The Changing Role of the Itinerant Teacher of the Deaf: A Snapshot of Current Teacher Perceptions

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Abstract

The past two decades have seen unprecedented changes to the field of deaf education. Several factors including technological advances and educational policy have resulted in the inclusion of the majority of students who are deaf or hard of hearing in the general education classroom with various levels of support services. Consequently, the role of the professional educator of the deaf has changed to the itinerant teaching model as the primary service delivery system in deaf education in the nation today. Because this role for teachers of the deaf is evolving, ongoing research is necessary to identify emerging trends, successes, and potential barriers to ensure effective service provision to students who are deaf or hard of hearing. This study sought to obtain a current picture of the roles and responsibilities of the itinerant teacher of the deaf (ITOD) via an electronic survey conducted through postings on a well-known professional website. Participants were 267 itinerant teachers of the deaf. Survey results support previous findings that lack of awareness of the needs of this population of students and lack of time due to increasing caseloads are barriers to service provision. Teachers reported being better prepared for the itinerant role in their preservice program than in past studies, and the use of mentorship appears to be an emerging teacher support strategy. Results supported the adequacy of the itinerant model in supporting students who are above, at, or within 6 months of grade level expectations, with increasing concerns about the ability to provide adequate levels of support to students in inclusive settings with greater educational delays via the itinerant model. Implications for these findings for the field as well as potential questions for future research on this topic are discussed.

Keywords: itinerant, deaf education, survey, service delivery model

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Introduction

Before 1975, more than 85% of deaf and hard of hearing (DHH) students attended specialized schools; today more than 85% of students are in general education settings (Shaver, Marschark, Newman, & Marder, 2014). Reasons for this statistical flip include the inclusion movement, early hearing detection and intervention (EHDI) programs, and technological advances. The trend of DHH students attending their local school and receiving instruction in the general education classroom is expected to continue. Consequently, the primary model of service delivery for DHH students currently in the United States is itinerant services from a teacher of

the deaf (ITOD) (Antia, 2013; Luckner & Ayantoye, 2013). An ITOD is defined as a "professional who provides instruction and consultation for students who are deaf or hard of hearing and most generally travel from school to school" (Luckner, 2006, p. 94).

Previous studies have sought to investigate ITOD roles, challenges, and perceptions. Early research identified itinerant practices in deaf education as differing significantly from traditional deaf education models particularly in the amount of time spent by the ITOD in non-teaching activities such as travel, in supporting the general education teacher, and in serving a wide range of students across grades and need intensities (Luckner & Miller, 1994; Yarger & Luckner, 1999). In the 2000s, research continued to confirm early findings and expand our understanding of this professional role. The importance of the ITOD being able to effectively communicate with a variety of other professionals as well as the potential isolation an ITOD may experience were highlighted in studies by Luckner and Howell (2002) and Kluwin, Morris and Clifford (2004). Foster and Cue (2009) surveyed 210 ITODs and found that services to DHH students comprised the primary duties of the ITOD, and consultation to other professionals the second; although, a shift towards increasing amounts of consultation or indirect services was noted. A second study surveying 356 ITODs (Luckner & Ayantoye, 2013) confirmed Foster and Cue's findings that ITODs ranked services to DHH students as their most important duty and consultation to other professionals and parents and the second.

Common challenges experienced by ITODs repeatedly appear in the research. Overwhelmingly, ITODs report lack of time as a significant barrier (Luckner & Dorn, 2017; Antia & Rivera, 2016; Compton, Appenzeller, Kemmery, & Gardiner-Walsh, 2015; Luckner & Ayantoye, 2013; Foster & Cue, 2009); specifically, increasing caseloads of students spread out amongst many school buildings and insufficient time for collaboration with other team members. Additional barriers faced by ITODs include difficulty scheduling services, navigating state and district policies, lack of follow-through by other team members, lack of administrative support, professional isolation, and stress and burnout (Antia & Rivera, 2016; Kennon, & Patterson, 2016). Finally, the issue of pre-service and in-service preparation has been discussed in the literature. Foster and Cue (2009) found that the majority of ITODs they surveyed learned their skills on the job and felt ill-prepared for this role by their pre-service programs. Additionally, ITODs from this study wanted professional development that focused specifically on the needs of ITODs. Later research confirmed that university programs were still not effectively preparing teachers of the deaf for itinerant roles, but that satisfaction with professional development on this topic was increasing (Luckner & Ayantoye, 2013).

In recognition of the evolving roles and responsibilities of the ITOD, the purpose of this study was to update current understandings by providing a snapshot of current ITOD practices and perceptions. Specific research questions posed were, 1) What do the caseloads of ITODs look like? 2) What is the nature of services ITODs provide and how do they view the adequacy of these services? 3) Do ITODs perceive their preparation programs equipped them for this role?, and 4) How do ITODs perceive professional administrative support?

