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# Collaborative Practices Among Professionals in Special Education Workplaces 

Shannon Lynne Coughlin<br>University of New Hampshire, slk722@wildcats.unh.edu

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COLLABORATIVE PRACTICES AMONG PROFESSIONALS IN SPECIAL EDUCATION WORKPLACES

by<br>SHANNON COUGHLIN

## HONORS THESIS

## Submitted to the University of New Hampshire in Partial Fulfillment of the Requirements for the Honors in Major for the Degree of Baccalaureate of Science in Communication Sciences and Disorders

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## COLLABORATIVE PRACTICES AMONG PROFESSIONALS IN SPECIAL EDUCATION WORKPLACES


#### Abstract

The aim of this study is to examine collaborative relationships existing among professionals working in special education and specifically the relationships between school-based speechlanguage pathologists (SLPs) and elementary school classroom teachers. A survey was administered to classroom teachers in New Hampshire. The first part of the survey asked teachers their opinions regarding the extent to which SLPs should be collaborating with teachers. The second part of the survey asked teachers to estimate how often they engaged in collaborative practices with the SLP currently working in their school. Results indicated that teachers would prefer SLPs to spend significantly more time in the classroom ( $p=>.05$ ) and co-teaching with teachers ( $p=>.05$ ). The results are discussed in regard to obstacles that may reduce collaboration between teachers and SLPs. This research highlights the obstacles that teachers and SLPs often face in collaboration and provides implications for solutions to overcoming those obstacles.


Keywords: collaboration, school, teachers, speech-language pathologists

## Introduction

## Human Behavior in Work Settings

When one thinks about a successful workplace, often the level of productivity and profit of the organization comes to mind. However, these two measures are directly impacted by the collective behaviors and practices of the employees who comprise the workplace (Salas, Kozlowski, \& Chen, 2017). An organization could possess great promise due to abundant financial resources, but if there is a lack of cohesiveness and understanding among co-workers, the ability for the organization to perform most effectively could be impaired. Therefore, it may be more accurate to state that the success of a workplace is determined by the people within the organization and their actions.

Industrial-organizational (I-O) psychology is an area of research concerned with identifying behaviors of individuals within a workplace, understanding the reasoning behind those behaviors, predicting outcomes due to the behaviors, and investigating how the behaviors can be changed (Giberson, 2015). When human behavior in the workplace is analyzed, the recognition of how it connects to the strengths and flaws experienced in the work environment can be achieved allowing employees to actively engage in the improvement of their overall performance.

Organizational citizenship behaviors (OCBs) are positive, voluntary behaviors of employees not mandated by contract (Ozer, 2011). Helping other co-workers with everyday operations by offering advice or problem-solving together is at the root of OCBs. The result of OCBs is strengthened employee interactions, often referred to as team-member exchange (TMX) (Ozer, 2011). The relationships existing among co-workers influence the success of both individuals and the organization as a whole. As effective TMX is built within a workplace, trust
and a sense of belonging is developed among team members (Farmer, Dyne \& Kamdar, 2015). As a result, co-workers are more likely to collaborate and contribute toward a common goal when they feel like they are a valued member of a team. If an organization is not performing to its expected standard, the consideration of employees' roles and the quality of their relationships could reveal the need for change in how employees communicate and interact with each other.

## Collaboration in Educational Settings

Although I-O psychology is often directed toward businesses, it can also be applied to educational work settings. Historically, collaboration among school professionals has been a challenge. The isolation experienced by teachers has been attributed to factors such as the nature of the occupation (Ostovar-Nameghi \& Sheikhahmadi, 2016). Classrooms have typically been separate entities where a teacher is removed from other educational professionals and the main focus is teaching the children who are in their room. Opportunities for discussion among colleagues regarding teaching practices is limited in such a setting. Beyond the physical environment of schools, teachers have also experienced isolation due to the structure of a school day (Ostovar-Nameghi \& Sheikhahmadi, 2016). Teachers are expected to teach lessons for a certain amount of time each day. The restriction in when teaching can be completed leaves little time for collaboration among teachers. However, there has been an increasing emphasis in today's schools on communication among teachers despite obstacles such as the aforementioned. Schools have been shifting from educators teaching in sole accordance with their personal standards to educators sharing new ideas and advice with one another in order to improve the delivery of education to their students (Avalos, 2011).

