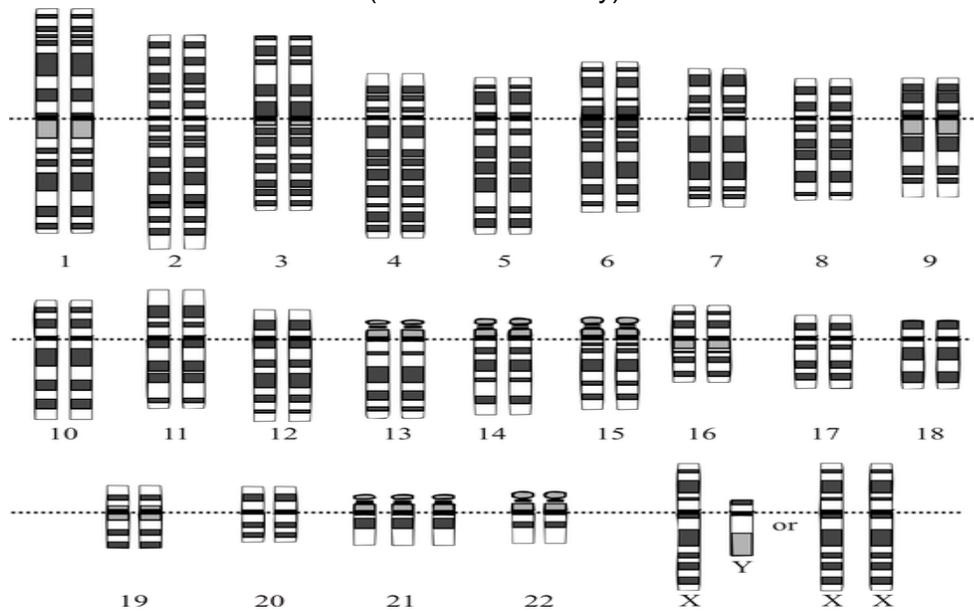


**ASSESSMENT OF NEEDS OF CHILDREN WITH DOWN SYNDROME  
AMONG SELECTED INSTITUTIONS**

(A Research Study)



Department of Social Welfare and Development

CARAGA Region

Butuan City

December 2011

## Chapter 1

### THE PROBLEM

#### **Background of the Study**

Former President Gloria M. Arroyo declared the period from year 2003 to 2012 as the Philippine Decade of Persons with Disabilities. This declaration is in consonance with the various legislations and executive issuances as a state policy written in our Philippine Constitution of 1987 where the total development of persons with disability were given emphasis.

The Magna Carta for Disabled Persons (RA 7277) provides people with disabilities the opportunities for “ self-development, rehabilitation and self-reliance to prepare them for full integration into the mainstream of society . Although the Philippine government recognizes persons with disabilities (PWDs)to have the same right as those who are not disabled individuals, yet the mandate was not taken seriously by the Filipino people. It was observed that the implementation of the said law was passive and that the sector (PWDS) did not enjoy the benefits and privileges as provided in the law. Hence, Executive Order 437 entitled : “ Encouraging the Implementation of Community-Based Rehabilitation (CBR) for Persons with Disabilities in the Philippines “ stipulated and expounded several Republic Acts to ensure successful implementation.

One major amendment was RA 9442 amending RA 7277 where additional privileges and incentives were clearly stipulated(Chapter 8, sec.32 and 33). Another enacted law, RA 7160 known as the Local government Code of 1991 mandates the devolution of services to the local government units (EO

437- Appendix) In effect, the conduct of such advocacy has given partner agencies in the local government to initiate into several programs and got into serious involvement in whatever activities were formulated for the PWDs.

Responsible agencies like the DTI, TESDA, DA, DOLE, DENR, DOST and DSWD collaborated to conduct entrepreneurial training, skills training, symposium and other economic development activities to ensure assistance for the PWDs (Appendix ). Among those activities conducted, none has been directed to the field of education since the aspect of educational development of PWDs is immersed in Alternative Special Education (SPED) offered by the Department of Education.

In DECS order # 26 s. 1997, implementation of the institutionalization of Alternative Special Education (SPED) was enacted . All Regional Offices were then mandated to offer technical assistance to different schools which opened the SPED aside from the basic education for individuals without disabilities.

Special education is the education of individuals with special needs as differentiated with educating individuals with normal stages of development who exhibit individual differences. This is the kind of education which is different from the usual method in developing the cognitive, psychomotor skills and the affective domain of a normal school child. In it lies the need for more understanding, patience and different gadgets to develop each child's remaining potentials out of the genetic defect of chromosomal number 21 (trisomy 21).

Trisomy 21 (47,XX,+21) is caused by a meiotic nondisjunction event. With nondisjunction, a gamete (*i.e.*, a sperm or egg cell) is produced with an extra copy of chromosome 21; the gamete thus has 24 chromosomes. When combined with a normal gamete from the other parent, the embryo now has 47 chromosomes, with three copies of chromosome 21. Trisomy 21 is the cause of approximately 95% of observed Down syndromes, with 88% coming from nondisjunction in the maternal gamete and 8% coming from nondisjunction in the paternal gamete (Ref. On Genetics). As many as 80% of babies conceived with trisomy 21 are miscarried or stillborn. About 1% chance of having a subsequent pregnancy affected by DS however, trisomy 21 may cause as 2% of all miscarriage and 1% stillborn (Mosaic.com, 2009).

In Butuan city, few institutions have worked out to build an educational venue for this kind of individuals. At any rate, Butuan City Central and that of Cabadbaran Elementary Schools are just the few Deped sponsored units. Preliminary interviews indicated that two or three groups have come up on their own to provide an educational setting for this type of PWDs in Butuan City but due to unavailability of funds, they were not able to sustain it. Now; two small units are springing out of personal commitment to help out and that in spite of such lack of facilities, still they are trying to stabilize it on their own expense.

The enactment of several laws give hope to this endeavor. The Field Office of DSWD Butuan has just conducted series of advocacy on PWDs related to laws, programs and services of the sector just last June 2010 upon

receipt of RA 100070. All partner agencies were informed and advocated the creation of Persons With Disability Affairs Officer in the five (5) provinces, six(6) cities and 73 municipalities of the region.

As such, a" great impact on the implementation of various programs of the PWDs resulted because partner agencies were getting seriously involved in whatever activities were conducted by the Field Office (Narrative report 2010, DSWD-Region XIII). However, among these activities , Alternative Special Education (SPED) for PWDs is just a budding endeavor that has entered to the arena of DSWD.

It was targetted by DSWD that the Academe Institutions will become partners in advocating the newly enacted laws stipulated in Executive Order 437. This is pronounced in Republic Act # 8425 where education and functional literacy (sec. 2) must be an intervening factor to poverty alleviation.

Thus, it is in this line of thought that this proposal was endeavored to supplement the advocacy of implementing programs to assist the PWDs to its maximum level of performance. It was projected that the outcome of this venture produces citizens who would become assets of our country and not an addition to liabilities in our community.

## Theoretical and Conceptual Framework

This study was anchored on Behaviorist Theories of Learning promulgated by renowned educators like Pavlov, Thorndike, Watson and Skinner. Such Theory of Behaviorism was focused on the study of observable and measurable behavior. It emphasized that behavior is mostly learned through conditioning and reinforcement (Ornstein, 1999). For children with Down Syndrome, cognitive impairments and other health concerns were manifested.

Genetically speaking, an individual follows a karyotype peculiar of his/her own arranged in chromosomal number from 1 to 23 pairs where the 23rd is designated as the sex chromosome where a pair of XY denotes male individual while that one with an XX pair indicates a female individual. The figure below illustrates it clearly.

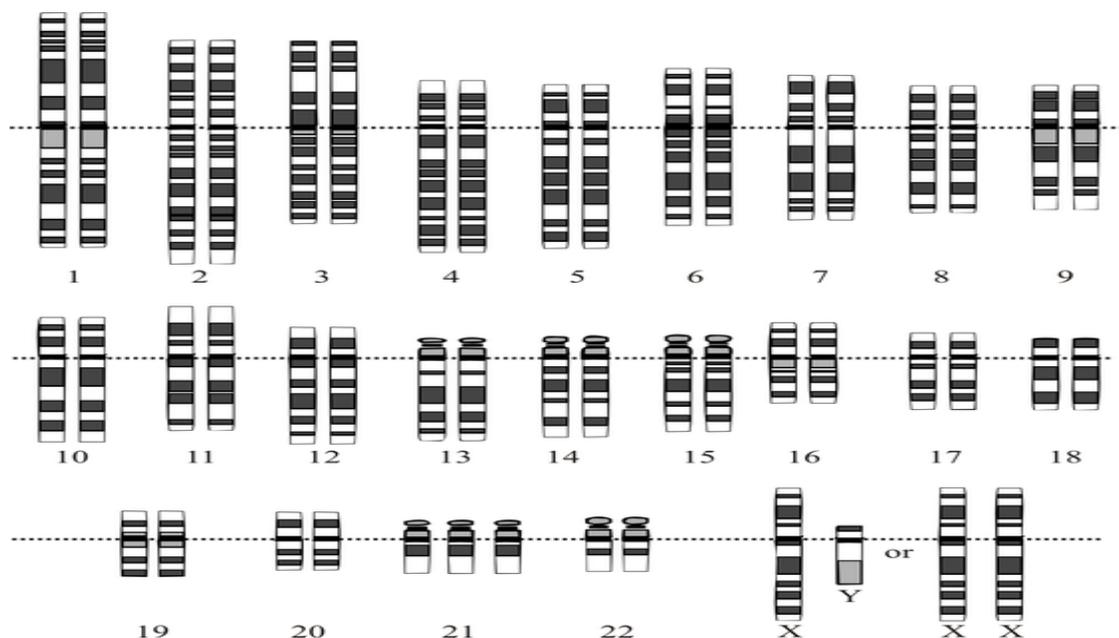


Figure 1. The Karyotype of a Person With Down Syndrome

Gregor Mendel, the Father of Genetics emphasized that for one to be a normal individual , one must have 23 pairs of Chromosomes of which one of each pairs comes from the mother and the other half from the father.

During the process of mitosis each of this pair of chromosomes carrying the genes or the hereditary traits of the parents goes separately (disjunction).

Trisomy 21 is usually caused by nondisjunction in the gametes prior to conception, and all cells in the body are affected. However, when some of the cells in the body are normal and other cells have trisomy 21, it is called mosaic Down syndrome (46,XX/47,XX,+21). This can occur in one of two ways: a nondisjunction event during an early cell division in a normal embryo leads to a fraction of the cells with trisomy 21; or a Down syndrome embryo undergoes nondisjunction and some of the cells in the embryo revert to the normal chromosomal arrangement. There is considerable variability in the fraction of trisomy 21, both as a whole and among tissues. This is the cause of 1–2% of the observed Down syndromes.