Method

The current study utilized a quantitative survey design with the data source being responses to 10 questions (each with subquestions) on an electronic survey. The survey was developed using Survey Monkey and was distributed to over 11,800 subscribers of Supporting Success for Children with Hearing Loss (SSCHL) in their bi-monthly update and was available for a period of one month. SSCHL, is a 'go-to' site for professionals and family members seeking more information about hearing loss and what can be done to better support the future learning and social success of children with hearing loss. It receives approximately 20,000 unique hits per month. Professionals, identifying as teachers of students who are deaf or hard of hearing who provide itinerant services, were invited to complete the survey. Survey items were developed with the desire to investigate the perceptions of ITOD on their roles and responsibilities, especially regarding caseload variations, inclusion practices, experience in the field, and perceived level of supervisor support. In total, 267 ITODs completed the survey. Descriptive analysis of frequency counts, means, and medians of the data were calculated using Excel. Results of this analysis are displayed below in narrative and graphic representations.

Results

Participants

The 267 ITODs who responded to the survey were balanced between novice and veteran teachers: 32% have been an ITOD for 1-5 years, 21% for 6-10 years, 19% for 11-15 years, 9% for 16-20 years, and 16% for 21 or more years. Of the total number, 40% indicated they are planning on leaving the field within five years. Part-time teachers comprised 11% of respondents. About 60% of the respondents have served in the role of ITOD in a center-based or resource room program, but are currently working in an ITOD role or providing services in both center-based and itinerant service models.

Caseload. The majority of ITODs in the study had caseloads ranging 10 to more than 55 students. Caseload size by percentage of participant were as follows: 10-15 students: 36%, 16-25 students: 30%, 26-35 students: 16%, 36-45 students: 10%, 46-55 students: 5%, and more than 55 students: 3%. Of the total student caseload, DHH students with additional needs (DHH+) comprised approximately 30% of participant caseloads. ITODs served an average of 10.6 buildings per month, with the range being 1-60 buildings and a median of 9 buildings. Figure 1 displays reported caseload size.

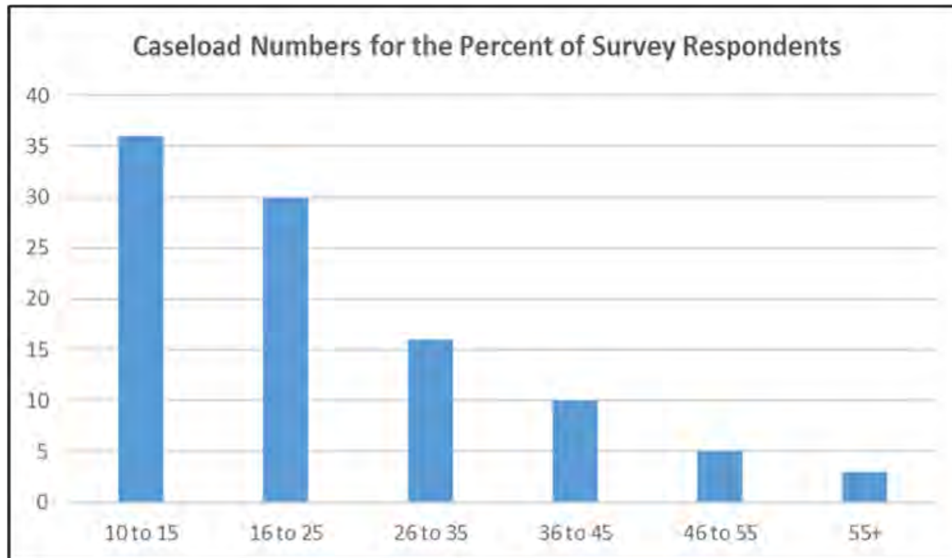

Figure 1. Caseload Size

Participants were asked about the grade level performance of DHH students on their caseload *with no additional disabilities*. Respondents considered their caseloads and identified the percent of their caseloads that were performing at each of the identified grade level performance descriptions. The median, or the center point at which 50% of the responses are below, and 50% of responses are above, are reported as being most representative for this body of data. Figure 2 shows the median values for percentage of caseload performance relative to grade level.

