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Postsecondary education for the deaf and its supportive system: the United States in comparison to Japan

Akira Honda

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POSTSECONDARY EDUCATION
FOR THE DEAF
AND
ITS SUPPORTIVE SYSTEM

-THE UNITED STATES IN COMPARISON TO JAPAN-

聴覚障害者の高等教育

本田晃

Akira Honda, Japan

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POSTSECONDARY EDUCATION
FOR THE DEAF
AND
ITS SUPPORTIVE SYSTEM

-THE UNITED STATES IN COMPARISON TO JAPAN-

Independent Study

Central Institute for the Deaf

Akira Honda

May, 1978

Saint Louis, Missouri, U. S. A.

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PREFACE

As one of the instructors in High School for the Deaf, I have long felt the necessity of postsecondary education for the deaf strongly through my own experience in the past years.

Now this is a world wide problem. This text was written as an Independent Study while I was learning at Central Institute for the Deaf (CID) (St. Louis, Missouri, U. S. A.) for 1977-1978 on an International Rotary Foundation Scholarship.

The data and references in this text are drawn from many sources. I gratefully acknowledge the permission to reproduce materials granted by each author.

I hope this will be useful and referential as regards post-secondary education, not only for educators but for the deaf, their parents, related persons, and the general population.

I shall be very pleased if you will give me any suggestions or advice after reading this.

August, 1978

Akira Honda

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1. THE PURPOSE AND MOTIVATION OF THIS STUDY 1

This year, 1977-1978, I was given the opportunity to study at the Central Institute for the Deaf (CID) 818 South Euclid, St. Louis, Missouri, 63110, U.S.A., on an International Rotary Foundation Scholarship. The scholarship is given to teachers of handicapped children by the Rotary Foundation. Thanks to Dr. Donald R. Calvert, Director, Central Institute for the Deaf and many other members of staff here, I have been able to study in the field of deaf education and I have prepared this Independent Study on postsecondary education for the deaf and its supportive system. I would like to give my thanks to Rotary Club, Hokkaido Educational Committee in Japan, CID college students and all those people both in the United States and Japan who have assisted me during this study period. I would also like to express my thanks to the principal, Mr. Tsuneco Mima and all my colleagues at High School for the Deaf in Hokkaido who helped make this possible.

The difficulties of postsecondary education for the deaf is a world wide problem. Many individuals in Japan, including educators for the deaf, parents, the adult deaf population and others

interested in the education of the deaf, have worked to establish better higher education. After the International Congress for the Deaf in Tokyo in 1976, a new interest developed.

The United States stands ahead of most countries in the training it provides for deaf citizens. A wide gap exists between the U.S.A. and Japan in the facilities that are available for training the deaf population. Postsecondary education for the deaf in Japan is still in its infancy.

In this paper, I would like to express concrete thoughts based on my own experience in secondary education. As a high school instructor of the deaf, I feel strongly about the necessity of establishing postsecondary education in Japan. This text is concluded with advocating postsecondary education for the deaf, with a supportive system, in Japan.

The first private educational facilities for the deaf opened more than one century ago in Kyoto, however public compulsory education for the deaf in Japan has only been adopted since around 1949. When we look at the present system, which ranges from infant to secondary education, one realizes that deaf education has been advanced remarkably. Innovations in teaching methods, better use of

residual hearings, acoustic amplifiers, and many³
teaching devices have led to these improvements.

Now is the time when we should start thinking of postsecondary education and its necessary supportive system. Regretably, there are no special higher educational institutions for the deaf in Japan, only colleges and universities for hearing students. As a result, graduates from high schools in Japan stop their education and many seek employment immediately. As an instructor of the deaf, I have come into contact with many of these individuals. Naturally, I have been concerned about the importance of postsecondary education and have made a special effort to learn about postsecondary education in the United States.

I hope that this study will be a useful aid in helping to establish postsecondary education for the deaf in Japan and in other nations where such education is limited. For this purpose, I have traced back in the literature and have attempted to formulate a model of postsecondary education for the deaf with its supportive system.

2. PROCESS OF STUDY

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My formulations are based on researching the relevant literature, associating with deaf adults, and visiting some institutions in the United States. I have read the relevant literature available in the CID professional library, thinking about the types or forms of postsecondary education that would be reasonable to implement in Japan and other countries.