The extra chromosome 21 material that causes Down syndrome may be due to a Robertsonian translocation in the karyotype of one of the parents. In this case, the long arm of chromosome 21 is attached to another chromosome, often chromosome 14 [45,XX,der(14;21)(q10;q10)]. A person with such a translocation is phenotypically normal. During reproduction, normal disjunctions leading to gametes have a significant chance of creating a gamete with an extra chromosome 21, producing a child with Down syndrome. Translocation Down

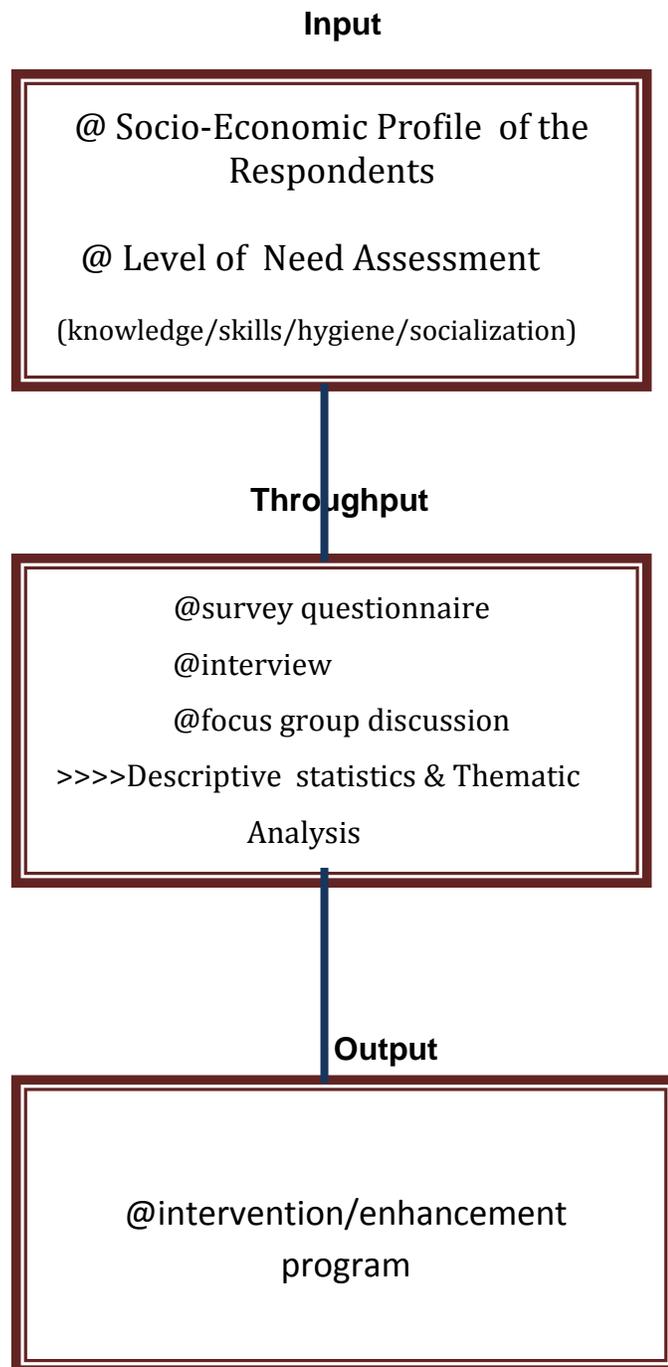
syndrome is often referred to as *familial Down syndrome*. It is the cause of 2–3% of observed cases of Down syndrome. It does not show the maternal age effect, and is just as likely to have come from fathers as mothers.

Rarely, a region of chromosome 21 will undergo a duplication event. This will lead to extra copies of some, but not all, of the genes on chromosome 21 (46,XX, dup(21q)). If the duplicated region has genes that are responsible for Down syndrome physical and mental characteristics, such individuals will show those characteristics. This cause is rare and no rate estimates are available.

Suffice it to say that individuals with this kind of disability exhibit distinctive facial , physical features and medical features some of which are just traits that are observable and manageable but some do need medical assistance.

Each individual has the right to live and develop his own personalities, his weaknesses and strength. Hence, this study is directed to provide the best that our government could offer in order for the Persons with Disabilities (PWDs) be socially adjusted , accepted and productive despite the disabilities that they have.

The research paradigm is presented in figure 2 where a flow chart exhibits the flow of the study starting from the input , throughput and finally to the output of the study.



**Figure 2. The Flow Chart of the Study**

### **Statement of the Problem**

This study was directed to the assessment of needs of persons with disability called Down Syndrome. Specifically, this sought to answer the following questions:

1. What is the profile of the respondents in terms of
  - a.) age ,
  - b.)sex ,
  - c.)parents' educational attainment ,
  - d.) parents' occupation ,
  - e.) parents joint income ,
  - f.)number of siblings and
  - g.) living condition ?
  
2. What degree of manifestation do the respondents have in the following areas of concern
  - a.) knowledge and skills,
  - b.) personal hygiene and
  - c.) socialization ?
  
- 3.)To what extent do the concerned agencies/institution had assisted the respondents in terms of
  - a.) educational inputs and
  - b.) social responsibilities ?

- 4.) What are the problems encountered by the parents/guardians/teachers in meeting the needs of the respondents?
- 5.) Based from the findings of the study, what enhancement/intervention programs may be recommended ?

### **Significance of the Study**

This study would be beneficial to the parents who are in a dilemma how to raise their children with Down Syndrome productively in the society.

This would also be of great help to the agency/institution to be guided properly on what assistance do they be able to give with persons affected with Down Syndrome.

The findings of the study would serve as a springboard for DSWD Caraga to initiate specific development programs based on the need assessment of persons with Down Syndrome.

### **Scope and Delimitation of the Study**

This study was focused on the Alternative Special Education (SPED) for persons with disability especially to those who have Down syndrome. Specific variables to be considered were the socio-economic profile of the respondents in terms of age , sex, parents education, parents occupation, income , number of siblings and living conditions.

This study was delimited to those individuals who have Down syndrome enrolled at Brave Heart Center , Ambago , Butuan City , SPED Center of Butuan

City Central , CASOCES of Cabadbaran and SPED Center of Buenavista , Agusan del Norte.

### **Definition of Terms**

The following words or variables are defined operationally and functionally to have a clearer understanding of the terms.

Chromosomes. This term refers to a tiny string-like structures in cells of the body that contain the genes, the so called hereditary traits.

Down Syndrome. This refers to a genetic disorder caused by an extra copy of chromosome 21 inside each of the body's cells. The extra chromosome on intellectual development (thinking skills).

Persons with Disabilities (PWDs). A person suffering from restriction or different abilities, as a result of a mental, physical or sensory impairment, to perform an activity in a manner or within the range considered normal for human being. Disability shall mean (1) a physical or mental impairment that substantially limits one or more psychological, physiological or anatomical function of an individual or activities of such individual; (2) a record of such an impairment; or (3) being regarded as having such an impairment (RA RA 7277/RA 9442)

Special Education. This term refers to the education of individuals with special needs as differentiated with educating individuals with normal stages of development who exhibit individual differences. This is the kind of

education which is different from the usual method in developing the cognitive, psychomotor skills and the effective domain of a normal school child. In it lies the need for more understanding, patience and different gadgets to develop each child's remaining potentials out of their disabilities in order to provide the opportunities for self-development, rehabilitation and self-reliance to prepare them for full integration into the mainstream of society.

## **Chapter 2**

### **REVIEW OF RELATED LITERATURE AND STUDIES**

This section contains the review of literature to clarify the basis for the theoretical and conceptual frameworks as well as review of related studies to substantiate the content of this study.

#### **Related Literature**

##### On Down Syndrome

Down syndrome is one of the genetic disabilities caused by the presence of all or part of an extra 21st chromosome. It is named after John Langdon Down (Gary L. Albrecht, 2006). Individuals with Down syndrome tend to have a lower than average cognitive ability often ranging from mild to moderate development disability. It (trisomy 21) characteristically produces mental retardation,

dysmorphic facial features and other distinctive physical abnormalities. It's commonly associated with heart defects (in approximate 60% of the patients) and other congenital disorders. Life expectancy for patients with down syndrome has increased significantly because of treatment related complication (heart disease, Respiratory and other infections, acute leukemia) Nevertheless up to 44 % such patients who have associated congenital heart defects die before age 1.(Cuskelly, M.et al, 2008). The incidence of Down syndrome is estimated at 1 per 800 to 1,000 births, although it is statistically much more common with older mother. Other factors may also play a role (Michael Russell 2008).

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Many of the common physical features of Down syndrome may also appear in people with standard set of chromosomes, including microgenia ( abnormally small chin) an usually round face, macroglossia (protruding or oversized tongue), an almond shape to the eyes caused by an epicanthic fold of the eyelid ,up slanting palbebral fissure (separation of between the upper and lower eyelids).It is further characterized with shorter limbs, a single transverse palmar crease (a single instead of a double crease across one or both palms), also called the semian or Play groups or early intervention programs with something to change with persons disabilities This needs something to consider because they need caring, and safe environment and opportunity like other children in the family.(Connors, C.K, 1997). Their head may be smaller than normal (microcephaly) and abnormally shaped. Other prominent characteristics are a flattened nose, protruding tongue, upward slanting eyes, short hands

fingers, and a single crease in palm. Treatment to the patient with Down syndrome and other disabilities are now cared for at home and attend special education classes, as physician and biomedical scientist evaluate potentials intervention on the basis of safety and benefits to patients. An organization called the Changing Mind Foundation is promoting a new treatment for Down syndrome that leads to life changing results form the treatment includes regular doses of Flouxetine (prosac), Ginkgo biloba. (Sue Buckley. et.al, 2002).

Many questions are raised like is down syndrome still curable? Many studies tend to provide cure or treatment of this . A combination of drugs is

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recommended for depression and attention deficits and hyperactivity disorder is being widely promoted as a “treatment” for Down syndrome. There is no scientific support for routine use of the routine use of this protocol by people who have Down syndrome. It is important that families and healthcare professionals are aware of the lack of evidence for safety and benefits from use of this protocol. (Florez, J.2007).