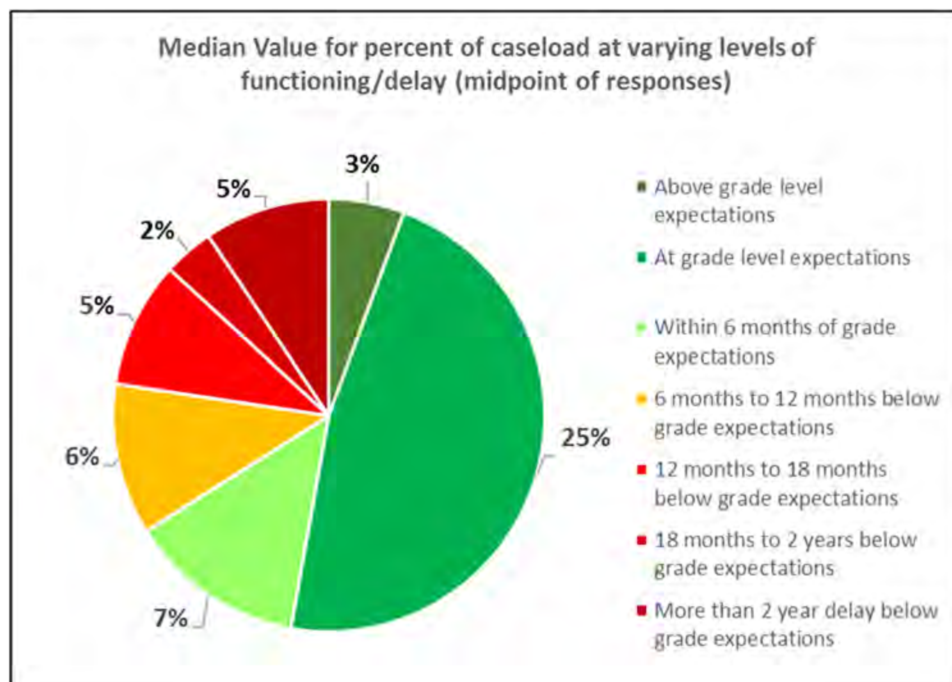

Figure 2. Caseload Performance Relative to Grade Level Expectations.

The median value for the percentage of caseload functioning at grade level was 25%. There were relatively few students served who were felt to be exceeding grade level expectations. Median values were similar at 6-7% of caseload functioning within one year of grade level and the same at 5% of caseload behind grade level by more than one or two plus years. The median percentage of caseload that was functioning above grade level was 3%.

Nature of Service Delivery. To develop a picture of the various aspects of service provision to DHH students from ITODs, several survey questions addressed this topic. Questions were related to service models, frequency, intensity, perceived adequacy of services as well as perceptions of Individualized Education Planning and the impact of full-inclusion models.

Direct vs. Indirect. Participants were asked what percentage of DHH students on their caseload received services categorized by one of four types 1) direct one on one or small group, 2) consultation only to special educators, 3) consultation only to general educators, and 4) team teaching. As shown in Figure 3, participants indicated the majority of services they provided to DHH students on their caseloads were one on one or small group direct services at 88%. Consultative only services to regular education teachers were provided second most frequently at a median of 9% of caseloads and consultation only services to special education teachers occurred for a median of 7% of caseloads. Team teaching only occurred for a median of 8% of caseloads of the services ITODs in this study were providing.

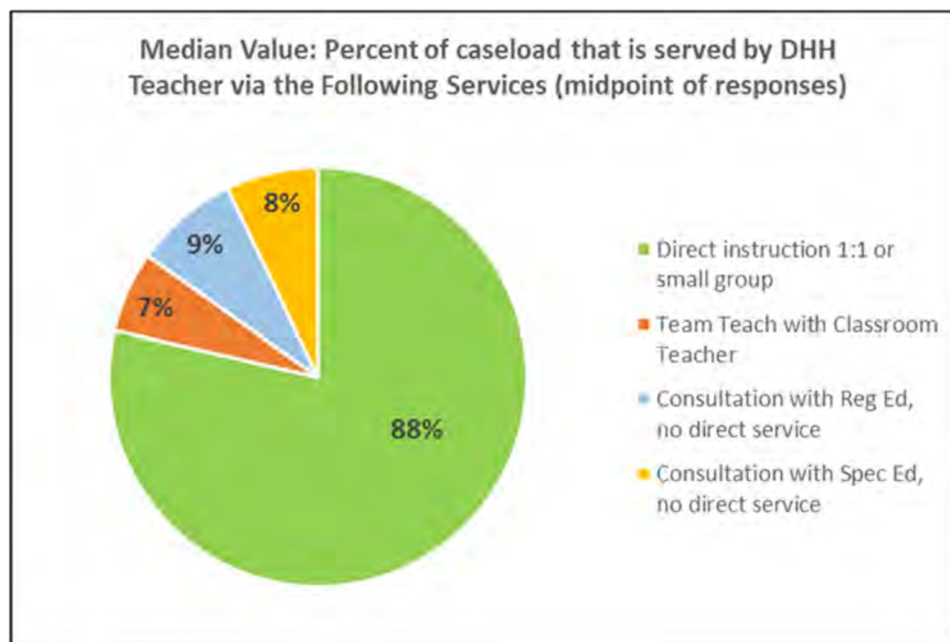

Figure 3. Median Percentages of ITOD Services Provided by Type

Relative to students who are DHH+, the median response for participants indicated that 31% of caseloads were comprised of students with hearing loss plus other disability conditions. When asked what percentage of their caseload received direct ITOD services versus consultation only, the median responses indicated 75% of DHH+ students receive direct ITOD services, and 20%

receive consultation only. Respondents further indicated that they felt that 90% of students who are DHH+ receive an appropriate amount of service.

