Teaching Home Management to the Visually Impaired: A Case of Copota School for the Blind Zimbabwe

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Abstract: This study examined the teaching of Home Management to visually impaired students. The purpose of the research was to find out how in the absence of sight, the visually impaired students studied Home Management. A qualitative case study of Copota School for the blind in Zimbabwe was used. A qualitative approach was used in order to study the phenomena in its natural setting. Purposive and convenience sampling procedures were used to collect data for the study. The participants were Home Economics teachers, the school administration and visually impaired students studying Home Management. Data was collected through interviews and observation. The findings revealed that teaching Home Management was negatively affected by inadequate resources such as stoves; port set readers, computers with voice, tape recorders. It was also noted that Home Economics teachers enrolled to teach had no training in handling the visually impaired. The teachers were qualified to teach Home Management but not to teach the visually impaired. The study recommended that teaching and learning should be supported by adequate resources for effective teaching and learning to occur. Teachers teaching the visually impaired students should, in addition to their Home Economics qualification, have special training in teaching the visually impaired.

Key words: Home Management, visually impaired, low vision, blind

Introduction and Background.

Special education in Zimbabwe began at Chibi Mission Station in Masvingo region in 1927 the school was later transferred to Copota where it is known today as Margaretta Hugo School of the Blind (Chimedza and Peters 2001). During the early days after the school was formed, no formal training was given to the teachers; they just learned to read and write Braille while on the job. Teachers today get training in special education at college for example, The United College of Education and Great Zimbabwe University.

The visually impaired students of Margaretta Hugo school for the blind study the Home Management component of Home Economics at secondary level. The syllabus covers Home and Community, Textiles and Clothing, Food and Nutrition and Consumer Education (ZIMBABWE Schools Educations Council ZIMSEC 1999). Home Management is a practical subject where student learn best when they are actively involved in the learning process. Oliva (1992) and supervised practice as the basic says, reality is in the interaction of the individual student and the environment and experience. Chamberlain and Kelly (1981) consider the demonstration methods
of teaching practical skills. The demonstration method utilises senses including sight. In the demonstration method learners usually observe the steps and procedures using sight.

In view of the above, the study was meant to find out how Home Management was taught to the visually impaired students, using senses other than sight.

**Research Questions.**

The study was guided by the following research questions:

- Are the methods used for teaching Home Management to the visually impaired students appropriate?
- Do the resources at the Margarretta Hugo School for the blind support the acquisition of skills and competences in Home Management by visually impaired students?
- Does the Home management syllabus expose visually impaired students to the skills and competences that make them effective members of society?

**Literature Review**

The literature looked at some key definitions used in connection with visual impairment. The literature also covered resources and teaching and learning strategies for the visually impaired.

**Definitions**

Heward and Orlansky (1992) define disability as the reduced function of a body part or organ. They go on to say that disability limits the ability to perform a task for example to see, walk, hear in the same way as a non disabled person. Disabled children fall in the category of exceptional children and these include children who are visually, hearing, and the mentally impaired, the gifted and those with learning disabilities (Van Osdol and Shane 1977). Keller (2005) gives two main categories of visual impairments: low vision and blind.

Heward and Orlansky (1992) view blindness as either having no vision or having only light perception. Blindness is distinguished by the ability to see clearly, distinguish numbers, letters and other symbols from a chart 20 feet away; 20/20 vision at 20 feet away indicates normal sight. When visual acuity is 20/200 or less one is considered legally blind (Herwad and Orlansky 1992).

The authorities say that a child who is totally blind or has so little vision learns primarily from other senses. Herward and Orlansky (1992) say that a child with visual impairment may have low vision. Such a child has a level of vision and can learn through the visual channel and generally learns to read print. In support Keller (2005) says that low vision students are print users.

Alcott (2002) is of the view that visual impairment varies considerably in severity from minor visual impairment, partial sightedness to blindness.

**Resources.**

These include human and material resources.
Human Resources.

The learning of the visually impaired can be affected by the personnel responsible for the learning and teaching process. The teachers are responsible for translating the curriculum into an action (Peresu and Nhundu 1999, Mupfumira 2011 and Sharps 1988).

Herward and Orlansky (1992) are of the view that teachers of the visually impaired students must be knowledgeable, competent and creative. The authorities go on to say that teachers must plan activities that will help their student gain as much information as possible through the non visual senses.