Concurrently, I attended CID deaf alumni meetings in St. Louis in an attempt to obtain greater understanding of the role of postsecondary education and the needs it must fulfill in Japan.

I also visited the National Technical Institute for the Deaf in Rochester, New York, Gallaudet College in Washington, D.C. and California State University at Northridge, California. I found these visits enjoyable and informative, but unfortunately I was unable to visit any of the other colleges and universities deaf students attend.

3. GENERAL TRENDS OF DEAF EDUCATION

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Throughout the history of education in the United States and in Japan, educational policies and systems for handicapped children have lagged behind those for hearing children. Yet, those who have handicaps need more specific and continuous education. Training should begin earlier and continue through postsecondary training. Without opportunities for education, the deaf can not successfully compete in a hearing world. We can not run with the times without learning. The deaf population can not hope to keep up with the changing times without the proper education. Education must help to overcome the deficit of the auditory sensation. Given these opportunities, I believe, many of the deaf will have a chance to be fully productive citizens. In Japan, opportunities for deaf education end after secondary education in a sense, but in the United States the educational process continues into postsecondary education.

When we look back, even the great philosopher, Aristotle (384-322 B.C.) misunderstood the deaf, because of his concept of language. He believed there was no language without sound; written

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language according to him was not a language.

Only spoken language was the medium of thought.

He also believed language could not be acquired by learning but was an innate ability. This thinking resulted in prejudice and discrimination toward the deaf.

In the middle of the sixteenth century, an Italian doctor, Cardan, proposed a theory of education which stated that the deaf population could be taught language by combining an object or a picture with the written word. First he altered Aristotle's misunderstanding that the deaf were ineducable. This concept of educability led to the establishment of educational systems for the deaf.

Prior to this, education for the deaf was largely ignored and this resulted in many misconceptions. Although this is generally being overcome, many people still fail to recognize the potential of the deaf population. This misconception at what the deaf are able to do with adequate education has affected the achievement of the deaf population and has delayed the establishment of adequate facilities.

Under these circumstances, we educators and the deaf themselves must make an effort to promote

interaction between the deaf and the hearing pop-⁷
ulation. In order to realize the right understand-
ing among the general population, we educators should
promote this interaction.

Without empathy and understanding for the deaf
among the general population, mainstreaming also
can not be accomplished. Since I came to the United
States, I was pleased to see an emphasis on main-
streaming the deaf population into schools, colleges
and universities for the hearing. Directive main-
streaming of deaf students in colleges and univer-
sities for hearing students has not been realized
in Japan. We should not blame anyone but rather
make an effort to produce a better situation for
handicapped children.

The deaf educational system in the United
States is not always complete and is continually
developing. In Japan, if we do not make haste,
the deaf population will miss the opportunities of
postsecondary education and will lose out in develop-
ing its full potential. This may be overcome by
fostering interaction between the hearing and the
deaf population. To reach the goal, we educators
must be able to present a concrete model of how
postsecondary education should be established.

In Central Institute for the Deaf, the use of hearing aids is emphasized from very early childhood. Some of the pupils may forget to wear their hearing aids when they go on a picnic or when they go out. However, teachers and staff have been alert to this problem and encourage them to wear their hearing aids. The wearing of hearing aids also relates to education for the deaf directly, but is only one of the many factors that must be considered. Consideration of all of these factors is necessary for the improvement of postsecondary education for the deaf.

Auditory training has been emphasized at the Central Institute for the Deaf. Pioneer studies on the use of residual hearing (Dr. Max Goldstein, 1870-1941) have been reported and its importance is recognized by everybody in the field of deaf education.

Some deaf students do not want to wear hearing aids because they are ashamed or they do not consider them to be of any use. Understanding of the importance of hearing aid use is basic. I would like to cite some examples of the effect of using hearing aids from the literature.

Miss Ruth Kohr, The Volta Review (1935, p. 37)⁹ said the following: "I got a new efficient instrument. But even then, the thought of wearing it was more than I could bear. I have always hated to be conspicuous." But later she was encouraged to wear a hearing aid by her parents. Her mother said to her: "I wish you would wear your ear phone all the time. It makes such a difference in the amount you understand. You would have a better time, and it would be a lot of help to me if I did not have to repeat so much." So Miss Kohr decided and said "I'll begin wearing it from now on."