Intensity of Services. For DHH students on their caseloads *whose only disability is hearing loss*, participants were asked to indicate what percentage of these students were receiving direct ITOD service minutes in each of nine possible time options. In rank order from the most common service minutes amount provided, to the least common amount of minutes provided, frequency counts indicate the following:

1. 45 minutes per week (median 30%).
2. 4-5 hours per week (median 11%).
3. 3-4 hours per week (median 10%)
4. 90 minutes per week and 30 minutes per week (tied at a median of 8%)
5. 2-3 hours per week and 1 hour per month (tied at a median of 1%)
6. 60 minutes per week and 30 minutes per month were negligible

Adequacy of Services. Participants were asked to judge whether or not the amount and type of services they were providing were adequate for DHH students on their caseloads who had no additional disabilities and for those students who are DHH+. When asked what percentage of their caseload of DHH-only students fell into certain levels of adequate services, median values for percent of caseloads are as follows: 1) very appropriate level of services to meet the needs = 70%, 2) close to what is needed to meet the needs = 17%, 2) about ¾ of what is needed to meet the needs = 14%, 3) about half of what is needed to meet the needs = 13%, 4) about ¼ of what is needed to meet the needs = 10%, and 5) probably more service than needed = 8%. Participants were also asked the percentage of their DHH only students whose needs were not being met through consultation only to either the general education teacher or the special education teachers. The median value for consultation only to the general education teacher was 8% and 6% to the special education teacher.

Thus, as summarized in figure 4, the responding teachers felt that the majority of their caseloads were receiving very appropriate (70%), close to what is needed (17%), or service that exceeds needs (8%). The results of a prior survey question indicated that of caseloads, the median number of students who were one year delayed in grade level expectations was 5%, 1.5 years delayed was 2% and greater than two years delated was 5%. The model of ITOD service provision is likely insufficient to provide for the needs of students with these more extreme levels of need, thus creating a situation in which teachers perceive that a substantial proportion of ITOD caseloads are felt to be underserved by ¼ (14%), ½ (13%), or ¾ (10%) of the service time actually needed. Part of this dissatisfaction may additionally be explained by the concerns that consultation only services are not sufficient to meet student needs.

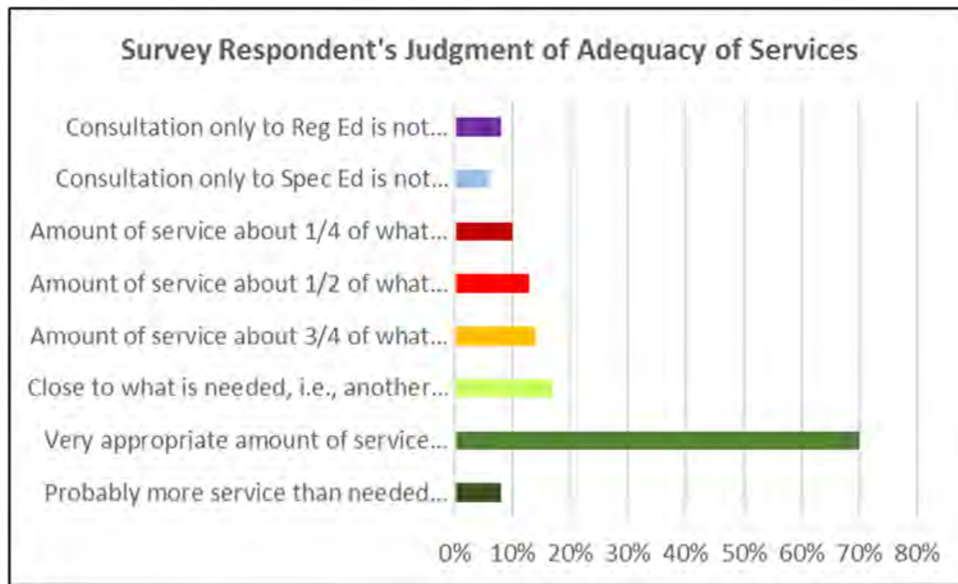

Figure 4. Median Percentages of Perceived Adequacy of Services.

Individual Education Plans and Inclusion. Two survey questions were designed to gather data regarding ITOD perceptions of the IEP process and the perceived impact of the full-inclusion models on their practices. Tables 1 and 2 display the survey statements and the corresponding percentage of ITODs that answered true for each statement. The result indicated more than half of the respondents perceived limited time and lack of understanding of DHH needs by other IEP team members as the greatest barriers to service provision. While nearly half of the responding ITODs are working in districts that have not embraced a full inclusion model, participants did indicate experiencing pressure to move to more indirect delivery (consultation) in lieu of direct services. Furthermore, less than 10% of participants indicated their districts had provided professional development for inclusive service delivery.

Table 1
ITOD Perceptions of the IEP Process

Survey Statement	Percentage of Participants Answering True
I have a lot of schools and only so much time available. When a new student is identified, I can only serve him/her the amount of time I can free up on my schedule, even if there is a clear need for more direct DHH service time. (My administration knows this and is not interested in hiring more DHH staff).	51.46%
The IEP teams usually underestimate the level of student needs, thereby specifying DHH services that are not as intense/frequent as are needed by most/many of my students.	50.49%

My district uses a service matrix or some other standard process when considering the amount of service time that each student needs.	25.24%
We are an ‘inclusion school district,’ and all pull-out services are highly discouraged, even if a student has one year or greater learning delays.	21.84%
My administration has told me that I can only spend a certain amount of direct service time (or maximum amount) with any one DHH student.	19.90%
My administration has told me that I can only provide consultation to the teachers that serve the identified students who are DHH (or there are clear guidelines on when DHH direct services will be allowed).	12.14%
My district uses a service matrix or some other standard process when considering the amount of service time that each student needs.	25.24%

