

Challenges in Teaching Pupils with Visual Impairment in Inclusive Classrooms: The Experience of Ghanaian Teachers

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Abstract

The study sought to investigate the teachers' challenges in teaching pupils with visual impairment in inclusive classrooms in Ghana. A sample of 59 teachers was chosen, representing 3 inclusive basic schools. A questionnaire was administered on the teachers. The study revealed that teachers have challenges in teaching pupils with visual impairment. Challenges on classroom size, available material and even know-how on their operation with such pupils. Teachers further agreed that they have some assistive device but the majority of devices are not provided to ease the teaching of the visually impaired pupil. Based on the findings, Teachers need in-service training in the use of Braille and large print material so that children with visual impairment can be effectively included in the ordinary school. Added to that, the government of Ghana should improve supply of teaching and learning materials Brailled textbooks as well as assistive devices.

Keywords: Challenges, Teachers, Visual impairment, Inclusive classroom

1.0 Introduction and rationale of the study

Teaching pupils with visual impairment presupposes that a suppose teacher is a qualified specialist and have the practical experience in the field of teaching the visually impaired (Spungin & Ferrell, 2000; Tuttle & Ferrell, 1995). The twenty-first century world, has witnessed a lot of changes in education especially in the area of inclusion in schools which on the one hand has affected contemporary teachers' role (Brown & Beamish, 2012). On the issue of influence on the contemporary teachers' role, it is assumed three main issues persist in the everyday activities that shape the responsibility of these teachers. First, the provision of education to students in regular classrooms has ensued in teachers of students with visual impairments spending considerable time sharing information and providing specialist support to regular classroom teachers (Holbrook & Koenig, 2000; Suvak, 2004). Second, the advancement of medical and technological, have led to the identification of children with one or two additional disabilities (Pagliano, 1998). This has resulted in increased demands for expert knowledge and more flexible teaming arrangements. Third, the decision making process for pupils with disability has developed paper work tasks related to curriculum planning, specific instruction, and specialized assessments (Bishop, 2004; Spungin & Ferrell, 2000). Hence, it is not a surprise to argue that the the task of the teacher in an inclusive education setting is daunting and thus requires an adequate knowledge on pupils and material resources.

The tasks of teachers' teaching pupils with visual impairment have resulted in identification of chiefly characteristics of their work. One is the complexity of their work that is the need to constantly adjust learning environments and students' plans, the ongoing sharing of information across staff members and families, and the routine updating of technical knowledge (Benton, 1984). Another is the uniqueness of their role that is the nature of visual impairments has resulted in teachers of students with visual impairments working with a low incidence population of students with extremely distinct educational and social needs (Sacks, 1998). The final is the flexibility and diversity of expected practice teachers of students with visual impairments are required to work with a diverse group of students with visual impairments across a range of educational settings (Kim & Corn, 1998; Lewis, 2010). For these purposes, the everyday work of these teachers has is described as challenging (Swenson, 1995). These challenges according to Marek (2008) are quite imaginable since they take a lot of time from teachers in the inclusive setting since they are not the only pupils they teach.

The past two decades, have witnessed a small number of studies that have emerged examining the challenges teachers face teaching pupils with visual impairments an inclusive education setting. Typical on these studies was a study conducted by Darkwa (2011) in the Masvingo District which revealed that teacher faced some problem in teaching of pupils with visual impairment. From his studies brailled books and raised diagrams were not readily available for use by teachers to enhance the children's learning. Still on this, some teachers indicated that as a result of the shortages of material, it was difficult to give feedback to the children on questions involving diagrammes. A few teachers indicated that the assistance from the specialist teacher in the resource room came, in too late for colleagues in the ordinary classes. Some teachers in the ordinary classes indicated that giving attention to the children with visual impairment retarded the progress of the other children. That not ending there, Gronlund, Lim & Larsson (2010) attempted to examine the notion of inclusive education in reference to person with visual impairment the study established that Tanzania does not have specific policy on inclusive education. To this end, inclusive education was mentioned in some of the policy documents such as disability policy and education and training policy but these policies do not state how inclusive education should be implemented, monitored and evaluated. The study further revealed that teaching and learning materials for

students with special needs were lacking making the works of the teachers daunting.