If it were not for her parents' advice, she would never have worn a hearing aid. We educators, parents, and the deaf themselves must know the necessity of wearing hearing aids.

In Applied Audiometry (1970, p. 237) John J. O'Neill cites the following: "A second study, which was a following up of the above study, was reported by Gates and Kusher.

"Thirty-eight of the children who had been fitted with hearing aids were studied. It was found that two-thirds of the group were still using their aids.

"Those individuals who were still wearing their aids were more intelligent and better adjusted than those who no longer wore the aids. Also, these children came from a better home environment which appeared to assist the child in adjusting to his aid. The aid-wearing group also had a better academic record and better social relationship" and he says that "hearing aids provide some improvement in speech-reception performance."

Miss Kohr says in The Volta Review (1935, p. 358), "What we need most in college and afterward is courage; courage to confess our deafness by wearing a hearing instrument, courage to realize that we have an obligation to society to manage our handicap as efficiently as possible."

We should recognize these facts and educate the deaf in the importance and proper use of hearing aids.

Early education of the preschool child is integral to later success in postsecondary programs. You cannot talk about one without the other. It lends continuity to the smooth educational process from early education to preschool to elementary to high school to college level work.

I have studied the parent-infant program

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(P.I.P.) at the Central Institute for the Deaf in St. Louis, Missouri, and have reaffirmed the importance of early intervention and education.

The Parent-Infant Program emphasizes the active role of the parent and child by visiting the P.I.P. house. The House is designed to be representative of the average American home. Positive and productive interaction are encouraged from the outset.

Dr. Audrey Simmons-Martin expresses the importance of the parents in this process in Early Management Procedures for the Hearing-Impaired Child (Chap. 10, p.16) "...We focus upon the parent rather than the child in our habilitative program. To insure that the parents see the important functional aspect of the interaction, the program is housed in a Home Demonstration Center rather than in a clinic or school."

Language, as a meaningful communicative device must be given at the earliest possible moment.

4. ABILITY OF THE DEAF AND THE IMPORTANCE OF DEVELOPING BOTH FACILITIES AND SUPPORTIVE SYSTEMS FOR THE DEAF.

Education and Ability

I have been in contact with the deaf population both in and out of the school environment since 1952. This experience of contact with deaf students and deaf adults has made me realize that no suitable scheme in the field of advanced education for the deaf has been adopted in Japan. Through my past experience, and my experience in the United States I have become aware of the extent to which the deaf population could develop its abilities, given the opportunity for further education.

At this point, I would like to mention some occupations in the United States in which the educated deaf have achieved success, for example, accountant, architect, biochemist, biologist, chemist, dentist, draftsman, editor, minister, physical therapist, translator and so forth. Lissy Feingold Jarvik, et. al. (Family and Mental Health Problems in a Deaf Population, 1963, p. 131) say that if such outstanding accomplishments as these can be achieved, indicates that high vocational goals for the deaf are not necessarily unrealistic.

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I agree with this and want to emphasize that the capabilities of the deaf must not be underemphasized. These achievements do not appear spontaneously. They are formed through the individual's ability, efforts, conducive surroundings, educational opportunities and many other factors. These high achievers are not many. But in Jarvick (et. al) it is said that it is remarkable that one third of a group of 27 deaf achievers lost all hearing before the age of nine months, eighty percent of them having been born deaf. These high level successes, however, are only one aspect of the total deaf population. In other words, not all deaf people will be able to succeed highly just as not all hearing persons can achieve so highly.

The general population is inclined to think that the deaf population is very different. This thinking has lead to an overprotection of the deaf and a feeling that they lack ability. Statements such as these may be heard among the hearing population: "As he is deaf, he must not think of driving a car.", "If it is a dangerous job, then as a deaf person he must not consider it." or "Because he is deaf, he had better choose his job soon after graduating from junior or senior high school."

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Such misunderstanding of the deaf population leads to misguidance, and poor direction for the deaf which may cause them to underachieve. Therefore, we should root out such misunderstanding.