Table 2
ITOD Perceptions of Full-Inclusion Impact

Survey Statement	Percentage of Participants Answering True
Does not apply. My district has not embraced ‘full inclusion practices,’ or these practices have been deemed to not apply to (most) students with hearing loss.	45.78%
My district has provided little or no training in team-teaching and/or consultation when supporting the DHH student in the inclusive model. I do not feel comfortable in this role.	30.12%
Fewer pull-out direct services are being allowed.	27.71%
All or almost all special ed services are provided by a small special education teaching staff and aides. Inclusion in this case, means I consult with the special education staff so they will address the DHH specific needs within the class or during ‘study session’ pull out.	24.50%
Consultation is being recommended instead of direct service.	20.88%
Team-teaching is being encouraged instead of direct service. Classroom teachers are generally welcoming when I come in to teach lessons to the class or a small group.	9.64%
My district has provided training in team teaching and/or consultation when supporting the DHH student in the inclusive model. I feel comfortable in this role. Administration has helped to make classroom teachers	7.63%

understand these changes and the purpose of my DHH services.	
Team teaching is being encouraged instead of direct service. Classroom teachers are often resistant to collaborative planning and when I come in to teach lessons to the class or a small group.	7.23%
Consultation is being recommended instead of direct service.	20.88%
My district has provided training in team teaching and/or consultation when supporting the DHH student in the inclusive model. I feel comfortable in this role. Administration has helped to make classroom teachers understand these changes and the purpose of my DHH services.	7.63%
My district has provided training in team teaching and/or consultation when supporting the DHH student in the inclusive model. I need more training and support from administration to feel comfortable in this role.	5.22%

Preparation. The survey included questions about the level of preparation the respondents felt they received from their preservice university training program to fulfil the various roles a teacher of the deaf and hard of hearing could assume, including that of itinerant teacher of the deaf and hard of hearing.

Table 3
ITOD Perceptions of University Preparation

Survey Statement	Percentage of Participants Answering True
My university training program prepared me to teach and support academics to a small group of students who are deaf or hard of hearing. I was not prepared (adequately) to fulfill the role of an itinerant teacher of the deaf and hard of hearing.	38.93
My university training program prepared me for any role as a DHH teacher - school for the deaf, center-based program, resource room, itinerant, team-teacher, consultant.	26.32
My university training program did a good job of preparing me to work as an itinerant teacher of the deaf/hard of hearing.	20.61

For preservice preparation, results were mixed with slightly more teachers indicating their university program did prepare them for itinerant work than not. Participants were also asked to comment on how well prepared they felt to meet the needs of DHH+ students on their caseloads.

Figure 5 indicates that 63% of ITODs felt mostly or fully prepared to serve DHH+ students while 26% said they felt fairly prepared, and 11% said they felt only a little prepared or not at all prepared.

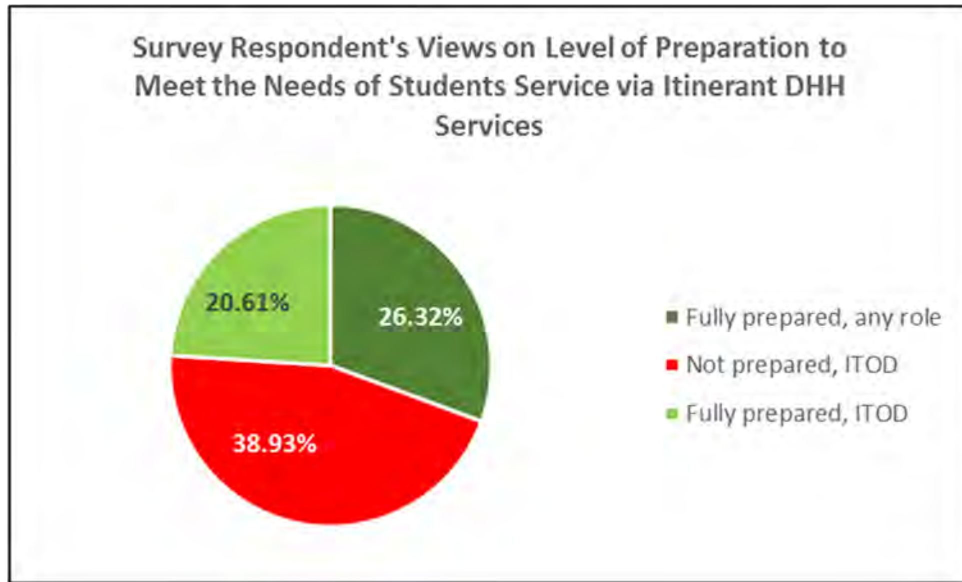

Figure 5. Perceived Preparedness to Serve DHH+ Students

Support. Two survey questions gathered data relative to ITOD perceptions of how well they were supported as professionals regarding collegial support, mentorship, administrative support, and professional development. Table 4 and Figure 6 illustrate ITOD "true" responses to statements of in-service support. Table 5 provides ITOD "true" responses to statements of supervisor support.