The study by Kesikta & Akcamete (2011), sought to establish the degree to which the professional standards for Turkish teachers of students with visual impairments were addressed during pre-service training and the degree to which the in-service teachers of visual impairments implemented these professional standards. Findings of the study showed that, there is insufficient knowledge and skills among teachers regarding implementation of inclusive teaching for students with visual impairments. A prior study by Miles (2003) conducted in Temeke district to explore appropriate and sustainable ways of building capacity of key stakeholders in education to reflect, analyse and document their experiences of promoting inclusive education, revealed that inclusive education is a difficult concept to understand among teachers.

Interesting as it look from the above studies, Lewis & Little (2007) also conducted a study with an intention of providing insight on the current situation of inclusive education in four countries, namely Nepal, Tanzania, Vietnam and Zambia. The findings of the study in Tanzania revealed that, teachers are not educated enough in sign language, use of braille materials, preparation of hearing and aids, tactile diagrams and maps etc. to be able to face the challenges of inclusive teaching. It was also found out that teacher education is insufficient in the components of inclusive education. Finally, the study revealed that rigid curriculum is also a problem for implementation of inclusive education. Teaching methods and examination systems are centrally controlled contradicting with the efforts to make inclusive environments for all children regardless of their learning differences.

Outside the context of Africa, Simon, Echeita, Sandoval, Lopez, (2010) conducted a study in Spain with the aim of analyzing the process of inclusion to students with visual impairments. The study found out that schools do not have appropriate teaching and learning resources to help students with visual impairments learn better in inclusive classrooms. Additionally, the study found that, there is a lack of collaboration and participation of parents in the educational affairs of their children. Moreover, the findings revealed that; teachers do not have enough knowledge of inclusion and how to teach students with visual impairments in inclusive classrooms.

The array of issues addressed above indicates that teachers teaching pupils with visual impairment have problems or challenges in their operation with such pupils. The current study was purposed to identify the challenges Ghanaian teacher also face in teaching pupils with impairment. In addition, the study aimed at finding out the assistive devices available in the inclusive basic schools in Ghana. The study would help bring to the public domain the actual issues teachers struggle with in teaching the visually impaired pupils in the inclusive basic schools in Ghana.

2.0 Methodology

2.1 Research Design

The descriptive survey design was used for the study. According to Gay (2009) the design involves collecting data to answer research questions about people's opinions on some topic or issues. Fraenkel and Wallen (2000) contend that the design describes an existing situation without analysing relationships among the variables. They add that information gathered from the descriptive research can be meaningful or useful in diagnosing a situation since it involves describing, recording, analysing and interpreting conditions that exist. Similarly, Creswell (2002) argues that a survey is done in order to describe the attitudes, opinions, behaviours or characteristics of a population. In other words, the design deals with phenomena as they currently are. That is, it provides a snapshot of how things are at a specific time. Thus, owing to the researcher's quest to giving a vivid presentation challenges teacher face in teaching pupils with visual impairment the descriptive survey design was deemed appropriate. Again, the descriptive survey design was considered the most appropriate for the study because it also has the potential of providing a lot of information from the teachers as regards their relational activities with visual pupils in the regular classroom.

2.2 Participants

The participants were Ghanaian instructors who perform instructional tasks with pupils with visual impairment in the pilot inclusive basic schools for the visually impaired in the Central, Volta and Brong-Ahafo Regions. The school used were Ghana National Basic inclusive School (Cape Coast); St Joseph's Practice School (Bechem) and Avakpedome D/A Basic School, in Mafi-Avakpedome. The schools sample consisted of 4 head teachers, 14 resource teachers and 54 regular teachers in all they were 72 in total. Out of the 72 participants, 59 participants were selected using the proportionate stratified purposive sampling technique which according to the Krejcie and Morgan's (1970) table for determining sample size, with a population of 70, a sample size of 59 is used. In doing this the researchers were guided by the formula as found in Adebisi-Ceasar (2012).

$$n = \frac{N \times n}{N}$$

Where:

n_n = sample size of stratum x (that is the sample size for each year-group)

N = Total population

N^x = Population size of stratum x (population size of each year-group)

n = Total sample size chosen

Applying this method, 21, 23 and 15 teachers were selected from Ghana National Basic inclusive school, St. Joseph's practice school and Avakpedome D/A Basic School respectively. In each school or stratum, the simple random sampling method, specifically the lottery technique was then employed to select the individual units in the sample. With this technique, the list of all teachers was obtained from the schools. Numbers were then assigned to the teachers on the list on a piece of paper and placed in a basket and the desired sample was selected by picking the required number of papers. Teachers whose names were picked were those included in the sample. The same method was repeated in each of the schools.