In order to achieve the ideal situation, the deaf themselves must make an effort to succeed in order to fulfill their capacities. It is often said that some of the deaf population is inclined to live in a subworld or subculture. Overcoming this would lead to interaction between the hearing and the deaf population and this would have some beneficial implications.

Prior to achieving this ideal situation, it is also indispensable for the deaf to be given educational opportunities and at the same time, their constant effort must be required. This can be thought of in the sense of the two rails of a train track. One track is education and the other is the constant effort of the deaf. They must have each other to work successfully.

If these conditions were achieved, the door would be opened for the deaf to develop their abilities and to contribute meaningfully as functioning members of society. I firmly believe that where there is no educational opportunity, there

is no development of ability. Besides, where there is no mutual understanding, there is no production.

Education and Job

Many misconceptions as regards the deaf population still prevail. This is particularly evident in the area of employment. Many hearing population still seem to believe that the deaf population can only be blue collar workers. This is a stereotypical attitude prejudiced toward the deaf and this thought should be eliminated. I am not saying that blue collar labor, per se, is no good. However, this imbalance in the job market can be seen in many studies on the deaf population.

According to Jerome D. Schein's Research, The Deaf Community, (1968, p.63) on the deaf male population and the hearing male population in Washington, D. C., he states that: "More than half of the deaf men fit these two (craftsmen and operatives) as opposed to only about one fourth the general male population." If more deaf individuals are found in these skilled or semi-skilled jobs than the hearing individuals, it becomes evident that most of the deaf individuals in these fields are obliged to choose these semiskilled or skilled jobs, because

they lack the training and education to enter other areas of the job market.

This great imbalance between the sort of jobs that the deaf must choose versus the jobs that are open to the hearing population must be rectified soon. Above all, we educators should stand in front of this movement to diminish the imbalance that exists in occupations where too many deaf individuals are not functioning to their fullest ability. Constructive attitudes and public relations must be developed among the hearing population. Mutual understanding will come through the interaction between the hearing and the deaf population. This is a very important problem that must be solved.

In order to establish a reasonable balance, certain priorities must be stated. We can not separate educational settings for the deaf from the rest of the population. Not only the hearing population but the deaf need and want further education. Education for the deaf has been lacking. Reasonable educational opportunity must be our first priority.

In his book, The Deaf Community, Jerome D. Schein (1968, p. 69) states further that "With-

out sufficient education, deafness seems to be a formidable handicap; with good education its effect on economic status, at least, can be minimized. A word of caution should be included. The rapidly changing occupational conditions demand adjustments in educational preparation that will assure that it will continue to meet the future needs of the deaf person. To maintain and improve the favorable aspects of their economic life, the deaf person also must have continuing education."

This formidable handicap must be overcome through the means of education! I am not trying to say that every deaf person has the same potential. One must take into account the individual's abilities. First of all, we must encourage all deaf people to achieve to their fullest potential. Those who have good abilities must be encouraged to succeed and opportunities and facilities must be available.

In this sense, postsecondary education for the deaf is now an urgent problem in every country. By virtue of postsecondary education, many of the deaf will extend their abilities to the utmost, will be active members of society and will be fulfilled. I feel we have underemphasized deaf

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education - postsecondary education for the deaf
in the past days.

Deaf College Graduates

We should recognize that there are many deaf students who have graduated from colleges and universities for hearing in the United States. Even though they are handicapped, they sought their educational opportunities in colleges and universities for hearing students. Many of them have overcome their difficulties without formal support in campus, and further, many have been helped by friends or instructors in these institutions.

What I want to emphasize is that those who could not hear have attained success in their own ways in colleges or universities for hearing students or deaf colleges according to their own individual ability and potential. Above all, those who graduated from the colleges and universities for hearing students have shown such courage and strong wills which the hearing population has never imagined. And one may wonder what enabled them to achieve success. I believe only constant effort made them successful and enabled them to realize their own dream. Eagerness to learn was the really important factor, because of the neces-

sity and desire to develop his or her abilities to the fullest. However, I imagine that their efforts to achieve must be greater than for the hearing individuals as they need to rely on the support of family and friends because of the difficulties in learning without assistance.

Supportive Systems

It is understood that some deaf students in colleges and universities for hearing students require little support in their studies whereas the majority will require assistance such as note-takers and interpreters. And one must consider the kind of special support that could be offered and how this assistance would be developed and they should be established according to the needs of the deaf individual.