For effectiveness, teachers of visually impaired students should be adequately prepared. Herward and Orlansky (1992) say teachers of the visually impaired are frequently called upon to teach skills and concepts that most children learn through vision. Tailor (2011) support the provision of adequate personnel preparation programs to train staff to provide specialized services which provide the academic and non academic curriculum needs of students with visual impairment. The authority goes on to say that there must be ongoing specialised personnel development opportunities for staff and parents.

Material Resources.

Material resources include infrastructure for example laboratories, equipment like stoves, perishable items like food, cleaning materials, brail machines, computers. Herward and Orlansky (1992) say that media and materials do play an important role in the teaching and learning of the visually impaired students. Students with visual impairments must have specialised services, book and materials in appropriate media (including Braille) as well as specialised technology to assure equal access to the core specialised curriculum to enable them to effectively compete with their sighted peers (Taylor 2011).

Alcott (2002) is of the view that we communicate with each other through our senses, cognitive skills, emotions and body language. We use the senses of touch, sight, smell, hearing and taste. According to Geoff (2009) information enters our brain in the following 87% by eyes, 90% by ears 4% by other senses. Research has also shown that people remember 20% of what they see, 40% of what they see and hear but about 75% of what they see and hear and do simultaneously (Lindstrom in Neo and Neo 2012). Kemp et al (1985), and Chamberlain and Kelly (1981) support the use of a variety of media in order to meet the requirements of different students, objectives, content, instructional methods and learning styles.

Kemp et al (1985) say appropriate instructional resources should be matched to required tasks. Mupfumira (2011) is of the view that, the right learning environment gives students required exposure and skills. A home management laboratory should be designed and equipped for conducting household activities, food preparation and serving. Hallahan and Kaufman (1994) recommend a meticulously arranged environment. This facilitates easy movement and is accident free. Keller (2005) advocates for labeling of materials, and supplies and equipment in the laboratory with regular print, large print and Braille. This helps in identifying materials and containers in the laboratory for all categories of students. Keller (2005) recommends always keeping materials and equipment in the same place.
Various types of media are essential to the learning and teaching situation. Handouts should be made available in appropriate form for the student regular print, large print, brail or tape depending on the student’s optimal mode of communication (Keller 2005, Kappi 1991). Keller (2005) recommends a micro projector to help the visually impaired to examine images from a microscope, tape recorders and descriptive videos. Keller (2005) goes on to say, a visually impaired student may use a computer with a voice input device to verbally enter commands. For those with partial visual impairment, magnifying devices may be used to assist in reading or working with objects that need to be observed (Keller 2005). Keller (2005) further recommends use of tactile 3D models, raised line drawings or thermoforms to supplement drawings or graphics in a tactile format when needed. Whenever possible the teacher should use actual objects for three dimensional representations.

Teaching learning Approaches/Strategies.

Chimedza and Peters (2001) and Lowensky (1992) say, blindness is a disability characterised by absence of vision. The next stage is overcoming limitations that emanate from the encounter between the non-seeing person and the environment. For effectiveness, a teacher should adopt a number of methods techniques (Deepak 2011). This also applies to the visually impaired. In support Chimedza and Peters (2001) say, special children like the blind need modified teaching methods and specialised facilities and services.

Geoff (2009) comes up with three ways in which all students learn; visually, auditory and kinesthetically. The auditory learn through explanations, discussions, and audio tapes. The visual benefit from graphic materials and kinesthetic from tactile approaches where students encounter ideas through action they engage in through practical experience. Most blind and visually impaired students learn by both auditory and kinesthetic means. A child who is blind is totally without sight or little vision that he/she learns primarily through other senses for example touch, smell; sound (Herward and Orlansky 1992).

Kapp (1991), and Hallhan and Kaufman (1994) recommend individualisation as a learning strategy. Kapp (1991) says individualisation should take precedence in learning through illustrations and demonstrations. The blind learn better if they are taught as individuals. The low vision students benefited from group work while the blind do not (Lowenfield 1975). Keller (2005) says assisting students in overcoming visual limitations requires unique and individual strategies.

Lowenfield (1975) points out that due to the fact that blind students have no visual stimuli and visual input they tend to lack experience of their environment that leads to verbalism. The authority advocates for concretisation of learning. Concretisation enriches student’s vocabulary and gives them opportunities for observations that will lead to reality and enrichment of the student’s environment. Lowenfield in Chimedza and Peters (2001) had to take students to a car so that they could explore it and identify its parts and be aware of its size. Sometimes it’s not easy to get objects, however learning must provide the blind and visually impaired students with intricate verbal details and hands on activities to group concepts.

