Independent Living for the Blind

By Kelly Green

This guide provides information to people who want to help friends or family members with a visual impairment. Advice on early intervention, services that are available for people who are blind is all provided for people to read and understand. The purpose of this information is designed to inspire people to learn and understand methods and devices that can be used to ensure independent living for people with a visual impairment.

CHAPTER ONE

People with a visual impairment, or also called persons who are blind have made tremendous steps towards living independently in the past four decades. Many advocate groups that continue to lobby governments around the world make it possible for this to happen, which is why many blind people have access to education, employment training programs, and adequate support. Many countries around the world are taking measures, such as inclusive education to help young people learn, and develop their skills to live independent lives while they are children. Inclusive education means integrating people who are blind, or with other disabilities into the regular educational system. Inclusive education, as it is called in advocacy and government circles must be able to provide the necessary resources and encouragement to insure their maximum success and independence. Integrated education, or inclusive education is a measure that helps people with a visual impairment develop into independent citizens, but there are many steps that must be taken, and methodologies to learn if one wishes to achieve an independent lifestyle. Achieving independence for a blind person does not have to be solely accomplished in the mainstream, or segregated school system. It also consists of domestic independence. From achieving academic independence to learning how to complete tasks in daily life around the house, and running errands helps people with

visual impairments, including those who have lost their vision in late childhood, or early adulthood gain the confidence that is a necessary step for independence.

Research from those who are interested in advocating or helping people with disabilities, including people who are blind illustrates the hypothesis that independent living doesn't start when people reach adulthood. Living independently is a process that begins at birth, and must be encouraged throughout life. Parents have the primary responsibility to seek assistance, read literature, and find support for their young children to lay the foundation for an independent, and successful life for their child. Advocates and occupational therapists claim that early intervention, or encouraging independent living for people who are blind begins when parents enrolling their child into a government run, or private daycare facility. The daycare facility, however, must be willing, or have knowledge to obtain support, and assistance to prevent isolation, which can happen to blind children, if they are not given one to one assistance in a daycare facility. Government run daycare facilities often have more resources to provide this kind of assistance to a developing child. Educational assistants are employed in the daycare when a child with a visual impairment is attending. The job of the educational assistant, or teaching assistant is to help the child learn basic skills that will enable him or her to progress to the next stage that must be completed for independent living. The educational assistant will often help the child learn verbal communication and commands, so he or she can communicate and interact with other children in the daycare. Introducing the child to various tactile objects and the environment around them in and outside of the daycare is another task that the educational assistant performs. Prevalent attitudes in societies are beginning to change to

the belief that people with disabilities can be included in mainstream activities and society. They still evade to the traditional methods that include, yet exclude. This is not how independent living is achieved. The child is blind, so as long as he, or she has one to one assistance to insure physical and cognitive development early in life, such as in a daycare setting, their ability to develop independently will be easier when they progress to the next steps in life. Including the child in all of the activities with their peers is crucial. Allowing this will develop their cognitive, physical and social skills, so they can build independent friendships, and learn from children their own age.

Early intervention and support is especially crucial for people who adopt children who are blind from orphanages nationally or abroad. Adoptions happen every day around the world for many reasons. Some people choose to raise a child that is not a descendent of their lineage because of their inability to bare children of their own. Others, however, choose to adopt a child based on the belief that all children deserve to have a happy and healthy life with people who can care for them. They discuss it with family and friends, and then proceed to research for reputable adoption agencies in their country, or abroad. Many factors must be decided by the potential parents. If the agency is reputable, they will discuss the various adoption possibilities with the parent or parents. The agency might even suggest adopting a child, or multiple children who have disabilities. The decision, however, must be made by the parents. If the parents, or parent decides to adopt a child with special needs, for example, a child who is blind, they must learn how to provide the child with support to assist, and encourage him or her to develop into an independent person. Support is available If you are adopting internationally. It can some

times be difficult to obtain, especially if you are adopting a child who is blind from an orphanage because of meagre resources and funding. Moreover, understanding that many orphanages do not have resources available to help children who are blind with basic skills to develop independence is important before the adoption is finalized. When parents adopt a child who is blind from an impoverished background, he or she will most likely need to learn basic life skills. When the parents, or parent adopts a child who is blind from an orphanage internationally, or in his or her own country, education and nurturing must begin immediately. This means teaching the child to complete household chores. Contact your local agency that deals with assisting, and providing services to children, or adolescents who are blind. They will most likely refer you to a rehabilitation instructor to provide support for you and the child. If the child is old enough to attend school, provide basic skills such as completing daily tasks and cognitive development before he or she is sent into the school system. The reason is because some children who are blind, and lived in orphanages do not have adequate cognitive, mobility, or social skills to flourish in the school system immediately. The rehabilitation instructor, together with the agency will also be able to give you information about a vision resource teacher, Orientation and Mobility instructor or how to obtain large print materials for your child to learn reading, writing, etc. Agencies that have these resources available will provide the necessary support with minimal charges, or for free. The agency with whom you are dealing with to help your child might also have programs where the child can meet other children who are blind. Allow your child to participate in these programs, as it will help him or her develop meaningful friendships and social skills with others before sending him or her to the school for the blind, or into the mainstream education system.

Moreover, with support from an agency that helps blind children, proper socialization and physical and cognitive development training, will encourage the development and process towards an independent, and happy life. Adoptions are all challenging; whether it is legal manoeuvrings with the agency, or international laws that can create challenges for families who wish to adopt. If you embark on the journey of adopting a child with special needs, such as blindness, it can be a daunting task, but if support is sought from friends, family, and agencies, it can be a rewarding experience, as you watch your child learn and live independently.

Whether your child is integrated into a regular education system is irrelevant for independence. Children can learn and thrive at a school for the blind, or in an integrated classroom. Although it is in most cases a positive experience for blind people to learn with sighted peers, it is unnecessary to dwell on that issue, when examining methods for helping blind people live independently. In order for a blind person to achieve independence, it might be in their best interest to educate them in a school where substantial resources are available, and all of the educators understand, and have acquired the training to assist in the process of independent growth for each student. I am certain that many people who are reading this will ask why is it unnecessary to dwell on whether or not to educate a blind person in a mainstream facility, or a traditional school for the blind. The reason is because independence means that every person, and family has the right to decide what will help their child, or family member who is blind without interference from others. Independence is not restricted to learning and completing tasks.

It is also the ability to decide for ones self how he or she will live his or her life; and how he or she will help their family members do the same. Moreover, it is an independent decision whether or not to have your child or adolescent learn independent living skills in a mainstream or segregated facility. If the decision is made to send your child to a school for the blind, it is important to make sure that it is in the best interest of the child. Here are some pieces of information that should be considered before making this important decision.

Many schools that are dedicated to teaching blind children and adolescents have resources and technological devices that will help the child thrive and gain important skills to access future educational opportunities and employment. The child or adolescent will most likely live on campus, or school grounds in dormitories with their peers. Giving them the opportunity to live and socialize independently at young ages. This is important because instructors often teach them life skills that other young people, who have no vision problems do not learn until they are adults. Moreover, there is nothing wrong with sending a child or adolescent to a school that dedicates itself to teaching the blind. Learning computers is also readily available for blind people to acquire. Numerous devices are available in schools for the blind that have the financial resources to provide them for students with partial, and for those with no vision at all. Staff are trained in helping students learn the necessary computer skills that will benefit them when they leave the institution for employment, or further education. Students who are blind have technological devices in many mainstream educational facilities, but many teachers who are trained in helping the blind do not have the skills to assist them in learning or furthering their technical skills.