Mendel’s two laws of inheritance and the law of independent assortment, form the basis of genetics. This has led to his characterization as the “Father of Genetics.” These laws describe basic and important rules for how traits are passed from parent to child. Many human traits, form eye color to sickle cell anemia, are inherited following patterns conforming to Mendel’s laws. Modern genetics has done a great deal to expand on this original work, but the care

observations describe phenomena relevant today. Mendel's work showed that individuals have two copies of every trait. One trait can mask a second trait. The

### On Socialization

Social development includes social interactive skills with children and adults, social understanding and empathy, friendships, play and leisure skills, personal and social independence and socially appropriate behavior. Each of these areas and development is discussed, drawing on the available research literature. Social understanding, empathy and social interactive skills are strengths for children and adults with Down syndrome, which can be built on

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throughout life to enhance their social inclusion and quality of life. The opportunity to establish friendship may be affected by social independence and by speech and language and cognitive delay (Johnston D., 2001). Parents and teachers need to think about ways of increasing the friendship opportunities of children during primary school and teenage years. The importance of friendships with both typical developing peers and peers with similar disabilities is stressed, as is the need to develop play, leisure and independence skills. Most of the children and teenagers with Down syndrome have age-appropriate social behavior, but some children do develop difficult behavior which cause family stress and affect social and educational inclusion. Information on the types of behavior which may cause concern is drawn to high incidence sleep difficulties as they influence day time behavior. Strategies for

encouraging age-appropriate behavior are discussed and ways of preventing and changing behavior are outlined. (Down Syndrome Issues and information.2002).

Schools are much better resourced to succeed now- though we need to be sure that too much planning and special needs expertise does not result in lowered expectations. Most aspects of social development involved in social interaction or social activity with other people and therefore, the ability to understand the behavior, emotions and feelings of others is important in developing social relationships and managing life. (Chapman, R.S and Hesketh,L. 2001). It is very important to stimulate, encourage, and educate children with Down syndrome from infancy. Programs for young children with

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special needs are offered in many communities. Early intervention programs, including physical therapy, occupational therapy and speech therapy can be very helpful. Like other children, children with Down syndrome greatly benefit from being able to learn and explore in a safe and supportive environment. Being included in a family, community, and pre school life will help a child with Down syndrome develop to his/her full potentials. While social development and social learning are often quite good, development in other areas such as motor skills, speech, and language are usually delayed. Many children with Down syndrome eventually reach most development milestones, but mild to severe learning difficulties will persist through life. (Snyder, Sharon et.al. 2002).

The social model of disability separates physical impairment from social disability and its most rigid forms does not accept that impairment can cause

disability at all. (Elizabeth Depoy. et.al, 2004.physical disability does not only affect their social interaction but also their means of living oh how they interact to the peers or the people around them. dominant trait doesn't destroy the recessive trait however. This allows a parent to pass on a trait that they do not exhibit. Not all genes independently assort. Genes that do not are called linked genes. This happens when genes are located close together on chromosomes. There are also violations of the first law, where a gamete gets both copies from a parent. An example of this in humans is Down syndrome. Down Syndrome is a chromosomal condition characterized by the presence of an extra copy of genetic material on the 21st chromosome either in 17 whole

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(trisomy 21) or part(such as due to translocation). Oftentimes such genetic aberration is associated with some impairment of cognitive ability and physical growth and a particular set of facial characteristics. Individuals with Down Syndrome tend to have lower – than- average cognitive ability, often ranging from mild to moderate disabilities. Many children with Down Syndrome who have received family support, enrichment therapies and tutoring have been known to graduate from high school and college and enjoy employment in the work force.The average IQ of children with Down Syndrome is around 50 compared to normal children with an IQ of 100. A small number have known to be having severe to high degree of intellectual disability.(Wikipedia).

On Alternative Special Education

United Nations Convention on the rights of Persons with Disabilities(PWDs) recognizes the total participation of a disabled person to live their life to the fullest in the society. As such , they have the right to whatever opportunity that may come in their way and come to a decision of their own. However to strengthen such privileges they do need extra way or method on their development. Proclamation # 240 gives these persons the chance to have total development. Coupled with Executive Order # 437 , comprehensive rehabilitation services were pronounced . In addition , the Republic Act #7160 mandates the devolution of services in the Local government Units. Thus, the Department of Education(DepEd) adhered to becoming the institution which promotes and

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maintains equality of access to education as well as the enjoyment of benefits of education by all its citizens (BP Blg. 232). This has been made possible by the creation of Special Education . DepEd pushes for the creation of Bureau of Special Education last April 4, 2010 . It pushes the creation of a Bureau of Special Education to attend to the education of children with special needs (CSN) and people with disability (PWD).

Special education is an early intervention of exceptional children and integration or mainstreaming of learners with special education needs into the regular school system and eventually in the community.

Senate Bill (SB) 2020 mandates the creation of at least one special education (SpEd) center for each school division (one each in 17 regions) and three SpEd centers in big school divisions.

Former DepEd secretary Jesli Lapus had asked Malacanang to certify as urgent Senate Bill (SB) 2020 as the government has to look after these children who are not yet provided with appropriate educational services. SB 2020 has been approved on second reading, and its Lower House counterpart, HB 6740, has been approved on third reading:

*“Most people have not yet recognized that certain CSNs or PWDs have very distinct talents and skills. And their integration and mainstreaming into the society will contribute significantly to national development,”* Lapus stressed.

Based on School Year 2004-2005 estimates, there were 5.49 million CSNs in the Philippines or 13 percent of all children’s population. Of this number,

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an estimated 4.2 million were PWDs while 1.27 million were gifted children. However, enrollment of these children only totaled to around 15,000 as of SY 2004-2005. This enrollment rate already represents an 88 percent growth from SY 1995-1996 when enrollment was only around 8,000. Children with special needs (CSN) are those who are autistic, gifted or talented, mentally retarded, visually impaired, hearing impaired, orthopedically or physically handicapped, learning disabled, speech defective, children with behavior problems, and those children that encounter health problems under the formal educational system. “All CSNs, irrespective of the degree of sensory, physical, or intellectual disability or needs, will have the opportunity to be educated in the most educationally-enhancing environment consistent with the provision of a quality education that

best meets their needs,” SB 2020 stipulated. Under the bill, special day care centers will be put up near existing SpEd centers with the support of the Department of Social Welfare and Development (DSWD). The bill provides for special instructional materials which may transcribe traditional instructional materials into Braille, large-type prints, or audio-tape without penalty or royalty. Computerized forms of these instructional materials may also be produced. The bill also spelled out that private institutions participating in these programs may avail of tax deductions, loan assistance and technological or scientific assistance. The bill provides for a P600 million yearly budget for five consecutive years for the SpEd program, while a separate P20 million yearly fund from the President’s

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Social Fund and from the Philippine Gaming Corp. will finance the founding and operation of the BSE.

A child is considered to have a need to train in a SpEd center if he differs from the average child based on mental characteristics, sensory abilities, neuromuscular or physical characteristics, social abilities, multiple handicaps, or has a developmental lag.

Rudy Mina, DepEd SpEd program specialist, said there are already 227 SpEd centers all over the PHilippines including 16 in Manila and six in Quezon City. However, the budget released for SpEd which was 84 million as of 2009,

was insufficient in order to cover for the big need to put up SpEd centers in hard-to-reach places.

For instance, it has been difficult to put up SpEd centers in the Autonomous Region for Muslim Mindanao (ARMM) specifically in Lanao provinces or Basilan or in Ifugao in the Cordillera Autonomous Region. DepEd is scheduled to train 350 SpEd teachers this year. As wide as the nation would want to cater to this inadequacy, it sure id good to have starte. As to how to sustain remains a great task to concerned agencies and other local government offices.

### **Related Studies**

#### On Down Syndrome

A study of Chapman(2002) on Predicting longitudinal change in language production and comprehension in individuals with Down Syndrome among 31

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individuals aged 5-20 years old concluded that (1) expressive language skills should continue to be intervention goals for adolescents and young adults with Down Syndrome; (2) progress in speech development can not be enhanced by concurrent focus on comprehension; and (3.) attention should be given to improve short-term memory due to demands of communication. In this study, age, hearing status, sex, nonverbal visual cognition, visual short-term memory and auditory short-term memory were taken as predictor variables.

On the other , according to Cunningham(2007), routinized and compulsive-like behaviors(RCBs) are common in typically developing children and in children and adults with Down Syndrome. Findings in his study revealed

that children who had Down Syndrome had significantly higher levels of RCBs than typically developing children. RCBs were positively associated with adaptive behaviors for younger groups but not for older children and adults with Down Syndrome. Children with Down Syndrome and over 5 years old are associated with behavior problems . It was then concluded that RCBs support developmental progress for all children less than 5 years but have different functions for older individuals.

Collacott , et al.(1998) conducted a study entitled Behaviour Phenotype for Down's syndrome where 360 adults with Down Syndrome and 1829 adults with learning disabilities of other etiologies were the respondents. Groupings were made into those who were 35 and less and that of those who were 35 years old and more. Results showed that despite an equal age and development

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quotient, the Down Syndrome group were less likely to demonstrate maladaptive behaviours. The behaviour characteristics of the adults with DS remained constant in the younger and older age groups. Cluster analysis demonstrated adults with DS to have an increase prevalence in cluster groupings with lower rates of maladaptive behaviours.

Another study was conducted to individuals with Down syndrome (DS) in terms of pain expression. Findings had shown that in between 75 control individuals and 26 individuals with DS , individuals with DS had significantly longer median latencies than control. This could be interpreted that individuals with DS are not insensitive to pain. They do express pain or discomfort more

slowly and less precisely than the general populace. This implies that medical teams managing these patients should use pain-control procedures even in the absence of obvious pain manifestations (Morin, et al. 2001)..

Glenn Ms and Cunningham (2001) had also conducted a joint study reflecting individuals with DS who talk out loud in themselves. In this study, parents of 78 young people with DS, aged 17 to 24 confirmed the result whereby a universality of private speech and its development pattern do happen..

Results further revealed that no association was found between private speech and behaviour problems, communication difficulties or social isolation. It was therefore concluded that talking out loud to self by young people with DS should be seen as adaptive and not an indication of pathology.

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Another study conducted by Wang(2002) in promoting balance and jumping skills in children with Down Syndrome concluded that motor skills in DS are related to training received not developmental growth. Physical therapy can make a difference.

A more interesting findings on the medical aspects of school-aged children with Down Syndrome was presented by Bower, et al.(1999). He reported that 33 % of children with DS had congenital heart defect most common of which is a septal defect. Others reported to be in constipation, and almost majority had “glue ear” which is characterized by a thick fluid in the middle ear cavity that

won't drain. It was also found out that 30 % of the children had near-sightedness, 27% had "lazy-eye " (strabismus) and they were prescribed with glasses.

Sleep characteristics in children with Down Syndrome was studied by Levanon (1999) where in it reached to a conclusion that children with DS have significant sleep fragmentation manifested by awakenings and arousals which are partially related to obstructive sleep apnea syndrome. The respiratory disturbance index was higher for children with DS with symptoms of obstructive sleep(OSA) than for children with DS without symptoms of OSA.