Table 4
ITOD Perceptions of In-service Support

Survey Statement	Percentage of Participants Answering True
I felt lost when I first started in the role of an itinerant DHH teacher. I learned through trial and error as I applied my university teacher training to the role of itinerant support.	43.51
Our DHH Team has regular meetings to discuss issues, for professional development, and/or participation in professional learning collaboratives. We continually work together to learn more about our roles and how to improve our services.	38.93
When I was hired into the itinerant DHH teacher role, I was paired with one or more mentors (officially or unofficially) who really helped to get me up to speed with what I should be doing in my role.	33.97

I've learned much of what I know about being an itinerant mainly from books like Steps to Success, Building Skills for Success in the Fast-Paced Classroom, Advocacy in Action, etc.	22.14
My school district/region/state has provided substantial inservice training to teachers of the deaf/hard of hearing. We are really supported in our professional development.	16.03
My district does not support me in receiving professional development specific to improving my services to DHH students.	9.54

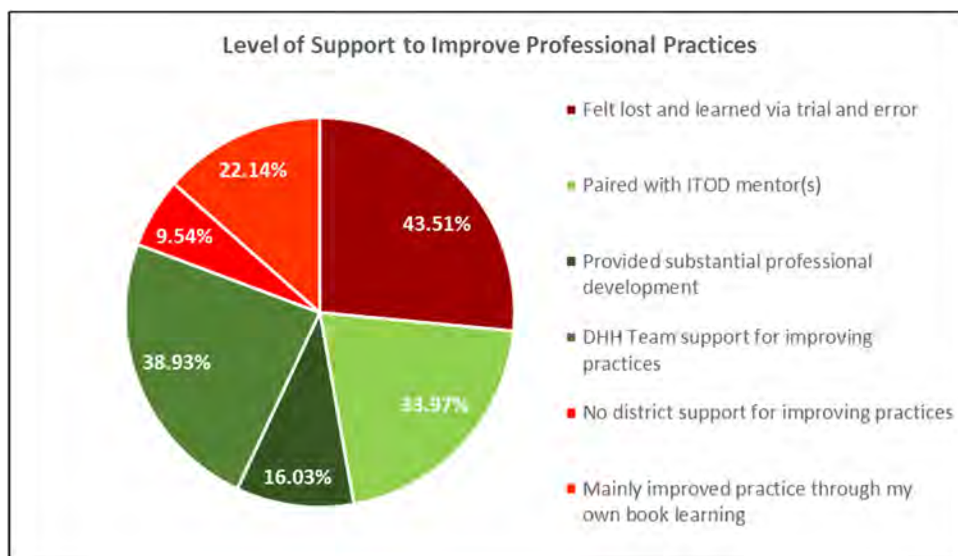

Figure 6. Perceived Levels of Support

Table 5
ITOD Perceptions of Supervision

Survey Statement	Percentage of Participants Answering True (n=259)
My supervisor is terrific! S/he really understands students and will 'go to bat' for our students and me when needed.	35.91
I find that I am continuously advocating for the needs of students with hearing loss because my supervisor does not understand, although he/she is willing to hear my point of view and is improving in DHH knowledge.	33.98
My supervisor has intervened before when a school building principal has been unsupportive of my providing appropriate services, the student's accommodation needs, classroom teacher resistance, etc.	28.57
My supervisor is over all of the speech pathologists and DHH (maybe other groups too). This person has very	24.71

basic knowledge of meeting the needs of children with hearing loss.	
I'm in a small district and work directly for the Special Education Director. This person does not have specialized DHH knowledge.	22.39
My supervisor is a long-time educator of students with hearing loss (or Interpreter background or speech AVT/LSLS) and really understands the unique needs of these students.	20.46
My supervisor is over DHH and blind/visually impaired. This person does not have specialized DHH knowledge.	11.58
We used to have a terrific supervisor with a background in DHH who really 'got it.' She left, and the district hired someone without (sufficient) knowledge, and now our students are no longer receiving the level of appropriateness of services they used to receive.	10.42
My supervisor rarely or never intervenes when a school building principal has been unsupportive. I am generally told to 'go with the flow' of the building and not 'make waves.'	8.88
I have been warned to not advocate so much for the needs of my students (i.e., an act of insubordination, mentioned in my evaluations, 'stern talks,' etc.)	6.95

Discussion

In response to research question one, *What do the caseloads of ITODs look like?,* the majority of ITODs in this study (36%) had 10-15 students on their caseload, and another 30% had between 16 and 25 students. Consistent with national estimates (GRI, 2011), approximately 30% of caseloads were comprised of students who are DHH+. ITODs served an average of 10.6 separate school buildings. ITODs reported a median of 25% of their students were performing at grade level or above (3%). In comparison to data reported by in 2013 by Luckner and Ayantoye, average caseload size and number of buildings served by ITODs has increased. Grade level performance was not measured similarly in both studies to allow for direct comparison. Research question two asked, *What is the nature of services ITODs provide and how do they view the adequacy of these services?* Consistent with previous studies, ITODs most commonly provide direct pull out services to the DHH students on their caseload. They also provide a substantial amount of consultative services, but very few ITODs reported using team teaching models for service delivery. The most common frequency for these direct services was 60 minutes per week; however, many students were receiving 120-180 minutes per week. The current study collected these data relative to students whose only disability was hearing loss. Luckner and Ayantoye reported the average frequency of direct services to be 155 minutes per week but did not differentiate by subgroups of students.