Hallahan and Kauffman (1994) recommend tutoring of students in functional skills. This helps in developing students who are self sufficient and who are functional members of society. ZMSEC
(1999) syllabus tries to achieve this as reflected in its preamble which indicates that students are furnished with knowledge and skills in food, shelter and clothing. This develops a self reliant productive individual through skills and knowledge acquired in the study of nutrition, food preparation, fibres and fabrics, parenting, consumer education, home and community (Ministry of Primary and Secondary Education Zimbabwe 1990).

**Methodology**

A qualitative case study was used to collect data. Bogdan and Biklen (1997) say qualitative research is ideal for studies that require understanding of human behavior in certain circumstances. The qualitative case study accommodated direct interactions with the research participants. Punch (2005) is of the view that qualitative researchers collect empirical data about the world in form of words and not numbers.

**Population**

The targeted population for this study comprised 1 headmaster, 2 Home Economics teachers and 26 students in Home Management at Copota School for the Blind. The Home Economics teachers were targeted because they are the ones who teach Home Management. Students were also part of the population because, they are the ones involved in the learning of Home Management. The headmaster was involved because as the administrator he is responsible for the provision and supervision of the subject.

**Sampling**

A sample of 25 respondents was used. Leedy and Armorod (2005) say, a small sample is what is recommended for qualitative research as data collecting methods are time consuming and expensive. Purposive sampling was used for sampling the teachers. Availability sampling was used to sample students. All students present on the day of the observation became part of the sample.

**Research instruments**

Punch (2005) and Walliman (2011) say, data collection instruments for qualitative research include interviews, observation, document analysis, record of material culture. Methodological triangulation was achieved through use of three data sources. This was to provide a measure for reliability and authenticity (Leedy and Armorod 2005).

**Observation**

The observation method was used to look at teaching and learning facilities and consumables. Students were also observed learning Home Management.

**Interviews**

Neuman (2000) defines an interview as a purposeful conversation between two or more people for obtaining information. The open ended interview was used. Through the interview data on resources and strategies in the teaching and learning of the visually impaired were investigated.
The researcher was able to probe for additional information and detail. The interview accommodated respondent’s views on what was being investigated.

**Document Analysis**

The syllabus, schemes of work and plans of work were examined to determine whether content and suggested methods and media were suitable for students with visual impairment.

**Data Collection Procedures**

Data collection was done through the, interview and observation and document analysis. The researcher observed the students learning Home Management. The interviews were conducted after the observation.

**Data Presentation**

The data collected was organized into categories and themes were generated from the categories. The data was presented in narrative form to capture the qualitative facts.

**Findings and Discussion**

The findings and discussions focused on the themes which emerged from the research. The recurring themes were:

- Skills and competences gained through learning Home Management.
- Material resources for teaching Home Management to the visually impaired,
- Personnel teaching and learning Home Management to the visually impaired,
- Strategies in teaching and learning of the visually impaired.

**Skills and competences gained through learning Home Management.**

From syllabus analysis and interviews, the findings were that the Home Management syllabus furnished students with relevant skills and competences.

An examination of the Home Management syllabus through document analysis and the interview showed that the syllabus supported the acquisition of relevant skills by the students. One of the aims of the syllabus is to “develop a self reliant, productive person through the skills and knowledge acquired in the study of nutrition, food preparation, fibers and fabrics, parenting, consumer education, home and community” (ZIMSEC 1999) the syllabus is quite comprehensive covering all aspects involved in the running of a household. In the interview one of the teachers said, “The area of nutrition is well covered since it incorporates topics which deal with the nutrients, diet, meal planning. This helps to develop an understanding of nutrition in students contributing towards good health” the skills gained in the planning of balanced diets and food preparation helped to promote good health. The research findings also showed that the Home Management courses exposed students to skills in management of resources. One interviewed teacher pointed out that, “Topics like budgeting, care of household utensils, cleaning of different surfaces, care of clothes help students to manage their resources effectively”.
Through the findings it was established that the visually impaired students were exposed to functional skills. Hallahan and Kauffman (1994) recommend tutoring visually impaired students in functional skills. By being tutored in Home Management, students became self reliant in household skills (Ministry of Primary and Secondary Education Zimbabwe 1990 UNESCO in Chimedza and Peters 2001). One interviewee said “The subject helps students to fit in society by providing them with skills in looking after themselves and their families”

The study established that the Home Management syllabus was too broad to be manageable in the period of study. The Home Management exam covered a wide area of Home Economics content making it difficult to select what to teach. This situation is supported by the following comment from one of the teachers who had this to say, “It is difficult to determine what to teach as examinations cover broad areas on the home and the family”.