#### On Literacy and Socialization

Study on the Social Adaptation of Chinese Children with Down Syndrome Found no difference between the DS group and the Mental Age (MA) group in terms of communication skills. However, the DS group scored much better than 24 the MA group in self-dependence, locomotion, work skills, socialization and self-management. Children in the CA group achieved significantly higher scores in all aspects of social adjustment than the DS children.

A stepwise linear regression analysis showed that family structure was the main predictor of social adjustment. Newborn history was also a predictor of work skills, communication, socialization and self-management. Parental education was found to account for 8% of self-dependence. Maternal education explained 6% of the variation in locomotion.

Although limited by the small sample size, these results indicate that Chinese DS children have better social adjustment skills when compared to their mental-age-matched normally-developing peers, but that the Chinese DS children showed aspects of adaptive development that differed from Western DS children. Analyses of factors related to social adjustment suggest that effective early intervention may improve social adaptability.(Wang, 2007).

The socio-demographic characteristics and the newborn history are shown in the study by Rong Li (2007) in the MA and DS groups having no significant difference in terms of PPVT raw score, sex, family income or parental marital status. Similarly, no differences in age, sex, mode of delivery, family income or parental marital status were found between the DS and the CA groups.

An earlier study reported significant age-related developmental progress in adaptive functioning in children with DS from infancy to elementary-school age, whereas in middle school a stagnation of social adjustment was

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documented. Chinese DS children usually enter elementary school from the ages of 8 to 11. Most of them have had no intervention before that time. Learning in special schools provides sufficient opportunities to develop the children's potential so that social adjustment in DS children of school age should develop continuously. Further investigations are needed that address a possible stagnation of development among Chinese DS children in middle school. Children with DS require special health care and early interventions to ensure optimal development, which also has a significant impact on their family.

Independence training for the affected individuals and advice to their parents for effective intervention might result in adults with DS becoming less dependent on their families for support and more able to utilize those skills and abilities that they undoubtedly possess.

All of the previously presented studies in this section would somehow help the researcher initiate intervention programs based on the actual result of this study . As such , there would be good benchmarking in the conduct of the programs for this research work since the related literature and studies have explicitly presented variables , issues and concerns of individual with DS which could be the point of reference to make this endeavor a successful one. With the Special Education Program of DepEd coupled with the financial support of the government, this agency , the DSWD of Caraga may as well be able to put a Center for this individuals with Down Syndrome that could look into their special needs.

### **Chapter 3**

#### **RESEARCH METHODOLOGY**

This chapter includes the research design, the research locale, the respondents of the study, the research instrument, the data gathering procedure, the scoring and quantification of data and the statistical treatment.

##### **Research Design**

This study utilized the descriptive method of research because it describes the data and characteristics of person with Down syndrome. Specifically, it described the personal profile of an individual with Down syndrome in terms of personal character traits and family background and identified the needs in terms of personal hygiene , knowledge and skills development. In combination, qualitative research was also used wherein focal group discussions and interviews of key informants were used where data gathered were subjected to thematic analysis.

### **Research Locale**

This study was conducted at Special Education (SPED) classes of Brave Heart Center located at Ambago , Butuan City , CASOCES of Cabadbaran and SPED Center of Butuan City Central School. The later two centers are public schools and the other is a private school . The rest of the identified schools

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from Barangay Obrero , A.D. Curato Street and Villa Kananga within the heart of Butuan City were not able to survive due to financial constraint.

Figure 2 illustrates the sketch map of the research locale in their respective town/city and figure 3 gives the geographical location of the three areas with reference to its location in the province of Agusan del Norte .

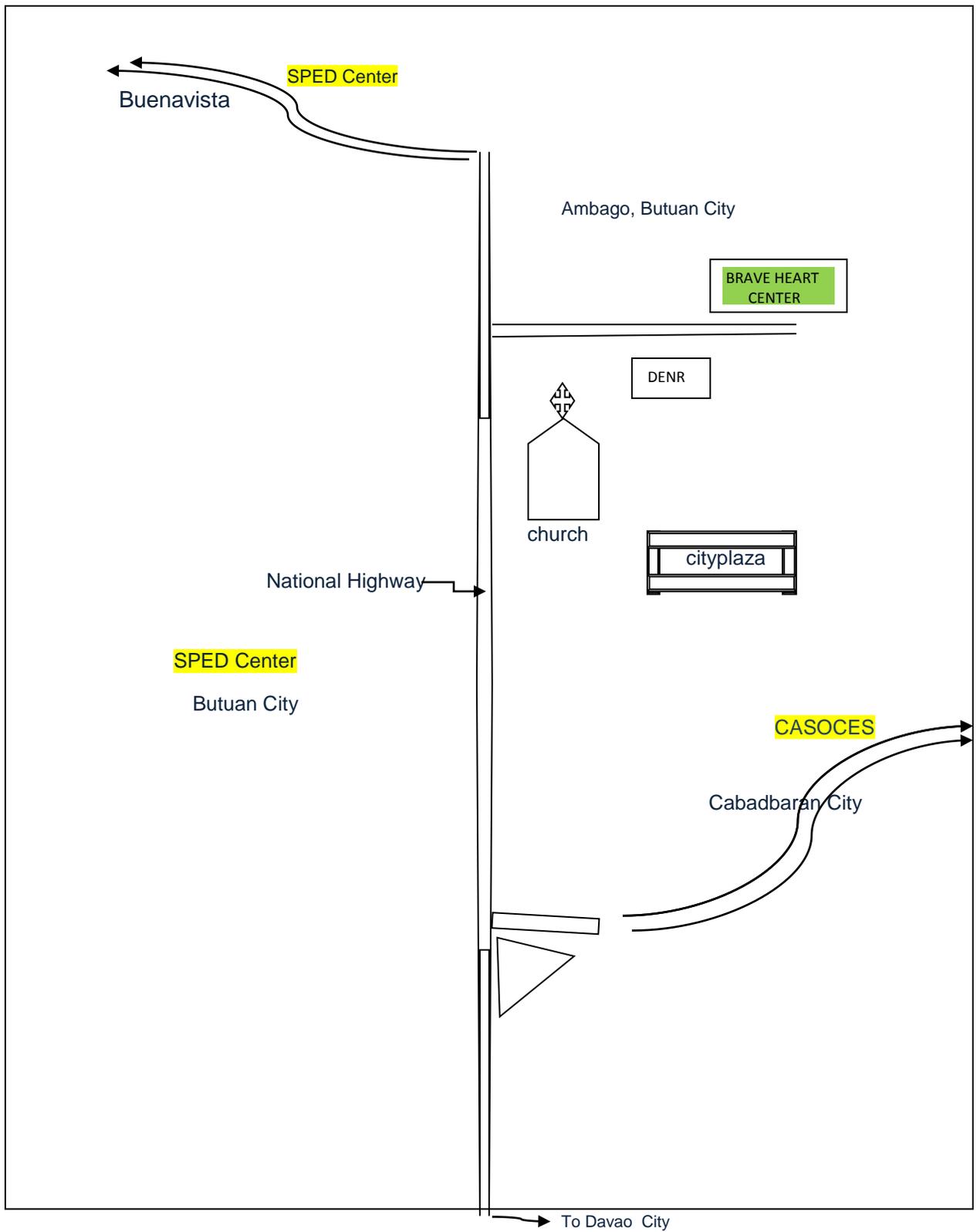


Figure 2. The Sketch Map of the Research Locale of the Study

**Population As Respondents of the Study**

The respondents of the study were individuals with Down syndrome at Brave Heart Center and SPED Center both located in Butuan City. At the moment, a great number of individuals with Down Syndrome can be seen around Butuan City but only few, 11 at most are enrolled in the Special Education at SPED Center and only three at Brave Heart Center . As such , cases from adjacent towns like in Buenavista SPED Center (8) and Cabadbaran who are enrolled at CASOCES SPED Centers(4) were taken as respondents for a tangible result of the study .

		SPED Center (8)							
					Brave Heart (3)				
		SPED Center (11)							
								CASOCES SPED Center (4)	

Figure 4. The lay-out mapping of the centers with enrollees who were taken as respondents of the study.

Legend :  Buenavista  Butuan City  Cabadbaran City

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### **Sampling Design**

This study utilized the purposive sampling design. Thus, every officially enrolled person with Down syndrome or the mentally challenged individual was taken as the respondents of this research work.

### **Research Instrument**

The survey questionnaire used to determine the knowledge and skills of the respondents was a standardized questionnaire provided by DepEd for the Special Education Classes. The instrument for the socio-demographic profile of the respondents was a researcher –based questionnaire that have been applied to other studies where socio-demographic variables were used.

The questionnaire was composed of three parts. Part 1 was about the personal profiles of a person with Down syndrome in terms of personal character traits and family background. Part 2 was on the needs assessment of the respondents in terms of knowledge and skills development , personal hygiene and socialization.

### **Data Gathering Procedure**

In gathering data, the researcher asked the permission to conduct the survey through a letter to the Head of the said institutions and the Superintendent

of the Division of Butuan City and Agusan del Norte. The teachers assigned the special classes of the selected institutions together with the researcher

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administered the questionnaire. The respondents were guided and instructed to answer with the aid of the teacher, the parents /guardians and the researcher. A checklist of need assessment in the questionnaire was put into exhibit to magnify the questions and to be answered with the assistance of the teacher , qualified personnel ' and the researchers . Personal interviews were also conducted to supplement the completeness of unanswered questions in the questionnaire. Retrieval of the questionnaires took sometime for its completion because of the nature of the students . In cases where respondents were not able to finish through the process , parents and key informants through focus group discussion was applied.

### **Scoring and Quantification of Data**

The following are the scales in categorizing the personal profile of person with Down syndrome in terms of personal character traits, family background, personal hygiene, socialization , knowledge and skills development .

#### I. Socio-Demographic Profile

##### Age:

Verbal Description	Scale	Interpretation
17-21years old	3	Adolescent
13-16 years old	2	Late Childhood
7- 12 years old	1	Early Childhood

Gender Profile

Verbal Description	Scale
Boy	2
Girl	1

Parents' Educational Background

Verbal Description	Scale	Interpretation
Elementary level	1	very low
Elementary Graduate	2	low
High School Level	3	below average
High School Graduate	4	average
Vocational Course	5	above average
Tertiary Level	6	high
College Graduate	7	very high
Post Graduate	8	very high

Parents occupation

Verbal Description	Scale	Interpretation
Academe	4	stable
Business	3	risky
Agricultural	2	dependable
Janitorial	1	not dependable

Parents Monthly Income

Verbal Description	Scale	Interpretation
15,000 and above	5	above middle class
7,001-14,999	4	middle class
5,001-7,000	3	below middle class
3,001-5,000	2	poverty
3,000-below	1	below poverty

Number of siblings

Verbal Description		
1-3	1	manageable
4-6	2	quite manageable
7 and more	3	less manageable

Living condition/Extent of Assistance

Verbal Description	Scale	Interpretation
Level 1	1	Poor
Level 2	2	Good
Level 3	3	Better`
Level 4	4	Best

Need Assessment (KS Dev't/personal hygiene/socialization)

Level	Mean Range	Verbal Description	Interpretation
5	4.5-5.0	Always	High
4	3.5-4.49	Sometimes	above average
3	2.5-3.49	Seldom	average
2	1.5-2.49	never	below average
1	0.5-1.49	not applicable	poor

**Statistical Treatment**

The following statistical treatments were utilized in the analysis of the data.

