups are reflected in Table 18. At the end of the 4th quarter of 2013, the student outcome data for the experimental OT participants (n=4) showed that 69% of the IEP goals of school-aged students were either mastered or adequately

progressing. No data were available on the percentage of core classes passed, statewide diagnostic tests clearly on track, and OAA and OGT tests at the least proficient level.

For the experimental OTAs (n=3), at the end of the 4th quarter in 2014, the student outcome data showed that 69% of the IEP goals were either mastered or adequately progressing for school-aged students and 57% of IEP goals were either mastered or adequately progressing for preschool-aged students. For preschool aged students, it was indicated that 100% of students showed new skills in the following areas: socio-emotional, general knowledge, and self-help skills. It should be noted that only one provider (n=1) provided preschool-aged data. No data were available on the percentage of core classes passed, statewide diagnostic tests clearly on track, and OAA and OGT tests at the least proficient level.

For the OTs in the control group, 61% of school-age and 83% of preschool goals were either mastered or progressing adequately. For the school-aged students, 57% of statewide diagnostic tests were clearly on track and 90% of core classes were passed. In terms of ECO Outcomes for preschool students, 71% of students showed new social-emotional skills, 86% showed new general knowledge skills, and 43% showed new self-help skills.

For the control group OTAs, 57% of school-age goals were either mastered or progressing adequately, 11% of statewide diagnostic tests were clearly on track and 100% of core classes were passed. Further, it was found that 51% of goals were either mastered or adequately progressing for preschool-aged students. In terms of ECO Outcomes for preschool students, 100% of students showed new social-emotional skills, 100% showed new general knowledge skills, and 100% showed new self-help skills.

Table 18. Comparison of LEA 12 Student Outcome Data

Conditions	Mastered or Adequate Progress on Goals		Passed Core Classes	Statewide Diagnostics	ECO Outcomes
	Preschool	School-age			
Experimental OT	N/A	69%	N/A	N/A	N/A
Control OT	83%	61%	90%	57%	43-86%
Experimental OTA	57%	69%	N/A	N/A	100%
Control OTA	51%	57%	100%	11%	100%

Provision of FAPE

Data were collected as it pertained to the provision of FAPE and interventions for students on the caseload. The 4 OTs in the experimental group provided services to 117 students with and without disabilities. The data showed 60 students (51%) received the exact amount of special education services as specified on their IEP, and 44 students (38%) received more services than were stated on their IEPs or intervention plans. The data also showed that 13 students (11%) received less minutes than were stated on their IEPs. Fewer services were provided to 3 of the students (23%) because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 13 students who missed services, 4 (31%) received “make-up” services. In total, 104 (89%) students on the caseload had their IEP minutes met despite absences and attendance at alternative school activities.

Only 2 of the 3 OTAs in the experimental group provided data regarding FAPE. The 2 OTAs provided services to 76 students with disabilities or intervention plans. The data showed 61 students (80%) received the exact amount of special education services as specified on their IEP, and 4 students (5%) received more special education services than were stated on their IEPs. The data also

showed that 11 students (14%) received less minutes than were stated on their IEPs. Fewer services were provided to the 11 students (100%) because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 11 students who missed services, 11 (100%) received “make-up” services. In total, 65 (86%) students had their IEP minutes met despite absences and attendance at alternative school activities.

State Waivers

The participants were asked to provide data regarding waivers for service providers who were over their group size or acceptable age ranges. LEA 12 reported that no OTs or OTAs exceeded any age range or acceptable caseload size.

Analysis of Workload

Data were collected regarding the service providers’ workload and contractual parameters. During the time study week, it was found that 100% of OTs (n=4) worked more hours than were indicated in their contract. The OTs worked an average of 3.44 hours over the number of hours indicated in their contract, with a range of 1.25 hours over through 6 hours over. Survey data showed 75% of OTs did not take their fully allotted lunch and none (0%) took their planning time.

During the time study week, it was found that of the OTAs (n=3), 67% worked more hours than were indicated in their contract. The OTAs worked an average of 1.17 hours over the number of hours indicated in their contract, with a range of working 2 hours under the amount of time specified in their contract to working 3.25 hours over the amount of time indicated in their contract. The survey data also showed that 0% of OTAs took their fully allotted lunch or planning time

Stakeholder Perceptions

LEA 12 collected data related to stakeholders' perceptions of the alternative approach and strategies. The following were shared:

The evaluation of the effectiveness of this new plan was first of all, the happiness of the staff, reduced stress levels for everyone, and a satisfaction that their workload was manageable. But, as an ESC dealing with district changes, [the] therapists had to adjust to a new data management software system that [was] extremely difficult to use and one that did not interface well with [other] technology systems. Therefore, another workload issue was created that was not able to be resolved this year and caused great frustration... [The] therapists [were] dedicated individuals who made sure that the students met their minutes, but they must work many hours out of the day to complete the compliance portion of their job.

Despite the fact that 86% of the service providers in the study worked overtime, all 7 service providers believed that they could reasonably provide FAPE using the LEA 12 approach and strategies. The service providers shared the following statements related to their workload and caseload ratios:

1. [I] worked 105 minutes over contracted time.
2. Travel[ed] during lunch. [Had] lunch during meeting. Report card week so lots more documentation time than [usual]. Worked an additional 285 minutes beyond contract time.
3. Work[ed] beyond 2.5 hours contract: 1.5 hours of preparation and 1 hour to read and respond to email.
4. Total workload [was] 35 hours but worked 38.25 hours.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it did not appear as though LEA 12's approach fully aligned with the Operating Standards (3301-51-09). The approach and strategies considered the following workload duties: Assessment, consultation (but called collaboration), intervention design, direct educational interventions, level and frequency of services, planning time, diagnostic testing, classroom observations (under assessment or diagnostic testing), coordination of program, and conferences. LEA 12 considered the scheduling and time demands that were associated with the management of equipment, correspondences with parents and staff, referrals to outside agencies, supervision of assistants, and Medicaid billing. They also attempted to ensure fulltime service providers were afforded 30 minutes of lunch each day. There was no or limited evidence to show that the approach and strategies considered the following: screening, counseling, training, related duties, staff development activities and follow up, and the demand of an itinerant schedule. LEA 12 did train staff on the eligibility and dismissal criteria and hold "troubleshooting" staff meetings, but it was unclear how the time needed for these activities was considered.

Conclusions

The implementation of the LEA 12 approach and strategies included a small sample size which only included OTs and OTAs. The sample size and sole use of OT and OTAs significantly limited the generalizability of results to other LEAs and service providers. There were incomplete data submitted, which prevented the experimental approach from being fully evaluated. Additionally, no control group data were provided for the workload and FAPE analyses, and therefore full comparisons between the experimental and control groups could not be made.

Upon reviewing the student outcome data, the experimental group of OTs and OTAs was found to have outperformed the control group on indicators related to progress on IEP and intervention goals. Further, the OTAs in the experimental and control groups performed similarly on

ECO outcomes. Although the experimental group outperformed or performed similarly on two student outcome indicators, a number of school-aged and preschool-aged students did not master or make adequate progress on IEP goals despite the fact that 38% received extra OT and 5% received extra OTA services. It appeared as though neither approach nor extra services ensured the majority of students mastered or made adequate progress on IEP or intervention goals.

All of the OTs and OTAs worked a reasonable work week but no one received their full planning time. Only one individual was able to take a full lunch. Because lunch and planning time was not consistently taken, it was determined the LEA 12 approach did not ensure service providers were given a reasonable caseload ratio.

A review of stakeholder perceptions showed all the OTs and OTAs in the LEA 12 study believed they could reasonably provide FAPE to students on their caseload using the new approach and strategies. Despite this belief, other stakeholders from LEA 12 acknowledged:” [The] therapists [were] dedicated individuals who made sure that the students met their minutes, but they must work many hours out of the day to complete the compliance portion of their job”. Even though the minutes were met and in sometimes cases extra services were provided to the students, an insufficient number of students mastered or made adequate progress on their IEP or intervention goals.

In conclusion, the LEA 12 approach and strategies did not ensure the majority of students mastered or made adequate progress on IEP and intervention goals. Further, their approach and strategies did not fully align with the Operating Standards (3301-51-09). With all these data in mind, the LEA 12 approach should not be adopted by ODE. Nonetheless, several implications for practice emerged.

Implications for Practice

Despite the fact that results did not result in desired student outcomes and reasonable caseload ratios, several important implications were realized.

1. LEA 12 realized that time needed to be scheduled into their service providers' day for the management of equipment (e.g., set-up, tear down, maintenance, purchasing).
2. Data from the LEA 12 time study showed service providers needed time in their day for correspondences with parents and staff, referrals to outside agencies, supervision of assistants, and completion of Medicaid billing.
3. LEA 12 trained stakeholders on eligibility and dismissal criteria for certain related services. This training helped service providers, staff, parents, administrators, and teachers better differentiate between students who needed related services versus teacher-led interventions (due to a lack of instruction).
4. The schedule and building assignments were designed to ensure OTAs and their supervising OT overlapped. LEA 12 determined that one fulltime OT should be assigned to supervise no more than 2 OTAs at any given time (1:2 ratio). The 1:2 OT to OTA supervision ratio was lower than the recommended ratio by the Ohio Occupational Therapy, Physical Therapy, and Athletic Trainers Board (i.e., 1:4 for evaluations and direct treatment; 1:6 for evaluations only). Despite the low OT supervisor to OTA supervisee ratio (1:2), LEA 13 student outcome data showed some limited student growth, especially at the preschool level. As with caseload ratios, the supervisory ratio should be considered within the context of student outcome data, severity, LRE, other workload duties, and the OTA's level of experience. LEA 12's contact person believed that the current licensure laws for OTs were "impractical for the school setting." She believed that there needed to be a "caseload number shift for school based services using the assistant model" and that ODE needed to address this issue.

5. LEA 12 also encouraged OTA and OT pairs to use technology to improve communications, (i.e. text, email, video model).

Recommendations from LEA 12

LEA 12 provided the following recommendations:

1. Develop clear guidelines that align with professional organizations (e.g., American Speech-Language-Hearing Association) and licensure boards (e.g., Ohio Board of Speech-Language Pathology and Audiology). Therapists are often concerned with violating their licenses when they work beyond their legal limits.
2. ODE can provide more information to administrators about “school-based therapy” by developing a mechanism to work within that framework of the “caseload/workload” model.
3. ODE could also be more diligent in the coordination of technology systems that interface with Medicaid companies. The documentation responsibilities use more time than therapists spend with the children they treat.

LEA 13

Background

LEA 13 participated in the Caseload Ratio Study during the 2010-2011 through 2012-2013 school years. LEA 13 participated in the study because they believed caseload distribution was one of the most difficult tasks faced by an ESC with many therapists providing services across a multitude of school districts. Several goals drove the creation of their approach.

1. Develop standardized nomenclature for terminology addressing workload issues.
2. Use the existing documentation system for IEP minutes and frequencies.
3. Track therapists actual time spent on service delivery.
4. Identify and quantify all workload duties associated with disability category, age, equipment needs, Medicaid and other documentation demands, and degree of IEP progress reporting.
5. Develop a weighting system, based on the North Carolina formula, for the calculation of caseload ratios.

LEA 13 Alternative Approach

LEA 13 based their approach off the North Carolina formula represented below:

1. The formula started by determining a full time equivalent (FTE), and the FTE represented 35 hours of work per week.
2. Standard time deductions were subtracted from a 35 hour work week in hopes of allowing time for evaluations, documentation, meetings, and professional development. LEA 13 determined the following standard deductions per discipline:
 - a. OTs were given 8.85 hours

- b. PT were given 8.15 hours
3. After considering the standard deductions, time was subtracted for workload duties related to travel, extra documentation, RTI and special district needs, and supervision of assistants.
4. Once time was set aside in a work week for various workload duties, the service providers' caseload ratios were determined. Students were considered in terms of IEP minutes converted into hours. After IEP hours were determined, each student's IEP hours were multiplied by the corresponding Special Education Code (SE Code). The multiplier considered the approximate time needed by the service provider to address planning time, interventions with others, addressing special education issues, crisis intervention and other factors. The multipliers were determined based on the data entered into the LEA 13 documentation system.
5. The remaining time would be set aside for student services.

LEA 13 designed the formula to address the time required for the following workload duties and factors within the school based therapist's workload:

- Direct services (i.e., level and frequency).
- Consultation.
- IEP meetings.
- Evaluations and screenings.
- Documentation and billing (e.g., OT/PT Licensure, IDEA/Operating Standards, Medicaid).
- Therapist assistant supervision, when applicable.
- Program consultation and staff training.

- Communication and consultation with staff, parents, and outside agencies.
- Travel between sites (varies based on number of sites served and distance between sites, and number of therapist’s transitions between sites).
- Section 504 plan activities.
- Equipment acquisition, maintenance, and training.
- Severity of student need.
- Services to students with and without disabilities.
- Contribution to intervention designs and educational interventions.
- Planning.
- Time for additional diagnostic testing and classroom observation.

The following is an example of a PT caseload ratio calculation:

	<u>Hours Per Week</u>
Total Working Hours Available:	35
Standard Deductions:	- 8.15
Average Weekly Time:	
Evaluations	-.7 Hours
Ongoing OT/PT Documentation:	-5 Hours
IEP Meetings/Team Meetings	-1.2 Hours
Staff Meetings/Professional Development	-1.25 Hours
District/Region Dependent Variables	
Travel and Building Transitions	-5.0
Additional District Request	
-Personnel training for environmental modifications, etc.	
Additional District Documentation System(s)	-1.5
Final Total Time Available	20.35

Available Student Service Time: 20.35 hours/week

<u>Student</u>	<u>Minutes/Week</u>	<u>Hours/Week</u>	<u>SECode Multiplier</u>	<u>Total</u>
Student 1	30 min/wk	.5	(TBI) 1.3	.65 hr/wk
Student 2	20 min/wk	.33	(OI) 1.1	.36 hr/wk
Student 3	45 min/wk (30 direct/15 consult)	.75	(MD) 1.5	1.13 hrs/wk

Continue Until Remaining Time is Used up = 20.35 Hours

The following is an example of an OT caseload ratio calculation

	<u>Hours Per Week</u>
Total Working Hours Available:	35
Standard Deductions:	- 8.85
Average Weekly Time:	
Evaluations	-1.2 Hours
Ongoing OT/PT Documentation:	-5 Hours
IEP Meetings/Team Meetings	-1.4 Hours
Staff Meetings/Professional Development	-1.25 Hours
District/Region Dependent Variables	
Travel and Building Transitions	-3.5
Additional District Request	
-Personnel training for environmental modifications, etc.	
Additional District Documentation System(s)	-1.0
Final Total Time Available	21.65
Available Student Service Time: 21.65 hours/week	

<u>Student</u>	<u>Minutes/Week</u>	<u>Hours/Week</u>	<u>SECode Multiplier</u>	<u>Total</u>
Student 1	45 min/wk	.75	(AU) 1.3	.98 hr/wk
Student 2	20 min/wk	.33	(Deaf) 1.3	.43 hr/wek
Student 3	20 min/wk	.33	(SLD) 1.1	.36 hr/wk

Continue Until Remaining Time is Used up = 21.65 Hours

Special Education Classification Multipliers

<u>SECode Category</u>	<u>Multiplier</u>
Autism(AU)	1.3
Cognitive Disability (CD)	1.1
Deaf Blindness (DB)	1.3
Emotional Disturbance (ED)	1.5
Hearing Impairment (HI)	1.3
Multiple Disabilities (MD)	1.5
Orthopedic Impairment (OI)	1.1
Other Health Impairment Minor (OHIMI)	1.1
Other Health Impairment Major (OHIMA)	1.5
Specific Learning Disability (SLD)	1.1
Speech or Language Impairment (S/L)	1.1
Traumatic Brain Injury (TBI)	1.3
Visual Impairment (VI)	1.3
Preschool/Developmental Delay (DD)	1.5

Evaluation of the LEA 13 Approach

LEA 13 had 18 participants in the experimental group portion of the study, 10 were PTs and 8 were OTs. There were also 20 participants in the control group portion of the study, 10 PTs and 10 OTs.

Student Outcome Data

Student outcome data were collected in May or June of 2013 for the experimental group. As can be seen in Table 19, the majority of students in each condition mastered or made adequate

progress on IEP goals. The students in the experimental and control groups who received preschool PTs services and school-aged OTs services achieved similar levels of IEP goal mastery. The students who received services from the control group PTs outperformed their counterparts in the experimental condition. Nonetheless, it appeared as though positive IEP gains were associated with both approaches. No data were provided on other student outcome measures.

Table 19. Student Outcome Data

Conditions	N	Mastered or Adequate Progress on Goals	
		Preschool	School-age
		Experimental PTs	10
Control PTs	10	98%	94%
Experimental OTs	8	NA	89%
Control OTs	10	87%	86%

Provision of FAPE

Data were collected as it pertained to the provision of FAPE. Due to the way LEA 13 submitted their data, it was only possible to determine whether or not the IEP minutes were provided.