Currently, it is widely accepted that a team-based approach to teaching is a key component of successful education of today's students. Each educational professional has a
unique perspective to share, that when offered, could influence the way in which their colleagues teach. The teamwork employed by teachers in their everyday operations promotes "teachingquality, innovation, and school effectiveness as well as produces a sense of satisfaction and commitment among teachers" (Somech \& Drach-Zahavy, 2011). Despite the consensus that collaboration is positive and arguably essential in schools, challenges are often faced, sometimes resulting in the resistance of teachers to engage in teams. Misunderstanding of team members’ roles, lack of enough time for meetings, and even lack of trust among team members can contribute to breakdowns in collaboration, (Friend, 2014). Educators, however, need to address the obstacles their teams face in order to provide the best possible education for their students. Teams become especially important when providing services to students with special needs (Hernandez, 2013). Children with disabilities typically require the expertise of various disciplines in order to be successful.

## Collaboration within Special Education

Special education is a constantly evolving system for children who require more intensive instruction than what is available in their general classroom. Depending on the severity of a student's disability, special education could involve a student meeting with a speech-language pathologist (SLP) a couple times per week or it could mean attending a specialized school. Historically, children with disabilities have been separated from their typically developing peers to receive their education, (Yell, Rogers, \& Rogers, 1998). Today, students with disabilities are increasingly being included in their general classrooms (Mcleskey, Landers, Williamson, \& Hoppey, 2012). This shift can partly be attributed to the greater emphasis that is now placed on collaborative practices among educational professionals. Special education teams can consist of a variety of professionals including general classroom teachers, SLPs, special education teachers,
occupational therapists, school psychologists, and social workers. Each professional on a student's school team provides expertise in one particular area of the student's life that requires support. When professionals share their knowledge, they provide each other with advice and strategies that can assist in the goal of having a child remain in their general classroom as much as possible.

## Types of Teams

Although teams exist in almost every special education workplace, the roles of the team members can vary. Multidisciplinary teams consist of educational professionals from different backgrounds who are working to support students with special needs. Each professional works independently of each other and the amount of collaboration time is limited. Individuals on an interdisciplinary team meet more frequently than multidisciplinary teams, share their specific knowledge with the team members, but execute their services mostly independently. Transdisciplinary teams consist of professionals who collaborate in the development of intervention plans for students and there is more significance placed on consultation and role release (Hernandez, 2013). Consultation and role release are two types of collaborative practices demonstrated by many professionals in schools.

## Types of Collaboration

Collaboration within special education varies from workplace to workplace. However, the idea that perspectives are being shared among professionals in order to produce a better understanding of the needs of students remains constant. The Individualized Education Plan (IEP) meeting is a prime example of a platform where collaboration occurs (Friend, 2014). Special education teams convene to discuss the educational and social needs of students identified with a disability and then create an appropriate education plan. It is unlikely that a
student only requires support in one area of their education. Therefore, each educational professional brings forth their particular knowledge to both educate their colleagues and contribute to an intervention plan that draws from more than one discipline.

Although collaboration especially exists when developing and monitoring IEPs, it can also take place outside the meeting room. Consultation refers to professionals seeking out another professional's expertise on a matter (Friend, 2014). A general classroom teacher may consult with an SLP if the teacher suspects one of his or her students experiences a speechlanguage disorder. The teacher may share observations and classwork with the SLP and then the SLP may share her opinion and conduct an evaluation of the student. Together, the two professionals are attempting to determine the problem and develop ways in which to support the student.

Another form of collaboration is co-teaching. Co-teaching occurs when professionals provide their services to students simultaneously (Friend, 2014). An SLP may co-teach with a general classroom teacher by teaching alongside the teacher during a reading lesson. The teacher might focus on teaching the students how to communicate the main idea of the story while the SLP might help students with reading strategies. The teacher is able to conduct her lesson and the SLP is able to provide speech-language services to students within a meaningful context.

A third example of collaboration is role release (Friend, 2014). An SLP might engage in role release with a teacher by providing the teacher with specific strategies to help students with speech and language. The teacher is then able to implement the strategies within the classroom, both allowing the students to remain in the room and the SLP to meet with other students during the day.