1. Frequency, percent and the weighted mean were utilized to determine the socio-economic background, personal hygiene, knowledge and skills development of the respondents .

2. Thematic Analysis was applied to determine problems encountered by the key informants, parents/guardians and teachers of the respondents

## Chapter 4

### PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the analysis and interpretation of data gathered from this study. The discussion of the problems is presented sequentially as follows:

**Problem 1. What is the nature profile of the respondents in terms of age, sex, parents educational background, occupation and income, number of siblings and living conditions ?**

The following figures graphically illustrates the socio-economic profile of the respondents of this study

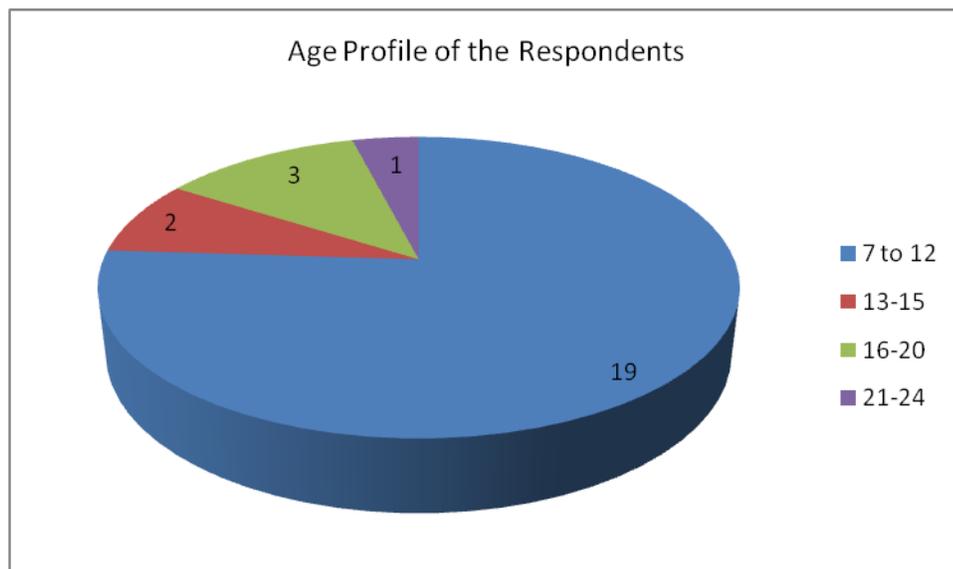


Figure 5. The Age Profile of the Respondents

The graph presents numerically the frequency of age ranges of the respondents of this study. It can be gleaned that out of the 25 respondents, there is only one individual who is in the age range of 21- 24 years old as indicated in violet slice of the pie graph. The others in the range has two and three counts only and the bulk of the respondents is in the age bracket of 7-12 years old as shown in dark blue color with 19 counts.

In the actual setting, they are not grouped into age ranges according to normal grade level distribution of but they are all mixed up in the room according to the schedule given by the school. Those of older ages are behaving just like the younger ones. This is in consonant with the study of Collacott, et al(1998),where the behavior characteristics of adult with Down Syndrome (DS) did not differ with the younger ones who are of the same state of disability.

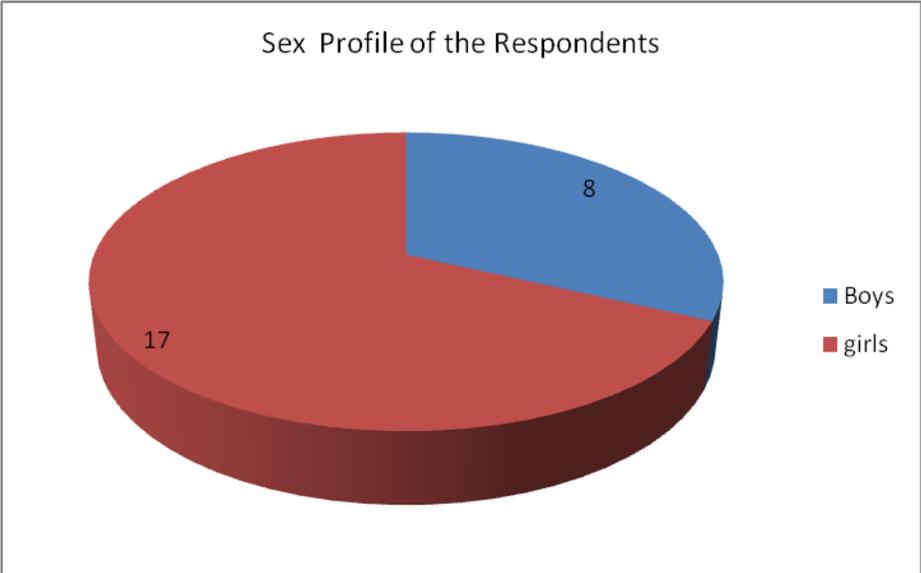


Figure 6. The Sex Profile of the Respondents

Figure 6 shows the distribution of the sex profile of the respondents. It can be seen that majority ,17 out of 25 respondents are girls and the remaining respondents are boys. This is in contrast to the article stating that Down syndrome is slightly more common among males with most studies showing about 106 to 125 boys for every 100 girls(<http://wiki.answers.com>). In addition , more males than females were affected in all groups. The prevalence rose over time in each age group, but decreased with age within the birth cohorts (Lin Edwards, 2009).

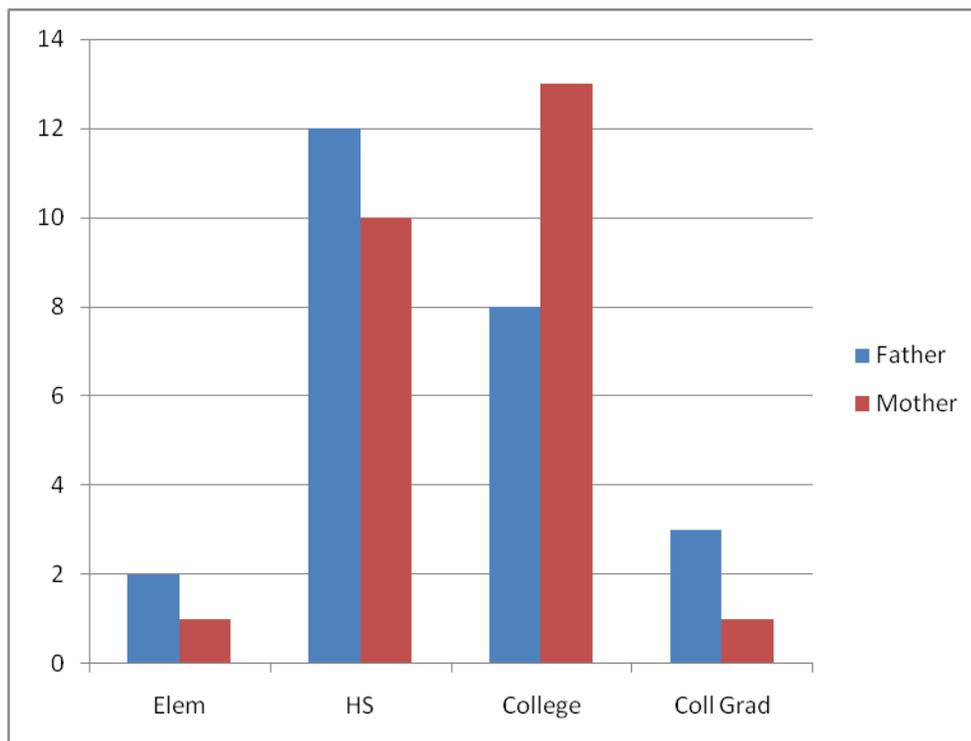


Figure 7. The Educational Attainment of the Parents of the Respondents

As can be seen in figure 7, more mothers have attained college education than the fathers of the children with DS. The result also presented that only few of the parents have finished college studies. However, attaining high school level gives the parents the basic knowledge of the status of their children. Having passed through second year high school in the basic education of the Philippine Educational System gives the parents the idea of what is going on with children with Down Syndrome (Biology).

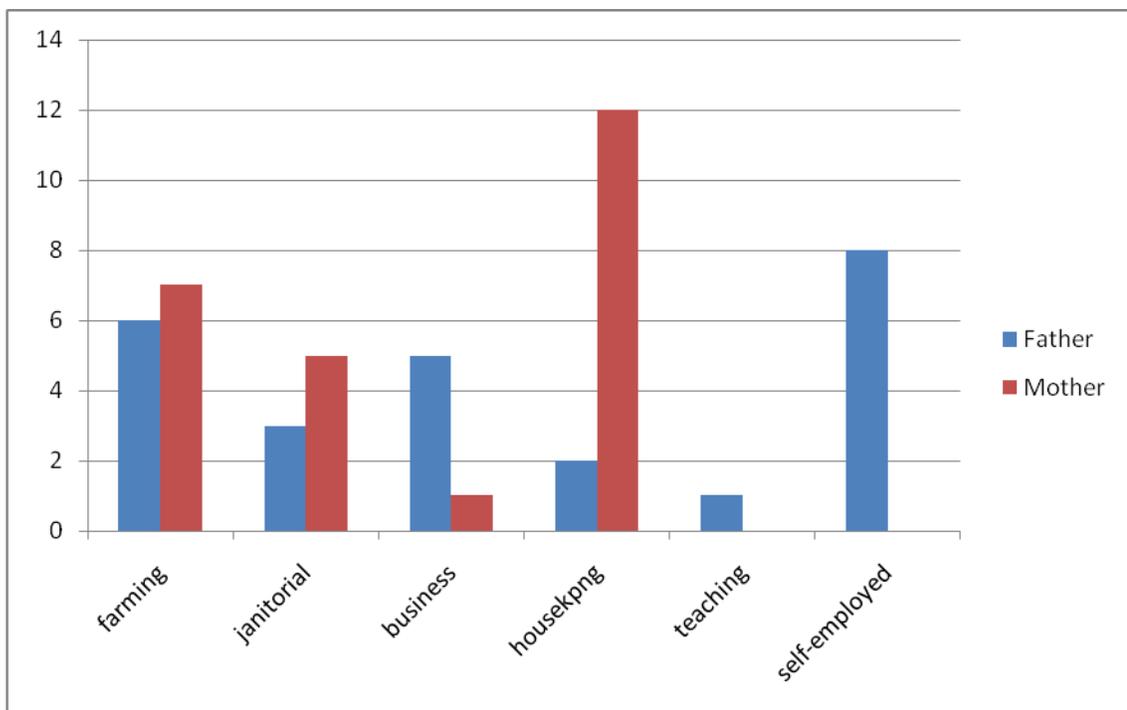


Figure 8. The Occupation of Parents of the Respondents

Figure 8 illustrates the distribution of the parents occupation. Such jobs range from being farmers to being self-employed in the case of fathers. For

mothers , majority , 12 out of the 25 respondents have mothers who can take care of them since they are house keepers. As such, mothers have ample time to

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take care of their children with this disability . Being taken cared of in a safe and supportive family will help a child with DS develop his/her potentials (Sharon,et al, 2002).