I propose that such supportive systems should be available in colleges and universities for hearing students in order to give deaf students assistance where this is needed so that they may attend such institutions knowing that aid is available. I believe if there is some aid that could be made available, deaf students who have the ability would choose integrated colleges and universities with the hearing population.

It is necessary to have not only supportive systems during learning, but also some national organization as regards job placement after their graduation from colleges and universities in both countries. I must also emphasize that after graduation, agencies such as government offices, private companies, and Employment Security Office Liason Council must be functional to aid these individuals in establishing appropriate job placement opportunities.

Resulting Conclusions

In short, in order to promote and develop high standards for the deaf, we must have a teamwork approach. This naturally includes the deaf themselves, their parents, educators, government officers, the managers of industry, rehabilitation workers, national employment security officers, and many other related persons in order to establish better situations for the deaf. When we consider this process of work for the deaf, we may think of it as a precision machine. Such a precision machine does not function adequately without any part of the machine missing.

Dr. S. Richard Silverman in his keynote at the International Congress for the Deaf in Tokyo

in 1976 compared the function of education for the deaf to the construction of a mosaic. This view is shared by many of us.

By taking into account all considerations, we must attempt to attain our ideal goal. Those of us who are involved with the deaf must devise and put into effect some concrete plans for the promotion of high standards for the deaf. We need to break down the imbalance in job opportunities that exists between the deaf and hearing population. One must accept that the pursuit of this ideal is not easy. However, we must make all efforts to try to realize it in the near future.

I have emphasized the importance of job opportunities, placement and postsecondary education for the deaf, including necessary supportive systems, and they are all indispensable to the realization of our ideal world for the deaf. Though specific conditions may differ in each country, those of us who are engaged in or are related to the education of the deaf should strive for the early realization of developing postsecondary education for the benefit of the deaf.

5. THE DEAF POPULATION AND POSTSECONDARY EDUCATION
IN THE UNITED STATES

There have been many studies done about the deaf population in the United States. Here I cite one of the studies. Jerome D. Schein expresses as follows: (Hearing and Deafness, p. 542), "The Deaf Community, then, consists mostly of pre-vocationally deaf persons, who number about 410,000 in the United States - a small minority of the total population."

Senator Lister Hill, on the Committee on Labour and Public Welfare (May 25, 1965) reported in The Volta Review (1965, p. 488) that "There are approximately 3,000 deaf students above the age of 16 who leave or graduate from state and local schools and classes for the deaf each year." According to Licille Miller et al. in The Journal of Rehabilitation of the Deaf, (1972, Vol. 6, No. 2, pp 80-81), "Gallaudet serves half of the nation's 2,000 hearing-impaired students in higher education programs. Among the remaining half, nearly 40 percent attend the National Technical Institute for the Deaf (NTID) and 60 percent are distributed among a number of regional and local programs."

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Accordingly then, in 1972, 70 percent of the United-States 2,000 hearing-impaired students in programs of higher education attended either Gallaudet or NTID. Such quality educational opportunities must be made available to the deaf in Japan. While these data are not current, the trend indicates that the number of students graduating from colleges and universities is increasing in the United States.

In The Deaf Community (1968, p. 60) Jerome D. Schein reported in his sample of the deaf community in Washington, D.C. that 41 percent of the white deaf males and 34 percent of the white deaf females had some college education while 9 percent of the nonwhite male and 5 percent of the nonwhite females had some education at the college level. Schein indicates that the deaf community in Washington is probably better than average in the United States. It does show what could be possible if a college education was offered in Japan.

The appearance of NTID was a milestone in the continuing history of the education of the deaf in the United States. Though still comparatively young, the Institute has, along with the more than century old Gallaudet College, offered educational

opportunities with new horizons and bright futures for hundreds of deaf students.