2.3 Instrument

A closed-ended questionnaire was developed for the study. The questionnaire sought information on challenges teacher face in teaching pupils with visual impairment.

2.4 Reliability and Validity of the Instrument

A pilot study was carried out to measure the internal consistency. This was used in determining the reliability of the instrument for the study. A Cronbach's co-efficient alpha for the pre-testing was .71 was arrived at.

2.5 Data collection procedure

In engaging this exercise, permission was obtained from the Head of Department of Educational Foundations in the University of Cape Coast, Ghana and sent to the school involved in the study. The collection of information was done disjointedly in one school at a time, during school hours, with the teachers gathered in group in each school.

2.6 Data Analysis

In responding to the research question, the following analyses of the data were undertaken. The information from the closed-ended items in the questionnaire was entered into the SPSS 16.0 statistical package. Third, an exploratory analysis approach was applied to all data, providing frequency distributions. Finally, the issues were discussed with existing literatures for the purposes of corroboration and contradiction.

4.0 Results and Discussion

The results of the survey on teacher challenges in teaching pupils with visual impairment are represented with simple frequencies and percentages.

Table 1 provides the descriptive analysis of the challenges teacher face in teaching pupils with visual impairment.

Table 1: Descriptive view on challenges teachers face in teaching pupils with visual impairment

Statement	Very true No. (%)	True No. (%)	Not true No. (%)	Total No. (%)
I do not have the appropriate braille skills to support pupils with visual impairment in inclusive classroom	20(34.5)	14(24.1)	24(41.4)	58(100)
I do not have adequate teaching and learning materials to teach pupils with visual impairment in the regular classroom	24(41.4)	25(43.1)	8(14.0)	57(100)
I am not able to involve other professionals in planning the child's IEP.	17(30.4)	22(39.0)	17(30.4)	56(100)
I find it difficult getting parents to discuss vital information about pupils with visual impairment in the regular school	27(47.4)	26(45.6)	4(7.0)	57(100)
I find it difficult getting parents to discuss vital information about pupils with visual impairment in	27(47.4)	26(45.6)	4(7.0)	57(100)
I do not get access to brailled text books for pupils with visual impairment.	39(68.4)	14(24.6)	4(7.0)	57(100)
I am not able to give individualised attention to pupils with visual impairment due to large class size.	26(45.6)	16(28.1)	15(25.9)	57(100)
Poor physical environment does not promote easy mobility of pupils with visual impairment in the regular school.	38(65.5)	14(24.1)	6(10.3)	58(100)
I am not able to prepare work in advance in order to send it to the resource centre for embossment for the visually impaired.	14(24.1)	27(46.6)	17(29.3)	58(100)
Getting experts to educate me on modern methods of teaching the visually impaired is a challenge.	19(33.3)	21(36.8)	16(28.1)	57(100)

Responding to the statement *“I do not have the appropriate braille skills to support pupils with visual impairment in the regular classroom.”* 20(34.5%) teachers responded very true. Fourteen (24.1%) responded true, while 24(41.4%) of the teachers responded not true. Best and McCall (cited in Lynch et al., 2011) in their review on inclusive educational practice in Kenya suggested that blind children present a particular challenge for teachers in mainstream or inclusive settings. Therefore, teachers need training to enable them meet the needs of these pupils. To take Braille as a specific example, teachers require not only a detailed knowledge of the Braille codes but a clear understanding of techniques for the development of literacy touch. This issue highlights an important concern relating to the skills that teachers require to successfully support pupils with visual impairment in inclusive settings.

On the issue of *teaching and learning materials not being adequate in teaching pupils with visual impairment in the regular classroom*, 24(41.4%) of the teachers responded “very true” 25(43.1%) of the teachers responded ‘true’ while 8(14.0%) of the teachers said it was ‘not true’. The use of teaching and learning materials is core in our education. Teaching and learning materials help the teacher in explaining concepts easily to the visually impaired in inclusive settings. It also helps pupils to remember and retain whatever they are taught. However, this finding is not endorsed by UNESCO (2005) that many teachers and pupils in developing countries experience teaching and learning conditions. They cited limited teaching and learning materials, inadequate shelter and lack of skills to manage equipment.