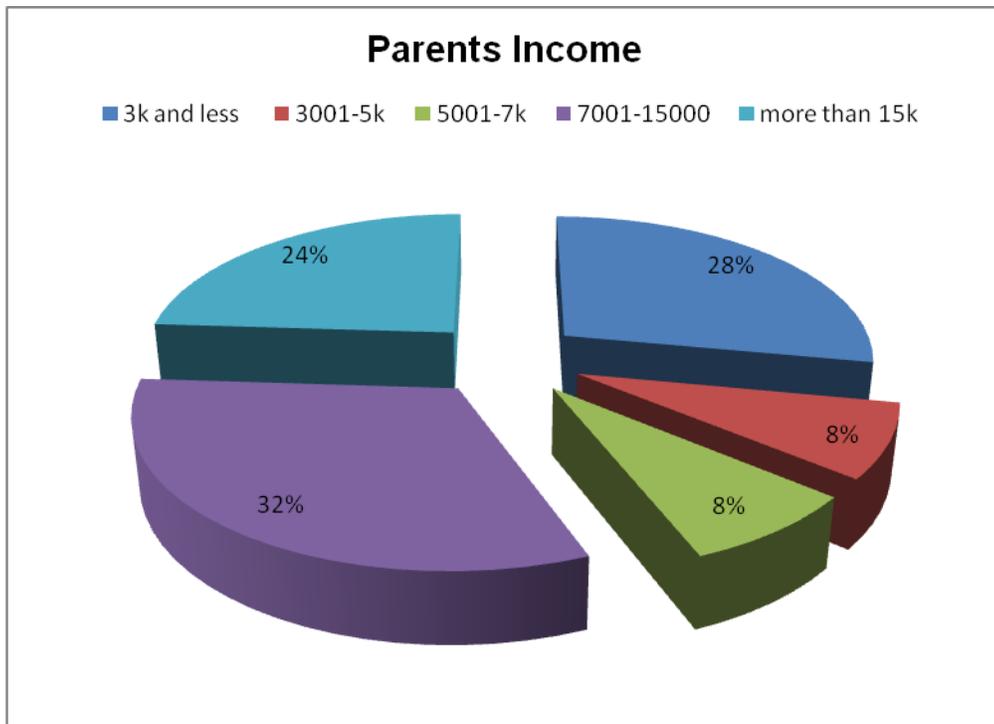


Figure 9. The Frequency Distribution of Parents Income

The figure above illustrates the distribution of the income of the parents of the respondents. As indicated by the graph, majority , 32 percent of the parents have income in the range of 7001 to 15000. Few of them , 24 percent have more than 15000. This is supported by the varied occupation of the parents which are not known to have great compensation.

This implies that with the meager income of the family medical and therapeutic needs of their child with DS could not fully be meet.

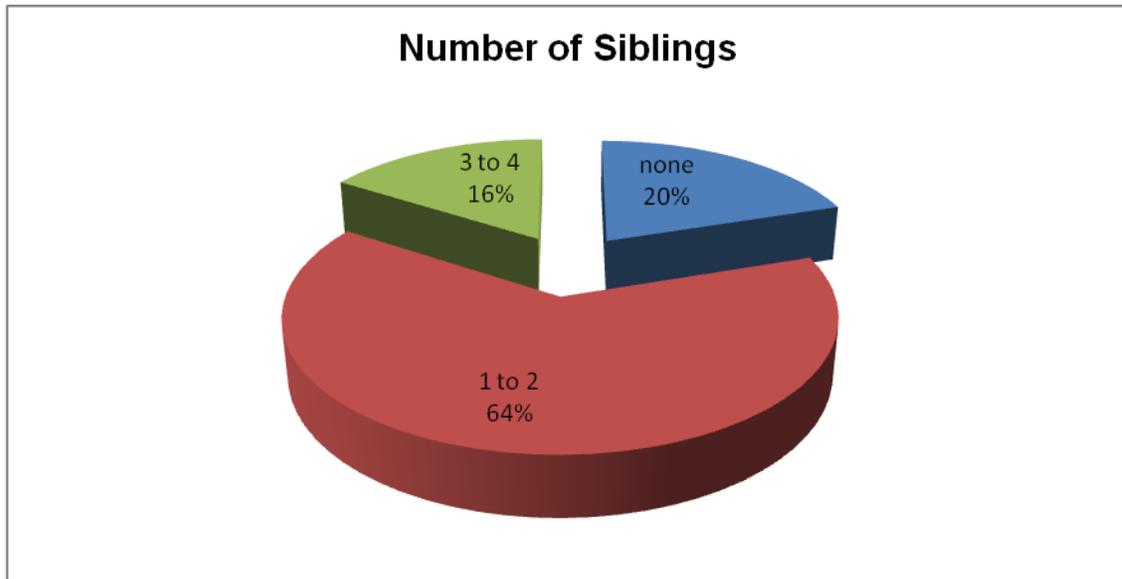


Figure 10. The Frequency and Percent Distribution of the Number of Siblings of the Respondents

The figure above illustrates the distribution of the percentages of the number of siblings of the respondents. It can be seen that more than majority of the respondents (64 percent) have one (1) or (2) siblings. A commendable percentage , 20 percent of the respondents do not have brothers or sisters and out from the 25 respondents, about 16 percent of them have three(3) or four (4) siblings .

In as much as the individual with DS needs socialization , being a lone child need to be exposed to other children. Thus, an institution where she is most accepted and will be developed must be equip for her maximum development to become self-reliant (RA 7277).

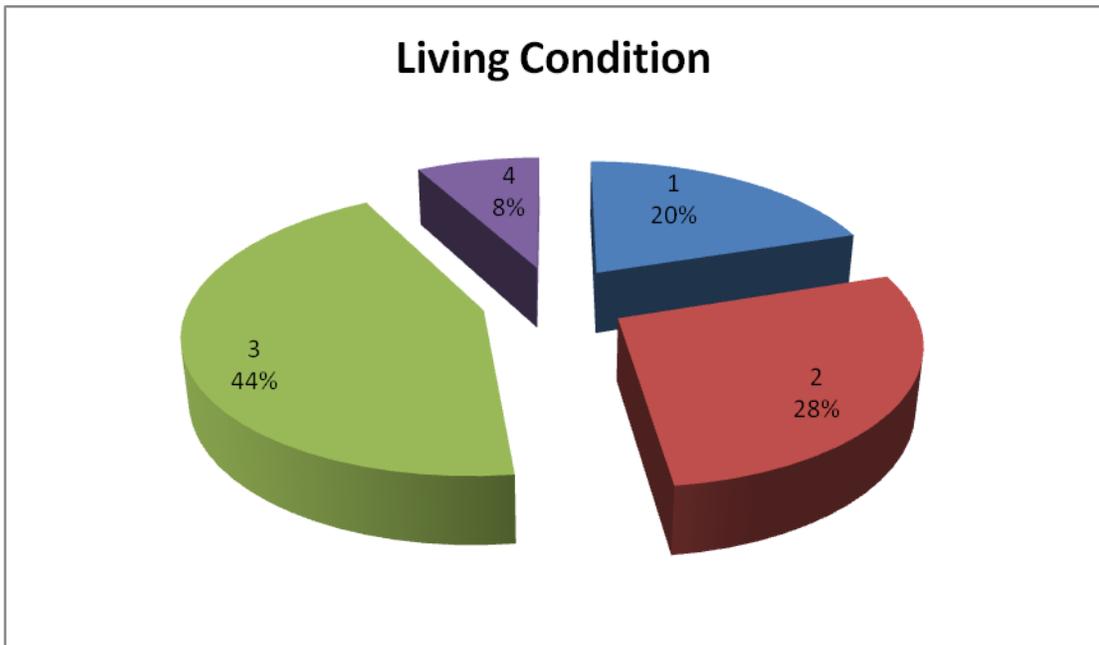


Figure 11. The Frequency Distribution of the Living Condition of the Respondents

As indicated in the graph above, the living condition of the respondents has been categorized into four descriptive levels. Level 1 which is described as a condition wherein the respondents have rented houses with no appliances and can not attend/celebrate special occasions has shown to involve 20 percent of the population (N=25). The least percentage (8 percent) has enjoyed the luxury of a living condition wherein the house owned is made of concrete materials and enjoy special occasions and have complete appliances.

The red colored slice which is indicated with 28 percent belongs to living condition 2. This is the condition wherein the house is owned but made of light

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materials, seldom attend/celebrate occasions and has only one or two appliances.

The bulk of the respondents, 44 percent, are living in a condition wherein the house owned is of concrete materials. They often enjoy attending/celebrating occasions and they have three or more appliances.

This implies that most of the respondents are living in an environment where they are able to manifest their abilities without much difficulties.

**Problem 2. What degree of manifestation do respondents have executed in terms of knowledge and skills, personal hygiene and socialization ?**

The following tables present the degree of manifestation of the knowledge and skills, personal hygiene and socialization of the respondents.

**Table 1**

**The Mean Distribution On the Degree of Manifestation of the Motor Skills of the Respondents**

Motor Skills	Weighted mean	Verbal Description	Degree of Manifestation
Do the following movements have been executed well?			
1. eye-hand coordination	4.44	Sometimes	Above average
2. eye-foot coordination	4.36	Sometimes	Above average
3. hand speed	4.32	Sometimes	Above average
4. leg power	2.6	Seldom	Average
5. agility (runs in straight line)	2.52	Seldom	Average
6. static balance	4.08	Sometimes	Above average

7. finger dexterity	2.68	Seldom	Average
8. body movement	3.64	Sometimes	Above average
9. jumping steadfast	3.44	Seldom	Average
10. do right/left face	3.44	seldom	Average
TOTAL	3.55	Sometimes	Above average

The data of table 1 present the weighted mean distribution on the motor skills of the respondents. Results show that indicators pointing on the weaknesses of the respondents are in leg power, agility , finger dexterity, jumping steadfast and executing left and right face. Some indicators which earned a merit of above average degree of manifestations are the eye-hand coordination, hand speed, static balancing and some body movements. These responses could be explained by the study conducted by Elliott (1990) where the finding of greater performance errors in verbal-motor behaviour may be attributed to Elliott et al. (1987) model of cerebral specialisation and Elliott, Gray and Weeks (1991) proposal that individuals with Down syndrome exhibit verbal-motor difficulties as a result of a dissociation of cerebral systems responsible for speech production and movement organisation (<http://DS.org>).