If blind people wish to gain independence, they must be equipped with the tools to succeed. These tools include learning, and accessing technological devices to help them access employment, and acquire adequate life skills to live on their own without supervision from family or friends. Integrated living, and education is an excellent strategy to help blind people learn about mainstream society, and build friendships with adults and peers. It is not the sole method to enable blind people to live independently. Research the information about your local institutions that advocate for people who are blind before making the final decision. If research has been sought, along with sound advice from friends and professionals, the decision that is chosen to provide your family member with the opportunity to live independently will be made to benefit them for their present and future lives.

Whether or not you decide to provide your child, or adolescent with the opportunity to develop independence in a school for the blind or a mainstream facility is irrelevant when the issue of learning to read is being discussed. Many academic facilities are able to provide resources to teach blind students to read and write Braille. The key resource for teaching this skill is often a vision resource teacher, who is specialized in teaching, and understanding Braille. Vision resource teachers have to be trained in the mechanics of Braille and how to teach it to others before they are employed by educational facilities. Most educational institutions, regardless of their quality or if they are mainstream, or specialized for the blind, require the vision resource teacher to have several years of experience in reading, writing and teaching Braille. University degree is

also an asset for most institutions, when they are employing a candidate. A meeting is usually set up with the student and vision resource teacher to make sure they are compatible to work and learn together. Once the match has been made, the vision resource teacher will provide one to one lessons with the student to insure their success in learning how to read and write Braille. In addition to one to one lessons in reading and writing Braille, the vision resource teacher will also make sure the student comprehends the new skill that they must learn to live independently, if they are completely blind. Evaluation tests will be given, such as asking the student to Braille a short story and then read it to the vision resource teacher. If the student is successful, the vision resource teacher will discuss with them the next level of Braille that they will be learning, which is usually grade two, or also known as contracted Braille. When improvements need to be made, or the student is struggling, it is the responsibility of the vision resource teacher to inform the main classroom teacher, and provide the student with tasks and longer lessons to help the student overcome the problem that he or she has been struggling to overcome.

Vision resource teachers are an important role in developing a blind student's ability to have independence in his or her future. If this resource is provided to a blind student, or even to some one who has lost his or her vision in adulthood, it will enable the student to read, write, and accomplish tasks easily and independently. If a blind person is not taught this skill, and has no visual ability, he or she will not be able to live independently, because one must be able to read and write, so he or she can access education and employment opportunities with confidence, and minimal or no supervision.

The beginning steps to an independent lifestyle for a person who is blind is necessary for positive self esteem and productivity in their personal lives, and for economic progress. People who help to ensure that blind people are independent contribute to the learning of each skill, and area of life. From educational assistants, vision resource teachers play a vital role in the strides towards independence, and self confidence. There are other skills that blind people have to learn to successfully complete domestic tasks. Although peers and family members can contribute to this area of life, it is also prudent for a rehabilitation instructor to assist. A rehabilitation teacher not only helps people who have suffered a debilitating disability from birth or in an accident, but there are some who are specialized in assisting blind people. There qualifications vary, but they are in most cases educated at a post secondary level with volunteer experience in organizations. There purpose is to help blind people learn how to care for themselves in the home. The rehabilitation instructor is often referred to each student by the agency where they are employed. They will discuss the situation, and needs of the future student with the family, or student, if family is not involved. After the consultation is complete, an appointment will be arranged for the instructor to teach the student the skills that he or she needs to learn.

One skill that rehabilitation instructors encourage is financial management. Information will be provided to the student concerning services at their local bank, or any other concerns they might have about other personal issues. In addition to being informative about concerns or challenges that each student faces in their daily lives, the instructor must notify their students about technical devices that will help them achieve independence in and outside of their home environment. If a student is having difficulty

with the task of pouring a pot of tea into a cup for example, and is unable to know when their cup is full, the instructor might suggest a device that clips onto the cup and plays a tune to indicate when the cup has been filled. Determining colours of clothes can also be difficult for people who have complete vision loss and are trying to separate their clothes when they wash them. Small plastic tags with the name of each colour embossed in Braille onto them are available. The rehabilitation instructor will teach their student how to sew each label onto their garments, so they can easily differentiate their clothes by feeling each Braille tag to determine the colours of each piece of clothing. Depending on what the instructor is helping the student to learn, he or she must be informative, patient, and able to understand each person's needs, problems, and achievements.

Rehabilitation instructors play an integral role in helping people who have lost, or are losing their vision later on in life gain independence in their personal lives. It is a necessary profession, and if the instructor is patient, understanding, and enjoys working with people, he or she will benefit those who would otherwise be unable to live independently. Rehabilitation instructors are necessary, because they assist in learning, and acquiring the skills to complete daily chores in life. If one wishes to complete tasks independently, he or she must be able to run errands, and be able to travel places with minimal assistance. Post secondary institutions, and some grassroots organizations hire people to teach the skill of traveling to different places to the blind. These people are called Orientation and Mobility Instructors, because they assist people who would otherwise be unable to travel to places independently. Orientation Mobility Instructors, also called ONM instructors work with blind people of all ages to help children,

adolescents and adults develop the confidence and techniques for independent travel, and lifestyle. The key strategy to allow blind people the freedom to walk and travel independently is a white cane. The ONM instructor is the person who provides his or her students with this important tool. The techniques for teaching this skill enables blind people to travel with minimal or no supervision on busy streets, and urban settings with minimal difficulties.

In order for a person to be given a white cane, the ONM instructor must teach him or her how to use it properly, so it benefits the student in his or her future endeavours. The first step that most ONM instructors teach their students is the diagonal technique. This is when the instructor tells his or her student to hold the cane in a diagonal position with the bottom of the cane two inches off of the ground. The student will be instructed to follow the direction and sound of his or her voice. If the student is successful, the ONM instructor will schedule another lesson to begin teaching the touch and drag technique. It is the responsibility of the ONM instructor to evaluate each student, so that he or she can assist in areas that need to be improved. Establishing a bond with each student is necessary, so that the instructor can understand and devise new methods to help each student learn, and succeed in independent travel.

Orientation and Mobility Instructors are there to provide the skills to enable people with visual impairments the skills to travel independently, so they can live productive lives, and eliminate isolation. As long as the Orientation Mobility Instructor is able to teach his

or her students the skills and techniques for an independent lifestyle, they will continue to encourage independence for blind men, women and children.

Orientation and Mobility instructors are also involved in camping programs for people who are blind. Attending programs that encourage independence for children who are blind for example, is important for many reasons. One reason is because it helps develop social skills, so that children and adolescents can learn the importance of relationships, and provide support for friends and peers who are struggling to learn skills that must be acquired to move to the next step towards independent living when they are adults. These programs are often established through agencies who advocate for an independent lifestyle for persons who are blind. Funded through government assistance, these agencies provide children and adolescents opportunities to learn and participate in peer oriented activities, such as trips to various recreational establishments, or camping trips that encourage independent life skills away from the supervision of parents. Of course, councillors are always on hand to teach and supervise, so they can learn independent skills in a safe, stable environment. Although children who are blind need to interact and develop independent living skills with those who have vision, or other disabilities, it is also important for them to learn and support others who have lost their vision with activities and programs that help each child or adolescent accomplish the goal of independence. These programs that encourage the development of these skills have a variety of activities to assist in the development of every child and adolescent.