The responses to two of the survey questions, considered together, provide insight into perceived inadequacies of service level. The perceived adequacy of the level of services provided and the perceived performance of students to grade level expectations for students who are DHH-only, appear in Table 6 below. The medians reported for the adequacy of services were in proportion, and roughly 2.5 times the medians reported for the grade level expectations. The largest group identified were those students receiving ITOD services who were performing at the expected grade level and the majority of respondents reported that the level of service received was appropriate. Respondents reported that the median of 7% of their caseloads had a delay in expected performance within 6 months, for which 17% identified a need for an additional 15 minutes per week. While greater delays in expected performance are a minority of caseloads, there continues to be a perception than 10% or more of these students receive inadequate levels of service to meet their needs. This suggests that the ITOD model of services is most adequate for students above, at or within six months of grade level expectations. The realistic ability for an ITOD to adequately meet the level of student needs appears to decrease as greater delay in student performance is observed.

The majority of students appear to be performing above, at, or within 6 months of expected performance levels and for these students ITOD services appear to be provided at an adequate level. The itinerant model for supporting students with hearing loss cannot be assumed to adequately meet the needs of students with greater delays in expected school performance. A continuum of alternative placements, including intensive resource room and center-based options are necessary to meet the unique needs of all students with hearing loss.

Table 6
Comparison of Perceived Student Performance to Expectations and Level of Adequacy of Services

<table>
<tr><th colspan="2">Perceived Performance to Grade Level Expectations</th><th colspan="2">Perceived Adequacy of Level of Services Provided</th></tr>
<tr><td>Above grade level expectations</td><td>3%</td><td>8%</td><td>Probably more service than needed</td></tr>
<tr><td>At grade level expectations</td><td>25%</td><td>70%</td><td>Appropriate amount of service</td></tr>
<tr><td>Within 6 months of expectations</td><td>7%</td><td>17%</td><td>Close to what is needed (another 15 minutes desired)</td></tr>
<tr><td>6 months to 12 months delay</td><td>6%</td><td>14%</td><td>About ¾ of what is needed</td></tr>
<tr><td>12 months to 18 months delay</td><td>5%</td><td>13%</td><td>About ½ of what is needed</td></tr>
<tr><td>18 months to 24 months delay</td><td>2%</td><td rowspan="2">10%</td><td rowspan="2">About ¼ of what is needed</td></tr>
<tr><td>More than 2 years delay</td><td>3%</td></tr>
</table>

Relative to how ITODs perceive the adequacy of the services they were providing, results of the current study differ significantly from the 2013 data. Luckner and Ayantoye reported 86% of ITODs felt their services were appropriate for the needs of their students. The construction of the current study prevents a similar percentage to be derived. However, it appeared as though the majority of ITODs said that DHH students on their caseload whose only disability was hearing loss, were receiving adequate services to meet their needs, whereas medians in the 10% to 14% range represented inadequate levels of service to students who were DHH-only. It appears that ITODs are perceiving that the pressure to serve more students through insufficient service time and indirect models is impacting student outcomes. When it comes to students who are DHH+

however, the results are more encouraging. This population is more likely to receive direct versus indirect services (median of 75%) and ITODs in this study reported that a median of 90% of DHH+ students on their caseloads was receiving adequate levels of services.
The IEP is an integral component of special education. ITOD perceptions of the IEP process in this study indicate previously identified barriers to effective service provision are still present. More than half of the participants agreed that the rest of the IEP team often underestimated the needs of the DHH student. The majority of ITODs also felt pressure to determine services based on their availability rather than student need. It is apparent that time, scheduling and lack of administrator support for appropriate services remain concerns for ITODs. Interestingly, 25% of ITODs reported the use of a service intensity scale or matrix to guide the IEP team in determining services. The development of such tools was recommended by Antia and Rivera (2016) as a potential solution for standardizing a rationale for service delivery frequency, and intensity based on student need rather than service provider availability. The finding that 25% of respondents use some kind of standardized guide to determine the level of service intensity does not appear to be reflected in their perceptions of the level of adequacy of service levels being provided. If one quarter or 25% of the respondents actually used such a guide, and their levels of service were indeed adequate, then the remaining 75% of the respondent perceptions are actually more skewed toward inadequacy than the data set as a whole reflects.

While the term inclusion does not appear in IDEA, this term is often used interchangeably with the least restrictive environment (LRE), a main component of special education law. Inclusion can be applied in different ways across school districts and states, the impact of which is unclear. Currently, 46% of ITODs reported that they served in districts that had not adopted a full inclusion approach. However, a substantial number (28%) indicated fewer direct services were allowed and they were encouraged to replace direct services with consultation. Twenty-five percent of ITODs indicated this consultation took the form of meeting with a small special education team who carried out direct services with the DHH students. Debates regarding placement (Moores, 2010) and personnel (Marlatt, 2014) in deaf education have been noted in the literature. What is particularly concerning is that while indirect services are increasing, more than 30% of ITODs in the current study reported they have had insufficient professional development in collaborative practices and do not feel comfortable using this approach to service delivery.