Again, in responding to the statement *“I am not able to use assistive devices to assist pupils with visual impairment in the irregular classroom”*. 18 (31.6%) of the teachers responded “very true” 22(37.9%) “true” while, 17(29.8%) responded “not true”. According to Edwards and Lewis (1998) assistive devices used by pupils with visual impairment remove some barriers to learning for pupils with visual impairment. Pupils with visual impairment become independent in learning. In addition, it opens up learning opportunities for pupils with visual impairment no matter their circumstances. Finally, it makes information available in the quickest manner as against the traditional method. Therefore, teachers’ knowledge about the use of assistive devices will enable teachers provide some form of assistance to pupils with visual impairment in the regular classroom in the absence of the resource teacher.

In responding to the statement *“I am not able to involve other professionals in planning the child’s IEP”* 17(30.4%) of the teachers responded “very true” 22 (39.3%) responded “true” while an equally 17(30.4%) responded “not true”. In inclusive classrooms, parents and teachers must work collaboratively in planning the child’s individualised education plan. Again, in Table 5, respondents responding to the statement *“I find it difficult getting parents to discuss vital information about pupils with visual impairment in the regular classroom”*, 27(47.4%) responded “very true” followed by 26 (45.6%) responded “true” while four (7.0%) responded “not true” to the statement. Huebner (2000) supported the finding that parents often know their children better than anyone else. Therefore, parents can help teachers and others to learn about their children with visual impairment. Besides, parents provide vital information about their children to teachers. However, the finding does not agree with the one made by Currie and Prudnikova (2005) in Russian. In their view, one major challenge to inclusion within the Russian context is the role of parents. According to them, parents had few rights in relation to the education of their children. Once handed over to the professionals their role was marginalized. They were not considered as reliable sources of information and not consulted about their child’s development. To involve parents as equal partners in a professionally dominated culture was therefore difficult.

Again, from table 1, in responding to the statement *‘I do not get access to brailled text books for pupils with visual impairment in the regular classroom’*, 39(68.4%) responded “very true”, 14(24.6%) responded ‘true’ while four (7.0%) responded not ‘true’. This finding support one made by Lynch et-al (2011) that lack of funding to replace broken embossers which are Braille printing machines meant that they had been unable to produce school text books in Braille for over years for pupils with visual impairment in inclusive schools. Lack of Brailled text books is considered one major barrier to inclusive education for pupils who are visually impaired.

In responding to the statement *“I am not able to give individualized attention to pupils with visual impairment due to large class size”* 26(45.6%) responded ‘very true’ 16(28.1%) responded “true” while a competitive as many as 15(25.9%) responded “not true”. This finding is in agreement with Mushoriwa (2001) that in developing countries due to large class size teachers are not able to give individualised attention. The writer cited Ghana and Zimbabwe as having approximately 50 pupils per class. Teachers’ inability to provide individualised attention to pupils with visual impairment in the regular classrooms can lead to poor performance of pupils with visual impairment in regular classroom.

Again, in responding to the statement *“Poor physical environment does not promote easy mobility for pupils with visual impairment in the regular school”*. Majority of teachers 38(65.5%) responded “very true”. Fourteen (24.1%) responded “true”, while 15(25.9%) responded “not true”. From the finding it can be seen that the physical environment in most inclusive settings does not promote easy mobility. This may serve as a barrier to the mobility of pupils with visual impairment in the inclusive settings as they are likely to bump into objects. In responding to the statement *“I am not able to prepare work in advance to be sent for embossment for pupils*

with visual impairment.” Twenty-seven (46.6%) responded “very true”, 14(24.1%) responded ‘true’, while 17(29.3%) of the teachers respondent ‘not true’. The finding shows a positive attitude by teachers to give equal opportunity to pupils with visual impairment in the regular classroom. Finally, in responding to the statement “*I do not get experts to educate me on modern methods of teaching the visually impaired*”. Nineteen (33.3%) of the teachers responded “very true”, 21(36.8%) respond ‘true’ while, 16(28.1%) responded “not true”.

The researcher was equally interested in knowing whether teachers had assistive devices to help in the education of the visually impaired in inclusive basic schools. In analysing this part of the study, a descriptive data is presented in table 2.