This implies that direction to be given for any motor execution of individuals with Down syndrome must be in simple and clear instruction for easy assimilation of directing words so that execution of motor skills may have its development through step approach.

The genetic disorder of individuals with DS has been known to be caused by an extra copy of chromosome 21 inside the body cells. This is the

chromosome on intellectual development (Genetics). In this study , the 25 respondents guided by their teacher were made to response to 10 indicators on the degree of manifestation of their knowledge as shown in table 2.

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**Table 2**  
**The Degree of Manifestation of the Knowledge of the Respondents**

Knowledge	Weighted mean	Verbal Description	Degree of Manifestation
Does the child manifest the following ....			
1. follow directions correctly as instructed ?	4.44	Sometimes	Above average
2. to pay attention to what is said?	4.36	Sometimes	Above average
3. able to work independently at his place with minimal teacher direction?	4.12	Sometimes	Above average
4. answer in class in front of the classmates?	2.6	Seldom	Average
5. take part orally in the class discussion?	2.52	Seldom	Average
6. follow classroom rules, with respect to being out seat, talking out, raising out etc...	4.08	Sometimes	Above average
7. capable of reading one page write-up?	2.68	Seldom	Average
8. accurately copy what is written on the board?	3.64	Sometimes	Above average
9. complete his homework/ assignment?	3.44	Seldom	Average
10. solve simple mathematical operation?	3.44	Seldom	Average
<b>TOTAL</b>	<b>3.52</b>	<b>Sometimes</b>	<b>Above average</b>

The data of table 2 present the degree of manifestation of the knowledge of the respondents. It can be gleaned that they are capable of following directions when clearly instructed. They have the capacity to pay attention and are able to

work independently. Their weak point is in taking oral recitation and answering in front of their classmates. Reading , solving simple mathematical operations and completion of school works render difficulty to the respondents. This adheres to

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the mental capacity of the respondents since the defect in their chromosome number is the one responsible of the thinking skills(Genetics) of an individual.

This extra chromosome changes the orderly development of the body and brain

(<http://nichcy.org/disability/specific/downsyndrome>) which is outwardly manifested in the behavior of the individual.

**Table 3**

**The Degree of Manifestation of Personal Hygiene of the Respondents**

Personal Hygiene Indicators	Weighted mean	Verbal Description	Degree of Manifestation
Does the child show or present the following actions ...			
1. appear clean in her/his self?	4.28	Sometimes	Above Average
2. look at the mirror to see if hair is in place ?	4.32	Sometimes	Above Average
3. take time to brush teeth	4.76	Always	High
4. take a bath	4.84	Always	High
5. do proper dressing or attire	4.20	Sometimes	Above Average
6. clean the place after eating	3.16	seldom	Average
7. drink water without spills	3.96	Sometimes	Above Average
8. eat properly	4.48	Sometimes	Above Average
9. wash hands before and after eating	4.64	Always	High
10. proper use of toilet	4.45	Sometimes	Above Average
TOTAL	4.30	Sometimes	Above Average

Table 3 presents the degree of manifestation of personal hygiene of the respondents. Results show that there is high degree of manifestation of their personal hygiene as indicated in brushing the teeth, taking a bath and washing

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hands before and after eating. These are basic health practices where individuals without disabilities perform routinely in their daily lives. Contrary to that self cleanliness, they are not much concerned with their place after eating. All other indicators have above average degree of manifestation.

Such actions imply that individual with DS are capable of learning health practices for themselves. Thus, personal hygiene which is essential to anybody could readily be imposed on them.

**Table 4**

**The Degree of Manifestation of Socialization of the Respondents**

Socialization Indicators	Weighted mean	Verbal Description	Degree of Manifestation
Does the child show or present the following behavior ....			
1.confident to talk with others	4.0	Sometimes	Above average
2. fear nobody	3.88	Sometimes	Above average
3. exhibit welcoming behavior with people seldom seen	4.36	Sometimes	Above average
4.loves to smile	4.62	Always	High
5. play with classmates	4.20	Sometimes	Above average
6. behave with the group properly	4.32	Sometimes	Above average
7. give place to others	4.16	Sometimes	Above average
8.show pleasing personality to every body	4.12	Sometimes	Above average

9.like to be a part of an activity	4.16	Sometimes	Above average
10.love to be the leader of the group	4.00	Sometimes	Above average
TOTAL	4.18	Sometimes	Above average

The data of table 4 indicate the social behavior of the respondents. It can be seen that they have high degree of manifestation in terms of smiling .All other indicators for socialization favor above average degree of manifestation.

This implies that they may be projecting a self –image of too engrossed with themselves but in actual setting among the people or in the community they are sociable individuals.

**Problem 3. To what extent do the concerned agencies/institutions had assisted the respondents in terms of educational input and social responsibilities?**

In this research work , there are three (3) institutions which are under the Department of Education namely SPED Center of Butuan Central School, SPED Center of Cabadbaran South Central Elementary School (CASOCES) and the SPED Center of Buenavista Integrated School. The lone private institution who cater children with Down syndrome is the Brave Heart SPED Center which is on its early stage of operation complete with therapeutic consultants and aides to assist the needs of every individual in the class.

The problem stated above has been treated with thematic analysis based from actual observations, case studies narrated by key informants and

interviews. A summary matrix on the extent of assistance bestowed to the respondents is being presented, analyzed and interpreted in table 5.

**Table 5**

**Thematic Analysis on the Extent of Assistance Given to the Respondents in terms of Educational Input and Social Responsibilities**

Areas	Observations	Case Studies	Interviews	Extent of Assistance
<b>A. Educational Input :</b> 1. teachers  2. instructional materials  3. facilities	>private institution has teaching force with aligned specialization > public SPED centers have teachers with varied degrees but undergone training/seminar for PWDs  >adequate for pre-schools	>history of teachers going out of SPED assignment in favor of less physical work  >requested materials appropriate for children with DS Is not in the priority list (DepEd)	>teachers in public clamor for assistance or teacher aides and increased compensation  >inadequacy of materials and facilities due to budget constraint	>DepEd: one per class  >Private: 1 per class w/1-2 aides  >>> good  >poor
<b>B. Social Responsibilities</b> 1. Family  2. Community	>mostly attended to by guardians/helpers  >well-accepted >at times can be observed to be more polite than	> three cases of Drop-outs due to transfer of residence, unavailability of nanny ,financial matters  -	>several pupils are assisted to commute on their own back home  >several pupils can communicate properly with	>good  >better

3.other agencies	normal children in the community  >no sponsoring activities		the people around and are able to socialize like individuals w/out disabilities >not in their program of work	>poor
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**Problem 4. What are the problems encountered by the parents or guardians and teachers in meeting the needs of the respondents ?**

The problems identified as presented in table 6 below are results from the focus group discussion of parents or guardians and designated teachers in classes specified for individuals with Down Syndrome.

**Table 6**

**Thematic Analysis on the Problems Encountered by Parents or Guardians and Teachers in Meeting the Needs of the Respondents**

Problems Encountered	Manifestation	Countermeasures undertaken by....	
		Parents/Guardians	Teachers
1.)when onset of wild behavior or tantrums occur	>flares up when something wanted is not given  > uncontrolled emotions of anger or dislike	>cuddle the child and do bargaining talk  >let her/him be until will get tired	>make punishment by assigning menial works like sweeping the floor  > for extreme cases , sent out with the guardian
2.) state of exhaustion	>uncooperative, uncommunicative	> let the child sleep >go for a walk, entertain to eat/see TV programs	> give a new set of work >let her stop whatever is assigned to be done
3.)becoming a scene stealer	> gets the attention of who is talking, runs to the center where individuals are in group, shouts to lead	> reprimanded > taken out aside > no viewing of favorite cartoon show	> given work to do > assign to be the leader in an activity or school work

<b>B.Knowledge/Skills</b>			
1.) can not follow directions	> will not write >exhibit exclusion from the class by positioning at the farthest corner of the room > performs differently from what is required	> let him be > let the child sleep	>do step approach >apply use and disuse principle > do reteaching

As indicated in table 6, there are two major problems encountered always by the teachers and the guardians. These are the behavioral dimension and the knowledge and skills of the respondents. The degree of incapability of the respondents in terms of knowledge and skills has not been clear. There are studies conducted where teachers will find it more effective to emphasize concrete concepts with a student who has Down syndrome, instead of abstract ideas . The teaching skills in a step-by-step fashion with frequent reinforcement and consistent feedback has proven successful (<http://ncyp.org.disability>)

Today, children with Down syndrome at SPED Center Butuan City are occassionally scheduled to attend in the regular classroom, alongside their peers without disabilities.

**Problem 5. Based from the findings of the study, what enhancement or intervention program may be recommended?**

The problem above is being answered in chapter 5 where an intervention program is being recommended.

## **Chapter 5**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATION**

This chapter presents the summary, conclusions and recommendations of the study based on its findings.

#### **Summary**

The main purpose of the study was to assess the needs of 25 individuals with Down Syndrome from selected SPED Centers of Butuan City and its adjacent towns .

Specifically it sought to determine the socio- economic profile of the respondents , to determine the degree of manifestations of the knowledge and skills , personal hygiene and social behavior of the respondents. In addition , this study would look into the extent of assistance of the educational inputs and social responsibilities of concerned agencies on the needs of the respondents and determined the problems encountered by the parents and teachers .

The study was a combination of quantitative and qualitative research wherein descriptive statistics was utilized to determine the socio-economic profile of the respondents and thematic analysis was applied to treat the qualitative aspect of the study. The instruments used in gathering the data were the survey questionnaires , focus group discussion, selected case studies and anecdotal interviews from key informants, parents.guardians and teachers.There was also the actual observation conducted by the researcher to look into the facilities and

activities of the respondents in their classroom setting as well as their behavioral dimensions when with acquaintances or peers without disabilities.

## **Findings**

Based from the data gathered in the study, the following results were obtained.