## Research Questions

No matter the forms of collaboration a school chooses to practice, it is essential that professionals engage in some level of communication with each other in order to maintain a holistic view of students and provide them with the most appropriate support for their specific needs. Understanding that effective collaboration is an important aspect of a successful special education workplace, it is concerning that educational professionals find challenges in the collaboration process. Specifically, the collaborative practices among general classroom teachers and SLPs are of interest. These findings led to three questions: How does the way in which classroom teachers believe speech-language services should be delivered compare to how they are actually delivered? How often do schools use collaborative techniques? What factors promote and prevent the collaboration of teachers and SLPs? The purpose of this study is to examine how an SLP functions within an interdisciplinary framework and to identify areas of collaboration that could be improved for the future.

## Method

## Participants

Two sets of 50 teachers were selected from southern New Hampshire elementary school websites. The first group of teachers were administered a survey via email. A week later, a reminder email was sent to the same group of teachers asking them to complete the survey. A second set of 50 different teachers was emailed a month later with the same survey the first group received. A week later, a reminder email was sent to this second group of teachers asking them to complete the survey. Of the 100 teachers who were administered a survey, the data were collected from a total of 26 respondents. The average length of experience as a classroom teacher of the 26 respondents was 14.5 years. Informed consent was obtained from all participants.

## Measures

The survey consisted of 17 questions. The first question asked respondents to provide how many years they have worked as a classroom teacher. The next seven questions asked the teachers to indicate their opinions on the extent to which SLPs should be collaborating with classroom teachers. The answers were rated on a scale from 1-5: 1 (never), 2 (a few times a year), 3 (a few times a month), 4 (on a weekly basis), 5 (on a daily basis). Some of the questions were to be answered with 'yes' or 'no'. The next seven questions asked teachers to indicate the extent to which the SLP in their school collaborates with classroom teachers as well as the level of overall collaboration experienced among professionals in their school. Answers were either rated on the same 1-5 scale as the previous questions or with a 'yes' or 'no'. The last three questions asked teachers to indicate from a selection of answers how team collaboration has worked well for them, the obstacles they face during team collaboration from a selection of
answers, and whether or not they believed their pre-professional training prepared them for the collaborative nature of their career with a 'yes' or 'no'. See Appendix I for full survey.

## Results

The set of individual responses to each question were gathered and averaged when answers were rated on a scale from $1-5$. In nearly all cases, surveys were completed entirely, but a few respondents left one to two questions unanswered (Tables 1, 2, and 3).

Table 1
Summary of Participants' Survey Responses on Questions 2, 3, 4, 8,9 and 10

| Question | Mean Rating | Rating Range |
| :---: | :---: | :---: |
| 2 | 3.65 | $2-5$ |
| 3 | 3.52 | $2-5$ |
| 4 | 3.81 | $2-5$ |
| 8 | 3.08 | $1-5$ |
| 9 | 2.16 | $1-4$ |
| 10 | 3.54 | $2-5$ |

Note: 1 = never, 2 = a few times a year, 3 = a few times a month,
$4=$ on a weekly basis, $5=$ on a daily basis

Table 2
Summary of Participants' Survey Responses on
Questions 5, 6, 7, 11, 12, 14, and 17

| Question | Yes | No | I Don't Know |
| :---: | :---: | :---: | :---: |
| 5 | 24 | 2 | - |
| 6 | 23 | 2 | - |
| 7 | 21 | 5 | - |
| 11 | 16 | 4 | 6 |
| 12 | 18 | 1 | 7 |
| 14 | 13 | 9 | 6 |
| 17 | 12 | - |  |

Note: Response sections marked " - " were for questions where the answer "I don't know" was not applicable.

Table 3
Summary of Participants' Survey Responses on Question 13

| Multidisciplinary | Interdisciplinary | Transdisciplinary |
| :---: | :---: | :---: |
| 9 | 11 | 6 |

Questions 15 and 16 were in a multiple-choice format and respondents were allowed to select more than one answer. Results are shown in Table 4.

Table 4
Summary of Participants' Survey Responses on Questions 15 and 16

| Question | 1 | 2 | 3 | 4 |
| ---: | ---: | ---: | ---: | :---: |
| 15 | 16 | 19 | 11 | - |
| 16 | 23 | 3 | 2 | 2 |

Note: 1-4 represent the multiple choice answers.
Question 15: 1 = all team members can understand students' needs holistically, beyond their discipline's scope, $2=$ team members can seek support from other disciplines, $3=$ various responsibilities are shared among team members, 4 = not applicable to question 15.