Table 2: Availability of Assistive Devices

Assistive Devices	Available		Not available		Total
	F	(%)	F	(%)	
Tape recorders	28	(48.3)	30	(51.7)	58
Perkins Braille	47	(81.0)	11	(19.0)	58
Braille embosser	17	(29.3)	41	(70.7)	58
Scanners	-		-		-
Closed circuit- television CCTV	7	(12.1)	51	(87.9)	58
Talking Calculators	2	(3.4)	56	(96.6)	58
Speech readers	2	(3.4)	56	(96.6)	58
None of the assistive devices	7	(12.1)	51	(87.9)	58

From Table 2, on the issue of availability of tape recorders, 30(51.7%) responded ‘No’ while, 28(48.3%) responded ‘Yes’. This suggests that there were very few tape recorders in the schools for pupils with visual impairment. Tape recorders minimize the workload on pupils with visual impairment as they are able to record lessons which facilitates learning. In the view of Punani and Rawal (2000) emerging research suggests that technology promotes acquisition of literacy and provides more equal access to information required for employment. As to whether the schools have Perkins Braille in their school 47(81.0) responded ‘Yes’ while, 11(19.0) responded “No”. The availability of Perkins Braille will help pupils with visual impairment to write fast as compared to the frame and stylus. Again, concerning whether the schools have Braille embosser, 41 (70.7%) responded ‘No’ while, 17 (29.3%) responded ‘Yes’. Braille embosser is a Braille printing machine connected to other accessories like the scanner and computer that embosses computer generated text as Braille on paper. This generates text as Braille in the quickest manner as compared to doing it manually. None of the school had scanners. Scanners are devices that convert an image from a printed page to a computer file. This finding is contradictory to the responses teachers gave on the availability of embosser, since the Braille embosser works together with the scanner connected to a computer.

Again, concerning the availability of Close Circuit Television, 51(87.9%) respondents ‘No’ while, seven (12.1%) responded ‘Yes’. The close circuit television will help pupils who are partially sighted to read printed materials by enlarging the font size. As to whether schools have talking calculators, 55(96.6%) of the respondents responded ‘No’ while, two (3.4%) of the teachers responded ‘Yes’. This will delay the computation of mathematical concept by the visually impaired in the regular setting. Concerning the issue on availability of speech reader, 56 (96.6%) responded ‘No’ while, two (3.4%) of the teachers responded “Yes”. This will create barrier in learning for the visually impaired in the regular setting. Finally, 51(87.9%) said they do not have any of the assistive devices listed above while seven (12.11%) responded they have. From the analysis it can be seen that majority of the respondents had Perkins Braille in their school. This will efficiently help pupils with visual impairment in terms of writing. Though the other assistive devices were there for pupils with visual impairment, they were very few in number.

5.0 Conclusion and Implications for policy makers

The present study is a clear indication that the task of teaching pupils of visual impairment is faced with a lot of inherent and external problems that derail teacher practices. It is an established fact the classroom practices of teachers are sometimes changed to suit learner needs, however, the situation whereby the basic material that will facilitate the visually impaired to learn is not available would increase the task of the teacher in inclusive classroom. This is likely to make teachers prefer to teach well-sighted person and have resentment or negative attitude towards the teaching of pupils with visual-impairment since the former activities does not require a lot of material as compared to the latter. Added to that, the low know-how by teacher on how to utilize the little resources available to pupils could jeopardise the learning rate of the visually impaired pupils since most of them learn from what their instructor teach them. On this note it is assumed that since teachers lack the right training in handling such pupils and also on the devices in teaching them, they are likely to act on their impulse and that could even worsen the education of such pupils.

With this intriguing issue coming from Ghanaian teachers in inclusive schools, the government of Ghana should improve supply of teaching and learning materials Brailled textbooks as well as assistive devices.

However, donations from Non-Governmental Organisations and philanthropists should be welcomed. Teachers' should involve parents in planning the Individualised Educational Plan (IEP) of their wards to aid in decision making. Regular classroom teachers should also be given some basic Braille skills to enable them assist pupils with visual impairment in their classrooms in the absence of the resource teachers.