**Personnel teaching Home Management to the visually impaired students**

It was established from the interview with teachers that they did not have prior training in the teaching and learning of students with visual impairments. As one interviewee pointed out “I have not received training in teaching the visually impaired students. I have learnt how to deal with the blind at this school”. The teachers are specialists in the teaching of Home Economics but did not receive any training in special education. The specialisation in Home Economics placed them in a good position to handle the subject content and skills but not to effectively handle the blind students. The teachers indicated that at first they had difficulty in teaching the blind as one teacher pointed out “I had problems demonstrating skills like rubbing-in in cake making, sweeping to someone who could not see”.

Findings from literature and the interview showed that teachers of the visually impaired should have training in strategies for the visually impaired. One of the interviewees said “It is important to be trained in how one teaches the blind instead of groping in the dark and learning by trial and error”. Teachers of the visually impaired should be knowledgeable, competent and creative (Herward and Orlansky 1992). The teachers of the visually impaired are expected to teach concepts that most children acquire through vision (Herward and Orlansky 1992).

The findings show that there were now a number of institutions offering programmes in special education unlike in the early days when no formal training was given to teachers for the visually impaired (Chimedza and Peters 2001).

**Material resources**

The research findings support the provision of relevant, adequate and specialised material resources for the visually impaired (Herward and Orlansky 1992). The right learning environment is essential for effective learning to occur (Mupfumira 2011). The respondents indicated that relevant media supported effective acquisition of skills and competences in teaching and learning of Home Management. One respondent pointed out that “Learning of skills by the visually impaired requires appropriate media. If students are learning to bake, they need a stove, baking utensils and the ingredients to make it possible”

Findings from observation of facilities for teaching Home Management indicated availability of relevant equipment for the teaching of various aspects of the subject. There were stoves, cooking
utensils like pots, pans and household cleaning equipment like brooms and brushes. Appropriate instructional resources should be available (Kemp 1985, Taylor 2011). However some of the equipment was not adequate like the stoves because some were not in working order. The teachers indicated that under normal circumstances, 2 students should use one stove.

The findings showed that besides the regular Home Management facilities, visually impaired students required special learning resources (Taylor 2011). For note taking purposes, the blind were observed using Braille whereas the partially sighted wrote their notes in exercise books. The teachers used ordinary diagrams for the partially sighted and diagrams on thermoform for the blind to feel. It was noted during observation that the blind used the sense of touch to feel the parts of an egg drawn on the thermoform for example egg yolk, membrane. The students had items like a port set reader which scans and reads for the blind, a Braille note taker and idiomatic television which enlarged print for the partially sighted. These pieces of equipment were very limited in number for example there was one port set reader.

The teacher provided handouts through transcribing material from the ordinary textbooks e.g. Cookery for Schools, Economical Recipes for Secondary Schools, into Braille. The students with low vision were provided with handouts in regular large print. The respondents emphasized use of varied media to reach every student as one respondent pointed out that, “The school provides handouts, tape recorders, videos, computer with a voice. We need more talking computers for our students”. Various types of media are essential for effective learning in order to cater for different students, the partially blind, blind, slow learners (Keller 2005, Kappa 1991, Kemp et al 1985, Chamberlain and Kelly, 1981).

To facilitate movement and practical work, equipment in the laboratory was neatly arranged with adequate space for students to move bodily. A meticulously arranged environment is recommended for the blind to avoid accidents (Kaufman and Hallahan 1994). For easy identification the equipment and stored items were clearly labeled in regular print large print and Braille (Keller 2005). One of the interviewed teachers said “The items are labeled and kept in the same place. During the first weeks, we familiarize students with the classroom set up. This helps them in finding what they need during lessons”.

Although the resources were generally varied, the problem noted by the researcher was inadequate media as one teacher interviewed said “There is only one stove in working order. The ideal situation is for 2 students to use one stove” however when a class of 8 students has to use one stove, it becomes difficult for the students to operate. This can cause accidents through crowding on one cooking point. Skill acquisition is negatively affected because not much individual practical work can be done by 8 visually impaired students using one stove (Kemp et al 1985).