Some programs, or also known as summer camps that are funded through agencies for the blind, provide life skill activities for children between the ages of five and

eighteen. Activities that teach life skills to children who are younger than eleven, often involve techniques for tying their shoe laces, as it is often difficult for children who are blind to grasp this task when they are young. Washing dishes after eating their meals is another life skill task that all children are encouraged to learn with the assistance from camp counsellors, and other agency staff members who choose to volunteer, or are paid to help in camp activities. I previously mentioned that most of these programs or summer camps also organize activities for adolescents. These activities are designed to prepare them for their teenage years, and adulthood. Cooking classes are an excellent activity that many camps for the blind organize. Counsellors will assign a meal for the camp members to cook, and will accompany them to the grocery store. This encourages them to know how to shop for food, determine spoiled food from items that are not, and the general cost of items such as fruits and vegetables, so they learn how to independently purchase necessary items for cooking. The adolescent camp members will then return to the camp to prepare the assigned meal with minimal supervision from camp staff. When the meal is finished, some camps organize the activities to include the younger members in the cleaning, and washing of dishes to encourage social interaction, and life skills training. In addition, Orientation and mobility training is also provided at the majority of these camping programs. The younger members will be taught how to use a white cane, and will participate in games that involve finding various objects, and navigating around the camp site that is organized by a government agency or advocate group. Adolescent children will often receive orientation lessons such as walking to the local variety, or grocery store to buy, or find a product that is necessary for future activities for their peers. Trips away from home and learning how to find facilities at the temporary camp

site are other techniques that orientation and mobility instructors who are members of the camp staff will use to help independence, and self confidence.

From peer development, social interaction to learning life skills lessons, these camps are available and are designed to provide support in teaching people who are blind the necessary skills to socially, cognitively, and independently develop into young, successful adults. Most agencies who are dedicated to helping and advocating for people, including children who are blind have information, or organized camp programs each year. If the child, or adolescent wishes to participate in this life-changing experience, be sure to find out information as to whether or not it will cost, and safety precautions taken by the agency takes to ensure a safe, happy, and wonderful learning experience, as the camp members learn life skills training, and develop meaningful friendships without the supervision of their parents or other family members.

Independent living programs not only teach life skills and improve relationship skills among peers. These programs also prepare children and adolescents for future relationships with colleagues and other people with whom they will connect with in adulthood. Relationships take place in the lives of everyone around the world. It is how people learn to live independently, and thus, crucial for people with a visual impairment to learn as well. Although segregation and prejudice is a universal human flaw, the relationships that people establish, including children interacting and bonding with other children or adults is a universal method of learning. Advocate groups who organize camps and other recreational programs for people with a visual impairment continue to

lobby governments on an international scale for integration and independent living in mainstream societies. This movement has made it possible for people with a visual impairment to access educational and employment opportunities, and succeed alongside their sighted peers. Through continual efforts of advocates, as well as implementing educational and work programs for people with a visual impairment to become contributing members of societies, relationships are becoming integrated with mainstream populations. This is leading to financial and domestic independence, because people with a visual impairment are obtaining employment in telecommunication, and computer industries, due to accessible computer and Braille devices marketed for the blind. Moreover, marriages, friendships, and other forms of relationships are built, so blind people can learn to live and succeed independently. For this movement of independent living to continue, it is important for people to learn how to act and build relationships with peers or colleagues who are visually impaired.

Feel free to ask questions about his or her disability, but do not be rude. the person with a visual impairment for example, might be able to use his or her other senses, and feel your stares. Talk to your new acquaintance about other daily events, and get to know him or her, as you would anyone else. Attend events and participate in activities together, if you both enjoy doing similar things, so you can learn from each other and build a lasting bond. Offer assistance if he or she needs it to travel to a place, but it should only be offered when asked. Always allow him or her to use his or her white cane when traveling to a destination, in order to maintain the independence he or she is learning, or has acquired. Allow your friend to cook dinner for you, if they have acquired the skills to complete this task. If your friend is unable to prepare his or her own meals

independently, encourage him or her to learn by giving verbal instructions for preparing and cooking simple meals. Offer to assist, but don't take over the learning process. When your friend learns how to cook some meals, accept his or her invitation for dinner. Relationships are designed to allow people to help and encourage each other in improving their lifestyles. If you and your friend share mutual interests and a willingness to learn, you will both reap the rewards, and will continue to enjoy a happy and caring relationship. Helping each other will benefit both you and your friend, because he or she can learn other skills and techniques for independence and self confidence, while you learn to understand that everyone needs to have independence and self confidence by forming relationships with colleagues and peers in an academic institution or camp.

CHAPTER TWO:DEVICES

Not only do people with a visual impairment have the resources to access and live independently, advancements in technology have made it possible to access computers and opportunities that were not always available for them to use independently. Cumbersome devices, such as the Perkins Brailler, and eventually computerized software called Artic Vision, created access to made it possible for people to work and succeed in mainstream society. This software, however, still limited people, but it was the beginning of future innovations. Attitudes are changing, as technology advances for both mainstream society and those who wish to be integrated and live independently within society. Artic software has been replaced with a more accessible, and efficient software

called Jaws for Windows. Braille devices are also advancing at a rapid rate. Examining the various software programs and Braille devices is important, so that people can learn and understand how crucial accessibility is to people who are have minimal or no vision.

Jaws for Windows for example, was developed in the mid nineties. It is designed to help blind people live an independent and productive life, due to its adaptability to windows 95 and higher. In addition to this advantage, one can also use the Internet with minimal difficulty in browsing websites for information, etc. The voice synthesizer that reads information on the computer screen enables the user to read information with no assistance from people with vision. The unfortunate side to this program is that it is compatible with most Microsoft products, but there are improvements that still need to be made for people to be able to independently access miscellaneous programs. Fortunately, if one wishes to access a program that the conventional Jaws for Windows is unable to read, he or she can hire a programmer to write a script that will enable the screen reader to operate the program; thus, making accessibility that much easier for people.

Installing and using the software is easy and accessible. Once the introduction appears on the screen, you will see a picture of a shark. Follow the voice commands, so it is installed correctly. Also, there will be an authorization disk in the box that came with the Jaws for Windows software program. Insert the disk into the floppy drive, and input the information, or key number that appears on the screen, so that the demonstration mode is turned off. Listen to the manual that also comes with the software program on a CD in the box. The manual has the title in Braille on the cover, as well as the actual software that is installed in the computer. Create an icon that will allow blind people to

access jaws with the key-board commands. Usually people access the program with the simple command control alt J for Jaws for Windows.

Key-board commands to use this software are simple for users to learn. Opening Microsoft word, simply press the control key and the escape key at the same time for the start menu. Move the down cursor to the next item in the start menu, and listen to the voice until it says Microsoft word. This applies to all other programs that are Microsoft compatible, which means that it will most likely be compatible with Jaws for Windows, since they design their versions for Microsoft products.

Jaws for Windows has numerous versions. From 3.0, up to the latest version of 5.57. It is a software that has given people with a visual impairment the opportunity to access information in mainstream society with the confidence that we all need to live and work independently. This software is going to be on the market of accessible items for many years to come, so it is important for people to learn, and understand how it works. If not, people with visual impairments will not be given the full access that they need to succeed.

Computerized software such as Jaws for Windows continues to advance, so that people can live independent lives, because of this software that can read material that in the past, was not possible for blind people to access in school, personal use, or in the workforce. This technological software has paved the way for other software packages that give people the ability to read print materials in a scanner. Like Jaws for Windows, these software packages need to be used on a computer that has windows 95 or higher. The software, as with the screen reader Jaws for Windows, allows people to read documents

in print by the synthesized voice that reads the text on the computer screen, once it is installed from the CD onto the computer. There are, however, problems with the older versions of scanning software. Kurzweil is the prevalent scanning software that is used to help people with visual impairments read printed documents. There has been improvements, but common complaints are in regards to inaccurate reading of documents that have poor quality text, columns, tables, etc. If one wishes to use Kurzweil to read documents or books independently, it purchasing the newest version, Kurzweil 1000 for accuracy, and minimal difficulties is recommended. There are other accessible software packages that can be used to read documents, books, and other materials with the use of a scanner. The newest one besides Kurzweil 1000 is Abbyy find reader. This ocular recognition software reads materials with minimal difficulty for the person who wishes to access them. Improvements in the software continue to be made to insure accurate reading of columns, tables, and other textual differences in documents and books. Newsletter from Abbyy find reader has information on upgrades, discounts, etc. If the user wishes to access this information, the news letter can be e-mailed to his or her computer on a monthly basis.

