# Assisting Hearing Parents of Deaf Students Learn Sign Language through Sign Language English Cebuano-Dictionary (SLEC-D) Mobile APP

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#### **ABSTRACT**

This study was conducted to help hearing parents of the 23 deaf learners of the Vicente N Chaves Memorial Central School learn more of the manual sign language through the SLEC-D Mobile APP (Sign Language English Cebuano Dictionary Mobile Application) and to better communicate with their deaf children and eventually provide more assistance in the modular learning. Per consultation by the researcher, parents had communication problems assisting their deaf children in their modular learning due to inadequate sign language vocabulary. Though the sign book provided to them last year was of help, it was not enough to augment their inadequate literacy in the sign language. Descriptive research design using take-all method in selecting the sample was applied. The findings of this study reveal that all parents learned more vocabulary signing words using the SLEC-D MOBILLE APP (Sign Language Cebuano English Dictionary Mobile App) and the app helped improve as well as enhance their skills in learning the sign language. This signifies that the intervention implemented boosted parents' ability in learning the sign language. Participants conclude that SLEC-D Mobile APP is a valuable tool for parents to address communication barriers and positively impact students' learning as they can better provide assistance to their children in the modular learning.

**Keywords:** hearing parents, deaf learners, communication problem, sign language

## Introduction

Parental involvement has been considered as one of the important components of a comprehensive inclusive program for children with special needs in DepEd Order No. 72 s. 2009 Re: Inclusive Education as strategy for increasing participation rate of children, as a "vital role in preparing the children in academic, moral, and spiritual development. Parents shall involve themselves in observing children's performance, volunteering to work in the classroom as teacher aide and providing support to other parents." (1)

As cited by Calderon, R. (2000), parental involvement plays a large role in a deaf child's language development. (2) Maternal communication in particular, is a significant indicator of language development, early reading skills, and social-emotional development. The better the language skills of the parents, the higher the chance deaf children will have of succeeding in school and beyond. The language skills of deaf children with hearing parents lag far behind those of hearing children with hearing parents and deaf children with deaf parents. The slower development of deaf

children of hearing parents has been attributed both to incomplete language models and less parent-child interaction.

#### **Justification**

In Vicente N. Chaves Memorial Central School Sped Center, all deaf children are born to hearing parents. Typically, these parents have had no exposure to American Sign Language (ASL), the most accessible language to deaf Filipinos, before the birth of their deaf child. VNCMCS Sped Center has catered self-contained multigrade classes for hearing impairment with its two existing classes, one for the Kindergarten and Grades 1, 2 and 3, and the other class for the Grades 4, 5, and 6. The present enrolment is 23 all of whom are born with hearing parents. Upon interview, all of the parents are sign language illiterate and therefore could not help fully their children's studies because of the language limitation.

In order to improve parental language ability in ASL, the researcher collaborated with a group of IT students of USTP Jasaan to develop SLEC-D – Sign Language English Cebuano Dictionary. The goal of SLEC-D is to help deaf learners and parents learn ASL and practice via the mobile phone.

# **Objectives**

The objectives of this study are:

- to help hearing parents of the 23 deaf learners of the Vicente N Chaves Memorial Central School learn more vocabulary words in manual sign language through the SLEC-D Mobile APP (Sign Language English Cebuano Dictionary Mobile;
- 2. enable parents to better communicate with their deaf children and eventually provide more assistance in the modular learning;
- 3. positively impact better performance of the students' learning

## **Best Practices Implemented**

#### **Innovation**

Application design SLEC-D APP is designed to help deaf students and parents learn and practice ASL on their mobile phones. By providing parents with better tools for learning the language, we hope to eliminate the language deficit experienced by deaf children of hearing parents. The current focus of SLEC-D APP is on vocabulary acquisition. It currently has two components for learning, the Basic Learning and High Learning. For Basic Learning, it consists of the letters of the alphabets, animals, colors, common places, common phrases, community helper, family, and fruits, and greetings. High Learning is composed of the parts of speech, songs and story.