Question 16: 1 = difficulty in coordinating meeting times, 2 = lack of trust or respect among team members, 3 = resistance of team members to collaborate, $4=$ misunderstanding of team members' roles.

Wilcoxon Signed-Rank tests were used to compare the two conditions (actual and ideal) on participants' responses to six pairs of questions. The Wilcoxon Signed-Rank test is a nonparametric statistical hypothesis test and is used to determine whether there is a difference between matched samples from the same participants. It was selected because the dependent variable (participant responses) was rated along an ordinal, rather than a continuous scale. In this study, answers to questions about the ideal perception of collaboration with SLPs were compared to the answers to questions about the actual collaboration occurring in participants' schools. The smaller the Wilcoxon test statistic, the
less likely the difference between samples occurred by chance. A critical value is required to determine if the null hypothesis can be rejected. If the W -critical value is greater than the W statistic, the null hypothesis can be rejected. Additionally, a small p-value, less than 0.05 , indicates that the difference between samples did not likely occur by chance.

Table 5
Results of Differences between Questions about Ideal and Actual Conditions

| Question Pair | W -value | W critical value | $p$-value |
| :---: | :---: | :---: | :---: |
| $2-8$ | 2.5 | 8 | .011 |
| $3-9$ | 0 | 30 | .001 |
| $4-10$ | 37.5 | 25 | .201 |
| $5-11$ | 8.5 | 8 | .053 |
| $6-12$ | 18 | 8 | .333 |
| $7-14$ | 3.5 | 11 | .009 |

The results of the statistical analysis indicated significant differences within question pair 2-8 $(\mathrm{W}=2.5, \mathrm{p}=.011)$, pair $3-9(\mathrm{~W}=0, \mathrm{p}=.001)$, and pair $7-14(\mathrm{~W}=3.5, \mathrm{p}=$ .009 ). The difference between questions 5 and 11 approached statistical significance ( $\mathrm{W}=$ 8.5, $\mathrm{p}=.053$ ).

## Discussion

The central question of this study was "How does the way in which classroom teachers believe speech-language services should be delivered compare to how they are actually delivered?". Assessing if there was a difference in the responses of participants when asked about their ideal versus actual perception of SLPs' collaboration assisted in providing an answer.

Three of the six pairs of questions involving ideal versus actual conditions were found to have answers that were statistically significant. Questions 2 and 8 asked about how often SLPs are collaborating with classroom teachers, questions 3 and 9 asked about how often SLPs coteach with classroom teachers, and questions 7 and 14 asked about meetings for consultation with SLPs and other educational professionals being mandated in students' IEPs. When asked to indicate their opinion on the topics, most participants' responses illustrated that teachers would like to have fairly frequent opportunities for collaboration with their school's SLP as well as times for consultation being incorporated into students' IEPs.

When asked to indicate the actual conditions in their school, there was more variety in answers. Eight teachers responded that their school's SLP works within the general classroom just a few times a year or not at all, ten teachers responded that co-teaching with an SLP never occurs within their classroom, and fifteen teachers either responded that their school does not mandate consultation in IEPs or that they did not know. It is not surprising that there are teachers who experience limited contact with their school's SLP. According to Ostovar-Nameghi, et al. (2016), teaching has traditionally been an isolated occupation. However, it is concerning that there are teachers who do not engage in collaboration with an SLP because a team-based approach to teaching has been identified as most beneficial to students. Of the 26 respondents, 16 stated that team collaboration has worked well because all team members can understand
students' needs holistically and beyond a single discipline's scope. There were 18 respondents who reported appreciating that team members can seek support from other disciplines. One respondent noted that the information gained from team meetings concerning the general curriculum "can be used and implemented into student service times, better supporting the child's overall growth across all areas". The results from the survey indicate that most teachers value collaboration. Therefore, what are the obstacles to collaboration that teachers find to impact them the most?