I want to emphasize that we should not disregard the potential of deaf children. In the field of deaf education, the level of academic knowledge, Intelligence Quotient, etc. have been important topics. Certainly, the deaf are presumed to be inferior to the hearing population because of their hearing impairment. Richard G. Brill expresses in his book Administrative and Professional Developments in the Education of the Deaf, (1971, p. 187) that "Three different studies have come up with relatively similar findings in regard to the educational level of deaf students at the time they leave school. The report of the Advisory Committee on Education of the Deaf, commonly known as the Babbige Report, disclosed that 920 students left public residential schools during or at the end of the 1963-64 school year. The median grade average for the whole group was just below the seventh grade level as measured by the Standard Achievement Test. Of these 920 students, 365 received academic diplomas. The median for this group fell in the eighth grade level. (Educa-
tion, 1965)."

We have to realize that such results are due only to the hearing deficit and not to the innate intelligence of these children. In the case of the deaf, we have to know that there are similar wide ranges of intelligence levels just like in the hearing population.

Some of us are apt to think strongly that the deaf have no qualifications for postsecondary education. Some of the deaf are able to learn just as well as the hearing college students. At the same time, we have to know that some of the deaf are not able to achieve the same levels as the hearing college students even though they have had some type of a supportive system in school, because they do not have the ability or have a severely limiting handicap. Some of them are not able to enter colleges for hearing students or deaf colleges in the United States. They choose a job training center or take jobs immediately after graduating from high schools.

In the United States, there are special post-secondary institutions for the deaf. NTID, Gallaudet College, Vocational Institutions plus colleges and universities for hearing students with supportive systems allow the deaf in the United States to choose

postsecondary education from a wide range of possibilities.

If we do not consider reasonable educational means for the whole range of the deaf population, there will be no opportunity for most of them. Their potentials will not develop to their highest levels and the hearing population will continue to consider them to be of lower intelligence. We educators should not let this prejudice limit the opportunities of the deaf. We must first understand the true meaning of educational theory. We need to emphasize the whole spectrum of educational opportunities from pre-school to postsecondary education for the deaf in each country.

According to 40 questionnaires that were responded to (Verna V. Yater, Mainstreaming of Children with a Hearing Loss, 1978, pp 63-141) the results indicate that many of the deaf in schools for hearing children picture their future plans as follows. (Children at school in St. Louis County, Missouri, forty children out of total seventy.)

| <u>Children's Future Plans</u> | <u>No. Children</u> |
|--------------------------------|---------------------|
| Colleges | 5 |
| NTID | 5 |
| Technical Institution | 1 |
| Etc. | 29 |

Jobs students aspired to: Artist, zookeeper, scientist, doctor, swimming instructor, nurse, teacher, football player, TV cameraman, business, auto mechanic, punch operator.

This is only one example of what deaf children feel they can attain in one county of a State. As the sample shows, their future plans range widely even when they are young. Some of them may go to colleges for hearing students or for the deaf. Some of them may go to the National Technical Institute for the Deaf. They are all able to imagine something desirable in the future.

Prior to expressing some patterns of post-secondary education for the deaf in the United States, I will define the term. Robert Frisina says, in Hearing and Deafness (1978, p. 483) ... "This definition includes six categories of institutions: research universities, comprehensive colleges, liberal arts colleges, two-year (community or Junior) colleges, specialty schools (in fields such as law, medicine, art, music, and engineering), and noncollegiate institutions (such as flight, cosmetology, and hospital schools).

Each of these types has evolved over the years and in sum they have come to satisfy a variety of

clientele and purposes."

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In the field of the deaf, Gallaudet College was established in 1864. National Technical Institute for the Deaf was established in 1968.

The first students graduated from Gallaudet College in 1869, and the first graduate of a university receiving no formal support was from California University, and he graduated from a deaf school in 1883. He lost his hearing at the age of two. His recorded degree of hearing was B (of A, B, and C) when he graduated at the age of 22 and got his B.L.

Through reading the records of the graduates from colleges and universities for hearing students in the United States, I tried to divide the type of attendance among compulsory, secondary and later postsecondary education in the United States. I found the record of deaf graduates and undergraduates in The Volta Review dating from 1883 to 1972. I divided these into nine categories.