Kurzweil1000, and Abbyy Find reader are the software programs that enable people to access their most confidential personal and business information. Future improvements in these software programs will allow people to access more information that isn't in Braille, or digital format. Providing extra assurance to blind people who wish to live independent and productive lives that they can access information without

interference or assistance from those who they don't want to read their personal or business related documents.

If one wishes to understand the key tool or resource that established a stable foundation for technical advancements for computer and Braille users, then one must learn the technique to use the Slate and Stylist. This small ruler shaped device was used in the late and early nineteenth and twentieth century to help people with visual impairments learn skills that would encourage independence for them, and thus, changing attitudes in societies around the world. The Slate and Stylist was the tool that began this process. This small device requires thick paper. The same paper that is used in a Perkins Brailler. The ball-point pen called the stylist at the end is what Brailles the letters. The portability of the device continues to be a convenient tool in exigent circumstances. People can simply put the slate and stylist into their purse, backpack, or pouch, and as long as they have a sheet of Braille paper available, they can write information down when necessary. Unlike the Perkins Brailler, and other more advanced Braille devices, using the slate and stylist requires the Braille user to Braille each letter from right to left. The Slate and Stylist is a ruler shaped device that fits onto the Braille paper by pressing until you hear the device click shut. Of course, one must move the device down the page to have a blank line to continue Brailling, so place the slate and stylist at the top of the paper. Instead of the Braille dots, or Braille cells being left to right, it is right to left, as previously mentioned. In other words, each Braille cell, which consists of six keys, or on a slate it is slots, is from right to left. Start the stylist at the right cell, and place the stylist in the right slot at the top for the letter "a". Each cell has six slots inside them, so this is

where it gets complex. This is more complex than learning the Perkins Brailler, which is why the Perkins Brailler is a more easier and accessible tool for blind people to learn. Move the stylist to the next slot beside the right one that you previously wrote the letter "a" in for the letter "b". Unlike the Perkins Brailler, the dots one and two that constitute the letter "b" will be the top Braille cells on the right hand side in the second slot beside the first set. The letter "c" is the third slot from the right, so if you wish to Braille this letter, then place the stylist pen in the top right hand corner of the third slot for dot one, and move the stylist to the left corner of the same slot for the fourth dot. When moving down to a new fresh line to continue Brailling with a slate and stylist, simply open the device by pushing on the right hand side, and the ruler shaped device will open without difficulty. Move the device to a line that is close to the previous one by feeling where it is blank, but close enough to line up to the previously written line. Close the slate, so you can continue Brailling your document.

Although the Slate and Stylist doesn't seem beneficial or accessible for those who wish to gain independence, it has some benefits, such as instructing those who are learning or are advanced Braille users in a historical method that encouraged the technical devices that were created later. The ability for people who were blind throughout the early developments of accessible technology to achieve independence with a portable device was a tremendous step towards independent living for future generations. Moreover, learning the Slate and Stylist is still important to provide people with the portability that is some times not efficient with battery operated devices. Most people only use the slate and stylist in emergency situations, which is understandable;

now that portability is a prevalent thought for manufacturers of Braille devices. If one has an emergency situation, they must know how to arrive at a solution if writing information down is necessary, and the person is unable to access a computer or portable battery operated Braille device. Moreover, learning the slate and stylist is another method to help people who are blind develop their skills for arriving at solutions in emergency situations in their independent and busy lives.

The history of accessible technology for blind people is long. From the slate and stylist to the creation of the Perkins Braille machine. This device was an advancement from the usage of the slate and stylist. These innovations needed to evolve into other devices for people with visual impairments to live, and succeed in the modern world of technology, multi-national work environments, etc. The Perkins Brailler is still a necessary resource to assist people with visual impairments in the area of independent living and learning. The awkwardness, and inability to access the latest computerized software, however, have made this useful device almost obsolete in the eyes of educators, employment counsellors for people with disabilities, and rehabilitation instructors. Consequently, most children or adults who have lost their vision only receive minimal training on this machine, and thus, have inadequate Braille skills, due to the emphasis on computer skills. Although the technological advancements in computer software, and Braille devices have allowed people access to independent living in mainstream societies, it is still important to use technological devices such as learning manual Braille, or acquiring adequate skills to use the Perkins Braille machine. The reason is simple. In order to achieve independence, people who have vision loss must be able to read and

write Braille. How this process was taught, and is still taught with minimal emphasis is through Braille instruction on the Perkins Braille machine. For those who believe in independence, learning how to use the Perkins Braille machine will enable children and adults to succeed in their later years.

The Perkins Brailler is a heavy, medium sized square device that requires no batteries, solar equipment, plugs, etc. It is a device that can be integrated in any environment for personal, educational, or work related use. Although it is heavy, it is still portable. The paper is specifically designed for this device, and is thick to withstand the puncture marks that is necessary to make each Braille character, or dot. Order this paper at your local agency, or advocate group for the blind. When you receive the Braille paper, (this is the correct name for the paper that is required for this device), simply use the round knobs to insert the paper, and roll the paper in with the cylinder shaped rollers on the left and right side of the machine. The keys that are located at the centre on the bottom of the device are what creates each Braille letter, character, or dot. There are seven keys in total. The key in the middle is designed for spacing, while the six oval shaped keys on either side of the space bar are what make each Braille letter or dot. This device has no extra technical features that the Braille note or Braille N' Speak have, but it is an excellent tool for those who are in the beginning stages of learning Braille. Press each key hard. If the six keys are not pressed with some strength, they will not produce the quality of Braille that is necessary for reading. Most letters require the six keys to be pressed in various combinations. There are exceptions, however. The letter "A", for example, is made by pressing the elongated, or oval shaped key that is directly to the left

of the space bar. The letter “B” on the other hand, is a combination of the first and second keys to the left of the space bar. As with print, or conventional writing, one has to move to a blank line on the piece of paper. The Perkins Braille machine has a key that when pressed will move to a blank line on the paper. This is a round button that is located to the left of the oval shaped keys on the left side of the dividing space bar. Press this hard and you will have a new line to continue Brailling. When you have done this step, there is a mechanism called a carriage. When it is pushed to the left it takes you to the beginning of your blank line on the paper. This is essential for those who need to line up a certain word, or for those who are creating columns. The reason is because it is not only used for returning a person to the beginning of their new line. When it is pushed down, it can also be moved to the right or left with no difficulty to create columns; lining words, numbers or sentences up perfectly. Like a computer, there is also another round button on the right side of the machine that back spaces you to a previous word or sentence. Simply press this key several times, and you can move to a previous word, sentence, number, etc. This is also used when creating columns of information, in the event that the carriage key does not line you up properly with the information necessary to continue Brailling.

The technological advancements are developing rapidly, as with conventional devices and computerized equipment. It is important, however, to understand and learn devices that were cost effective, required no batteries or extra equipment, and were once considered the corner stone for access to independence for those who were losing or had lost their visual capabilities. Using and learning the Perkins Brailler is necessary for

beginners, and even those who are advanced because it enables people to acquire the skills of reading and writing Braille, so that he or she can learn the advanced Braille and computerized technology that provides them the capability to succeed and gain independence.

If you are learning how to assist people with a visual impairment in learning the Perkins Braille machine or the Braille letters, it is necessary to understand the basic formula. The Braille formula consists of six dots, and when used in combinations, it is a writing and reading style that one must simply practice and memorize. The instructor who teaches Braille has to be a Braille user or have extensive experience in working with the numerous Braille devices and with those who are Braille users. If you are wanting to teach Braille, you will most likely be using a Perkins Brailler to learn the basic skills for several intensive weeks. Activities will include watching videos of various methodologies and Braille users or instructors who have taught Braille for many years to learn, and observe the different skills that must be acquired in order to learn and teach this formula to others. Magnets with Braille characters and letters on them will be distributed to each member of the class, so each person can feel and examine the letters and numerous combinations of dots that represent the twenty-six alphabetical letters. Assignments that help students to learn how to write each Braille letter will be given to ensure knowledge retention.