As can be seen in Table 20, the PTs and OTs in the experimental group were asked to document the amount of IEP services provided to students. The data showed the majority of PTs and OTs in the experimental groups provided the exact amount of services to students. A small number of students missed services because they were absent or attending a school sponsored event. These missed services were made up in most cases. No data were submitted by the control group.

Table 20. Provision of FAPE

Conditions	Number of Students	Less Services- Student Absent or Attending	Less Services- Service Provider Absent or Unavailable	Exact Amount Services
Experimental PTs	365	6%	1%	93%
Experimental OTs	342	5%	1%	94%

Analysis of Workload

Data were collected regarding the service providers' workload and contractual parameters.

As can be seen in Table 21, the majority of service providers in the study worked more hours than indicated on their employment contract, but none worked a significant number of overtime hours. During the time study week, the OTs in the experimental group worked less hours when compared to their counterparts in the control groups and the PTs in both groups worked essentially the same number of hours. Lunch and planning time was not part of the PTs' and OTs' contracts, and therefore no data were submitted. An analysis of the data showed the PTs and OTs worked a reasonable number of hours, which resulted in one workload indicator being met.

Table 21. Analysis of Workload

Conditions	Hours Contracted to work	Worked Beyond Contracted Hours	Average Hours Worked	Range of Hours Worked
Experimental PTs	35	70%	35.72	-8.75 – +10.41
Control PTs	35	50%	35.38	-4.67 – +2.9
Experimental OTs	35	75%	36.10	-10.25 – +9.75
Control OTs	35	70%	39.15	-.76 – + 14.41

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their maximum caseload ratio or acceptable age ranges per instructional period. One PT was reported to have exceeded the acceptable group age range but no state waiver was granted. Two OTs reported that they exceeded the maximum caseload ratio but no state waivers were granted. These data were provided by the service providers and were not verified by the researcher.

Stakeholder Perceptions

All the PTs (100%) and 5 of the OTs (63%) in the experimental group indicated that they could reasonably provide FAPE to students on their caseload using the LEA 13 approach. In the control group, all 10 PTs (100%) and 9 OTs (90%) in the control group indicated that they could reasonably provide FAPE to students using the ESC's old approach.

Alignment with Operating Standards

Based on the data provided, reports, correspondences, and proposal, it appeared as though the LEA 13 approach fully aligned with 3301-51-09 (I)(1)(a-d) of the Operating Standards. The ESC also factored in the scheduling and time demands that were associated with the supervision of assistants and services to students on 504 plans.

Conclusions

Two methodological limitations prevented the LEA 13 approach from being fully evaluated. First, incomplete data were submitted related to the provision of FAPE and student outcomes. Second, PTs and OTs were the only service providers who provided data. The absence of some data and the sole use of PTs and OTs limited inferences about the effectiveness of the approach as well as the generalizability of results.

Despite methodological limitations, several advantages were associated with the LEA 13 approach. First, a majority of students mastered or made adequate progress on IEP goals. Second, the PTs and OTs in the experimental condition worked a minimal amount of hours in overtime. Third, the majority of students received the exact amount of IEP service and few students missed therapy. Next, 83% of service providers in the experimental group believed FAPE could be reasonably provided to their students using the new LEA 13 approach. Finally, the LEA 13 approach closely aligned with 3301-51-09 (I)(1)(a-d) of the Operating Standards and considered the workload was associated with service 504 eligible students and supervising assistants.

The implementation of the LEA 13 approach resulted in two disadvantages. First, three (8%) of the service providers were reported to have exceeded their maximum caseload ratios or the allowable age ranges per instructional period and no state waiver was obtained. Second, some service providers in the experimental group worked well short of a 35 hour work week, which suggested the formula overestimated their workload commitments or caseload size.

When the advantages and disadvantage were considered together, it appeared as though the LEA 13 approach produced many positive results and therefore, ODE should investigate whether the LEA 13 approach can be applied to ISs and other related service providers. Many elements of the LEA 13 approach appeared to hold promise for ODE if further research produced similar results.

Implications for Practice

1. LEA 13 did not believe that lower caseload ratios would provide for the equitable distribution of students and workload duties. Instead, their approach focused on quantifying the workload associated with different eligibility categories.
2. LEA 13 considered both direct and indirect services in the calculation of caseload ratios.
3. The ESC factored in the scheduling and time demands associated with the supervision of assistants.
4. The use of standard deductions and the multiplier appeared to ensure PTs and OTs had ample time in their work week to complete various workload duties, especially paperwork.
5. LEA 13 used county-wide time studies to quantify workload duties and develop the standard deductions. Time studies were also used throughout the year to track service providers' actual time on service delivery.

6. The service providers in the study committed to using common nomenclature, documenting needed service on the IEPs (versus a standard practice of providing extra services), and entering data related to services into a LEA 13 data base.

Recommendations for ODE

LEA 13 did not make any recommendations for ODE.

LEA 14

Background

LEA 14 participated in the Caseload Ratio Study from February 2011 until March 2013. LEA 14's ISs struggled with balancing the time needed to provide services in a pull-out and resource room setting with maintaining "access" to the general education curriculum. Additionally, various workload duties (e.g., writing IEPs, planning for differentiated instruction, progress monitoring) were "eating into" school time and that time could be used for student services and interventions. According to LEA 14, their "over-arching goal was... to develop a more efficient method of service delivery by using intervention specialists and [paraprofessionals] in a different way."

LEA 14 Strategies

LEA 14 used the following strategies to achieve their goal, improve services and interventions, and manage workload:

1. Utilized co-teaching to ensure students with disabilities received specially designed instruction in the regular education classroom, when appropriate.
2. Created teacher-based teams and provided opportunities for them to jointly plan instruction, interventions, and specially designed instruction.
3. For the elementary buildings, adopted a response to intervention (RTI) model that served students across grade levels and utilized all available staff (e.g., regular education and Title-1 teachers, ISs) to provide high-quality instruction and interventions.
4. For middle school, assigned ISs' caseloads by grade levels and focused less on disability category.

5. At the high school, case management occurred across grade levels and ISs were assigned content areas (e.g., language arts, mathematics, science, and social studies). The ISs were given time to plan with regular education teachers and other colleagues who worked within a specific content area. The high school scheduled services “on the block”.
6. LEA 14 provided stipends to ISs who attended meetings during their planning time or outside of typical work hours.

LEA 14 examined data related to the students with disabilities at each grade level and determined the students’ specific needs. The ISs’ caseloads were loaded (i.e., assigned) based on this examination. In calculating caseload ratios, LEA 14 assigned students among the ISs per student need throughout the year in the following manner:

Multi-handicapped students were placed on a shared [IS] caseload at the middle school. Typically each [IS was] assigned to work with a grade level of all high incidence cross-categorical students in an inclusion, pull-out as needed, model. Due to a small population of [students with multiple disabilities and autism spectrum disorders] at the middle school, the [ISs] were also assigned periods of the day to work with these students in addition to their high incident caseload. The students were still assigned by grade level to an [IS] for caseload management, but were served by each of four [ISs] throughout the day, plus an aide. The student rotated rooms to access the [IS].

The elementary started full inclusion with pull-out on an as-needed basis this year. Students were assigned primarily by grade level at this time. As [RULH] moved forward, the next step will be to assign students by skill deficits within grade bands and balance the load accordingly. A multi-handicapped unit has been housed at this site and [was] considered separately for numbers and services to meet the intense needs of the students. As these

students age-out of the elementary to the middle school, [LEA 14 rotated] the unit to the middle school. Elementary students who were multi-handicapped and who remain at the elementary [were] served cross-categorically with a reduced ratio of students to staff, according to intensity of needs.

The high school follow[ed] a full inclusion model, including multi-handicapped students with [paraprofessional] support. ISs started the year with caseloads assigned by grade level, but offered services by subject area. This changed as the year progressed because of the block schedule that was used. An overload of students scheduled in the second semester in some classes necessitated coverage in the classes based on student need. Flexibility and course correction mid-year have helped us to work out the discrepancies in planning and student need.

Finally, LEA 14 evenly divided certain workload duties for case management (i.e., writing IEPs, monitoring implementation of IEPs) at each building among the ISs who were assigned to that building.

Evaluation of the LEA 14 Strategies

Participants

LEA 14 had 11 participants in the experimental group to evaluate the effectiveness of their approach. All of the participants were ISs. The district conducted their time study during the week of March 24, 2013 and collected student outcome data at the end of the 2012-2013 school year.

Student Outcome Data

The participants in the study provided outcome data related to their students' IEP or intervention progress, grades, and group standardized test scores. These data were collected from

May through June of 2013. At the end of the school year, the student outcome data showed 76% of the IEP goals were either mastered or adequately progressing and 89% of students passed their core academic classes. At the end of the 2012-2013 school year, 57% of OAAs and 69% of the OGTs were at least at the proficient level.

Provision of FAPE

The participants in the study provided data related to the provision of FAPE. The 11 ISs who participated in the evaluation of the LEA 14 strategies provided services to 192 students with disabilities. From this total, 138 students (72%) received the exact amount of special education services, 31 students (16%) received more special education services, and 23 students (12%) received fewer minutes than were stated on their IEPs. The review of data showed 169 students (88%) with and without disabilities had their minutes met at the end of the time study week. Fewer services were provided to 19 students (83%) because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 23 students who missed services, 20 (87%) received “make-up” services.

Analysis of Workload

The service providers were asked to conduct a time study to quantify their workload. They were also asked to complete a survey about certain aspects of their employment contract. During the time study week, 36% of the ISs worked more hours than were indicated in their employment contract. On average, the ISs worked .14 hours in overtime with a range of 3.48 hours under through 3.46 hours over the number of hours indicated on the employment contract. Survey data also showed 100% of ISs took their fully allotted lunch and 81% took their full amount of planning time.

State Waivers

LEA 14 was asked to provide data regarding waivers for service providers who were over their group size or acceptable age ranges. LEA 14 reported that one intervention specialist (9%) exceeded the allowable age ranges within an instructional period but LEA 14 did not have a waiver to exceed the age ranges. All the ISs reported that they were within the maximum caseload ratio. It was important to note that these data were reported by the service providers and not verified by the researcher.

Stakeholder Perceptions

Data from stakeholders were analyzed to determine their perceptions of the LEA 14 strategies. Parents were asked to respond to a district created questionnaire about services and interventions. A common theme emerged: “Services should be wrapped around homework completion, no matter the service delivery ratio”.

LEA 14 also found scores on state tests indicated a continuing gap between students with disabilities and their nondisabled peers. Encouragingly, LEA 14 felt “classroom performance data indicated students were making acceptable progress in the core content areas on the student grade cards”. The ISs reported that most students received services and interventions in a pull-out, resource room setting, and as such, “students were not exposed to the core content instruction in the same manner as peers, and in different situations, not taught by teachers that were HQT in the subject”.

Out of 11 ISs, 7 (64%) stated that they felt that they could reasonably provide FAPE to their students using the LEA 15 alternative caseload ratio approach. Several ISs provided the following justifications for their perceptions about the effectiveness of the LEA 14 strategies:

1. My students are making progress. I have a wonderful aide that helps out.
2. Sometimes students’ behavior interferes with my instruction time.

3. My caseload number is fine. Time is difficult to distribute due to inclusion and students being in multiple classrooms. Students are in several classrooms at the same time and it is difficult to get to all of them.
4. When covering all four grade levels, you have two or more classes to cover going on at the same time, makes it difficult to cover all the students in each block. It is hard to cover all the needs of the students.
5. Students are in 4- 80 minute blocks, and I'm assigned to cover science and social studies. At the high school level in our district, they get credit in a ½ year semester and then change to different classes in January. Most of the time is committed to those in core/required classes, in which the students are spread out throughout the school. We spend much of our time going into various classes throughout the day to be sure to provide the best possible service to our students. If a test/quiz during a period, we are in our resource rooms and students in other classes must come to us.
6. I have so fewer students on my caseload this year.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it was not entirely clear if LEA 14's strategies aligned with the Operating Standards (3301-51-09). What was clear was most students received all their services and no IS worked more than 3.46 hours beyond their contractual hours. These data suggested that the LEA 14 strategies allowed enough time in the ISs' schedules to complete workload duties and serve students with and without disabilities.

Additionally, LEA 14 strategies considered the severity of students' disability, grade level, and their academic and functional needs when configuring the ISs' caseloads. The schedule was also designed to build in time for planning, which enabled 81% of the ISs to take their fully planning time

during the time study week. Finally, all 11 service providers received their full lunch, which suggested the LEA 14 approach factored in time for this as well.

Conclusions

The implementation of LEA 14's strategies included a small sample size which only included ISs. The sample size and sole use of ISs significantly limited the generalizability of results to other LEAs and service providers. Additionally, no control group data were provided, and therefore comparisons could not be made.

Despite the aforementioned methodological limitations, it appeared as though the strategic use of caseload and workload strategies was associated with several positive outcomes. First, a large percentage of students passed core academic classes. Second, FAPE was provided to the majority of students with IEPs and extra service were limited (i.e., 16%). Third, the workload analyses showed no service worked an excessive number of hours in overtime, all received their lunch, and the majority took their full planning time.

Although positive outcomes that were realized, four ISs (36%) did not believe the LEA 14 strategies could be reasonably used to provide FAPE to students. Additionally, not enough data was provided to determine if the LEA 14 strategies fully aligned with the Operating Standards (3301-51-09). LEA 14 also shared some data collected during the implementation of the LEA 14 study. First, parents wanted services to support their children with homework completion. Next, the administration recognized that there was a growing gap between students with and without disabilities on OAA and OGT performance, but were encouraged by the students with disabilities' classroom performance. Third, when specially designed instruction was provided, it occurred in a more restrictive environment, which did not always allow the students to be "exposed" to core

content instruction. Finally, not all of the ISs were considered highly qualified in certain subjects. With all these data in mind, the LEA 14 strategies should be investigated further in order to determine their utility across service providers and impact on student outcomes. Nonetheless, several implications for practice emerged.

Implications for Practice

Several important implications were realized after the implementation of the LEA 14 strategies.

1. Co-teaching was used to provide services to students in the regular education setting.
2. LEA 14 placed a large amount of importance on co-planning time and provided predictable and consistent time for regular education teachers and ISs to meet to plan instruction, interventions, and specially designed instruction.
3. RTI was implemented across the elementary grade levels and utilized all available staff members in different and flexible capacities.
4. For middle school, assigned ISs' caseloads by grade levels and focused less on disability category.
5. At the high school, case management occurred across grade levels and ISs were assigned content areas (e.g., language arts, mathematics, science, and social studies).
6. Stipends were given to ISs who performed certain workload duties during their planning time or outside of typical work hours.

Recommendations from LEA 14

The recommendations of the LEA 14 are:

- Allow for flexible groupings cross categorically according to student need and not just identified disability.

- Make access to licensure across disabilities more fluid. Many times a staff member may bring or acquire experiences working with different disabilities, but they do not have the licensure that allows them to teach a specific disability. Broadening the licensure categories and grade level bands would assure compliance. LEA 14 shared the following situation as it related to this recommendation:

We still have older teachers with specific licensure. Also, some have mild/moderate or moderate/severe. Making sure the staff is highly qualified at the high school level in at least one subject area is a concern, too. If we need a teacher to be a teacher of record, to utilize and stretch our limited staff, we would like to have everyone be HQT in at least one core content area (not always reading/Language Arts).

LEA 15

Background

LEA 15 participated in the Caseload Ratio Study during the 2010-2011 and 2011-2012 school years. According to the LEA 15, ISs and other service providers were able to have a positive effect on students with varying degrees of need, in part, due to having caseloads lower than the ODE's current ratio. The LEA 15 Caseload Ratio Grant Core Team determined the current practice of providing services to students with and without disabilities across multiple settings (e.g., general education classroom, resource rooms) was not desirable. If the current ODE ratios were used, service providers would not be able to effectively and efficiently provide interventions and FAPE to students with disabilities in the least restrictive environment.

The purpose of the LEA 15 study was to determine new caseload ratios based on the needs of students. Their approach analyzed various workload duties and services and considered stakeholder feedback. In developing an alternative approach to calculating caseload, the overreaching goal was to serve more students with and without disabilities effectively in a classroom connected to the general education curriculum.

LEA 15 Alternative Approach

The students working with ISs were found to fall within three need categories: Mild, moderate, and intensive. These students included those with disabilities as well as nondisabled students who required interventions. Students with mild needs received services from an individual IS for less than or equal to 500 minutes per week at the elementary level (grades K – 6) or less than or equal to 600 minutes per week at the junior high and high school levels (secondary; grades 7 – 12). Students with moderate needs received services from an individual IS for greater than 500 minutes

and less than or equal to 750 minutes per week at the elementary level or greater than 600 minutes and less than or equal to 1,000 minutes per week at the secondary level. Students with intensive needs received services from an individual IS for greater than 750 minutes per week at the elementary level or greater than 1,000 minutes per week at the secondary level.