References

- Benton, S. A. (1984). Supporting visually handicapped children in ordinary schools. *British Journal of Visual Impairment*, 2, 3–7.
- Bishop, V. E. (2004). *Teaching visually impaired children* (3rd ed.). Springfield, IL: Charles C Thomas.
- Brown, J.E., & Beamish, W. (2012). The changing role and practice of teachers of students with visual impairments: practitioners' views from Australia. *Journal of Visual Impairment & Blindness*, 81-92.
- Creswell, J. W. (2002). *Educational research: Planning, conduction and evaluation quantitative and qualitative research*. New Jersey: Pearson Education Inc
- Currie, L. A., & Prunikova, V. (2005). Establishing an inclusive educational system in samara: A partnership between West and Lothian Barnardo's and Samara. *Support for Learning*, 20(4), 195-120.
- Darkwa, E. (2011). A reflection of teacher's perceptions on the inclusion of children with visual impairment in ordinary schools. *Zimbabwe International Journal of Open & Distance Learning* 1 (1), 56-59.
- Edwards, B. J., & Lewis, S. (1998). The use of technology in programs for students with visual impairments in Florida. *Journal of Visual Impairment & Blindness*, 92, 302-312.
- Fraenkel, J. R & Wallen, N. E. (2000). *How to design and evaluate research in education* (4th ed.). Boston: McGraw-Hill
- Gay, L. R. (1987). *Educational research: Competencies for analysis and application*. (3rd ed.). Columbus, Ohio: Merrill Publications.
- Gronlund, A., Lim, N., & Larsson, H., (2010). Effective Use of Assistive Technologies for Inclusive Education in Developing Countries: *Issues and challenges from two case studies*. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 2010, Vol. 6, Issue 4, pp.5-26.
- Kesikta, A.D. & Akcamete, A.G. (2011). *The relationship of Personnel Preparation to the Competence of Teachers of Students with Visual Impairments in Turkey*. AFB.
- Kim, Y., & Corn, A. L. (1998). The effects of teachers' characteristics on placement recommendations for students with visual impairments. *Journal of Visual Impairment & Blindness*, 92, 491–502.
- Lewis, I. & Little, D. (2007). *Report to Norad on Desk Review of Inclusive Education Policies and Plans in Nepal, Tanzania, Vietnam and Zambia*. Retrieved from: http://www.eenet.org.uk/resources/docs/Policy_review_for_NORAD.pdf
- Lewis, S. (2010). Understanding students with visual impairments. In A. Turnbull, R. Turnbull, & M. L. Wehmeyer (Eds.), *Exceptional lives: Special education in today's schools* (6th ed., pp. 428–459). Upper Saddle River, NJ: Merrill.
- Lynch, P., McCall, S., Greame, D., McLinden, M., & Bayo, A. (2011). Inclusive educational practices in Uganda: Evidencing practice of itinerant teachers who work with children visual impairment in local mainstream schools. *International Journal of Special Education*, 15(10), 1119-1134.
- Marek, B. (2010). Teaching visually impaired students in Poland, *Teacher Forum*. Retrieved from <http://www.unicef.org/teachers/forum/0300.htm>
- Mushoriwa, T. (2001). A study of the attitude of primary school teachers in Harere towards the inclusion of blind children in regular classes. *British Journal of Special Education*, 28(3), 142-147.
- Punani, B., & Rawal, N. (2000). *Visual impairment hand book*. India: Blind.
- Sacks, S. Z. (1998). Educating students who have visual impairments with other disabilities— An overview. In S. Z. Sacks & R. K. Silberman (Eds.), *Educating students who have visual impairments with other disabilities* (pp. 3–38). Baltimore, MD: Paul H. Brookes.
- Simon, C., Echeita, G., Sandoval, M. & Lopez, M. (2010). The Inclusive Educational Process of Students with Visual Impairments in Spain: An Analysis from the Perspective of Organization.
- Spungin, S. J., & Ferrell, K. A. (2000). The role and function of the teacher of students with visual handicaps. In A. J. Koenig & M. C. Holbrook (Eds.), *Foundations of education: Instructional strategies for teaching children and youths with visual impairments* (2nd ed., Vol. 2, pp. 785–791). New York: American Foundation for the Blind
- Swenson, A. M. (1995). Itinerant teaching: An insider's view. *RE:view*, 27, 113–117.
- Tuttle, D. W., & Ferrell, K. A. (1995). Visual impairment. In E. L. Meyen & T. M. Skrtic (Eds.), *Special education and student disability: An introduction—Traditional, emerging, and alternative perspectives* (4th ed., pp. 487–532). Denver, CO: Love