For those who wish to learn Braille, it is difficult, but important to learn to help people with a visual impairment accomplish goals and independence.

Moreover, with practice and memorization of the various letter the combinations, this will help teachers and students develop an understanding and appreciation for education

and this advancement in reading, writing and technical advancement for people with visual impairments.

When you are learning the Braille alphabet to teach to your child who is blind or a student with whom you are working with, you will be using a Perkins Brailler to learn and teach. It is advisable that you teach your young child, or a student who is either a child or an adult the Braille alphabet with the Perkins Brailler. The reason is because the Perkins Brailler is less difficult to teach than a Slate and Stylist, but still requires the basic skills to Braille each letter. It also requires no computer skills, so if your student or child has recently lost his or her vision, it will be easier to teach their new method for reading and writing on a device that doesn't require a lot of technical knowledge to produce the letters or documents. Roll the Braille paper into the Perkins Braille device, and begin teaching the letters. The basic letters are "a", which is key one. The first key to the left of the space bar. The second letter that one must know, or teach is the letter "b", which is dots one and two. Located to the left side of the space bar. The third letter is of course, the letter "c". Keys one, and four; the first keys on the left and right of the space bar. They must be pressed together to make the embossed combination for this letter. For the letter "d", simply press keys one, four, and five. The keys must be pressed together. Looking at the Perkins Braille device, you will see the space bar in the middle, and six keys on either side. For the letter "d", the keys that are pressed are the first key directly beside the space bar on the left hand side, along with the first two keys on the right side together. When you want to Braille, or write the letter "f", simply press the first two keys on the left side of the space bar, along with the first key on the right hand side

of the space bar together, and this will produce the correct letter. As you can see, most of the letters that make the English alphabet are Brailled with combinations of the six keys that are often pressed together to make each letter. The letter “g”, one must press the first two keys on either side of the space bar together. The letter “h” is achieved by pressing the first two keys on the left of the space bar, and the second key from the right of the bar together. Writing the letter “i” is not difficult to do either, as long as you know the combination of the keys that need to be pressed. The combination of keys that need to be pressed to emboss this letter for “i” is the second key from the left of the space bar, and the first key directly on the right of the space bar. In other words, it is keys two and four. The Braille keys are six in total, so keys one, two, and three are on the left of the space bar. Keys four, five and six are on the right. The keys for the letter “j” are keys two, four, and five pressed together as a combination for this letter to be embossed to read. The keys for the letter “k”, press keys one and three together. Logically, the next letter in the English alphabet is the letter “l”, and in Braille, it is the same, as it is only a form of embossed writing for the blind that can be used to help people read in any language. Press all three keys together on the left side of the space bar. For the letter “m”, press keys one, three, and four together. Continuing on the quest to learn the Braille alphabet to teach those who are blind, or to use in a seminar to teach instructors or advocates who wish to help blind people, it is keys one, three, four and five together for the letter “n”. Press keys one, three and five for the letter “o”. Keys one, two, three and four is the formula for embossing the letter “p”. For letters “q”, press keys one, two, three, four, and five. The letter “r” is made by pressing keys one, two, three and five. Embossing the alphabetical letter “s” is made by pressing keys two, three, and four together. Brailling

the letter “t” is keys two, three, four and five together. Pressing the letters to write the alphabetical letter “u” is keys one, three, and six in unison. For the final letters, they are also easy as well. Simply press keys one, two, three, and six at the same time for the letter “v”. The letter “w” is keys two, four, five, and six together. The letter “x” is very simple. Press keys one, three, four and six together. For the letter “y”, one must press keys one, three, four, five and six at the same time to emboss the correct letter. Writing the letter “z” is keys one, three, five and six at the same time.”

If one understands that Braille is a method of embossing letters by pushing raised dots in combinations on a thick piece of paper, it will be easier to learn, and teach this historical method of writing and reading. The importance of learning the various combinations of dots that make each letter in the English, or any other linguistic alphabet is compulsory, if one wishes to learn, and eventually teach blind children, young adults, or older adults this method of reading and writing. If you are able to refer to materials that show how each letter is formed, and constitute your findings and skill into lessons that will help others learn Braille, then you will be encouraging independence, and thus building confidence for many people who are blind. This will also enable blind people to achieve opportunities in their future endeavours, as they learn the technically advanced Braille devices. For learning the Braille alphabet, and teaching it to others, it is difficult, but necessary to continue the movement that began two centuries ago for independent living.

The Perkins Brailler laid the foundation for computerized Braille devices such as Braille N' Speak. This device is a portable Braille machine, and unlike the Perkins Brailler, it can transfer information from Braille to print. The speech output reads the information that the user has written into the memory. This technological advancement makes it possible for people with a visual impairment to utilize their Braille skills, while ensuring that material is accessible and legible to those with vision.

The Braille N' Speak has also made improvements in its technological advancements with new features, such as spell-check, word count; thus, making it into a computerized Brailler. In other words, if a person wishes to use the Braille N' Speak without the computer, he or she is able to do so without having to use the latter to access or read information. The Braille N' Speak has some limitations. One must purchase a portable disk drive to transfer the information from the Braille N' Speak onto the disk drive, if he or she wishes to print information for employers, teachers, or any other person who is sighted to read. The Braille N' Speak does not have a Braille display. Limiting the user's ability to read Braille characters or dots. The Braille N' Speak only has the speech synthesized voice to read the information that the user of this device Brailles into the machine.

there are simple commands that must be learned to use it effectively. The digital, or computerized element allows people to use it without paper, tapes, disks, etc. Each document is called a file. Creating a file is simple. Turn on the Braille N' Speak, and press the space bar, which is the rectangular shaped button in the middle, as it is with the Perkins, along with the letter "o", which is keys one, three, five together. The speech synthesizer will say the word option, thus, wanting to know what the command will be.

Press the letter “C”, which is a combination of keys one and four, as it is with the Perkins Brailler to create your new file. The voice will then say, create file. Provide the name of your file, or document, and then press the space bar, and the letter “E” together, which is dots one and five in combination with the space bar to finalize your command, and create your new file. When this command has been completed, you are free to use the Braille N’ Speak to Braille your document. Unlike the Perkins Brailler, the voice synthesizer is the user, or instructor’s only guide to reading, or manoeuvring around in each document he or she has created. Everything is computerized, so the command for moving to a blank line in your file is the space bar, and keys four, and six, which are the first and last key on the right hand side, directly after the space bar. Reading or moving to a previous line is simple. Press the space bar, and the first key that is on the left hand side, directly after the space bar. If there is text that is on a line below the one you are on, press the space bar, and the key directly after the space bar on the right side of the device. The voice will read each line of text, so you know where you are in the document. Deleting a line, word, or letter in a document is simple, and necessary for one to learn for those times when mistakes are made. In order to delete a word, press the space bar, along with keys one, four and five together. The voice will ask you what needs to be deleted. Your cursor must be on the word that needs deletion, so that the wrong word is not erased. When the speech software inside the device asks you what needs to be deleted, press the keys for the letter “w”, thus symbolizing the command for delete word, and then press the space bar and the letter “e” together to complete the process. In addition, deleting letters requires similar steps. Press the space bar, and keys one, four, and five to prompt the speech software to ask you what needs to be deleted. Type the letter “c” and the voice

will say character. Your cursor again must be on the correct letter for it to be properly deleted from your document. Press the second key from the left hand side of the space bar to specify the amount of letters or characters that need to be deleted. If there are more than one letter or character that needs to be erased, simply type in the numbers, using the Nemeth code numerical method for completing this task. If you want to save your document, simply pres the space bar, and the letter "e" to complete this task, so you can turn off the device without losing files.