The ISs were then split into four separate categories: Elementary ISs who provided services to students receiving any part of their education within the general education setting; elementary ISs who provided services to students receiving all of their education within a resource room; secondary ISs who provided services to students receiving any part of their education within the general education setting; and secondary ISs providing services to students who received all of their education within a resource room. For each category, the caseload ratio was calculated by finding the mean workload times for all IS service providers and adding 1 standard deviation. The ISs found to have workload times greater than 2 standard deviations from the mean were not calculated into the final formula.

In order to calculate the maximum number of students with mild-moderate needs allowed on a IS's caseload, the mean number of these students on each IS's caseload was calculated and one standard deviation was added. The maximum number of students with intensive needs on a caseload was determined by calculating the mean number of students with intensive needs per caseload, not receiving all of their education in a resource room, and adding 1 standard deviation. The category of would be determined by the student with most intensive needs on the caseload. For example, if a IS case manager had a caseload that included 2 students with mild needs, 3 students with moderate needs, and 1 student with intensive needs; the case manager would fall under the criteria for a caseload of students with intensive needs.

The maximum number to be served in an instructional period was based on the calculated caseload. The maximum number to be served in an instructional period for students with mild or moderate needs, at both the elementary and secondary levels, included individuals with disabilities and general education students receiving intervention services from the IS. The instructional period could occur in a general education setting or resource room. The maximum number served in an instructional period for students with intensive needs at both the elementary and secondary included individuals with disabilities who received services from the IS. The instructional period could occur in a general education setting or resource room.

The caseload ratio for SLPs considered students with and without disabilities. The students who worked with SLPs were found to fall into two categories: mild-moderate and intensive. Students with mild-moderate needs were those who worked with an individual SLP for less than or equal to 85 minutes per week. Students with intensive needs were those who work with an individual SLP for more than 85 minutes. The SLP workload was calculated by finding the mean workload time across the district's SLPs and adding 1 standard deviation. The caseload was calculated by finding the mean caseload across the district's SLPs and adding 1 standard deviation. The maximum number of students with intensive needs who could be served was calculated by finding the mean of students receiving more than 85 minutes of services from a SLP and adding 1 standard deviation.

Evaluation of LEA 15 Alternative Approach

Participants

LEA 15 had six ISs and one SLP who used the new caseload ratio approach (i.e., the experimental group) and five ISs and one SLP who used the traditional head count approach (i.e., the control group). The participants conducted time studies and completed the workload survey during

the week of May 6, 2012. Student outcome data were collected during the 4th quarter of the 2011-2012 school year.

Student Outcome Data

As is reflected in Tables 22 and 23, participants in the study provided data related to their students' IEP or intervention progress, grades, and group standardized test scores. At the end of 4th quarter (May through June 2012), data from the IS experimental group showed 53% of the IEP or intervention goals were either mastered or adequately progressing and 80% of students passed their core classes. For the experimental SLP group, 83% of the IEP or intervention goals were mastered or adequately progressing and 83% of core classes were passed. At the end of the 4th quarter (May through June 2012), data from the IS control group showed 65% of the IEP or intervention goals were either mastered or adequately progressing and 79% of students passed core classes. For the SLP control group, 94% of the IEP goals were either mastered or adequately progressing and 92% of core classes were passed. The control group outperformed the experimental group on IEP progress indicators. When data from the IS experimental and control groups were compared, there was essentially no difference found on the percentage of students who passed core classes. When data from the SLP experimental and control groups were compared, more students in the control group passed core classes.

Table 22. Student Outcome Data

Experimental Group	Mastered or Adequate	Passed Core Classes
--------------------	----------------------	---------------------

	Progress on Goals	
IS	53%	80%
SLP	83%	83%
Control Group	Mastered or Adequate Progress on Goals	Passed Core Classes
IS	65%	79%
SLP	94%	92%

Data were also collected on students' performance on group standardized testing during the year the alternative caseload approach was implemented. In the experimental IS group, 38% of students were at least proficient on OAAs, 14% were at least proficient on OGTs, and 39% were at least clearly on-track on statewide diagnostic tests. In the SLP experimental group, 27% of students were at least proficient on OAA tests. No OGT or statewide diagnostic test data were provided for the SLP experimental group. In the control IS group, 16% of students were at least proficient on OAAs and 16% were at least clearly on-track on statewide diagnostic tests. No OGT data were submitted by the IS control group. In the SLP control group, 28% of students were at least proficient on OAA test. No OGT or statewide diagnostic test data were provided for the SLP experimental group.

Table 23. Group Standardized Test Scores

Experimental Group	OAA	OGT	Diagnostic Tests
IS	38%	14%	39%
SLP	27%	N/A	N/A
Control Group	OAA	OGT	Diagnostic Tests
IS	16%	N/A	16%
SLP	28%	N/A	N/A

Provision of FAPE and Interventions

The participants in the experimental and control groups provided data related to their provision of FAPE and interventions for students on their caseload. The data in Table 24 illustrate the amount of services provided to students on IEPs or intervention plan during the week of the time study. There was a tendency across the ISs and SLPs in the experimental groups and the ISs in the control group to provide more services than were indicated on the students' IEPs or intervention plans. Overall, 74% of the students in the experimental IS and 58% of the students in the control IS groups received more services or interventions than documented on their IEPs or intervention plans. Fifty-seven percent of the students on the experimental SLP's caseload and 23% of the students in the control SLP's caseload received more services or interventions than documented on their IEPs or intervention plans. All the students who received less services than listed on their IEPs or intervention plans were absent or attending some school sponsored activity (e.g., field trip, assembly).

Table 24. Provision of FAPE and Interventions

Experimental	Number of Students	Less Services	Exact Amount Services	More Services
IS (n=6)	111	*19%	7%	74%
SLP (n=1)	56	*5%	38%	57%
Control	Number of Students	Less Services	Exact Amount Services	More Services
IS (n=5)	72	*8%	33%	58%
SLP (n=1)	57	*14%	63%	23%

*Less IEP or intervention services were provided because the students were absent or attending alternative school sponsored activities.

Analysis of Workload

The service providers were asked to conduct a time study to quantify their workload. They were also asked to complete a survey about certain aspects of their employment contract. Overall, the time study data, which are reflected in Table 25, showed the majority of service providers (77%) in the LEA 15 study worked before and after school, on the weekends, and through their lunch and planning time. More ISs in the experimental group took a full lunch and planning time when compared to those ISs in the control group and the SLPs. As a whole, the ISs and SLP in the experimental group worked a reasonable work week and less than their counterparts in the control group.

Three ISs were found to have worked fewer hours than was indicated on their employment contract. More specifically, two full-time ISs in the experimental and one IS in the control group

were able to provide services to students on the caseload and complete workload duties in about 4.25-4.5 days. The three ISs who worked the fewest hours during the time study week, had the lowest caseload, tended to provide the exact number of minutes as stated on the students' IEP, and did not provide more than the specified amount of services to students on the caseload.

Table 25. Analysis of Workload

Experimental	Worked Beyond Contracted Hours	Average Hours Worked	Range of Hours Worked	Took Full Lunch	Took Full Planning Time
IS (n=6)	67%	+7.46	-4.23 to +24.08 hours	50%	50%
SLP (n=1)	100%	+1	+1	0%	0%
Control					
IS (n=5)	80%	+12.72	-5.58 to +33.9 hours	20%	20%
SLP (n=1)	100%	+5.5	+5.5	0%	0%

Two ISs in the experimental (33%) and two IS in the control group (40%) worked a substantial number of hours beyond their employment contract (i.e., 17.91, 22.58, 24.08, and 33.9 hours over). Two had been in the current position 1 year, one had been in the position for 4 years,

and one had been in the position 10 years. The following are quotes from these providers about why they put in so many hours on caseload and workload duties:

- The paperwork is too much.
- Students with special needs require a lot of support. I do not have time in my day for paperwork. I have to complete required paperwork on my own time.
- I feel there are too many students with too many different needs, and so while they are getting their mandated minutes, they may not always be getting the most appropriate interventions.
- I meet their individual service goals but I also spend so much more time with them working on social, academic, and post high school needs [and] skills... I feel all that [these activities] should be able to be logged as intervention time...[These are] interventions meet the needs of the individual students, not just time I spend teaching individual goals...I also had to list my contractual lunch time but everyday day for the last 16 weeks I have worked through my lunch either on IEP's or with students in my room who need extra time on other school related or in class work... My contractual duties again are not reflective of my time with my students because I am always working with at least 2 of my behavior kids during my time on my 52 minute hall duty... [My] planning time is not reflective of my time I work with my students. I have had 1 or 2 students with me during my planning time for the last 24 weeks doing their online...They are here from bell to bell of my planning time...I also have kids arrive at my door at between 7:10 & 7:25 each day to get information on jobs and job application and seeking skills. [M]y contracted time [does] not [start] until 7:30 but the kids know I am here and come in to use it as 1 on 1 time...

Those individuals who worked a significant number of hours beyond their employment contract tended to provide more services to their students than were indicated on the IEP or intervention plan. Respondents seemed to provide these “extra” services or interventions to students in order to address academic and functional needs, but these activities were not captured on the IEP. They also used their weekends or came in early or stayed late to complete paperwork.

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their allowable group sizes or acceptable age ranges. LEA 15 reported that no service providers in the experimental group of ISs exceeded any age range. One IS in the experimental group exceeded the acceptable caseload size per instructional period and reported that there was no waiver given to exceed the limit. No SLP or participants in the IS control group needed a waiver.

Stakeholder Perceptions

The LEA 15 surveyed stakeholders and found students and parents were pleased with the educational programs overall. Students indicated they needed greater access to their case managers or intervention specialists to address their needs in the general education classroom. At the end of the time study, the ISs and SLPs in the experimental and control groups were also asked to share their perceptions about the implementation of the LEA 15 approaches to calculating caseload ratios. A third of the ISs in the experimental group did not believe FAPE could be reasonably provided using the newly developed approach. All the ISs in the control group felt that the traditional LEA 15 approach could be used to reasonably provide FAPE to students on the caseload. The experimental and control SLPs did not feel FAPE could be provided using either LEA 15 approach.

Alignment with the Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, the LEA 15 approach may align with 3301-51-09 of the Operating Standards. The data showed that there were three areas that suggested alignment. First, the district quantified and considered various workload duties for SLPs. Second, student severity (i.e., based on how many minutes were listed on students' IEP or intervention plans) was used as the primary mechanism used to calculate caseload ratios. Finally, the majority of service providers worked a reasonable workweek.

Conclusions

The experimental LEA 15 approach appeared to ensure that service providers had manageable workloads. Although, the workload analyses showed the majority of service providers (77%) worked beyond their contract, those service providers in the experimental group worked a reasonable workweek and fewer hours than their counterparts in the control group. When workload data were analyzed further, the number of hours worked seemed to be tied to the amount of IEP and intervention plans services provided. The three ISs who worked the fewest hours during the time study week, had the lowest caseload, tended to provide the exact number of minutes as stated on the students' IEP, and did not provide more than the specified amount of services to students on the caseload. Those individuals who worked a significant number of hours beyond their employment contract tended to provide more services to their students than were indicated on the IEP or intervention plan. Respondents reported that they provided services to students to address academic and functional needs and provide 1:1 support even though these services were not captured on the IEP. They also reported that an excessive amount of paperwork contributed to their workload.

Despite working reasonable workweeks, the data suggested the LEA 15 approach was not fully effective at calculating caseload ratios for ISs and SLPs. First, in using a caseload ratio formula assumed IS and SLP caseloads across the district were calculated appropriately and no extra services

provided. The minutes used to calculate means and standard deviations, and subsequently the caseload ratios, did not take into account the extra necessary services or interventions provided. The caseload ratios were calculated solely from the minutes on the IEP or intervention plans and underestimated the students' true needs (i.e., severity). Further, documented IEP minutes did not fully capture the extent of services and interventions that were provided to students on the caseload.

Second, the use of the LEA 15 caseload ratio approach was not associated with consistent positive student outcomes when compared to the control group. The experimental group did not perform better than the control group on two out of three student outcome indicators. More students in the IS (12%) and SLP control (11%) groups mastered or made adequate progress on IEP or intervention goals when compared to the experimental groups. There was essentially no difference between the IS experimental and control groups on the number of students who passed core classes, and 9% more students in the SLP control group passed core classes when compared to the experimental group. Finally, 43% of service providers in the experimental group did not believe FAPE could be reasonably provided using the new LEA 15 approach. With all these data in mind, the LEA 15 approach should not be adopted by ODE. Nonetheless, several implications for practice emerged.

Implications for Practice

The following implications for practice emerged from a review of the LEA 15 data.

1. Future approaches that consider student severity should factor in all the services and interventions that are provided to the child, not just what is listed on IEPs and intervention plans. There is evidence to suggest students received more services and interventions than what was agreed upon at IEP and intervention plan meetings.

2. Service providers should be trained on how to properly document services on IEPs and intervention plans. Participants expressed frustration at the amount of services they provided beyond the already documented IEP or intervention plan minutes/hours. The services described revolved around helping students with class assignments, vocational skill development, accommodations, direct instruction in a 1:1 or small group setting, assistance with web-based academic programs, and behavior management. These “extra” activities appeared to be appropriate for services and interventions for IEP or intervention plans and could be listed under specially designed instruction, related services, or accommodations.
3. Reduce the amount of unnecessary or reduplicative paperwork.
4. Determine which paperwork can be completed by clerical staff.

Recommendations from District

The recommendation of the LEA 15 was:

1. To review caseload ratio formulas.

LEA 16

Background

LEA 16 participated in the Caseload Ratio Study during the 2010-2011 and 2011-2012 school years and collaborated with a local university to develop and implement their approach. LEA 16 reported their district experienced high caseloads, which did not allow the ISs to provide appropriate small group or one on one instruction. LEA 16 hoped to serve as many students with disabilities as possible in the regular education setting. Furthermore, the high caseloads prevented the provision of small group testing during statewide testing.

The purpose of the LEA 16 study was to develop a caseload ratio formula for ISs that could support the well-being and safety of students and ensure FAPE was provided. The developers of the LEA 16 approach also hoped to integrate student teachers into their school in order to alleviate high IS caseloads. Their approach was designed to consider the following:

1. Severity of student disabilities.
2. Service time required to ensure student success and continuous progress.
3. Level and frequency of services necessary to meet the needs of students in inclusionary settings.
4. Time needed to analyze and use screening data to inform practice.
5. Time needed to implement, summarize, and use ongoing formative and summative assessments to inform practice.
6. Time needed to observe, record, summarize, and analyze observation data at regular intervals and use the data to inform practice.

7. Time needed to collaborate with regular education staff to implement the “co-teaching” model including but not limited to:
 - a. Time needed to formulate weekly standards-based lesson plans.
 - b. Time needed to conduct weekly standards-based assessments.
 - c. Time needed to complete weekly anecdotal observations/records.
8. Time needed to participate in professional development activities including but not limited to conferences, workshop, seminars, and/or college courses.

LEA 16 Alternative Approach

LEA 16 did not develop an alternative caseload ratio formula as initially proposed. Instead, LEA 16 used several strategies to alleviate heavy workload and high caseloads. LEA 16 used co-teaching at grades 9-10, creative student groupings, shared workload with student teachers and regular education teachers, and intensive services for freshmen and sophomores as their alternative strategies.

For small group testing, students were split up in different groups to decrease numbers of students who required individual and small group support. Students were “chunked” together into the same classroom or section so it was easier to co-teach in classrooms and offer more individualized services. This “chunking” of students also helped ensure that LEA 16 students received services. Because caseload numbers were high and students in grades 9-12 required significant support, focused and intensive services were given to freshmen and sophomores so that significant support would not be required when the students were juniors and seniors.

Student teachers were used to assist ISs with high caseloads. The regular education teachers used differentiated instruction and provided accommodations and modifications to the curriculum in

order to provide support for those students with disabilities who were unable to receive special education service due to high caseloads. Students not supported by an IS in a co-taught classroom received special education services through communication between the teachers and support personnel.

Evaluation of LEA 16 Alternative Approach

Participants

The LEA 16 Alternative Caseload Ratio Approach was implemented by two ISs during the 2011-2012 school year. Two ISs conducted time studies and completed the workload survey during the week of March 19, 2012. Both ISs also provided student outcome data at the end of the school year to demonstrate the effectiveness of their strategies.

Student Outcome Data

The participants in the study provided data that related to their students' IEP progress, grades, and group standardized test scores. At the end of the 4th quarter (May through June 2012), data showed 73% of IEP goals were either mastered or adequately progressing and 63% of the students passed their core classes. During the year that the LEA 16 alternative caseload ratio approach was implemented, only 42% of the students who took the OAA tests and 33% of the students who took the OGT tests were found to be at least proficient on these statewide standardized tests.

Provision of FAPE

The two ISs provided data that related to the provision of FAPE and interventions for students on their caseload. The data showed services were provided to a total of 32 students with and without disabilities, and 9 of those students (28%) received the exact amount of services as specified on their

IEPs or intervention plans. It was further found that 12 students (38%) received more special education services or interventions than were stated on their IEPs or intervention plans. The data also showed that 11 students (34%) received less minutes than were stated on their IEPs because of absences from school or attendance at alternative school sponsored activities (e.g., assemblies, field trips). Of the 11 students who missed services, only 1 (9%) received “make-up” services. In total, all students received FAPE after make-up services and student absences were considered.