With 23 respondents noting that one of the greatest obstacles they experience in collaboration is "difficulty in coordinating meeting times", it is clear that teachers are finding that they are not collaborating because there is not enough time more so than any other reason. It is encouraging that no more than 3 respondents stated that obstacles to collaboration have included resistance from team members, lack of trust or respect among team members, and misunderstanding of team members' roles. If schools are facing the issue of lack of trust, respect, and understanding among team members, it is suggested that time is set aside for professionals to educate each other about their discipline and a discussion is fostered to determine methods of building respect. These results indicate that the majority of respondents value the team of professionals with whom they work and want to engage in collaboration, but are unfortunately hindered by the logistical issue of scheduling.

Based on the finding that time is a major barrier to collaboration, it is suggested that schools formulate a plan for organizing meetings. Schools might set aside a day of the week where the majority of meetings will take place. Professionals could also agree to meet on certain days after school hours to discuss the education needs of students on their caseloads. According to the results from question pair 7-14, the majority of respondents stated that meetings for
consultation should be mandated in students' IEPs but only 5 respondents stated that their school actually mandates meetings in IEPs. Incorporating times for collaboration in IEPs could help ensure that professionals meet regularly about their students. However, it is not expected that one plan will be effective or feasible for all schools. Therefore, it is important that a plan that best suits the needs of the students and faculty is developed, tested, and altered as needed.

The results for the last question illustrated an almost even divide between teachers who believed their pre-professional training prepared them for the collaborative nature of their career and those who did not believe they were prepared. Although there were many respondents who entered their career expecting to engage in the collaboration process, there were many others who may not have understood the extent to which they would need to exchange thoughts and advice with other professionals. It is important for higher education programs to include interdisciplinary education courses in their curriculum for educational professionals. If an emerging professional is exposed to collaboration with other disciplines early in their education rather than waiting until they are in their career, the ability for that professional to effectively communicate with colleagues while advocating for the needs of their students will be greatly strengthened.

## Limitations

A limitation to this study includes that an emailed survey was used to gather data. Each respondent may have had different interpretations of the questions and there was not an opportunity to explain the survey in person. The data from the survey also came from a small sample size of 26 respondents located in southern New Hampshire. Therefore, the results from the study cannot be concluded to be representative of all teachers. Additionally, some respondents noted in their surveys that the reason they rated the amount of time they collaborate
with their SLP as infrequent is because there are no students in their classroom who require speech-language services. It is important to note that collaboration with other professionals is dependent on the needs of students. Teachers may not be collaborating with an SLP but could still be engaging in collaboration with other professionals whose expertise meet the needs of the students in a particular teacher's classroom.

## Areas for Future Research

Future studies might evaluate the plans schools currently have in place for coordinating meeting times. Another survey could ask educational professionals how meetings with other professionals are scheduled in their schools and what does and not work well with those systems. Findings from such a study could point to reasons why scheduling collaboration time is a problem in schools as well as provide schools with ideas on how to overcome scheduling obstacles.

Higher education institutions could also be evaluated to determine how many programs offer interdisciplinary training to their students pursuing degrees in an educational profession. Examining how schools are preparing future professionals to collaborate with other disciplines in their careers could indicate if there is a need for more education surrounding collaboration for these individuals.

## Appendix I

Survey Administered by Email to 100 Elementary School Classroom Teachers

1. How many years have you been a classroom teacher? (include this year)

The following 16 questions may ask for your response on a scale from 1 to 5.1 being never, $\mathbf{2}$ being a few times a year, $\mathbf{3}$ being a few times a month, $\mathbf{4}$ being on a weekly basis, and 5 being on a daily basis.

Questions 2-7 are asking for your opinion on what ideally should be happening with speech-language service delivery in schools.
2. How often do you think a speech-language pathologist (SLP) should work within the general classroom setting? Answer: Rate on a scale of 1-5
3. How often do you think co-teaching should occur between SLPs and general classroom teachers? Answer: Rate on a scale 1-5
4. How often do you think an SLP and other faculty members (including but not limited to general education classroom teachers, OTs, special education teachers, and school psychologists) should communicate about students on their caseloads?

Answer: Rate on a scale 1-5
5. Should SLPs engage in role release, or the sharing of their expertise with other professionals so that others can learn and implement their strategies? Answer: Yes or No
6. Should therapy sessions with an SLP enhance the general curriculum of the students?