**Strategies for teaching visually impaired**

The findings showed that the visually impaired use the auditory and kinesthetic styles of learning since the visual requires sight (Geoff 2009). From the findings it was noted that, teachers use the lecture, demonstration, discussion and group methods.
The research showed that teachers used the lecture method in the teaching theory to capitalize on the sense of hearing. The effective use of the sense of hearing through detailed descriptions of processes helped the visually impaired to learn (Keller 2005). Theory lesson observed on Kitchen used the lecture method to explain in detail the various kitchen layouts. The explanations were supported by the use of diagrams on thermoform for the blind; use of ordinary diagrams on charts helped the partially sighted.

The findings revealed that the demonstration method was used supported by a lot of explanation. For the blind, the demonstrations were individualised (Kappa 1991, Hallahan and Kaufman 1994). As one of the respondents pointed out, “We demonstrate to each blind individual, for example when sweeping”. Demonstrations have to be individualised so that the student uses sense of touch to feel the motions. In the lesson observed on sweeping, the student placed her hands over those of the teacher to feel how the teacher was sweeping. The demonstration was supported by a verbal description (Keller 2005). The research findings established that the demonstration was essential since Home Management involved acquisition of practical skills (Chamberlain and Kelly 1981, Oliva 1992). The findings indicated that since the school has both students with partial vision and the blind, use of group work maybe beneficial (Kapp1991). The teachers indicated that for practical work they paired the blind with the partially sighted. As one teacher pointed out, “I find it helpful to pair up a blind student with the partially sighted for the practical work. This helps in that the sighted may assist the blind in practicing practical skills demonstrated. This also helps in telling when something is ready for example a cake and giving direction when table is dirty and needs cleaning”.

The findings have also revealed that learning for the visually impaired should be concrete through engaging in practical work. One teacher pointed out, “In learning Home Management, students are exposed, to practical hands on activities where they learn to do things for themselves like cooking”. Through concretisation of learning, students are able to verbalise their learning experiences (Chimedza and Peters 2001, Lowenfield in Chimedza and Peters 2001). The findings also show that concretisation of learning helps in developing self reliance (ZIMSEC 1999).

Sensational learning

It was noted through the study that people communicate through the sense of touch, smell, sight, sound and taste. The findings showed that sight was an important sense in the learning process when combined with other senses; it greatly contributed to effective learning (Neo 2012). The respondents indicated that absence of sight in learning was a limiting factor since most of the media used in the teaching and learning of Home Management was visual. One respondent said, “Most of what we use in Home Management is visual since the subject is practical. If you want to teach a topic like methods of cooking, you use stoves, utensils and ingredients”. However it was noted in the study that the teacher of the visually impaired had to maximize on the senses available for effective learning (Herward and Orlansky 1992). Teaching of Home Management created a great challenge because visual media may not be used. One respondent said “Teaching table setting is easier when one has sight. The student will easily see how the various table appointments are placed”. It becomes difficult to use multimedia approaches since visual media is not very beneficial as students cannot see. The findings from literature were in agreement that
due to lack of sight, the visually impaired lacked experience of their environment (Lowenfield 1975).

In summary, the findings from this study showed that the visually impaired gain relevant skills and competences in Home Management to make them effective in the home making. The resources and strategies used in the teaching learning process promote learning through audio and kinesthetic styles.

Conclusions

From the findings it may be concluded that the skills and competences gained from learning Home Management, made students self reliant and able to effectively run their households. However the findings reflected that the Home Management syllabus and examination needed to broad to be managed by the visually impaired in the period of study.

In terms of personnel for teaching Home Management to the visually impaired, the conclusion is that the subject was manned by teachers who were Home Economics specialists; they had no prior training in special needs education. These teachers were not well versed in teaching students with visual impairments and faced problems in effectively preparing students for exams.

It may be concluded from the study that the visually impaired students required specialised adequate facilities and equipment to ensure equal access to the curriculum so that they may effectively compete with their sighted peers.

From the findings it may also be concluded that effective strategies for the visually impaired allowed students to be actively involved in the learning situation and maximize the use of other senses to compensate for sight. Individualised demonstrations supported by explanations were found to be beneficial for the blind.

Recommendations

The study recommends.

• Equipping the institutions for the visually impaired with relevant and adequate resources to facilitate effective teaching and learning.
• Teachers for the visually impaired should undergo special education and training to effectively implement the curriculum.
• The Home Management syllabus and examination be reviewed to accommodate the visually impaired.
• Research on the effectiveness of the preparation for the ‘O’level Home Management syllabus in furnishing the visually impaired with self reliant skills be conducted.

References