State Waivers

The school districts were asked to provide data regarding waivers for service providers over their group size or acceptable age ranges. LEA 16 reported that neither intervention specialist exceeded the allowable age ranges. Additionally, no intervention specialists had a caseload which exceeded the acceptable ratios.

Analysis of Workload

The service providers were asked to conduct a time study to quantify their workload and complete a survey regarding certain elements of their employment contract. During the time study week, both (100%) intervention specialists worked more hours than were indicated in their contract. The intervention specialists worked an average of 5.65 hours beyond their contractual work week with one working 3.13 additional hours and the other working 8.17 additional hours. In addition to the data that were provided about the number of hours worked during the time study week, survey data showed neither of the intervention specialists took their fully allotted lunch period and only one (50%) took their full planning time.

Stakeholder Perceptions

LEA 16 collected data related to stakeholder's perceptions of the alternative caseload approach. The district reported that data were collected during weekly caseload ratio project meetings with administration, regular education staff, intervention specialists, special service consultants, parents, and clerical staff. The following stakeholder perceptions were shared in the LEA 16 final report: "The general education teachers seem to be on board with these practices and are eager to help." No other stakeholder perceptions were provided by LEA 16.

At the end of the time study, both intervention specialists were asked to share their perceptions about the implementation of the alternative approach. Both intervention specialists felt that they could not reasonably provide FAPE using the LEA 16 approach. There appeared to be a disparity between what the general education teachers and interventions specialists perceived about the implementation of the LEA 16 alternative caseload ratio approach.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it was not clear whether LEA 16's approach aligned with the Operating Standards (3301-51-09). It appeared as though LEA 16 utilized strategies to reduce or redistribute workload (e.g., student teachers) and used various service delivery models (e.g., consultation, co-teaching) and student groupings (e.g., chunking students with disabilities into few classrooms or sections) to provide FAPE.

Conclusions

The implementation of the LEA 16 alternative caseload ratio approach included a small sample which only included ISs. The sample size and the sole of intervention specialists significantly limited the generalizability of results to other school districts and service providers. Further, no control group was available, which prevented comparisons from being made. Finally, LEA 16

acknowledged that they were not able to fully evaluate the effectiveness of their approach because of staff changes and a lack of data. They shared the following:

The evaluation of the effectiveness of the alternate plan is not very clear. While formal data have been collected and are in the process of being collected, the program is too new to analyze results. Since both intervention specialists are new for the 2012-2013 school year these are the problems they have been currently facing. There are not a whole lot of records shown from previous years as to how the whole alternative approach to calculating caseload ratios worked.

Although the general education teachers positively regarded the LEA 16 approach, both ISs believed that the approach could not be used to reasonably provide FAPE to children on the caseloads. These negative perceptions may be related to the fact that both ISs skipped lunch and worked beyond their contractual work week to ensure children received services and interventions and various workload duties were completed (e.g., paperwork). Thirty-eight percent of children with and without disabilities received more services than were indicated on their IEPs and intervention plans. Despite the extra time that ISs worked, 27% of children did not make adequate progress or master IEP goals and 37% of them did not pass core classes.

In summary, it did not appear as though there was enough data to fully evaluate the merits of the LEA 16's alternative caseload ratio approach. Those data that were available indicated that the approach was not effective as designed, and therefore should not be adopted in its entirety by the Ohio Department of Education.

Implications for Practice

Implications for practice can be drawn from the implementation and evaluation of the LEA 16 alternative caseload ratio approach.

1. Student teachers were used to redistribute and reduce workload. Districts should consider using student teachers, paraprofessionals, staff, and trained volunteers to complete certain workload duties (e.g., clerical tasks, data collection, creation of materials, cafeteria monitoring). When workload duties are taken away from service providers, more of their expertise was available for direct and indirect services and specialized interventions.
2. Regular education teachers were trained how to co-teach and deliver differentiated instruction, which in turn ensured students remained in their LRE. Service providers should professionally develop regular education teachers on topics related to differentiated instruction, evidenced-based practices, co-teaching, and data collection.

Recommendations from the LEA 16

The recommendations from LEA 16 were:

1. Caseload counts for students with disabilities should be lower, particularly in high school.
2. Students that require greater needs should be identified through specific labels other than specific learning disabilities, which are wide-ranging disabilities.
3. Funding should be provided through assessment from schools detailing specific and greatest need of students rather than blanket funding for those students in broad-range categories.
4. More resources should be provided to school for mandated data collection in order ensure students received proper services.
5. If there are schools that are at a high risk for having too many students per caseload ratio amount then more assistance should be provided for schools to stay in compliance.

LEA 17

Background

LEA 17 participated in the caseload workload grant for the 2010-2011 and 2011-2012 school years. LEA 17 believed there “was an apparent lack of support to meet the individual needs of each student when combined in a classroom with varying disabilities based on their chronological age due to ODE’s age restriction policy.” For two years, LEA 17 worked with an educational consultant on how to provide the “best possible educational services” to their students. It was recommended that LEA 17 “restructure” the way students and staff were assigned to classes (by individual need/strengths versus chronological age span). Four groupings were suggested: 1) An intensively structured classroom, 2) a technology-based classroom, 3) a functional academics classroom for younger students, and 4) an independence/vocational classroom for older students.

LEA 17 Alternative Approach

In order to restructure the school, LEA 17 requested school-age waivers from ODE in Fall 2010, which allowed them to work outside of the 60 month chronological age range requirement (3301-51-09) and the maximum caseload ratio for ISs who provide services to students with multiple disabilities. ODE granted the LEA 17 their waiver. After the waivers were obtained, ISs were assigned to a classroom based on their “strengths, skills, and interests”. Finally, the students were placed in one of four classrooms based on each student’s “primary need”, with the option of being able to attend another classroom activity, when appropriate.

After the classrooms were implemented for a year, changes were made. First, the technology-based classroom was eliminated. Although students had increased their opportunities to use a variety of technological supports in their classroom, they struggled to use the same technologies in the

general education environment with their peer models. Second, the intensively structured classroom, which serviced younger and older students, was separated into two classrooms.

LEA 17 argued that the current age ranges were inappropriate and individual students' needs were not being met because of the following reasons:

1. The needs within the classroom were too diverse and intense.
2. The ISSs' attention was often times spread out while dealing with a multitude of classroom issues.
3. Students modeled the negative behaviors that attention-seeking peers displayed.
4. The range of curriculum accommodations and modifications varied to a large extent within each classroom.
5. Related service providers found it difficult to provide integrated school-based services due to the variety of student needs within a classroom.
6. The assistive technology needs varied from one classroom to another, so multiple piece of equipment and technologies (e.g., computer adaptations, switches) were needed.

Evaluation of the LEA 17

LEA 17 had 4 ISSs who formed the experimental group. LEA 17 conducted their time study the week March 25, 2013.

Student Outcome Data

Student outcome data were collected in May and June of 2013. At the end of the 4th quarter, 93% of the students either mastered or made adequate progress on IEP goals. When the data from group standardized testing were analyzed, 100% of statewide diagnostic tests were clearly on track

and 80% of OAAs were at least proficient. All four ISs reported that 100% of students passed the components of a functional curriculum (versus academic core classes).

Provision of FAPE

Data were collected as it pertained to the provision of FAPE. The four ISs in the experimental group provided services to 28 students with disabilities. The data showed 0 students (0%) received the exact amount and 96% received more special education services than were stated on their IEPs. The data also showed 1 student (4%) received less minutes than were stated on the IEP of a student due to absence or attendance at an alternative school sponsored activity (e.g., assemblies, field trips). The 1 student (100%) who missed services received “make-up” services. Although all of the students received the services that were listed on their IEP, the majority of student also received extra services.

Analysis of Workload

Data were collected regarding the service providers’ workload and contractual parameters. During the time study week, 100% of the ISs who were in the experimental group worked more hours than were indicated in their contract. The ISs worked an average of 3.7 hours in overtime, with a range of 2.33 hours over through 7.25 hours over their employment contract. In addition to providing data about the number of hours worked during the time study week, survey data showed 100% of intervention specialists took their fully allotted lunch and planning time. The time study data showed the ISs worked a reasonable work week.

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their maximum caseload ratio or acceptable age ranges. LEA 17 reported that all 4

intervention specialists exceeded the age range within an instructional period and they all received an ODE waiver. One IS (25%) exceeded the allowable maximum caseload ratio but no state waiver was obtained. These data were reported by the service providers and not verified by the researcher.

Stakeholder Perceptions

LEA 17 analyzed the results of their stakeholder survey and realized the ISs struggled to provide differentiated instruction. Additionally, only half of the ISs believed that FAPE could be reasonably provided when teachers were allowed to serve students outside of the 60 month age range.

Alignment with the Operating Standards

By nature of their study, LEA 17 was granted waivers to educate groups of students outside of the allowable age ranges per instruction period (3301-51-09(I)(2)). No data were provided to evaluate if their approach considered the workload duties that were spelled out in 3301-51-09 (I)(1)(a-d).

Conclusions

Several methodological limitations prevented the LEA 17 approach from being fully evaluated. First, the evaluation of the approach included a small sample size (i.e., four ISs). Second, there was no control group available, which prevented comparisons. Third, ISs were the only service providers who provided data. Therefore, the absence of the control group, small sample size, and sole use of ISs significantly limited inferences about the effectiveness of the approach as well as the generalizability of results.

Despite several methodological limitations, several advantages were associated with the LEA 17 approach. First, a majority of students mastered or made adequate progress on IEP goals, were proficient or on track on group standardized testing, and passed the functional curriculum. Second, all

of the students received their IEP services. Third, all the ISs worked a reasonable amount of hours during the time study week and they each received a full lunch and planning period.

In conclusion, the methodological limitations prevented this approach from being recommended to ODE for adoption. Although the outcome data were very positive, it was not clear if these results were due to LEA 17's approach or other unknown variables. Consequently, the approach should be replicated in other settings, with a larger sample, and across other service providers and students. If similar results are produced, then ODE should consider the appropriateness of the 60 month age range requirement.

Implications for Practice

1. LEA 17 assigned students to classrooms in order to maximize school resources (e.g., technology), capitalize on service providers' strengths, ensure a generalization of skills to multiple settings, and flexibly address students' needs.
2. The creative use of ODE waivers allowed the school to develop flexible student groupings based on need and services versus age ranges.

LEA 18

Background

LEA 18 described itself as “a school which caters to special education students.” More than half of their students were eligible for special education services and served in cross categorical classrooms. Given the range of disabilities and needs, the cross categorical “scenario was less than optimal” and student groups were further limited by ODE’s 60 month age range (3301-05-09 (I)(2)). In these classrooms, students displayed a wide range of maturity levels, required coursework, and learning needs. Although the classrooms were compliant with (3301-05-09 (I)(2) of the Operating Standards, the ISs found it difficult to provide effective special education services to students on the caseload.

Four goals drove the development of the LEA 18 approach.

1. To increase the academic abilities of special education students.
2. To reduce negative behaviors by serving students with similar disabilities together.
3. To increase general education teachers’ awareness of accommodations and modifications for special education students.
4. To serve special education students with peers who had similar disabilities and were within 24 months of each other. It was LEA 18’s hope that “teachers could now focus on one disability and not have to worry about other problems such as behavior.”

LEA 18 Alternative Approach

LEA 18 analyzed their data and came up with maximum caseload ratios for their school. The ratios are presented in Table 26.

Table 26. Maximum Caseload Ratios by Service Providers, Grade Level, and LRE

Service Provider	Grade Level	LRE	Maximum Caseload Ratio IS: Students
IS	High School	Resource Room	1: 18
IS	High School	Inclusion Setting	1:18
IS	Upper Elementary	Self-contained Classroom	1:6 with one paraprofessional
IS	Middle School	Resource Room	1:15
IS	Middle School	Inclusion Setting	1:15
IS	Elementary K-3	Not Specified	1:8

In order to develop their caseload ratios, they adapted the Minnesota model and considered the following factors: Contact minutes, student minutes per week, instructional minutes per week, and number of IEP's. The general formula that takes in consideration of all of these factors is shown below in Table 27:

Table 27. Formula: Number of IEP's + Contact Minutes= Caseload

Formula: Number of IEP's + Contact Minutes= Caseload		
Term	Definition	Clarification
Number of IEPs	Represented the number of students on IEPs for whom the IS was designated as the case manager	

Contact Minutes	A computed value that was determined by dividing the total 'Student Minutes per Week' by the number of 'Instructional Minutes per Week'	Contact Minutes = Students Minutes Per week / Instructional Minutes per week
Student Minutes per Week	Was determined by aggregating the number of minutes per week the students were assigned to the IS on the students' IEPs. '	Included student "walk-in" time (i.e., support help such as reading a test to a student, assistance with assignments or behavior, team or planning meetings).
Instructional Minutes per Week	Represented the number of minutes per week the IS was available to provide special education instruction. It was determined by subtracting lesson preparation time and lunch from student contact minutes on a weekly basis.	

The example below illustrated one of the calculations that were behind the LEA 18 caseload ratio determinations.

$$11 \text{ (number of IEPs)} + \frac{930 \text{ (student minutes per week)}}{560 \text{ (instructional minutes per week)}} = 11 + 1.66 = 13 \text{ (case load)}$$

Evaluation of the LEA 18 Approach

LEA 18 had 4 ISs in the experimental and 3 ISs in the control group portion of the study. The control group conducted their time study during the week of January 23, 2012 and the experimental group conducted theirs sometime between December 3rd and December 17th, 2012.

Student Outcome Data

The experimental group's student outcome data was collected in May 2013. The student outcome data showed that 96% of the IEP goals were either mastered or adequately progressing, 100% of core classes were passed, and 99% of statewide diagnostic tests were clearly on-track. Additionally, 6% of OAAs were at least proficient. No OGT related data were provided.

For the control group, student outcome data were collected in May and June of 2012. At the end of the 4th quarter, the student outcome data showed that 74% of the IEP goals were either mastered or adequately progressing and 93% of the students passed academic core classes. Further, none of the 2011-2012 statewide diagnostic tests were clearly on-track and none of the OAAs and 9% of the OGTs were at least at the proficient level. The experimental group outperformed the control group when IEP progress and passage rates in core classes were considered.

Analysis of Workload

Data were collected regarding the service providers' workload and contractual parameters. All of the ISs in the experimental group worked more hours than were indicated in their contract. They worked an average of 6.18 hours in overtime, with a range of .67 hours over to 19 hours over their employment contract. When the workload data were averaged together, it appeared as though the IS

group worked a reasonable work week. Further, survey data showed 75% of participants took their fully allotted lunch and 50% took their full planning time.

During the time study week, 68% of ISs in the control group worked more hours than were indicated in their contract. The ISs worked an average of 1.61 hours in overtime, with a range of 1.33 hours under to 4.5 hours over their employment contract. When compared to the experimental group, the ISs in the control group worked less hours during the time study week. Survey data showed 68% of ISs in the control group took their fully allotted lunch and planning time.

Provision of FAPE

Data were collected as it pertained to the provision of FAPE. The four ISs in the experimental group provided services to 46 students with disabilities or intervention plans. The data showed 30 students (65%) received the exact amount of services. Three students (7%) received more and 13 students (28%) received less special education services than were stated on their IEPs. Fewer services were provided to 11 of the 13 students (85%) because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 13 students who missed services, 9 (69%) received “make-up” services.

The three ISs in the control group provided services to 48 students with disabilities or intervention plans. The data showed 27 students (56%) received exact amount and 21 students (44%) received less special education services than were stated on their IEPs. Fewer services were provided to 17 of those students (81%) because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 21 students who missed services, 3 (14%) received “make-up” services.

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their group size or acceptable age ranges. LEA 18 reported that one IS in the control group (33%) exceeded acceptable age range per instructional period and a state waiver was obtained. All other ISs were in compliance relative to the age ranges and maximum caseload ratios. It was important to note that the data on waivers were reported by the service providers and not verified by the researcher.

Stakeholder Perceptions

As it related to their participation in this study, parents were given progress updates through weekly newsletter and a parent survey was created. The parents shared the following:

1. 90% of the parents said that LEA 18 was a positive and welcoming place for their child.
2. 75% of the parents said that LEA 18 provided their child with all the services documented on their child's IEP.
3. 90% of the parents said that ISs implemented accommodations and modifications as indicated on their child's IEP.
4. 65% of the parents said that they were encouraged to be an equal partner with their child's teachers and other service providers.

The ISs in the study also provided perceptions of the new LEA 18 approach and the traditional way of determining caseload ratios. The data showed all the ISs in the experimental believed they could reasonably provide FAPE using the new LEA 18 approach. Only one IS (33%) of the ISs in the control group shared the same belief.

Alignment with the Operating Standards

Based on the data provided, reports, correspondences, and proposal, it appeared as though the LEA 18 approach fully aligned with all but one of the activities or workload duties in 3301-51-09

(I)(1)(a-d) of the Operating Standards. LEA 18 was housed in one building and therefore, the school did not need to consider the demands of the itinerant schedule.