The Braille N's Speak is a tool that is helpful to those who are visually impaired, as it also enables them to convert files from Braille into printed documents by using a portable disk-drive, so that the information from the Braille N's Speak can be imported onto a disk, loaded onto a regular computer, and printed off into a regular document for those who are sighted to access. Using the Braille N' Speak is easy for advanced Braille users. The simple commands are accessible for teaching assistants and Braille users, so it will not discourage people who frustrate easily. The digital, or computerized element allows people to use it without paper, tapes, disks, etc. Each document is called a file. Creating a file is simple. Turn on the Braille N' Speak, and press the space bar, which is the rectangular shaped button in the middle, as it is with the Perkins, along with the letter "o", which is keys one, three, five together. The speech synthesizer will say the word option, thus, wanting to know what the command will be. Press the letter "f" for file, then "C", to create your new file. The voice will then say, create file. Give your file a name, and then a voice prompt will ask you how many pages do you want your file. Specify how many pages your file will be by using the Nemeth code for the number of pages for

each file. Provide the name of your file, or document, and then press the space bar, and the letter “E” together, which is dots one and five in combination with the space bar to finalize your command, and create your new file. When this command has been completed, you are free to use the Braille N’ Speak to Braille your document. Unlike the Perkins Brailler, the voice synthesizer is the user, or instructor’s only guide to reading, or manoeuvring around in a created document. Reading or moving to a previous line is simple. Press the space bar, and the first key that is on the left hand side, directly after the space bar. If there is text that is on a line below the one you are on, press the space bar, and the key directly after the space bar on the right side of the device. The voice will read each line of text, so you know where you are in the document. Moving to a blank line in your file is the space bar, and keys four, and six, which are the first and last key on the right hand side, directly after the space bar. Deleting a line, word, or letter in a document is simple, and necessary for one to learn for those times when mistakes are made. In order to delete a word, press the space bar, along with keys one, four and five together. The voice will ask you what needs to be deleted. Your cursor must be on the word or letter that needs deletion, so that the wrong word is not erased. Press the keys for the letter “w” for deleting a word. Then type how many words you want to delete and press the space bar and “e” together to exit out of the command. Deleting letters is the same steps for deleting words, but instead of typing “w” for word, type “c” for character. Specify how many letters need to be deleted, so that you get the desired result, and exit out of the command by pressing the space bar and the letter “e”. Saving documents is done by pressing the space bar, and the letter “e”, so you can turn off the device without losing files.

The Braille N's Speak is a tool that is helpful to those who are visually impaired, as it allows the portability to travel and work where ever the user desires. It also enables them to convert files from Braille into printed documents by using a portable disk-drive, so that the information from the Braille N's Speak can be imported onto a disk, loaded onto a regular computer, and printed off into a regular document for those who are sighted to access. This device has enabled technology to advance for the benefit of assisting those who wish to work, learn and live independent lives.

Braille users who travel, and live busy lives, the Braille Note is a portable Braille device that evolved from the Braille N' Speak. Similar to the Braille N' Speak, the Braille note is portable, but has added features that no improved Braille N' Speak device has in its computerized memory. Not only does the Braille note have a Braille display for users to read the Braille letters, but users can access the internet and use other word processing programs, while reading Braille, or listening to the screen reader. In addition, Braille note users do not have to worry about alternative format, or converting the Braille material into print, because of its e-mail capability. It also enables people who wish to work, travel, while using the internet, or e-mail for business, the ability to do so with no inconvenience. It is important to note, however, the Braille note is expensive, but one can gain access to purchasing this technical advancement using several options.

Several computer shops that specialize in selling technology to give blind people the access to independent lives have used devices, such as Braille note devices. If you purchase, or wish to purchase a Braille note, make sure that the device is in working

order. Some computer shops who sell used devices do not ensure their equipment is useable. Common complaints with used Braille notes are broken mother boards, so make sure that if a used Braille note is purchased, that it is one that works properly. In many developed countries that have government programs, or funding for people with disabilities, government funding is possible. The costly nature of purchasing this device can be alleviated by applying to your provincial, state, or federal government. In Canada, for example, Assistive Device Program will fund up to seventy-five percent to ensure access to devices that would otherwise hinder the ability for blind people to live independently. There is criteria that one must fit for funding to be given for technical devices. When applying for funding, the form will outline the categories that each device falls into, so that you can fill out the form easily. Fundraising is also possible with local government, or non government organizations. Write a letter to each organization that you feel would be open to helping you purchase a Braille note, or any other device that will help you access opportunities and information to improve the chances, and convenience when living independently.

Follow up with phone-calls to ask if each organization has received the letter, or wishes to inquire about your request. One will most likely tell you that they have read your letter, so arrange an appointment with the person who is in charge of financial decisions to discuss the details and why this will help you live an independent, and productive life.

For those who enjoy traveling, reading books without waiting or worrying for a library to deliver books in Braille, and succeeding with minimal inconvenience, or assistance from others, the Braille note is an excellent advancement to ensure independent lives can remain that way. Purchasing a used device, such as a Braille note

might be the most cost-effective method for those who live in countries or states that don't have government funding programs, but it is important to research, and look for options to ensure that one can afford to purchase a new, or used technical Braille device.

When the development of technological devices for the blind was advancing in the late twentieth century, the need for a device that produced Braille for large documents was necessary. Braille Printers, or Braille embossing devices make it possible for people to transfer print material into Braille from a regular computer, or computerized Braille device. The challenges in the beginning with Braille printers were the quality of Braille that was produced, and the complicated nature of the device and software, which was called mega dots. Many Braille printers have been produced, and are now producing better quality Braille. Their efficiency in transcribing printed books into Braille have made Braille printers or Braille embossers as they are formally called an excellent method for blind people to obtain and access information and work in mainstream schools and employment sectors. There are however, different types of Braille embossers. If one wishes to purchase this device, making sure that the most suitable Braille embossing device for your needs is crucial.

The main printer, or Braille embosser that people purchase for work or academic use is the Romeo. The Romeo is one of the larger Braille embossers, but the quality of Braille is excellent. Many people use this embosser for producing Braille documents for assignments, or Brailling exams so students can access their test with minimal or no supervision. Although this Braille printer or embossing device is not cost-effective, it is

possible, as with other technical devices for the blind to purchase a machine through government assistance programs. If you are wanting to purchase it out of your own pocket, it will cost around ten-thousand dollars. Purchasing a used Romeo Braille embosser, however, make sure that the printer is in good condition, and does not need to have the Braille heads cleaned, or any other repairs.

The Laser Braille embosser is a larger device that is mostly used in large institutions such as libraries for transcribing and producing books from print into Braille. The durability is even better than the Romeo, as this Braille embossing device is able to print novels and other larger documents with minimal or no difficulty. This Braille embosser can be funded through assistive programs with government agencies, or organizations who are interested in assisting independent lifestyles and productivity for people who are blind.

Moreover, Braille printing or embossing devices are what ensures access to books, documents, and for those who wish to read or access Braille in academic institutions. If people learn the skill of using a Braille printer for producing large quantities of information that cannot be accessed in any other format, then people who are blind will be able to continue thriving and living independently all over the world.

As with regular print, different embossed symbols represent letters, words, etc. Numerical Braille is achieved by writing in alphabetical Braille with a number sign indicating the letters are being used for numerical purposes. If you understand the alphabetical formula, learning to Braille numbers is easy. When you are learning Braille

in your program that specializes in teaching Braille to earn a diploma that will allow you to assist the blind in academic institutions, workplace, or at home, you will not only be taught alphabetical Braille, but the numerical characters that help people who are blind learn the basic math skills for independent living. The first combination of keys that one must learn in order to understand and formulate Braille numbers is the number sign. If there is no number sign in front of an individual number, then chances are that it will be confused for a regular alphabetical letter. This is a basic outline that will help you understand how numbers one through fifty are formed. If you are taking a course to become an instructor for the blind, you will be having more in depth instructions. If you are given too much information at once, it will cause you to become overwhelmed, and we don't want that to happen.