The app is user-friendly with the vocabularies have caption both in English and Cebuano and can be use offline using an android phone. One basic requirement for the parent and learners is to own at least an android phone. The researcher deployed the app using the Share It App. The search component in the app is intended to be use when parents have immediate communication needs with their child. They can search for an ASL video by typing the English equivalent on the keyboard. The search component aids learning because parents are retrieving signs so they can immediately use them in context.

Progress is determined by the number of signs they have gotten correct when they are requested by the teacher researcher to do the sign of the words, they learned for the week during the module retrieval.

Initial deployments of SLEC-D to hearing parents with deaf children have been promising. Parents have reported enjoying the application and sharing it with others in their family.

## Strategy

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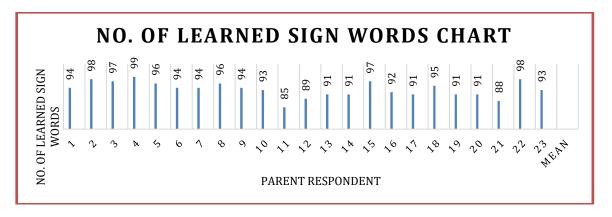
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## **Impact**

This study was designed specifically to help parents learn sign language to address communication barrier with their deaf children and eventually assist the children in their modular learning. The table below shows the number of words each respondent learned in a month according to the Basic Learning component. Of the total 100 vocabulary sign words, 93% were learned by the parents on average.

Respondents	No. of signed words learned										
	Alphabet (26)	Animals (10)	Colors (10)	Common Places (10)	Common Phrases (10)	Community Helper (10)	Family (10)	Fruits (4)	Greetings (10)	Total (100)	%
1	26	8	10	7	10	8	10	4	10	94	94
2	26	10	10	8	10	8	10	4	10	98	98
3	26	10	10	10	5	10	10	3	10	97	97
4	26	10	10	10	9	7	10	3	10	99	99
5	25	10	10	9	7	8	10	2	10	96	96
6	26	10	10	7	8	9	10	4	10	94	94
7	26	7	10	8	10	10	10	3	10	94	94
8	26	10	10	6	10	10	10	4	10	96	96
9	26	10	10	10	9	5	10	4	10	94	94
10	26	10	10	10	7	7	10	3	10	93	93
11	24	5	10	5	8	8	10	3	10	85	85
12	26	9	10	9	6	6	10	3	10	89	89
13	26	10	10	6	7	8	10	4	10	91	91
14	26	6	10	7	8	10	10	4	10	91	91
15	26	9	10	8	10	10	10	4	10	97	97
16	26	10	10	5	10	7	10	4	10	92	92
17	20	10	10	9	9	9	10	4	10	91	91
18	26	8	10	10	7	10	10	4	10	95	95
19	26	8	10	10	8	6	10	3	10	91	91
20	26	10	10	10	6	5	10	4	10	91	91
21	19	10	10	7	10	9	10	3	10	88	88
22	26	10	10	9	10	10	10	3	10	98	98
23 MEAN	26	7	10	6	10	10	10	4	10	93 93	93 93



The findings of this study reveal that all parents learned more vocabulary signing words using the SLEC-D MOBILLE APP (Sign Language Cebuano English Dictionary Mobile App) and helped improved, enhanced their skills in learning the sign language. Parents were more participative in the teaching-learning process of their deaf children.

# **Summary and recommendations**

This signifies that the intervention implemented boosted parents' ability in learning the sign language. Participants conclude that SLEC-D Mobile APP is a valuable tool to address communication barrier and positively impact students' learning as they can better provide assistance to their children in modular learning. The purpose of this study was to help parents learn more sign words vocabularies and be able to better communicate with their deaf children. With the use of the SLEC-D MOBILE APP, the parents seemed to enjoy learning this style much better than using the printed sign book. It is more convenient and easier to use. Aside from the parents, the teacher researcher wishes to recommend the use of the SLEC D MOBILE APP for untrained teachers in the sign language those whose station has poor internet connectivity and for hearing and struggling deaf learners for vocabulary acquisition.

For future development, the SLEC-D MOBILE APP may be improved in terms of more words to be included in the app like those words that are in use for learning in other subject areas with the teacher researcher performing the signing.

#### Reference

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