Conclusions

Two methodological limitations prevented the LEA 18 approach from being fully evaluated. First, the ISs were the only service providers who provided data. Second, a small sample was used to evaluate the approach. The small sample size and sole use of ISs limited inferences about the effectiveness of the approach as well as the generalizability of results.

Aside from the methodological limitations, the implementation of the LEA 18 approach resulted in one disadvantage and one erroneous assumption. First, the approach was not associated with high enough student performance on the OAAs and OGTs. Their levels of achievement on OAAs and OGTs were well below the grants threshold for success. Second, and most importantly, the LEA 18 approach assumed that IEP case managers also provided services to students they case managed. Across Ohio, this was not always the case. School districts have been known to first assign ISs a certain number of students to case manage, and this number was usually calculated relative to the current caseload ratios (i.e., 3301-51-09 (I)(2)). Then, administrators assigned ISs to provide services to a certain number of students, but these students do not always overlap with students who were case managed. LEA 18's approach could only be employed by school districts if ISs also provided services to students with whom they case managed. Additionally, it was not clear how this approach would work if two or more ISs provided services, albeit at separate times, to the same students.

Despite methodological limitations, several advantages were associated with the LEA 18 approach. First, a majority of students served by the experimental ISs mastered or made adequate

progress on IEP goals, passed core classes, and were clearly on track on state diagnostic testing. Second, the ISs in the experimental condition worked, on average, a reasonable number of hours during the time study week. Third, the majority of students received their IEP services, and few students received extra services. Next, all of ISs in the experimental group believed FAPE could be reasonably provided to their students using the new LEA 18 approach. The majority of parents demonstrated approval of special education services. Finally, the LEA 18 approach closely aligned with 3301-51-09 (I)(1)(a-d) of the Operating Standards.

When the approach was considered as a whole, it appeared as though the LEA 18 approach produced many positive results and held promise for ODE. It was recommended that ODE replicate this approach on a larger scale in order to determine if the LEA 18 approach could be used to calculate caseload ratios for related service providers and ISs who shared a caseload or who only provided case management to certain students.

Implications for Practice

Several implications for practice emerged from the data:

1. In calculating caseload ratios, LEA 18 recognized the need for consider how much time ISs spent on IEP services as well as “walk in” student activities (e.g., providing testing accommodations, homework help, attendance at meetings).
2. LEA 18 devoted 80% of their ISs’ time to student services. In determining the ISs’ productivity, LEA 18 calculated how much time students were available for instruction and services. When students were available for instruction and services, LEA 18 made every effort to focus their ISs’ time.
3. LEA 18 recognized that workload related to case management activities should be considering in calculating caseload ratios.

4. Much like another LEA participating in the study, LEA 18 believed the 60 month age range presented many challenges that affected ISS' workload. In their case, they preferred a 24 month age range.
5. LEA 18 professionally developed the regular education staff on accommodations and modifications. Although the training took time to develop and deliver, it greatly benefited the students in the general education setting. The scheduling and time demands associated with training teachers and staff should be considered in the calculation of caseload ratios.

Recommendations from LEA 18 for ODE

The LEA 18 recommended the following:

1. Smaller students/teacher ratios in order to accommodate students' needs for self-contained, inclusion and pullout services and behavior.
2. Allow ISSs to have more time that can be used for planning and designing differentiated instructions, evaluating student progress
3. Provide professional development and educate teachers and ISSs on formative assessments, conferencing and team planning, collaborative planning for the development of lesson plans, co-teaching
4. If state implements more restrictive ratios, schools would have to abide by rules and thus will be able to serve students with disabilities more effectively.

LEA 19

Background

LEA 19 served approximately 750 juniors, seniors and students who deferred diplomas to further their education. Out of those nearly 750 students, approximately 230 of them (about one-third) were students with disabilities. LEA 19 career technical special needs coordinators (VOSEs) attended as many IEP meetings as possible, but this was difficult.

LEA 19 offered mainstreamed academic courses only for a total of four per day—one in each core area—with the other half of a student’s day in his/her career technical program. Two ISs worked with all students in two academic subject areas and LEA 19 experienced strong success rates with the students using this service delivery model. Despite these successes, LEA 19 found it difficult to “mesh the required minutes of intervention per week with what [LEA 19 saw] as necessary supports for student success (which is often more than or less than what was noted in the IEP).”

LEA 19 had the following goals that drove the development of their alternative caseload approach:

1. To assess the current ISs’ caseload ratios and service delivery models for students with disabilities.
2. To develop an alternative approach to calculate caseload ratios for ISs, provide needed services, and ensure students with disabilities made progress in their career technical programs and academic courses.
3. To identify the types of professional development needed in order to successfully implement the new caseload ratio and improved service delivery model.

LEA 19 Alternative Approach

A stakeholder survey was created and the data were analyzed by LEA 19 and an outside consultant. The outcomes of this survey drove the creation of the LEA 19 alternative approach. Through the surveys of the LEA 19 special education staff, several topics were consistently mentioned as areas of concern: Communication, collaboration within the school and with affiliate school, how to develop support in a classroom where the assistance was not wanted, and how-to deliver the support. Additionally, affiliate school districts wanted: 1. Additional IEP and progress monitoring compliance (i.e., wanted more communication and collaboration), 2. Additional career technical options for students with disabilities (because their incoming students were not always prepared for the one or two year programs or Project SEARCH).

After the survey data were analyzed, LEA 19 concluded that supports were needed for the following areas: 1. Retention of students on the campus, 2. Attainment of student competitive employment in Project SEARCH, and 3. Consistent caseload ratios for VOSEs. LEA 19 elected to pilot a rubric approach based upon students' needs and assign tiers of IS services based on those needs. The three tiers were based off RTI concepts of low, moderate and intensive intervention needs. Students were assigned to a tier based on the following criteria:

1. The number of special education classes (based on periods or bells) that the student needed to make progress toward IEP goals.
2. An initial, intensive four week review/ranking of students' needs (estimated to go through the third week of September each year). This was done as LEA 19 got to know the students better within the career-technical educational delivery as well as what was documented as necessary by the associate schools' special needs staff.

3. A six-week cycle of review from both our ISs and LEA 19 special needs coordinators (VOSEs) of student performance in both academic classrooms as well as career-technical programs.
4. Development of a checklist of services rendered by the ISs for monitoring based upon consistent criteria (covering tests such as OGT, career-technical assessments, academic assessments, and others as applicable for comparable data).

Evaluation of LEA 19 Approach

LEA 19 piloted their new approach and collected their own data over six weeks for 24 students. Their analysis of their data revealed the following:

Suffice it to say that the efficacy of [the LEA 19] method and student achievement was not as documented as [LEA 19] would have liked. However, from the staff involved standpoints, this Low, Medium, and High engagement worked very well for our staff and our students as far as getting the work done, getting supports to our students, and student success. The “problem” still was that LEA 19 was not compliant with the actual minutes written on an IEP by non-career center staff in the spring prior to them coming to LEA 19, while still at their sending districts’ setting. With the change of setting into a career-tech setting where ½ of students’ day was in their lab and ½ of the day was in their 4 academic classes- LEA 19 found that students seldom needed “support” during their labs, but still needed support during their academics, which sometimes was in “conflict” with their daily minutes of intervention.

LEA 19 had 5 participants in the experimental group who provided various pieces of data (i.e., 2 ISs and 3 VOSEs) for independent evaluation. The ISs and VOSEs provided combined student

outcome but separate time study and waiver data. The ISs provided FAPE data. The district conducted their time study during the week of April 22, 2012.

Student Outcome

Student outcome data were collected in May and June of 2012. At the end of the 4th quarter, the student outcome data showed 86 % of the IEP goals were either mastered or adequately progressing and 91% of students' academic core classes were passed. When considering OGT scores, "the large majority of seniors, they either met participation requirements per the school of residence, or they had no change in their results", per LEA 19.

Provision of FAPE

Data were collected relative to the provision of FAPE. The 2 ISs provided services to 24 students with disabilities. The data showed 0 students (0.0%) received exact amount of special education services and 19 students (79%) received more special education services than were stated on their IEPs. The data also showed that 5 students (21%) received less minutes than were stated on their IEPs. Fewer services were provided to 3 of the 5 students (60%) because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 5 students who missed services, 3 (60%) received "make-up" services.

Analysis of Workload

Data were collected regarding the service providers' workload and contractual parameters. During the time study week, both ISs worked more hours than were indicated in their employment contract, and averaged .75 hours in overtime work. One IS worked 30 minutes over and the other worked 1 hour beyond their contract. In addition to providing data about the number of hours worked during the time study week, survey data showed that both ISs took their full lunch and planning time.

For the full-time VOSEs, one (33%) worked a 96 hour work week, one worked a 10 hour work week, and another worked a 32.5 hour work week. One VOSE received a full lunch and one took planning time. Two VOSE respondents did not believe they were entitled to planning time.

The data showed the ISs were assigned a manageable workload and caseload but the VOSEs were not. One VOSE worked a significant amount of hours in overtime, while the two other VOSEs worked fewer hours than were indicated on their employment contract.

Stakeholder Perceptions

One of the ISs (50%) believed the LEA 19 rubric-based approach could be used to reasonably provide FAPE to students with disabilities. No VOSEs shared if they believed FAPE could be reasonably provided. No FAPE indicators of success were achieved.

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their group size or acceptable age ranges. LEA 19 reported that no ISs or VOSEs in the control group exceeded any age range. It was reported all ISs and all VOSEs exceeded their caseload ratios and only 1 IS received a state waiver to do so.

Alignment with Operating Standards 3301-51-09

It does not appear as though there is enough evidence to determine if the LEA 19 approach fully aligned with the Operating Standards. LEA 19's approach primarily focused on the level and frequency of IEP services and the severity of the students' disabilities. Data were not provided to show how the scheduling and time demands that were associated with various workload duties (3301-51-09(I)(1)(a-d)) were considered.

Conclusions

Several methodological limitations prevented the LEA 19 approach from being fully evaluated. First, the evaluation of the approach included a small sample size (i.e., two ISs and three VOSEs). Second, there was no control group available, which prevented comparisons from being made. Third, ISs and VOSEs were the only service providers who provided full-time employment data. Therefore, the absence of the control group, small sample size, and sole use of ISs and VOSEs significantly limited inferences about the effectiveness of the approach as well as the generalizability of results to preschool-high school ISs and related service providers.

Despite several methodological limitations, some advantages were associated with the LEA 19 approach. First, a majority of students mastered or made adequate progress on IEP goals and passed core academic classes. Second, both ISs worked a minimal amount of overtime and received a full lunch and their planning time.

Several disadvantages emerged from the data. First, most of the students were given extra IEP services, which indicated the IEP did not reflect the needed services. LEA 19 further acknowledged that they were not “compliant” with providing the actual IEP minutes. The workload data showed the VOSEs were not assigned a reasonable workload or caseload. Finally, all ISs and all VOSEs exceeded their caseload ratios and only 1 IS received a state waiver to do so. When the advantages and disadvantage were considered together, it did not appear as though the LEA 19 approach was effective as designed, and therefore should not be adopted in its entirety by the Ohio Department of Education.

Implications for Practice

Several implications for practice emerged from the data.

1. LEAs need to factor in the time and scheduling demands that were associated with meeting attendance. As transition specialists, VOSEs need to be available to participate in IEP meetings when transition assessments and services were discussed. Their meeting participation will assist in the development of FAPE and enable LEAs to coordinate services with outside agencies. Video and phone conference technology can be used to reduce travel time while ensuring meeting participation.
2. LEA 19 recognized professional development could be used improve service delivery.
3. LEA 19 developed a stakeholder survey in order to understand the needs of their associate school districts. LEA 19 used the data to develop and refine their caseload ratio approach, coordinate services, and deliver professional development.
4. Their approach was based on the needs of the students. The students were served in general education settings, as much as possible.
5. In calculating caseload ratios, administrators and IEP teams needed to ensure IEPs reflected what students needed in order to master IEP goals. The LEA 19 service providers delivered extra services to a majority of students, which added unexpected workload. When extra services were omitted from IEP, especially for VOSEs, administrators were unable to determine how much time was needed to provide all services and complete workload.

Recommendations from LEA 19

LEA 19 did not provide recommendations for ODE.

LEA 20

Background

According to the LEA 20, it was difficult to balance caseload ratios for ISs because numbers of students with disabilities, including those with low-incidence disabilities, varied widely by grade level. Additionally, it was often difficult to find an appropriate time for related service providers and ISs to provide differentiated instruction. The purpose of their study was to develop an approach that allowed students to be educated in the least restrictive environment, improve parent involvement, and increase student achievement in reading and mathematics. One overarching goal drove the creation of their approach: To find ways for ISs to spend more time on the most important work (e.g., such as working with students) and spend less time on the least important work.

LEA 20 Alternative Approach

LEA 20 utilized several methods to calculate caseload ratios for service providers. First, they developed a means to provide balanced caseload ratios for ISs. They assigned caseloads using the rubric in Table 28, which was based on intensity of students' needs, not grade level or number of students.

Table 28. Caseload Ratio: Student Level Rubric**

Level	Description			Color
	Setting	Service	Disability	
Level 1 (least)	Full inclusion	Consultation, accommodations, no modifications	Speech, limited social and learning needs	green
Level 2	Inclusion with limited resource room	Limited support, accommodations and no modifications	Learning disabilities, <i>minor cognitive disability</i> , mild social and behavior needs	blue

Level 3	Resource room with appropriate inclusion, intermittent paraprofessional support	Significant support, modified curriculum and accommodations	Significant physical disabilities, moderate cognitive disabilities, moderate behavior and social needs	orange
Level 4 (most)	Resource room with limited inclusion, paraprofessional support	Modified or functional curriculum	Significant cognitive disabilities, non-verbal, need personal care, significant behavioral and social issues	purple

**This rubric is merely a guideline. Students should be evaluated on a case by case basis.

Second, they provided a common time for related service providers and ISs to provide differentiated instruction using research-based practices in an inclusionary setting. This was done by initiating an elementary school ‘Intervention Bell’ (i.e., period of time) when students with disabilities received differentiated instruction, occupational therapy, physical therapy and speech services, in the least restrictive environment. LEA 20 then increased the use of research-based interventions, including Project MORE and other low-cost programs. In order to train their staff, LEA 21 did the following:

- Provided opportunities for staff to attend special education workshops using the grant funding.
- Partnered with OCALI and their local educational service center to provide an autism and low incidence Coaching Team throughout the 2012-2013 school year.
- Provided training for staff, including paraprofessionals, on differentiated instruction and co-teaching, provided by a consultant from a local university;
- Organized visits to schools which have increased the achievement of students with disabilities.

- Provided clerical support to reduce intervention specialist's clerical duties and increase time implementing instruction.

Third, they prioritized work and limited nonessential duties. LEA 20 focused service providers' time in the following ways:

Ensured Important Work Was Completed:

1. Provide direct specialized instruction.
2. Ensure the needs of multiply disabled students were met and procedures were followed (i.e., safety, fire, tornado).
3. Meet collaboratively to develop IEPs and interventions, collaborate on lessons, and problem-solve issues related to students.
4. Coordinate services and work together.
5. Attend special education department meetings.
6. Use data to drive services and instruction.
7. Provide focused reading and math interventions.
8. Hire a part-time paraprofessional to aid in workload duties.

Reduced Not so Important Work:

1. Limit the amount of time ISs act as paraprofessionals in the general education setting.
2. Limit school duties so teachers and ISs can work more with students.
3. Reduce 'First Day' procedures.
4. Reduce the amount of time ISs spend on clerical work, such as IEP invitations.
5. Limit attendance and participation at PTO events during the school day.
6. Reduce interruptions to instruction.

Evaluation of the LEA 20 Approach and Strategies

LEA 20 participated in the Caseload Ratio Study during the 2011-2012 and 2012-2013 school years. The district had 6 participants in the experimental group portion of the study. Four were ISs, one was a SLP, and one was an OTA. The district conducted their time study during the week of February 27, 2012. No control group data were submitted.

Student Outcome Data

Student outcome data were collected in May and June 2012 and are reflected in Table 29. An analysis of the student outcome data showed positive gains associated with the LEA 20 approach and strategies. More specifically, the majority of students mastered or made adequate progress on goals and passed core classes. Some positive group standardized testing results were found for those students who received speech-language and occupational therapy services. For students who received high school IS services, a sufficient number of students were found to be at least proficient on OGT scores.

Table 29. Student Outcome Data

Conditions	Mastered or Adequate Progress on Goals	Passed Core Classes	Statewide Diagnostics- At Least Clearly on Track	OAA- At Least Proficient	OGT- At Least Proficient
IS (n=4)	90%	96%	54%	73%	78%
SLP (n=1)	100%	100%	NA	83%	100%
OTA (n=1)	100%	99%	N/A	75%	100%

Provision of FAPE

Data were collected as it pertained to the provision of FAPE, and they are illustrated in Table 30. The majority of students were provided more services than were indicated on their IEPs or intervention plans, which suggested services were not calculated appropriately by the IEP or intervention teams. Almost all (98%) of the students received at least the minimum amount of services from the service providers.