The first number that one must learn is the "a" key with the number sign in front of the letter to indicate that it is now being used as a number. The number sign looks like an upside down printed letter "l", and is keys three, four, five and six that must be pressed together as with most of the other characters and Braille combinations. Avoid spaces. Make sure that the number sign and the number one, which is the number sign and key one beside each other. The keys for the number 2 is the number sign, and then keys one and two. Number three, simply press the number sign, and keys one and four. Number four is the number sign plus keys one, four and five, which without the number sign indicating that it is a number, would be the letter "d". The method for Brailling the number five is the number sign and keys one and five. Six is the number sign, and keys one, two and four. Seven is the number sign, and keys one, two, four and five. Keys for

the number eight are of course, the number sign, and keys one, two and five. Keys for the ninth number are the number sign, and keys two and four pressed at the same time beside the number sign without spaces. It is important to note however, that like printed numbers, there has to be a space after writing or Brailling each number. The tenth number is the number sign, and keys one, and then two, four and five beside each other. The numbers from now on will be two digits, so in Braille, it will be two sets of combinations that you will have to press, but without spacing them. Use the space bar after you Braille the two digit numbers. Eleven is the number sign and then keys one, and one again. Keys for Brailling the number twelve are the number sign, key one, and beside that without any spaces is keys one and two. For the number thirteen it is the number sign, keys one, and beside the single dot or character, press keys one and four. Number fourteen is the number sign and keys one, and then one, four and five. Fifteen is the number sign key one, and then keys one and five beside the first number, or dot. Press the number sign, keys one, and after that, one, two and four for the number sixteen. Seventeen is the number sign and keys one, and then one, two, four and five beside the dot one. Number sign and keys one, and then a combination of one, two and five fat the same time beside the first dot represents the number eighteen in numerical Braille. The number sign and keys one, and then two and four beside the first dot represents the numerical Braille number for nineteen. Twenty is the number sign, and keys one and two, two, four and five.

It is important that when you are learning numerical Braille that you grasp the concept of this important skill. If not, then it will be difficult to instruct those who are

blind, and need to learn this skill for living independently, and achieving financial independence and confidence with basic mathematical skills. If numbers are grouped into columns, for example, when learning place value to be able to calculate simple mathematic equations, that there is a number sign at the beginning of the group or columns of numbers, but for the rest of the equation that one is trying to add, subtract, divide, etc., there are no number signs. Moreover, learning numeric Braille is difficult, but important, so that rehabilitation instructors, as well as vision resource teachers, or otherwise known as Braille instructors can teach this skill to benefit people who are blind when they develop their independent skills to live on their own in society.

Using Braille Contractions

Learning Contracted Braille

Letter for letter Braille is the alphabetical letters that the user types out to emboss each word in sentences, phrases, etc. It is the first technique that people, including Braille instructors learn and use before they can develop the skills to learn the short hand Braille formula, or Braille contractions. These contractions are difficult to memorize, but with practice, time, and information guides that provide the keys to press for the necessary contractions, it will be easier to grasp. The purpose for learning contracted Braille, or short hand Braille is simple. If you wish to encourage and teach blind people Braille, then you must learn it to understand, and be able to teach it to others. For those who want to help blind people by providing Braille transcription services one must realize that most

people who are advanced Braille users want to read documents in contracted Braille format.

The alphabetical letter “a” does not have any contracted formula for a word. The letter “b”, however, which is keys one and two that must be pressed at the same time, can be a contraction for the conjunction “but” in the advanced, or contracted Braille formula. The letter “c”, which is keys one and four pressed at the same time, is a contraction for the word “can”. The letter “d”, keys one, four and five pressed together, can be a contraction for the word “do”, when using advanced Braille. “E”, keys one, and five pressed together, stands for the word “every”. The letter “f”, keys one, two and four pressed at the same time, stands for the word “from” in the contracted Braille formula. The letter “g”, keys one, two, four and five in unison, stands for the word “go”. Keys one, two and five makes the letter “h”. This letter in contracted Braille stands for the word “have”. There is no contracted meaning for the letter “i”. The letter “j” on the other hand, which is keys two, four and five, stands for the word “just” when using contractions, or short hand Braille. The letter “k”, which is keys one, and three, stand for the word “knowledge” in contracted format. The letter “l”, keys one, two and three pressed together stands for the word “like”. “M”, keys one, three and four, stands for the word “more”. “N” is keys one, three, four and five together. This letter also stands for the word “not” in the contracted level of Braille. As with the letters “a” and “I”, there is no contraction for the letter “o”. You can however, combine the letters “o” and “u”, which has the contraction for the word “out”. The keys to make the contraction for these two letters, “o” and “u” is keys one, two, five and six. You can also combine the letters

“g” and “h” for a contraction, but it doesn’t symbolize a word. It is simply used for short hand, and to save room and time for the Braille user. Let us return back to the topic at hand. Illustrating each alphabetical Braille letter, and its partner contractions. The letter “p” is keys one, two, three and four pressed together. This letter in alphabetical, or basic Braille is just a letter that can be written in combinations with other letters for words. In contracted Braille, however, it stands for the word “people”. The letter “q”, which is keys one, two, three, four and five, stands for the word “quite”. “R”, keys one, two, three and five, stands for the word “rather”; the word “so” in contracted Braille is the letter “s”, keys two, three and four pressed together. The letter “t” which is keys two, three, four and five is a contraction for the word “that”. It can also be contracted into the word “the”, but it is not the same keys that are used to make the letter “t”. The keys that one would press for the word “the” is two, three, four and six. This is the contracted form for this word. If you were using the basic Braille formula, then you would press “t”, keys two, three, four and five; “h”, keys one, two and five; and “e” keys one and five to write the word letter for letter. In contracted Braille it is simply the keys two, three, four and six that symbolize this word. The letter “u” is written when the user presses keys one, three and six at the same time. This letter also stands for the short hand form for the word “us”. “V”, keys three, four, five and six stands for the word “very” when used in the contracted Braille formula. “W”, keys two, four, five and six symbolizes the word “will”. In alphabetic Braille, the letter “x” is just a letter, but in contracted Braille it stands for the word “it” It is keys one, three, four and six pressed together. The letter “y”, keys one, three, four, five and six represents the word “you” in contracted Braille.

Finally, the letter “z”, keys one, three, four and five pressed together, stands for the word “as” in contracted Braille form.

Braille contractions are necessary, because they reduce the space that is needed when writing and reading Braille. They also make reading the Braille formula less time consuming, and thus, more efficient for those who are busy, yet need to read information to help their productivity and independence in their lives. If you are teaching Braille, understanding Braille contractions is necessary for succeeding in earning your qualifications to teach this writing formula, and to be able to encourage others to learn, so they can live and succeed in their independent lifestyles for their future.

Braille contractions are a formula that is taught and used by millions of instructors, and people who are blind around the world. The development of contracted Braille makes it easier for people who are blind to write fast, and efficiently. It also allows the Braille user and reader to ascertain more information into one document, or academic literature than using the conventional alphabetic, letter for letter Braille format. It is important, however, to understand and grasp the alphabetic, or basic Braille formula before advancing into the second level of contracted Braille. The reason is because the Braille contraction requires extensive knowledge of the Braille symbols, combinations, and Perkins Braille device. Each contraction is used from the same keys and combinations that are in the alphabetical Braille formula. The difference is that each contraction is a shorter method for writing words; thus creating an embossed short hand

system. This is to further illustrate how contracted Braille works to enhance the life skills and independent lifestyles that instructors, and people who are blind encourage and want. If one understands and is fluent in alphabetical or letter for letter Braille, then it will be a minimal challenge to learn this short hand formula. Always remember that receptionists or any other occupation that requires fast and efficient computer and typing skills use short hand, so Braille users who are able to work efficiently use short hand or also called contracted Braille. Most words can be written in short hand in print and in Braille, so let us examine the variety of contracted words or letters and how they are Brailled.