Answer: Yes or No


#### Abstract

7. Should meetings for consultation among SLPs, teachers, and other professionals be mandated in students' IEPs? Answer: Yes or No


Questions 7-16 are asking for you to reflect on your school and the speech-language services delivered by your SLP(s).
8. How often does your school's SLP(s) work within the general classroom setting? Answer: Rate on a scale 1-5
9. How often does co-teaching occur between SLPs and general classroom teachers in your school? Answer: Rate on a scale 1-5
10. How often do you and other faculty members (including but not limited to SLPs, OTs, special education teachers, and school psychologists) communicate about students on your caseload? Answer: Rate on a Scale 1-5
11. Does the SLP(s) engage in role release, or the sharing of expertise with other professionals so that they can learn and implement the SLP's strategies?

Answer: Yes, No, I don't know
12. Does your school's SLP's therapy sessions enhance the general curriculum of the students? Yes, No, I don't know
13. Would you describe the team model employed in your school as multidisciplinary (multiple disciplines working independently of each other), interdisciplinary (multiple disciplines collaborating with each other though still working mostly independently of each other), or transdisciplinary (multiple disciplines sharing the responsibilities of creating intervention plans with greater emphasis on consultation)?

## Answer: Multidisciplinary, Interdisciplinary, Transdisciplinary, None of These

14. Are meetings for consultation with SLPs, teachers, and other professionals mandated in students' IEPs? Answer: Yes, No, I don't know
15. How has team collaboration worked well and benefited the implementation of services? Answers (more than one may be selected):

- all team members can understand students' needs holistically, beyond their discipline's scope
- team members can seek support from other disciplines
- various responsibilities are shared among team members
- other: $\qquad$

16. What are the greatest obstacles you face in team collaboration?

Answers (more than one may be selected):

- difficulty in coordinating meeting times
- lack of trust or respect among team members
- resistance of team members to collaborate
- misunderstanding of team members' roles
- other:

17. Do you feel as though your pre-professional training prepared you adequately for the collaborative nature of your career? Answer: Yes or No

## References

Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. Teaching and Teacher Education,27(1), 10-20. doi:10.1016/j.tate.2010.08.007

Farmer, S. M., Dyne, L. V., \& Kamdar, D. (2015). The contextualized self: How team-member exchange leads to coworker identification and helping OCB. Journal of Applied Psychology,100(2), 583-595. doi:10.1037/a0037660

Friend, M. P. (2014). Special education: contemporary perspectives for school professionals (4th ed.). Boston: Pearson/A and B.

Giberson, T. R. (2015). Industrial-Organizational Psychology and the Practice of Performance Improvement. Performance Improvement Quarterly, 28(2), 7-26. doi:10.1002/piq. 21191

Hernandez, S. J. (2013). Collaboration in Special Education: Its History, Evolution, and Critical Factors Necessary for Successful Implementation . US-China Education Review B, 3(6), 480-498.

Mcleskey, J., Landers, E., Williamson, P., \& Hoppey, D. (2012). Are We Moving Toward Educating Students With Disabilities in Less Restrictive Settings? The Journal of Special Education, 46(3), 131-140. doi:10.1177/0022466910376670

Ostovar-Nameghi, S. A., \& Sheikhahmadi, M. (2016). From Teacher Isolation to Teacher Collaboration: Theoretical Perspectives and Empirical Findings. English Language Teaching,9(5), 197. doi:10.5539/elt.v9n5p197

Ozer, M. (2011). A Moderated Mediation Model of the Relationship Between Organizational Citizenship Behaviors and Job Performance. Journal of Applied Psychology, 96(6), 13281336. doi:10.1037/a0023644

Salas, E., Kozlowski, S. W., \& Chen, G. (2017). A century of progress in industrial and organizational psychology: Discoveries and the next century. Journal of Applied Psychology, 102(3), 589-598. doi:10.1037/ap10000206

Somech, A., \& Drach-Zahavy, A. (2011). Schools as Team-Based Organizations: A Structure-Process-Outcomes Approach. Group Dynamics: Theory, Research, and Practice, 11(4), 305-320. doi:10.1037/1089-2699.11.4.305

Yell, M. L., Rogers, D., \& Rogers, E. L. (1998). The Legal History of Special Education: What a Long, Strange Trip It's Been! Remedial and Special Education, 19(4), 219-228. doi:10.1177/074193259801900405