Table 30. Provision of FAPE

Conditions	Number of Students	Less Services Provided	Make-up Services Provided	Exact Amount Services	More Services
ISs	50	8%*	100%	30%	62%
SLP	41	5%*	0%	15%	81%
OTA	22	0%	0%	0%	100%

*Fewer services were provided due to student absences or attendance at school sponsored events

Analysis of Workload

Data were collected regarding the service providers' workload and contractual parameters. These data are found in Table 31. During the time study week, it was found all the ISs and the SLP worked more hours than were indicated in their contract. Half of the service providers worked a significant number of hours in overtime work. The OTA was able to provide services and complete workload duties in 36 hours, but the OTA did not take lunches during the time study week. When the

data were taken as a whole, lunch and planning time were not consistently taken and half of the service providers worked more than 7.5 hours in overtime.

Table 31. Analysis of Workload.

Profession	Hours Contracted to work	Worked Beyond Contracted Hours	Average Hours Worked	Range of Hours Worked	Took Full Lunch	Took Full Planning Time
IS (n=4)	37.5	100%	46.77	+5.41 to +9.27 hours	50%	50%
SLP (n=1)	37.5	100%	45.08	NA	0%	0%
OTA (n=1)	37.5	0%	36	NA	0%	100%

State Waivers

The school districts were asked to provide data regarding waivers for service providers who exceeded their caseload ratios or acceptable age ranges. LEA 20 reported that no service providers exceeded maximum caseload ratios or age ranges per instructional period.

Stakeholder Perceptions

All service providers believed that FAPE could be reasonably provided using the LEA 20 approach and strategies. No other stakeholder perceptions were provided for analysis.

Alignment with Operating Standards 3301-51-09

Based on the data provided, reports, correspondences, and proposal, it appeared as though the LEA 20 approach and strategies aligned with most of the facets of the Operating Standards (3301-51-09). It appeared as though their approach and workload strategies considered the following: Screening, assessment, consultation (also called collaboration), training, related duties, level and frequency of services, diagnostic testing, classroom observations, conferences, staff development and follow up, and the demands of an itinerant schedule. Although not specifically stated, educational interventions and counseling were likely considered under the level and frequency of services. They also considered the time spent on “other duties”. It was not clear if the district considered the scheduling and time demands that were associated with intervention design and planning time, especially given the fact that the SLP and half the ISs did not take their full planning time.

Conclusions

Several methodological limitations prevented the LEA 20 approach and strategies from being fully evaluated. First, the evaluation of the approach included a small sample size (i.e., four ISs, one SLP, and one OTA). Second, there was no control group available, which prevented comparisons from being made. Third, no PT, PTAs, OTs, and school psychologists were included in the sample. Therefore, the absence of the control group, small sample size, and absence of other types of service providers significantly limited inferences about the effectiveness of the approach as well as the generalizability of results.

Despite several methodological limitations, some advantages were associated with the LEA 20 approach and strategies. First, the majority of students mastered or made adequate progress on goals and passed core classes. A number of students reached minimum expected levels on group standardized testing. Second, nearly all the students were provided at least the minimum amount of services that were listed on the IEPs and intervention plans. Third, all service providers believed that

FAPE could be reasonably provided using the LEA 20 approach and strategies. Finally, the new LEA 20 approach and strategies aligned with most of the workload duties that were detailed in the Operating Standards (3301-51-09).

Several disadvantages also emerged from the data. First, most of the students were given extra IEP services, which suggested the IEPs did not reflect all the needed services. It seemed likely the use of extra services negatively impacted the effectiveness of the rubric because these services were not considered. Second, half of the service providers worked a significant number of hours in overtime and lunch and planning time were not consistently taken.

In conclusion, if all IEP and intervention services were known and documented before the rubric was used, then it was possible that the equitable distribution of students could have occurred. The LEA 20 approach would then hold some promise for ODE. This approach should be replicated in other LEAs across service providers in order to determine its effectiveness.

Implications for Practice

Several implications for practice emerged.

1. The rubric approach that was based on student services, LRE, disability, and need was associated with positive student outcomes and a belief the approach could be used to provide FAPE.
2. The district surveyed the service providers about their needs and partnered with outside agencies in order to provide needed professional development to service providers, including paraprofessionals. The professional development was coordinated and designed to positively impact services for students. External funding was also obtained in order to fund these professional development activities.

3. LEA 20 organized visits to schools that increased the achievement of students with disabilities. LEA 20 implemented some of the things they observed in these districts.
4. Provided clerical support and enacted several workload reducing strategies to ensure service providers' time was focused on services and related duties.

LEA 20 Recommendations for ODE

LEA 20 recommended that ODE consider the following:

1. Implementation of caseload ratios by time-intensity required in working with a student, instead of disability category or number of students.
2. Increased training on low-cost, research based strategies for working with students with disabilities.
3. Increased training in teaching with students with autism, and low incidence disabilities.

LEA 21

Background

LEA 21 believed that their district had caseload problems due to issues related to the following: Student access to general education programs, use of assistive technology, and behavioral data collection procedures. In addition, with the advent of RTI, ISs became active participants on intervention teams, consulted with general education teachers on intervention strategies assisted low achieving students, provided direct intervention to students without disabilities, supervised paraprofessionals, coordinated with community service providers, and assumed a greater role in communicating with parents. With more students being served in their home school, ISs provided services to students with various disability categories, intensities, and needs.

LEA 21 felt the individual and unique needs of each student, services, and teacher responsibilities must be factored into caseload development. Given the size of the district, the use of inclusion, a range of student needs, and staffing limitations, students were served outside the general education class more due to scheduling issues than due to individual needs. LEA 21 believed ISs could not adequately serve students in the general education setting when caseload numbers were rigid.

LEA 21 participated in the Caseload Ratio Study during the 2010-2011 and 2011-2012 school years. The district's goal was to develop a model for service provider ratios for K-12 ISs that maintained the well-being and safety of students and met the requirements of FAPE. In order to achieve this goal, LEA 21 reviewed a number of existing models, including North Carolina, Minnesota, Michigan and Iowa. The team selected the model from Iowa as a starting point. The Iowa model included a basic rubric with least restrictive environment (LRE) and eligibility category as the variables. LEA 21 chose to revise the Iowa model to include six factors: Curriculum, IEP, LRE, Collaboration, Behavior Support, and Daily Physical Support (self-care). They ranked each factor on

a scale of 1-4. A detailed rubric (see Table 32) was developed to assist IEP teams in determining the weight of each student. A range of points was identified as a caseload “ratio”, but the ratios were not available at the time of this report.

Table 32. Iowa Revised Caseload Ratio Totals

Iowa Revised Caseload Ratio Totals		Student Name			
		1 Point	2 Points	3 Points	4 Points
Points	Curriculum	Student requires no changes to access the general curriculum.	Student requires accommodations to access the general curriculum.	Student requires accommodations and modifications to access the general curriculum.	Alternate Functional Life Skills Curriculum
	IEP	Home Bound Instruction		In district and attending school	In district and attending school with Alternate Assessment this school year.
LRE		Services Outside the General Education Setting: Less than 21%	Services Outside the General Education Setting: 21% to 60%	Services Outside the General Education Setting: More than 60%	
Collaboration	Collaboration is similar to what is provided for all students.	Special education teacher collaborates with 1 general education teacher, related services providers, and/or paraprofessional.	Special education teacher collaborates with 2 - 3 general education teachers, related service providers, and/or paraprofessional.	Special education teacher collaborates with 4 or more general education teachers, related service providers, and/or paraprofessionals.	
Behavior Support (more than a typical peer) N.A. = Zero Points		Mild Behavior Support from Teacher (May not have behavior goal; Needs significant, verbal redirection beyond a typical peer)	Moderate Behavior Support from Teacher (Needs adult intervention when behavior manifests itself, Not Everyday, 2 - 3 times a week)	Intensive Behavior Support from Teacher (Constant need for adult supervision and support)	
DAILY Physical Support (Self-Care) N.A. = Zero Points	Direct Staff Support needed for: Toileting, Feeding, Dressing, Physical Transfers 1 out of 4 (from above)	Direct Staff Support needed for: Toileting, Feeding, Dressing, Physical Transfers 2 out of 4 (from above)	Direct Staff Support needed for: Toileting, Feeding, Dressing, Physical Transfers 3 out of 4 (from above)	Direct Staff Support needed for: Toileting, Feeding, Dressing, Physical Transfers 4 out of 4 (from above)	

Revised: K. Wholehan's Version 5/4/11

Total _____

Evaluation of the LEA 21 Approach

LEA 21 had 7 participants in the experimental group portion of the study and 7 participants in the control group portion of the study, and all the participants were ISs. The district conducted their time study during the week of April 22, 2012.

Student Outcome Data

Student outcome data were collected in May or June of 2012. At the end of the 4th quarter, the student outcome data for the experimental ISs showed that 82% of the IEP goals were either mastered or adequately progressing, 95% of students passed core academic classes, and 83% of statewide diagnostic tests were clearly on track. Further, 76% of OAA and 83% of OGTs were found to be at least proficient.

For the control ISs, the 4th quarter student outcome data 70% of the IEP goals were either mastered or adequately progressing, 88% of students passed core academic classes, and 44% of statewide diagnostic tests were clearly on-track. Further, 46% of OAA and 100% of OGTs and tests were found to be at least proficient. The experimental group outperformed the control group on all measures except OGT performance.

Provision of FAPE

Data were collected as it pertained to the provision of FAPE. The 7 ISs in the experimental group provided services to 88 students with disabilities or intervention plans. The data showed 53 students (60%) received the exact amount and 30 students (34%) received more special education services than were stated on their IEPs or intervention plans. The data also showed 5 students (6%) received less minutes than were stated on their IEPs. Fewer services were provided to 3 students

because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 5 students who missed services, 1 (20%) received “make-up” services.

The 7 ISs in the control group provided services to 87 students with disabilities or intervention plans. The data showed 50 (57%) students received the exact amount and 26 (30%) students received more special education services than were stated on their IEPs. Fewer services were provided to 8 students because they were absent from school or attending an alternative school sponsored activity (e.g., assemblies, field trips). Of the 11 students who missed services, 6 (55%) received “make-up” services.

Analysis of Workload

Data were collected regarding the service providers’ workload and contractual parameters. During the time study week, it was found that 100% of ISs in the experimental group worked more hours than were indicated in their contract. These experimental ISs worked an average of 6.3 hours in overtime, with a range of 1.50 hours over through 12.53 hours over. On average, it appeared as though the ISs worked a reasonable work week. In addition to providing data about the number of hours worked during the time study week, survey data showed 29% of the experimental ISs took their fully allotted lunch and 43% took their full planning time.

During the time study week, 100% of ISs in the control group worked more hours than were indicated in their contract. The ISs worked an average of 7.82 hours in overtime, with a range of working 2.67 hours over to 15.08 hours over the amount of time indicated in their contract. The survey data also showed that no ISs in the control group took their fully allotted lunch. Finally, it was found that 71% of the ISs in the control group took their full planning time. The experimental group worked less hours during the time study week.

State Waivers

The school districts were asked to provide data regarding waivers for service providers who were over their group size or acceptable age ranges. LEA 21 reported that no IS in the experimental group exceeded the maximum caseload ratio but 3 of 7 (43%) ISs exceeded the acceptable age range. None of the 3 ISs reported that they received a state waiver to exceed the age range.

None of the ISs in the control group exceeded the allowable age range within an instructional period but one IS (14%) exceeded the acceptable caseload ratio per instructional period. No state waiver was obtained in order to exceed the maximum caseload ratio. It was important to note that the data on waivers were reported by the service providers and not verified by the researcher.

Stakeholder Perceptions

The service providers were asked if they believed they could reasonably provide FAPE using either the traditional or alternative caseload approach. The data showed less than half of all service providers (43%) believed they could reasonably provide FAPE. In LEA 21's final report to ODE, they shared contrary IS perceptions:

Use of the matrix consistently produced caseloads that reflected resolution of the original problem issues identified at the beginning of the project. ISs concluded that the use of the matrix resulted in manageable caseloads that included the flexibility to serve a caseload of students with varying levels of need and disability eligibility category.

Alignment with the Operating Standards

Based on the data provided, reports, correspondences, and proposal, it appeared as though the LEA 21 approach largely aligned with the Operating Standards (3301-51-09). The approach and strategies considered the following workload duties: Screenings, assessment, consultation,

counseling, training, related duties, the level and frequency of services, planning time, diagnostic testing, classroom observations, coordination of the program, conferences, staff development, and demands of an itinerant schedule. Although not directly addressed, intervention design likely was captured under planning time and intervention design. There was no or limited evidence to show that the approach and strategies considered educational interventions that would be part of RTI.

Conclusions

Several methodological limitations prevented the LEA 21 approach from being fully evaluated. First, the evaluation of the approach included a small sample size (i.e., 14 ISs). Second, ISs were the only service providers who provided data. Therefore, the small sample size and sole use of ISs significantly limited inferences about the effectiveness of the approach as well as the generalizability of results.

Despite these methodological limitations, several positive results were associated with the new LEA 21 approach. First, the experimental group outperformed the control group on student outcome measures related to IEP progress and passage rates for core academic classes. Second, the experimental group also met all three the success indicators related to IEP progress, passage rates for core classes, and performance on OAAs and OGTs. Third, the majority of students served by ISs in the experimental group received at least the minimum amount of IEP services. Fourth, the ISs in the experimental group worked on average 6.3 hours in overtime, which was less time worked than their counterparts in the control group. It was also considered a reasonable work week. Finally, the LEA 21 approach aligned closely with 3301-51-09 (I)(1)(a-d) of the Operating Standards (3301-51-09).

Although several positive outcomes were associated with the LEA 21 approach, the approach lacked some clarity (i.e., what was an appropriate caseload ratio), which could affect future implementation. Additionally, there was a tendency for ISs to provide extra services to students with disabilities, and these additional services were not factored into their weighting system. Although it

was not clear why extra services were provided or how these extra services impacted workload, more than half of the ISs believed the LEA 21 approach could not be used to reasonably provide FAPE to students on the caseload. Finally, the data showed a small percentage of ISs in the experimental group took their full lunch and planning time.

While several successes were realized during and after the implementation of the LEA 21 alternative caseload ratio approach, one fundamental problem emerged with the implementation of the LEA 21 approach. The district assumed that all the IEPs reflected FAPE, and they assigned weight using information from each child's IEP. However, actual data on the provision of FAPE showed this assumption was flawed because over a third of all students received extra IEP services. It was therefore recommended that more data be collected on the LEA 21 approach (i.e., revised weighting based on actual IEP minutes provided, ratios) and the approach be replicated across other service providers before it can be considered for adoption by ODE.

Implications for Instruction

Several implications for practice emerged from the data.

1. LEA 21 believed the information and services that were found on students' IEPs were the most objective pieces of data for calculating the weight of each student. The eligibility categories were only minimally considered.
2. Since IEP services and needs were used to calculate student weight, it was critical that each IEP reflected exactly what the student needed (e.g., direct and indirect services, behavior plans, accommodations). When extra services were provided to students, the LEA 21 weighting system fell apart and the student weights were underestimated. If the approach was to be replicated, IEP teams need to ensure that all the needed services, supports, accommodations, and modifications were listed on the IEP.

District Recommendations for ODE

LEA 21 recommended that ODE act on the results of their project and any ensure any alternative method should do the following:

1. Account for the ability of an ISs to serve students with a variety of eligibility categories and recognize the flexibility this would offer in terms of serving students more efficiently and effectively.
2. Account for the “other” workload considerations in addition to only number of students. This would include the extensive paperwork requirements that, if not accounted for, consume large amounts of instructional time.
3. Recognize the differences between city, suburban and rural school districts and be sure the model can be applied with desired results in a variety of districts.

Summary of Major Findings

Methodological limitations prevented the research team from fully recommending one or more of the alternative caseload ratio approaches and accompanying strategies. Unfortunately, the research designs that were used by the LEAs were not rigorous enough to make causal conclusions. Many, if not most, of the LEAs used a small sample size, lacked a control group, submitted incomplete data, or used one category of service provider in the sample. These methodological limitations hindered the generalizability of the results and limited conclusions about the effectiveness of each approach and strategy. Additionally, extraneous variables, which were not controlled, likely impacted the outcomes of the study. Finally, none of the approaches and few of the strategies were replicated across LEAs. This was problematic because each of the approaches and many of the strategies were unique and no LEAs conducted the study in the same way.

Despite the methodological limitations, positive outcomes were realized when the data were taken as a whole. Table 33 illustrates the LEA outcomes and provides a side-by-side comparison of the data.