Contracted Braille does not have contractions for entire sentences, or phrases. It only has a short hand formula for words and letters. Child, for example, is keys one and six, which is the "ch" contraction. When the person or advanced Braille user reads this shorten version, they automatically know it to be the word for "child". We did illustrate the contraction for the conjunction "but", which is the letter "b". Keys one and two pressed together. For those who are curious and grammatical detectives, one might ask themselves if there is a contraction for the preposition "be". The answer is yes! The keys for this contraction is two, and three pressed at the same time. This is called the "be" contraction, so of course, it is written in sentences as the preposition for "be". For words that have two letters that are the same, such as "affect", one would simply press two, three and five to achieve the contraction for the two letters "ff". Shortening the word for efficiency. The same keys that are pressed to make this contraction are often used to contract the preposition "to". Note, there is no contraction for the other "too", nor is there one for the number "two". The problem that many people have with contractions,

as you can see, is that they do not follow a chronological or alphabetical order. When learning the first steps of contracted Braille, it seems to be alphabetical, and easy to grasp, but when you progress to Brailling sentences it is not as simple. The letters “e” and “n” for example are embossed by pressing the keys two and six for “en” together. This contraction can also be written for the word “enough”, or in a letter for letter word to reduce the amount of Brailling for advanced Braille users. The letters “i” and “n” can be used to shorten a word that is Brailled in alphabetic form, or to represent the preposition “in”. This contraction is achieved by pressing keys three and five at the same time. “So” can be written simply by pressing the keys that constitute the letter “s”, and since we discussed how to do that before, it will be easy for you to accomplish and remember. The letters “t”, “u” “v”, “x”, “y”, “o” and “w” are also written in the contracted Braille formula. The word that is used when writing the letter “t” is “that”. “U” stands for the contraction of the preposition “us”. “V” stands for the adverb “very”. “Ow” can be Brailled as a contraction. The “ow” contraction is formed by pressing keys two, four and six at the same time. The preposition “with” and “of” are keys two, three, five and six; keys one, two, three, five and six. “Ar”, and “er” are keys three, five, six, and one, two, four, five and six. Key five, and the letter “r” symbolizes the short form “right”. “Rather” is the letter “r”, which is keys one, two, three and five pressed together. “T, h”, is the contraction for the word “this”. If one wishes to write this word in contracted form, press keys one, four, five and six together. The prepositions “by” and “to when used with words such as “the”; for example, by the lake, or let’s go to the store has to be written without spaces, when they are used in short hand, or contracted form. The keys that are pressed when writing these prepositions are keys one, five and six, and two, three and

five. These are the keys for “by” and “to”. The contraction for “the” is two, three, four and six, so when this word is used with the preposition “by” there can be no spaces between the two words.

Brailling contractions is complex. If one wishes to encourage independent living for people who are blind, remain patient and accept the challenges that arise when learning the numerous contractions. Courses that one must take to help people who are blind offer Braille training, so it is most likely that students who are taking programs such as a vision resource teacher, teaching assistant, transcriber, or even rehabilitation instructor will have to master this task in order to be qualified to help people who are blind learn independent life skills.

Brailling numbers also has an advanced formula called Nemith code. It uses many of the same keys that are used with regular words and contractions, but requires a number sign to indicate individual numbers. . When mathematic equations are grouped in columns, and the person who is blind is reading, or Brailling the numbers to arrive at an answer, then the Nemith code only requires a number sign to indicate the beginning of the equation, as with basic numeric Braille. Let us examine some of the keys that are used when making numbers in Nemith code, so that it will provide a foundation for those who are learning to use Braille for their development, and students who are completing or starting their program to help blind people live independently.

The numbers in Nemith code have the same keys as with the letters that are embossed in short hand, or contracted Braille. If you have difficulty in remembering the Nemith code numbers you can contact an instructor if you are taking a program that involves learning Braille for teaching purposes. Instructors that teach Braille to the blind population in your local city or town will be able to help you remember, and develop methods for yourself, so you can succeed in this important accomplishment. The numbers from one to ten are embossed using the following keys. The number one is pressed by using the number sign and key two on the left side of the space bar. Number two is keys two and three, and yes, the number sign in front of the Nemith number. Three is pressed with keys two and five. The fourth number is pressed using keys two, four and five at the same time. Number five is pressed with keys two and six. We all remember that these two keys in contracted Braille are short hand for the letters "en", but with a number sign in front of it, or if it is placed in a group of numbers, it represents the number five in Nemith code Braille. The number one in Nemith Braille, which is number sign and key two is also a contraction for "ea" in short hand Braille letters.

Keys two, five and six with a number sign in front to indicate numerical value is the contraction for "dd" and a period in letter for letter Braille. The number seven is pressed with keys two, three, five and six. Without a number sign indicating that it is a number is the contracted letter for "gg". Eight is keys two, three and six in Nemith Braille. It also represents the word "his" in contracted Braille letters. The ninth number is keys three and five pressed together with a number sign in front, as long as it is not in a group of numbers in a mathematical equation. The tenth number is accomplished when keys two and then three, five and six with a number sign in front. It is also important to note that

the plus sign is keys three, four and six at the same time. This sign, if not in a mathematical problem or equation is the contraction for the letters “ing”.

Mathematic Braille was developed to help people with complete, or minimal visual loss achieve independent lives through learning and succeeding in grasping basic, or even advanced mathematical skills and equations. It is an important skill to learn, as blind people progress on their steps to independence, positive self confidence, and success in productivity in personal and economic contributions.

People with visual impairments have a desire to live independently and achieve productive lives as children and adults who are not visually impaired want to achieve this goal. It is however, a more difficult process for those with a visual impairment because they have various obstacles to overcome in a world that is geared to people with intact vision and faculties. This however, is not to say that people with visual impairments have no methods or techniques that they can use to accomplish independent living. From the numerous professions that are responsible for encouraging independence and self confidence building for those who are blind to the high and low technical devices that are designed to help people who are blind access regular life skills and opportunities. These are the innovasions that have been developed to help people with a visual impairment strive, accomplish goals, and thus, live independent and happy lives. If you are a parent who is raising a young child who has a visual impairment, accessing support early in their lives is essential to help them develop into independent, confident adults. The facilities and services that were illustrated earlier are some of the measures that a parent, or any other care giver of children or adults who are blind can research and contact to help in

learning, so the care giver and the support that is given by agencies and schools can work together to help children and adults learn and thrive independently. From the support of orientation and mobility instructors, teaching assistance, as well as vision resource teachers and instructors in mainstream, or specialized school systems and institutions for the blind, these services and people are there to provide others with support and tools to help people with visual impairments acquire the skills to work, and live independent lives both financially and emotionally. If you are willing to access support for a friend, co-worker, or anyone else who you know with a visual impairment, then you will be assisting them in a transition that is necessary for everyone to try and succeed in completing. Providing services to families or friends who are trying to learn the skills necessary to help blind people gain independence, research the career or area of this broad profession before embarking on this rewarding journey. Most courses that specialize in teaching people the techniques to assist the blind are a minimum of two years. People who are in need of learning independent living skills due to a visual impairment will increase, as the baby boom generation becomes senior citizens. Moreover, learning how to assist in teaching blind people to live on their own, and to gain self confidence is going to be in demand, so it is important to have people who are qualified in helping people with visual impairments achieve this natural desire for independence and self worth.