As noted in previous research, pre-service preparation programs have been slow to move from preparing teachers of the deaf for self-contained classrooms to itinerant and inclusionary service delivery roles. The answer to research question three, *Do ITODs perceive their preparation programs equipped them for this role?*, the results are encouraging. Twenty-six percent of ITODs said their university programs prepared them for a variety of service delivery models, including itinerant, and 20% said their programs did a good job of preparing them to be an ITOD. Further examination of the data indicated that ITODs who were newer to the field were more likely to indicate that they were better prepared in university for this role. It, therefore, suggests that teacher preparation programs are recognizing the need for ITOD training and are modifying their curricula accordingly.

The final research question posed was, *What are ITOD perceptions of professional support?* ITODs in this study report their deaf education colleagues are sources of support. Thirty-nine

percent identify their local DHH team members as mutual support. Surprisingly, 34% reported they were provided with a mentor who helped them learn their role. A recent call to action highlighted the need for addressing the acute stress and burnout rates amongst ITODs (Kennon & Patterson, 2016). Mentorship has been well-researched in teacher education and in special education, but its specific application to the field of deaf education is lacking (Rynda, 2016). Finally, ITODs generally did not report dissatisfaction with their supervisor or administrator; however, they did indicate the ongoing need to educate and advocate for the necessity of their services. As a low-incidence disability, administrators (and other school professionals) are often unaware of the unique needs of this population (Miller, 2015). Kennon and Patterson (2016) found that this professional isolation and the regular need to justify or "prove" why their services were required contributed to stress and burnout amongst ITODs.

Conclusion

The current study revealed some consistencies as well as changes in the ITOD's role when compared to previous work on the topic. The challenge of educating others of the unique needs of DHH students and the subsequent need to advocate for ITOD services remains at the forefront. Investigation of effective avenues for accomplishing this task which includes the development of a scope of practice for ITODs is recommended. Increasing amounts of consultative and collaborative service delivery models call for systematic professional development for teams serving DHH students on how needs can be addressed within the general education classroom and responsibility shared by team members through true collaborative service provision. Limited research is available regarding this topic; however, evidence does indicate collaborative consultation models in deaf education can be successful when implemented systematically (Pedersen, 2013).

The majority of students appeared to be performing above, at, or within 6 months of expected performance levels and for these students ITOD services were judged to be provided at an adequate level. While greater delays in expected performance are a minority of caseloads, there continues to be a perception than 10% or more of these students receive inadequate levels of service to meet their needs. This suggests that the ITOD model of services is most adequate for students above, at or within six months of grade level expectations. The realistic ability for an ITOD to adequately meet the level of student needs appears to decrease as greater delay in student performance is observed. The itinerant model for supporting students with hearing loss cannot be assumed to adequately meet the needs of students with greater delays in expected school performance. With due respect to education agencies who direct that all special education students be educated in inclusive mainstream classrooms, a continuum of alternative placements, including intensive resource room and center-based options continue to be necessary to meet the unique needs of all students with hearing loss. Moving forward, the need for continued efforts to assess the actual adequacy of services, in addition to ITOD perception of adequacy, are necessary (Antia & Rivera, 2016).

In the preservice arena, ITODs in the current study are reporting better preparedness for this role than in previous research. Continued emphasis amongst professional organizations in the field such as the Association for College Educators of the Deaf and Hard of Hearing must be made on how to effectively prepare teacher candidates for the complex aspects of the ITOD. Attention to

preservice ITOD issues must extend into the transition to in-service. This study revealed the use of mentoring to support ITODs is gaining ground. This study found that caseload size and number of buildings served by ITODs is increasing. Efforts to provide multiple means of support, including mentorship, will be vital to reduce attrition and maintain a workforce of effective ITODs.

Study Limitations

It is unknown if the ITODs in this study served in rural or urban areas, which may have provided insight into whether or not the identified barriers of time and availability were more acute in rural areas. The survey asked respondents to consider their caseload and to report on the approximate percentage of their caseload as it applied to the various survey questions. While this is a logical way for teachers to consider the differences and similarities among their caseloads of students, the analysis required that median results be used and not an average score for each survey item which would have been easier for readers to understand. The survey choices for reporting percentages of caseload which translated into median scores also did not allow for comparisons to previous research data.

The Supporting Success for Children with Hearing Loss website that sent out the bimonthly update information that included this survey was sent to subscribers who were both parents and professionals. While it was stated that this survey was to be completed specifically by itinerant teachers of the deaf and hard of hearing from the United States, it is possible that there may be a minority of responses that do not represent this group. Finally, while this was an anonymous survey with no location identified by the respondents, as the ITODs were asked to evaluate their own services, it is possible that some respondents may have wanted to paint a view of their services that was skewed more positively or negatively, and not present the actual situation.

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