Table 33. Side-by-side Comparison of LEA Results

LEA	IEP (%)			CA (%)		OAA(%)	OGT(%)	ACH		FAPE (%)		Sustainability	
	E		C	E	C	E (C)	E (C)	E	C	E	C	E	C
												Y(N)	Y(N)
1													
2	93			95			55	6.43		94			9(5)
	83	PS											
3(IS)	87		80	99	97	80	(44)	6.17	4.68	100		98	4 (1) 3(1)
4(IS & RSP)	69			73		51	66	6.38 under		96			1(1)
5(RSP)													
6(IS)	66			78				15.5		100			2(4)
7 (SLP)	89							3.08 under		100			(1)
	89							3.67 under		80			1
(PT)	87							7.55		83			3
(IS)	89							1.28		100			1
(OTA)	89							0.33		100			1
(OT)	89												
8 (SLP)	98	PS	94					11.5	7.36	90		98	4(1) 3
	96		94										
(OT)	98	PS	94					8.5	2.3	90		93	3(2) 3
	97		93										
(PT)	95	PS	89					3.75	6.5	96		97	(1) 1
	97		100										
9 (IS)	50			96				15.29		100			2
	97			97				2.67		100			2
(VOSE)	87		80	99	97		(44)	7.75	3.7under	98		81	4 2(3)
10 (IS)						64	49						
11													
12 (OT)	69		61		90			3.44		89			4
		PS	83										
12 (OTA)	69		57		100			1.17		86			3
	57	PS	51										
16 (IS)	73			63		42	33	5.65		100			2(2)
13 (PT)	85		94					0.72		99			10
	96	PS	98										
(OT)	89		86					1.10		96			5(3)
		PS	87										
14 (IS)	76			89		57	69	0.14		98			7(4)

15 (IS)	53	65	80	79	38(16)	14	7.46	12.72		4(2)	5	
(SLP)	83	94	83	92	27(28)		1.00	5.5		(1)	(1)	
17 (IS)	93		100		80		3.7		100	2(2)		
18 (IS)	96	74	100	93	6(0)	(9)	6.18	1.61	91	92	4	1(2)
19 (IS)	86		91			18	0.75		92		1(1)	(3)
(VOSE)												
20 (IS)	90		96		73	78	9.27		100		4	
(SLP)	100		100		83	100	7.53		96		1	
(OTA)	100		99		75	100	1.5 under		100		1	
21 (IS)	82	70	95	88	76(46)	82(100)	6.34	7.82	95	94	3(4)	3(4)

Table Key:

GOALS: Goals mastered or adequately progressing

CA: Core academic courses passed with grade of C or better

OAA: Ohio Achievement Assessment scores that were found to be 'at least proficient'

OGT: Ohio Graduation Test scores that were found to be 'at least proficient'

ACH: On average, the number of hours service providers worked beyond their contract

FAPE: Services and/or interventions provided, after make-up services and student absences were considered

SUSTAINABILITY: Number of service providers who think the approach can be used to reasonably provide FAPE to students

E: Experimental group

C: Control group

RSP: Related service providers

PS: Preschool

Student Outcome Data

Overall, the newly developed caseload ratio approaches appeared to produce better student outcomes related to progress on IEPs, intervention plans, and core classes, when compared to the control group. An analysis of the collective student outcome data suggested 12 LEAs ensured the majority of students (80% or more) mastered or made adequate progress on IEP or intervention goals. Where comparisons could be made, the experimental group outperformed the control group in 6/8 reporting LEAs.

A majority of students (80% or more) in 12 reporting LEAs passed core academic courses. As would be expected, LEAs that had a lower percentage of students mastering or adequately progressing on their goals also produced lower passages rates in core academic areas. This was true in all cases except two. Where comparisons could be made, the experimental group slightly outperformed the control group in 4/5 LEAs.

Finally, a majority of students (75% or more) in 3/13 reporting LEAs passed standardized group testing. There was only one LEA where the experimental group outperformed the control group on standardized group testing scores.

Analysis of Workload

As a whole, the newly developed approaches and strategies tended to produce more reasonable workloads and caseload ratios for service providers. Although most service providers worked some amount of time beyond their contractual hours, 12/18 LEAs implemented approaches or strategies that produced reasonable workweeks for the various categories of

salariied service providers. Six LEA service providers in the experimental groups worked beyond what was considered to be a reasonable workweek.

Provision of FAPE and Sustainability of the Approaches and Strategies

All 18 reporting LEAs provided at least the minimum amount of services and interventions listed on IEPs and intervention plans. Additionally, 13/18 LEAs provided extra IEP or intervention services to at least a quarter of the students with IEP or intervention goals. It appeared to be common practice for LEAs to provide more services and interventions than were indicated on IEPs and intervention plans. Further, at meetings, it appeared as though LEAs consistently underestimated how much time was actually needed for students to make progress and master goals. The consistent practice of providing extra services certainly affected workload and likely impacted perceptions about the effectiveness of the various approaches and strategies.

Conclusions

In conclusion, the data analyzed from LEAs reflected a high level of performance. As a whole, the data suggested that service providers and LEAs were meeting the needs of student and FAPE was provided irrespective of the caseload ratio formula used. However, the caseload ratio study also showed 29% (51/176) of all service providers in the study worked beyond a reasonable workweek in order to meet the needs of students and many did not feel that the caseload approaches were sustainable. In order to be effective at providing services and interventions, a balance must be found between the amount of time to provide services/interventions and the time needed to complete workload duties during the workweek.

Implications for Practice

While no one approach or strategy rose above the rest, several approaches and strategies were promising. These promising approaches and strategies should be modified or combined in order to ensure the desired student, workload, and other outcomes were reached. The most promising approaches and strategies with the best outcomes were developed by:

- LEA 2
- LEA 7
- LEA 10
- LEA 13
- LEA 17
- LEA 18
- LEA 20
- LEA 21

Not only are these approaches useful to LEAs, they have the potential to guide ODE in the development of one objective workload process that can be used across service providers. This workload process could be used to calculate caseload ratios, consider workload, and evaluate outcomes.

Summary of Major Implications for Practice

In an effort to assign service providers a reasonable amount of workload duties and students, the following strategies are recommended for consideration:

Use the Existing Waiver Process and Monitor Caseload Ratios

1. The data on waivers showed 11/14 (79%) LEAs were out of compliance with regard to age ranges per instructional period or maximum caseload ratios. Seven LEAs did not provide data. The results showed 15 service providers reported that they exceeded the age ranges per instructional periods, but only 33% of them received the necessary waiver from ODE. Similarly, 14 waivers were needed by service providers to exceed the maximum caseload ratios, but only 21% of those LEAs received a waiver to do so. ODE should consider monitoring LEAs in the areas of age ranges and maximum caseload ratios.
2. Many of the service providers, particularly from five LEAs, worked well beyond what was considered a reasonable workweek. ODE should consider monitoring LEAs in order to determine if caseload ratios were calculated appropriately and aligned with 3301-51-09.

Use Time Studies or a Similar Workload Process to Identify and Quantify Workload Duties

1. Common caseload and workload nomenclature could be developed across LEAs and the state. Formal time studies could be used to quantify workload duties at various times throughout the school year and the data should be contained in an LEA centralized database for analysis. Training could occur in order to ensure the time studies were done with fidelity. Commercial web-based staffing programs could be used to optimize staffing and scheduling for school district service providers.

2. Time study data could be used to ensure service providers devoted as much time as possible to priority workload duties (e.g., specially designed instruction, related services, special education compliance paperwork, supervision). The data could be used to assist in the redistribution of workload duties, where appropriate and necessary.

Basic Assumptions behind the Calculations of Caseload Ratios

1. The formula should be as simple as possible and applicable to all categories of special education and related service providers. The simplest formula was the following:

Time for services + Time for workload duties = The total number of hours in a service provider's work week.

2. Lower caseload ratios likely will not automatically ensure the equitable distribution of students and workload duties across service providers. Arbitrary caseload ratios do not consider students' severity and needs and fail to factor in the skills of individual service providers and the range of workload duties that are unique to each and every LEA.
3. Service providers should be able to provide services to students on their caseload and complete all of their required workload duties within a designed and reasonable period of time (i.e., school day, work week, quarter, semester, academic year).
4. When calculating or determining the appropriateness of caseload ratios, data from student progress reports and other data should be considered. If students fail to make adequate progress, the service providers' workload and caseload size should be evaluated in order to determine any impact. Student progress and needs should contribute to staff allocations and caseload sizes.

5. In calculating caseload ratios, the needs of the students, as determined by the IEP, 504, or intervention team, should be considered. Parental input, as reflected on the IEP, 504 plan, or intervention plans, should be considered as well.
6. The information and services that were found on students' IEPs should emerge as the most objective pieces of data for calculating the weight of each student and subsequent caseload ratios. The eligibility categories alone should be only minimally considered.
7. Since IEP services and needs were so important to the calculation of caseload ratios, it was critical that each IEP reflected exactly what the student needed (e.g., direct and indirect services, behavior plans, accommodations). When extra services were provided to students, caseload ratios were underestimated.

Considerations for Future Caseload Ratio Approach

Utilizes a Team-based Approach

1. A team of district stakeholders (e.g., principal, special education administrator, service providers, regular education teachers) and parents determine service providers' caseload ratios using various pieces of data (e.g., time study data, historical data on the number of evaluations typically completed in a month, number of buildings and transition time, student progress reports, minutes on IEPs).
2. Services and certain workload duties (e.g., supports for school personnel, assistive technology services, transition assessments and services, delivery of accommodations and modifications) will be based on the IEP, 504 plan, or intervention plans.

Driven by Objective Data

1. Time study analysis

2. Standard deductions for known workload duties and activities (e.g., lunch, planning time)
3. Multipliers based off the workload that would be associated with categories of students (e.g., severity, needs as reflected by IEP, disability category, LRE).

Considers a Range of Student Factors and Workload Duties

1. Training teachers and staff
2. Attending meetings
3. IEP participation
4. Student severity and needs
5. Direct and indirect special education and related services
6. Interventions
7. Supervision of paraprofessionals and assistants
8. Mentorship activities
9. Consultation
10. Planning time
11. Paperwork
12. Correspondences
13. School duties
14. Providing accommodations and modifications
15. Case management
16. Management of equipment (e.g., set-up, tear-down, maintenance, purchasing)
17. Referrals to outside agencies
18. Completion of third-party billing and associated paperwork (e.g., Medicaid billing).

Allows Flexibility with Age Ranges

1. Allow districts to consider students' needs when groups were designed. Arbitrary age ranges may not always be most appropriate.

Professional Development was Key

1. Service providers and IEP teams should be trained on how to properly document services on IEPs and intervention plans. "Extra services" (i.e., services that were not documented on the IEP, 504, or intervention plans) have the potential to violate the LRE mandate and could be considered a change in placement in some cases. Additional services could also contribute to the inappropriate calculation of caseload ratios.
2. Professional development could be used to train service providers on compliance paperwork, instructional strategies, and service delivery methods. As service providers became more adept and experienced with these tasks, they could reduce the amount of time spent on these activities.
3. Regular education teachers were trained how to co-teach and deliver differentiated instruction, which in turn ensured students remained in their least restrictive environments. Service providers should professionally develop regular education teachers on topics related to differentiated instruction, evidenced-based practices, co-teaching, and data collection.
4. Principals investigated and rectified any disconnects that existed between the beliefs and expectations of service providers and stakeholders.
5. VSH professionally developed the regular education staff on accommodations and modifications. Although the training took time to develop and deliver, it greatly benefited the students in the general education setting.

Administrators Focused Service Providers' Time on Services and Related Duties

1. LEAs and stakeholders could determine the percentage of time (i.e., service productivity) that they would like service providers devote to direct (e.g., 1:1, small group, co-teaching) and indirect services (e.g., consultation, meetings). In some districts, service providers spend 60-80% of their time providing services. In determining the service providers' productivity, LEAs use the following formula: $\frac{\text{The amount of time in minutes service providers provide services}}{\text{how many minutes students were available for instruction and services}} = \text{Desired Productivity}$.
2. Some LEA ensured 90% of the paraprofessionals' time was devoted to student services and/or certain school duties.
3. Trained volunteers were used to provide services and interventions to students in order to devote service providers' and paraprofessionals' time to students with more complex needs.

Workload Reducing and Scheduling Strategies

1. For service providers who serve multiple buildings or for those who travel, video and phone conference technology could be used to reduce travel time and ensure meeting participation. The same technologies could be used by supervisors and assistants as well as mentors and mentees.
2. Student teachers were used to redistribute and reduce workload. LEAs provided clerical support to ensure service providers' time was focused on services and related duties. Districts could also consider using student teachers, paraprofessionals, staff, and trained volunteers to complete certain workload duties (e.g., data collection, creation of materials, cafeteria

monitoring). When workload duties are taken away from service providers, more of their expertise could be available for direct and indirect services and specialized interventions.

3. Administrators could reduce the amount of unnecessary and reduplicative paperwork and determine which paperwork can be completed by clerical staff (e.g., IEP meeting invitations).
4. Several LEAs placed importance on co-planning time and provided predictable and consistent time for regular education teachers and service providers to meet to plan instruction, interventions, and specially designed instruction.
5. The schedule and building assignments were designed to ensure OTAs and their supervising OT overlapped. One LEA determined that one fulltime OT should be assigned to supervise no more than 2 OTAs at any given time (1:2 ratio). As with caseload ratios, the supervisory ratio should be considered within the context of student outcome data, severity, LRE, other workload duties, and the OTA's level of experience.
6. Technology (e.g., iPads) could be used to aid in data collection and analysis.
7. Students could be clustered together in regular education classrooms to reduce workload and maximize services (e.g., reduce the amount of consultation needed, how much assistive technology needed to be installed, and the number of co-teaching lessons).
8. Service providers were paid to complete documentation at home up to a certain amount of hours, attend meetings before or after work hours, and compensated for attendance at parent-teacher conferences. The compensated work that was completed before and after school allowed service providers to focus their school day on services and interventions.
9. LEAs provided release time or offered professional development days to service providers so that they could attend a professional development event, participate in a staff meeting, or meet with parents and co-workers. Stipends were given to service providers who performed

certain workload duties during their planning time and extra paid workdays were offered to complete paperwork (i.e., write IEPs). Qualified substitutes were hired to provide services while the service providers were absent.

10. All IEP meetings were held on two full days, the ISs were released to attend those meetings, and a substitute teacher was hired to cover services. Additionally, the “planning and testing days” were scheduled far enough in advance and qualified substitute teachers were hired to cover services.

Training and Guidance: Operating Standards

Training and Guidance Recommendations

These training and guidance recommendations were developed in response to data that emerged during the Caseload Ratio Study and the companion Supply and Demand Study. Both studies were funded by the Ohio Department of Education Office for Exceptional Children.

Role of the preschool and school-age service provider

1. Provide guidance on which preschool and school-age providers must be considered under 3301-51-09 (I)(1)(a-d). Should speech-language pathology and school psychology interns be included? Some administrators are not clear which related services providers can consider their workload (I)(1)(a-d) when calculating caseload ratios.
2. Clarify if preschool-age service providers can also provide indirect and direct services in one or any combination of instructional grouping, including large group, small group, individual instruction, or parent and teacher training and consultation. Currently, only school-age providers are included, which implies preschool-age providers and related service specialists are not allowed to utilize the same service delivery models and student groupings (G)(2).
3. Clarify what are the similarities and differences between vocational special education coordinators and intervention specialists as it relates to their service provision. Some LEAs use these professionals interchangeably.

Services

1. (G)(3)(b) states that regular education teachers must be supported by early intervention and school-age intervention specialists and related service specialists. (G)(3)(b) then suggests these preschool and school-age providers should work in partnership with regular education personnel to implement the IEP in the child's least restrictive environment. Clarify if a regular education teacher can solely implement a child's IEP or must there always be an early intervention and school-age intervention specialist and related service specialist attached to the IEP in a direct service or consultative capacity. Clarify if a regular education teacher is allowed to be the sole provider of specially designed instruction.
2. Clarify if OT services and OTA services are considered different services. If so, clarify how these services should be documented under the related services section of Step 7 on the IEP. The same applies to PT services and PTA services. Should supervision of assistants be included under the related services section of Step 7 on each IEP when assistant services are provided?
3. Under (I)(2), it states school-age service providers will provide direct services. (I)(2)(a-g) provide direction on how many children intervention specialists shall "serve." Clarify what "serve" and "provide direct service" means (e.g., direct interventions, evaluation, screening, case management, etc.) and specify if it includes services to students who have suspected disabilities and are undergoing a multi-factored evaluation.
4. Clarify what is meant by level of services in 3301-51-09 (I) (1) (b). Can the wording match the wording on the most current version of the IEP (e.g., frequency and amount of time)?

5. Provide guidance to IEP teams on how to include assistant (I)(5)(d and e) and paraprofessional (H)(2)(b)(iii) supervision and training on IEPs under support for school personnel, if appropriate. Current language and practices are not consistent or clear. Supervision and training seems to be appropriate activities to place on the IEP if they are designed to ensure students make progress toward goals and objectives and enable services, assessments, accommodations, and modifications to be implemented with fidelity.
6. Provide guidance on how to calculate minutes/hours of special education and related services during classroom-based services. Some students have inflated IEP services because the IEP team included the time students spent physically in the room (e.g., working independently, receiving instruction from the general education teacher). These “extra minutes” do not include time spent receiving specially designed instruction or related services. Some frequencies and durations on IEPs are overly inflated because of this confusion.
7. When do missed services, related or otherwise, need to be made up? Which specially designed and related services need to be made up? The Procedures and Guidance document does not appear to be in alignment with guidance that was provided by OSEP.
8. What is meant by minimum services? Some IEPs are being written with a standard number of minutes/hours under the assumption the student will need and receive more services. This is problematic if the “extra services”, which are not documented on the IEP, remove the child from his/her least restrictive environment.
9. Provide guidance on how to document indirect services on IEPs. The IEP Inter-rater Agreement Tool provided some guidance on how to document these services, but

confusion remains (e.g., direct and indirect services are lumped together as if they are one service).