On the socio-economic profile of the respondents, majority of them belong to the age bracket of 7- 12 years old, mostly were girls whose mothers have greater educational attainment than their fathers. Results also showed that even if mothers are mostly at college level they indulged in housekeeping and fathers went into self-employment. In terms of parents income, majority were in the category of having an income in the range of 7001-15000 pesos. In terms of siblings of the respondents, data showed that more than 50 percent of the respondents has one or two siblings and few have no sibling at all. This gave the respondent an environment where she/he is well attended to. And in terms of living condition, majority has a house of their own in concrete material, have necessary appliances and can afford to go on special events and celebrations(level 3).

On the degree of manifestations on the motor skills of the respondents, results showed that they were categorized to be above average. In terms of knowledge, findings have indicated to be also of above average degree of

manifestations. In terms of personal hygiene , individuals with Down syndrome also exhibit above average manifestation and they were also found to manifest above average degree of socialization.

Thematic analysis showed two problems encountered by the parents/guardians and teachers in dealing with individuals with Down Syndrome. Findings pointed out that behavioral dimension and knowledge and skills were the needs most sought after by the respondents. Although they manifested above average socialization , knowledge and skills , still these were the areas considered to be problems because when the child went into unmanageable behavior (go into tantrums )high risk of getting into destroying things and even inflicting injuries to others were considered to be normal for this type of disability. Thus, when such scenario occurred at any time of the day, the child was sent home.

On the extent of assistance from educational input , teachers were found to be good but instructional materials and facilities were having poor assistance. And in terms of social responsibilities, family sector was rated good, better for community and poor for other agencies.

## **Conclusions**

Based from the findings of the study the following conclusions were drawn:

As in any other individual, persons with disabilities do exhibit similar socio-economic profile. They also have their socialization and concerned with personal hygiene. In their own world of development , they also exhibit knowledge and skills where they manifest to a degree acceptable by the society which enable them to mingle in the community just like any other citizen of this country. And if opportunity has been given to them were their training and development started much earlier just like any normal individual , then a stable foundation would contribute more to what they are capable.

Thus, the recommended program is hereby proposed .

## **Recommendation**

### **PROPOSED EARLY INTERVENTION PROGRAM FOR PERSONS WITH DOWN SYNDROME ( A 5-Year Development Plan)**

Fe M. De la Cruz

## **Rationale :**

The findings in the study entitled “ Assessment of Needs of Persons with Down Syndrome” revealed that persons with this disability is capable of learning . Though would take in knowledge and skills preferably in a step- by-step approach, still the capability to learn is a springboard to design a curriculum fitted for them to be able to sustain and reach higher level of understanding.

The respondents of the study did not pass through early intervention program , thus, what knowledge and skills they have gained in school at later ages are what they have now.

It is in this line of thought that an early intervention program could start them to gain access to better life. Even with persons without disabilities, training them at an early age gives an individual more access to gain knowledge and skills for a higher endeavor. Such that this program is designed to have early development of persons with Down Syndrome.

And in as much as other agencies or institutions could not readily extend assistance to this noble cause, the Department of Social Welfare and Development is challenged to initiate this project with the following program of activities and implementing schedule :

Title of the Project	: PROPOSED EARLY INTERVENTION PROGRAM FOR PERSONS WITH DOWN SYNDROME
Proponent	: FE M. DE LA CRUZ
Host Agency	: DSWD in collaboration with Pre-school Institution
R & D Station	: DSWD Bldg. Caraga Region
Classification	: Development
Sector	: Socio-Economics
Discipline	: Human Resource Development
Target Beneficiaries	: Children with Down Syndrome (aged 3-6)

Implementing Schedule : Year 1

PROGRAM/ACTIVITY PROJECT	OUTPUT INDICATORS	TARGETS OF OUTPUT			
		QUARTERLY ACCOMPLISHMENT TARGETS			
		1st(2012)	2ND	3RD	4th
		Jan -March	April-June	July-Sept	Oct-Dec
I . Human Resource. Development					
A. Capability /Team Building >> staff training	> self-discovery of character traits and personal capabilities  > cooperativism	X			
B. Skills Development  >training/Workshop Seminar of teaching force	>prof therapist >2 professional Pre-sch teachers >3teacher-aides	X			
II. Physical Facilities	>nursery classroom >comfort room >sleeping room >playground >musicroom/AVR	X  X	  X  X	   X	
III Instructional Materials	>concrete models >teaching materials		X  X		
IV Monitoring and Evaluation	>project leader >evaluation team >quarterly report	X  X	 X  X	 X  X	 X  X

A Memorandum of Agreement will be made to any Pre-School Institution that will link with DSWD for the said Intervention Program.

Initially, DSWD will construct additional facilities intended for the Intervention Program for Persons with Down Syndrome ages 3-6 years old. Eventually, this will be the Pre-School Intervention Center for Persons with Down Syndrome, a joint Project of DSWD with A Pre-School Agency.

Implementing Schedule : Year 2-5

PROGRAM/ACTIVITY PROJECT	OUTPUT INDICATORS	TARGETS OF OUTPUT			
		QUARTERLY ACCOMPLISHMENT TARGETS			
		1st(2012)	2ND	3RD	4th
		Jan -March	April-June	July-Sept	Oct-Dec
I. Sustainability Development Program					
A. Periodic staff /teachers training	>competent staff and teaching force		X		X
B. Repair and Maintenance of School Facilities and Instructional Materials	Ocular Inspection Documentation		X		X
C. Monitoring and Evaluation	Quarterly Report	X	X	X	X

Budgetary Requirement :

A. Infrastructures and facilities	.....	1,000,000
B. Honorarium for		
>3 licensed pre-school teachers @ 10,000 /mo.	.....	120,000
>2 capable teacher aides @ 6,000/mo.	.....	60,000
>1therapist (consultant) @ 5,000/mo	.....	50,000
C. Seminar/Workshops/Training	.....	80,000
D. Contingency fund	.....	<u>30,000</u>
	Sub- Total	340, 000

For a 5- year Project Plan :

1.)Operational Expenses:

340, 000 x 5 yrs .....1,700,000.00

2.)Capital outlay :

Infrastructure/facilities ----- 1,000,000.00  
 2,700,000.00

3.)Monitoring /Evaluation

(for 5- year development program) 300, 000.00

3,000,000.00

**SURVEY QUESTIONNAIRE:**

Part I. On Socio-economic profile. Please put a checkmark on the space provided before each variable that fits in to your profile.

1. Age :

7-12 yrs. old                       16-20 yrs. old  
 21-40 yrs. old                       41-60 yrs. old

2. Gender Profile                       Boy                       girl

Parents' Educational Background (for father & mother)

Elementary level                       High School Level  
 High School Graduate                       Vocational Course  
 Tertiary Level                       College Graduate  
 College Graduate                       Post Graduate

Parents occupation(father & mother)

Teacher                       Business man  
 Farming                       Agricultural  
 Janitorial                       Others , pls specify:  
\_\_\_\_\_

Parents Monthly Income

15,000 and above                       7,001-14,999  
 5,001-7,000                       3,001-5,000  
 3,000 and less

Number of siblings

\_\_\_\_ 1-3

\_\_\_\_ 4-6

\_\_\_\_ 7 and more

Living condition

Encircle what level you are in if 4 or more of the situations below characterize your living situation.

Level 1 : house is rented ,no appliances, cant go on a recreation, does not enjoy special occassions, does not celebrate birthdays, can't buy new clothes.

Level 2. House is owned but of bahay kubo type,seldom goes to enjoy special occasions, seldom buys clothing and seldom goes on vacation and at least there are 1 or two appeances at home.

Level 3: House is owned but of concrete type, often goes to enjoy special occasions,often buys clothing and often goes on vacation and at least there are 3 or more appliances at home.

Level 4: House is owned but of concrete type, often goes to enjoy special occasions,often buys clothing and often goes on vacation and at least there are 3 or more appliances at home.

Need Assessment :

Please put a check mark in line with the column of your answer.

5 – always

4-sometimes

3 – oftentimes

2- never

1- not applicable

(1) Basic Motor Skills

Skills Indicator

Do the following movements executed well?	1	2	3	4	5
1. eye-hand coordination					
2. eye-foot coordination					
3. hand speed					
4. leg power					
5. agility (runs in straight line)					
6. static balance					
7. finger dexterity					
8. body movement					
9. jumping steadfast					
10. do right/left face					

(2) Knowledge

Direction: Please put a check mark (/) on the columns that corresponds to your answer for the following given questions .

5 – always                      4-sometimes                      3 – oftentimes  
2- never                                      1- not applicable

Indicators :

Does the child show or manifest the following...	5	4	3	2	1
1. follow directions correctly as instructed ?					
2. to pay attention to what is said?					
3. able to work independently at his place with minimal teacher direction?					
4. answer in class in front of the classmates?					
5. take part orally in the class discussion?					
6. follow classroom rules, with respect to being out seat, talking out, raising out etc...					
7. capable of reading one page write-up?					
8. accurately copy what is written on the board?					
9. complete his homework/ assignment?					
10. solve simple mathematical operation?					

(3) Personal Hygiene

Direction: Please put a check mark (/) on the columns that corresponds to your answer for the following given questions .

5 – always                      4-sometimes                      3 – oftentimes  
2- never                                      1- not applicable

Indicators

Does the child show or present the following manifestations or actions ...	5	4	3	2	1
1. appear clean in her/his self?					
2. look at the mirror to see if hair is in place ?					
3. take time to brush teeth					
4. take a bath					
5. do proper dressing or attire					
6. clean the place after eating					
7. drink water without spills					
8. eat properly					
9. wash hands before and after eating					

10. proper use of toilet					
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(4) Socialization (Social Behavior)

Direction: Please put a check mark (/) on the columns that corresponds to your answer for the following given questions .

5 – always                      4-sometimes                      3 – oftentimes  
 2- never                                      1- not applicable

Indicators

Does the child show or present the following behavior or manifestations ...	5	4	3	2	1
1.confident to talk with others					
2. fear nobody					
3. exhibit welcoming behavior with people seldom seen					
5. play with classmates					
6. behave with the group properly					
7. give place to others					
8.show pleasing personality to every body					
9.like to be a part of an activity					
10.love to be the leader of the group					

FGD/Interview Guide : (for teachers, parents/guardians, Kis)

A. On Problems encountered:

1. When does the child go into tantrums ?

\_\_\_\_\_

2. What are the expressions or manifestations indicated when the child goes into exhibits of misbehaviors ?

3. As such, what are your countermeasures to pacify such behavior ?

NOTE: to answer questions 2 and 3 please fill –in the table below:

Expressions/Manifestations	Countermeasures/Remedy

B. On the extent of assistance from other institutions/agencies :

1. What educational assistance have been extended by other agencies (please specify the name of the institution/agency) to teachers handling the class with children with Down Syndrome ?

2. What instructional materials and/or facilities have been given/donated?

3. What social responsibilities had been extended by the following:

a. Family

b. Community

c. other agencies  
(LGU,NGO,private companies)

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