10. Clarify if consultation can be the only service on an IEP. To some IEP teams, consultation seems like an appropriate stand-alone service delivery model when special education or related service providers attempt to adapt, as appropriate, to the needs of the eligible child, the content, methodology, or delivery of instruction (G)(3)(e). For students who receive speech-language services as specially designed instruction, it is a common practice to use the consultation process to achieve the adaptation of content, methodologies, and delivery of instruction for students on the caseload. Additionally, some special education and related service providers are using consultation as the sole vehicle to support regular education teachers so that children's IEPs can be implemented in the least restrictive environment (G)(3)(b-e).
11. For related service providers, define what is meant by "shall provide direct services". More specifically, provide guidance on what constitutes direct services (e.g., evaluation, screenings, related services, observations, assessment/progress monitoring, and specially designed instruction) to students with disabilities. Please clarify if direct services also include services to students with suspected disabilities who are receiving interventions while they are undergoing a multi-factored evaluation.
12. Especially for educational audiologists and school psychologist, clarify how to calculate how many students with disabilities receive direct services. Is it at any point in time, per school year, or for some other time frame?

Personnel Qualifications and Professional Development

1. Under (H)(1 and 2), provide guidance on if substitutes, who are hired to cover absences and other leaves for speech-language pathologists, need to be licensed by the Ohio Board of Speech-Language Pathology and Audiology **and** hold an Ohio Department of Education Pupil Service License as a School Speech-Language Pathologist. Currently, some LEAs hire substitute teachers without these credentials to provide speech-language services during absences. The same question applies to substitutes who are hired to cover absences for special education teachers (H)(1 and 3). The LEAs who use substitutes in this manner reason that substitutes are not held to the same licensure standards as permanent special education and related service employees.
2. Should speech-language pathology interns be included under (H)(2) in a manner similar to school psychology interns?
3. Clarify which services can be provided by paraprofessionals (e.g., production practice/reinforcement or specially designed instruction). Some paraprofessionals are being used to provide what seems to be specially designed instruction.

Planning Time

1. Provide clarification on which special education and related service providers are eligible to receive planning time under rule 3301-35-05 of the Administrative Code. Some related service providers are not aware they are able to set aside the allowable time for planning activities.
2. Which workload activities can be completed during planning time? Some administrators believe consultation can be completed during planning time.

Conflicting Caseload Ratios

1. Provide guidance on how to rectify the conflict between section 3317.15 of the Revised Code and 3301-51-09 of the Operating Standards (e.g., What if a SLP works in a very large high school building and there are 2,000 or more students there but there are only 20 students who require direct services? Does the district have to assign a full time SLP to that high school setting to satisfy the Revised Code requirement (1 SLP per 2000 students))? Please also clarify if these totals are calculated district wide or per building?

Other

1. Provide guidance and training on the two prong approach to calculating caseload ratios.
2. Provide guidance and training on how to quantify workload (I)(1)(a-d) and consider these in the context of caseload ratios.
3. Provide training and guidance on completing time studies and workload analyses.
4. Provide training and guidance on how to consider time study data and workload analyses.
5. Provide guidance and training on the waiver process.
6. Clarify whether a student, who qualifies as disabled under Section 504 of the Rehabilitation Act, can be counted as a child with a disability for caseload ratio purposes.

Recommended Language Changes for 3301-51-09

The language changes that are presented below consider data that emerged during the Caseload Ratio Study and the companion Supply and Demand Study. These suggested changes are intended to be made to rule 3301-51-09 (I)(1)(a-d) of the Ohio Operating Standards, and consider each of the workload activities that were identified during the course of the study.

- Suggested Language:
 - “For special education and related service providers, all areas of direct and indirect services provided to children with and without disabilities, including:
Time needed for the administration, scoring, interpretation, writing educational records, follow-up, meetings, and other related duties for screenings, evaluations, assessment, and progress monitoring.”
 - Rationale:
 - “For special education and related service providers” was added so LEAs knew to whom this section applied.
 - It might be beneficial to reference the definitions for related services to 3301-51-01 (A)(52) and special education or specially designed instruction 3301-51-01 (A)(58).
 - The use of “direct and indirect” is believed to be more consistent with current IDEA and Operating Standards language.
 - The word “observations” was deleted because it is a form of assessment or evaluation.
 - “Diagnostic testing” was deleted because the word “evaluation” is a more inclusive term.

- The term “evaluation” is preferred because it is more consistent with current IDEA language.
 - The term assessment was added to capture the time needed to collect data for manifestation determinations, progress reports, report cards, interim reports, universal screenings under RTI, and RTI intervention data.
 - The term “meeting” is preferred over “conferences”. “Meeting” is a more inclusive and consistently used term.
 - The phrase “in the school setting” was removed because some services are provided during nonacademic and extracurricular activities or in those settings.
 - The terms “counseling, consultation, and training” were removed because they fell under direct or indirect services.
- Suggested Language:
 - “The severity of each eligible child’s need and the amount, frequency, and locations of services, accommodations, and modifications necessary to attain IEP goals and objectives.
 - Rationale:
 - The phrase “level and frequency of services” was replaced with “the amount, frequency, and location of services, accommodations, and modifications” because it better aligned with current language on the IEP.
- Suggested Language:
 - “Time needed for coordination and management of the program, settings, and equipment; professional development activities and follow-up; third party billing

and other related paperwork; supervision and mentorship, and other related duties; support and training for school personnel; services that support medical needs of children; assistive technology services; participation in performance evaluation process; verbal and written correspondences; school district duties; demands of an itinerant schedule, including the number of settings, the distance between the settings, transitions and travel; and other related duties.”

○ Rationale:

- The phrase “progress related data collection and reporting” was removed because it is captured in another workload section.
- The term “setting” is preferred in lieu of “buildings” because it includes home-based services, different classrooms, community employment, and nonacademic settings (e.g., playground).
- The term “school district duties” is preferred over “school duties” because some duties are more district-based than just school-based.
- The term “transitions” was included in order to capture the time that was needed for set-up and tear-down activities and equipment and to manage the physical space.
- Coordination of “settings and equipment” were added in order to capture the workload related to purchasing/managing/troubleshooting FM systems and other assistive technologies, medical equipment, and adaptive fine and gross motor equipment; modifying the physical space (e.g., in TEACCH classrooms); calibrating equipment (e.g., audiometers); programming

augmentative alternative communication devices; and sound proofing classrooms.

- Third party billing and other related paperwork was added in order to capture the time needed to complete Medicaid billing, Social Security documentation, BCMH paperwork, and timesheets.
 - Supervision and mentorship activities were added in order to capture the time needed to supervise therapy assistants, interns, and paraprofessionals and mentor colleagues.
 - Supports and training for personnel were added in order to better align with language found on the IEP.
 - Assistive technology services were added in order to better align with language found on the IEP.
 - Language referring to participation in the performance evaluation process was added in order to capture time spent on the new Ohio educator evaluations.
 - The terms “transitions” was added in order to capture the travel time between classrooms and buildings. The term “transition” also included time needed for the set-up and tear-down of activities, equipment, and the physical space.
- Time needed for planning in accordance with paragraph (A)(9) of rule 3301-35-05 of the Administrative Code.

Proposed Workload Process for Consideration

Deductions: Standard Workload

Following are the deductions which should be considered before deciding caseload:

1. *Lunch & Breaks*—Time service providers are allocated daily for lunch and breaks. This should be determined based on the information provided in the employment contract. Disregard if you are not entitled to one or both of these.
2. *Planning Time*— Time service providers are allocated weekly for planning. The state minimum for a full-time equivalent service provider is 200 minutes a week. However, a review of the employment contract is required in the event the institution provides for more time.

Strategy to reduce workload:

- a. Ensure planning time is taken at times when students are not available for services.
- b. With the increased focus on high stakes tests and crucial to school improvements, all service providers should meet as an interdisciplinary team during predetermined common planning time. While it may not be required to meet weekly, these should be at least once a month. Scheduled planning time for a common group of students increases student performance.
- c. Establish clear expectations for the work products developed during planning time. Additionally prepare agendas for team planning time to increase efficiency.
- d. Organize the instructional schedule to include sustained time for team planning. Use other teachers, principal, aides, or parent volunteers to free service providers to participate in team meetings.
- e. Allocate resources to support planning times for interdisciplinary teams.

- f. Restructure budgets so that funds are provided for teacher planning time.
3. *School Duties*— Time service providers are required to perform school duties (e.g., bus duty, hall monitor, cafeteria supervision). Review the employment contract for this information or disregard if not responsible for these.

Strategy to reduce workload:

- a. Reassign or reduce in order to reduce workload and increase caseload ratio.
4. *Staff Meetings and Professional Development Activities*—Determine time needed to attend department, building, and district meetings. This should also include time spent attending and participating in professional development activities. This should not include time that is devoted to meeting with parents. Review employment contract for this information. Additionally a review of records of the service providers may also be needed to determine the average amount of time spent at these meetings and activities. Disregard if not participating in these activities.
 - a. Strategy to reduce workload: Use podcasts, distance learning equipment, or videoconferencing technology to alleviate travel and transition times.
 - b. Research indicates that joint planning time is critical for building a professional learning community that schools aspire to achieve. Groups of teachers and service providers who are committed to continuous improvement, shared responsibility, and collective goal alignment will allow for more strategic and coordinated professional development depending on the specific needs of staff.
 - c. Offer relevant professional development by asking teams to identify areas of need based on results of assessment data. Use these areas of weakness to choose professional development that will be relevant to the team.
 - d. Prioritizing, monitoring, and coordinating resources for professional learning.

5. *Supervision & Mentorship*— Time service providers are allocated for supervision and/or mentorship of therapy assistants, paraprofessionals, mentees, clinical fellows, interns, student teachers, and others. This information should be based on a review of the employment contract. Additionally, a review of the service providers records should be included in determining the average amount of time spent on these activities. Disregard if not responsible for these activities.

Strategy to reduce workload:

- a. When allowed and appropriate, use podcasts, distance learning equipment, or videoconferencing technology to provide e-supervision or e-mentoring and reduce travel and transition times.
 - b. Provide clerical support with scheduling and paperwork.
6. *Travel/Transitions*— Time service providers need to travel between classrooms and buildings, including time spent travelling to conduct home-based and/or itinerant services. This should also include time needed for set-up and tear-down of activities, equipment, and the physical space. This information should be based on a review your employment contract and a review of records to determine the average amount of time spent traveling and transitioning. Disregard if not engaged in these activities.

Strategy to reduce workload:

- a. When allowed and appropriate, use technology to provide e-supervision, e-mentoring, or telepractice and reduce travel and transition times.
- b. Use clerical support to schedule itinerant services.
- c. Find out which aspects of school time can be controlled by you and the teacher. In some schools, service providers may discover they can change the scheduling of pull-out programs, extracurricular activities and outside interruptions. Ask the principal to

help control time-wasters such as unexpected visitors and frequent intercom announcements.

- d. Plan for smooth transitions by having materials ready.

7. *Other*

- a. Strategy to reduce workload: Reduce the amount of administrative tasks assigned to service providers, especially school psychologists.

- b. Streamline paperwork when possible to maximize efficiency.

- c. Strategy to reduce workload: Minimize staff relocations and transfers whenever possible.

When administrators consider which service provider needs to be relocated or transferred, the administrator should consider the impact the move has on already established collaborative relationships. Only move service providers once the loss of those collaborative relationships is considered.

- d. Strategy to reduce workload: Review service providers' job descriptions and ensure each assigned duty and workload activity is appropriate.

Deductions: Correspondences, Paperwork, Parent-Student Meetings, and

Diagnostic/Screening

1. *Screenings, Assessments, and Evaluations*—Determine time needed to complete the screening, assessment, evaluation, and progress monitoring processes. This includes time needed for scheduling, planning, collection of data, scoring, analysis, write-up, and other related activities. You may have to review records (e.g., Medicaid billing, time sheets) to determine the average amount of time spent on these activities.

- a. Strategy to reduce workload: Conduct kindergarten, hearing, and vision screenings over the course of several months but before the deadline.

- b. Strategy to reduce workload: Hold screening events in the summer (e.g., Kindergarten Readiness, Orientation events, Kindergarten Registration Events).
 - c. Strategy to reduce workload: Cluster multiple screenings (e.g., speech-language) together at the end of the month or quarter.
 - d. Strategy to reduce workload: Conduct assessments and progress monitoring during ongoing direct services as opposed to completing them as separate activities.
 - e. Strategy to reduce workload: Consider using a diagnostic team to evaluate students and develop reports.
 - f. Strategy to reduce workload: Provide clerical support with scheduling and paperwork.
2. *Conferences and Meetings*—Determine time spent on attending meetings and conferences focusing on an individual student. These meetings and conferences could include RTI/IAT, parent-teacher conferences, IEP, ETR, manifestation determination, mediation, due process, transition planning, and other meetings or conferences. Conferences include meetings with the student and/or parent and not solely another staff member. A review of records (e.g., Medicaid billing, time sheets) should be completed to determine the average amount of time spent on these activities. Disregard if not responsible for these activities.
- a. Strategy to reduce workload: Use technology to participate and reduce travel and transportation time.
 - b. Strategy to reduce workload: Limit team to mandatory IEP team members.
 - c. Strategy to reduce workload: Utilize a Standard Treatment Protocol-based RTI model for Tier 2 non-behavioral interventions. The use of a Standard Treatment Protocol approach will decrease the number of RTI meetings.
 - d. Strategy to reduce workload: Provide clerical support.

3. IEP/Intervention Plan /504 Plan Development and Writing—Determine the amount of time spent on developing and writing IEPs, intervention plans, or 504 plans. Consider time for data collection and analysis, report writing, scheduling, meeting, and follow-up (e.g., distributing copies, completing and mailing prior written notices). If provided with designated release days for IEP writing, only include time that falls outside of these days. Review records to determine the average amount of time spent on these activities. Disregard if not responsible for these activities.
 - a. Strategy to reduce workload: Provide clerical support.

4. Correspondences—Determine time is spent on verbal and written correspondences. This does not include time spent at meetings or conferences which are described above. Disregard if not responsible for these activities.

5. Third Party Billing and other Paperwork Requirements—Determine the amount of time spent on third party billing and other documentation (e.g., Medicaid, BCMH, Social Security, etc.). A review of records (e.g., Medicaid billing, time sheets) should be completed to determine the average amount of time spent on these activities. Disregard if not responsible for these activities.
 - a. Strategy to reduce workload: Provide clerical support.

Calculation of Caseload Ratio: Time left for Direct and Indirect Services

Begin filling in the remaining time slots with services for individual students and/or student groupings. Continue filling in time slots until no time remains. When no time remains, the service provider has been assigned his/her appropriate caseload ratio.

Ensure that services align with every student's LRE, group size, and frequency and duration, as designated on each IEP, IP, and/or 504. Be sure that each group size does not exceed any allowable age

ranges or group size restrictions; this information can be found in the *Operating Standards for Ohio Educational Agencies serving Children with Disabilities*, 3301-51-09.

If a service provider exceeds their caseload ratio, they must request a waiver from the state.

Guidance on Ratio Calculations and Incorporation into a Funding Model

As of July 1, 2013, the Evidence-based Funding Model was replaced by Governor Kasich's Achievement Everywhere formula. Governor Kasich's formula provided for a "ten-fold increase in funds" for students with disabilities. Currently, ISs are funded at a ratio of 1 IS per 20 weighted students with disabilities. Related service providers have maximum caseload caps and not ratios.

The approach that was developed by LEA 2 provided a weighting system for ISs that considered student services and needs, least restrictive environment, accommodations, modifications, and certain workload duties (e.g., supervision of paraprofessionals). Encouragingly, LEA 2's weighted formula was associated with many positive student, workload, and other outcomes (see their summary report for details). Although their study contained several methodological limitations, the weighted approach held promise.

Similarly, the weighting formula that was created by LEA 3 held promise. Students with disabilities were weighted according to the amount and type of specially designed instruction or related services (i.e., calculated in time) they required. Goal areas, accommodations, modifications, and some related workload duties (e.g., assessment) were factored into the weighting formula. Ultimately, each student's weight was determined by the IEP team. As with LEA 2, methodological limitation existed, but positive student, workload, and other outcomes were associated with this weighted formula (see their summary report for details).

The LEA 2 and LEA 3 weighted approaches should be replicated on a larger scale in order to determine if the outcomes generalized to other LEAs. If similar findings were realized,

these weighted formulas could serve as starting points for the creation of a new IS funding system.