- (1) School for the Deaf
- High School for hearing students
- College or University for hearing students
 - (a) without supportive system
 - (b) with supportive system

- (2) School for the Deaf
High School for Hearing Students
Gallaudet College
- (3) School for the Deaf
High School for Hearing Students
National Technical Institute for the Deaf
- (4) School for Hearing Pupils
High School for the Deaf
College or University for Hearing Students
 - (a) without supportive system
 - (b) with supportive system
- (6) School for Hearing Pupils
High School for the Deaf
National Technical Institute for the Deaf
- (7) School for the Deaf
High School for the Deaf
Gallaudet College
- (8) School for the Deaf
High School for the Deaf
National Technical Institute for the Deaf
- (9) School for the Deaf
High School for the Deaf
College or University for Hearing Students
 - (a) without supportive system
 - (b) with supportive system

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6. CASES OF DEAF GRADUATES FROM COLLEGES AND UNIVERSITIES - WITHOUT FORMAL SUPPORTIVE SYSTEM

The aim of this study is to examine progress of deaf students in colleges and universities for hearing students and how they overcame their handicaps, and I thought it was very important to trace deaf attendance in the past. Regretably, at one time The Volta Review stopped continuous questionnaires of the deaf graduates in the United States because of financial conditions.

As these data are old, we can not expect them to be perfect. However, it is worthwhile to study. From such a point of view, I shall be glad if this information is useful and significant. First of all, I copied all the lists in The Volta Review and made notes in order to make generalizations. The number of graduates and undergraduates is six hundred and thirty-four. Through this checking, I focused on these areas:

- A. The hearing college or university deaf students attended.
- B. Percentage of children attending the deaf high school and hearing high school.
- C. Degree and content of support received.
- D. From this sample, I studied 10 deaf students who had a Ph.D. before 1962.

- E. Introduction of CID graduates
- 1) From contacts with CID graduates
 - 2) From Dr. Helen S. Lane's study

A. Which Colleges and Universities did the Students Attend?

I picked up 634 graduates and undergraduates from 1883 to 1972, that attended colleges and universities for hearing students in the United States (The Volta Review). I decided to choose those colleges and universities which two or more deaf students had attended.

There were 109 different colleges and universities listed. Two hundred seventy-seven colleges and universities for the hearing students had only one deaf student. The total number of students attending colleges and universities for hearing students was 386.

As the data are rather old, some of the colleges or universities may no longer exist or may have changed names. If I were to compare this historical data to present day data, I would expect a great deal of difference. I believe that the number of deaf graduates from colleges and universities for hearing students would increase with the time.

The names of colleges and universities are as follows: (* with supportive system as of 1975)

Augustana College
University of Akron
Alfred University
Bethany College
Brigham Young University
Brooklyn College
University of Buffalo
Bryant and Stratton Business College
Boston University
University of California
Columbia University
Colorado College
University of South Carolina
University of Chicago
University of Southern California
University of Cincinnati
Catholic University
Carnegie Institution of Technology
University of Colorado, Boulder
Colorado University
Clarke University
California State Polytechnic
Community College*
Cobby Junior College
Central Methodist College
California State College
Duke University
Dickson College
University of Delaware
Dean Junior College
Denver Community College
Emory University
Fonbonn College
Fort Wright College
Harvard University
Iowa State College
University of Illinois
Southern Illinois University
Northern Illinois University *
Johns Hopkins
University of Kentucky
Kinman Business College
Lafayette University
Louisiana State University
Lowell Community College
La Valley College

Long Beach City College
Los Angeles City College
Laurel Technical Institute
Lasell Junior College
University of Miami
University of Michigan
University of Minnesota
Manhattan
Marquett University
University of New Mexico
University of Maryland
University of M.D.
Minnesota Business College
Mt. Aloysius Junior College
Mac Murry College
West Michigan University
University of Massachusetts
Mt. Idaho Junior College
College of the City of New York
New York University*
Nixon-Clay Community College
Northwestern University
New York State University
New York City College
Oklahoma A&M College
Ohio State University
University of Oklahoma
Oberlin College
Pasadena Junior College
University of Pittsburgh
Princeton University
Pennsylvania State University
Portland Community College*
University of the Pacific Stockton
Riverside City College*
Rochester University
Rutgers
Stanford University
St. John's University
Swarthmore College
Stephens College
St. Louis Business College
Spokane Community College
Institute of Technology (Mass)
Institute of Technology (Calif.)
Tri-State College
University of Tennessee
University of Toronto
Texas A&M University

Union College (N.Y.)
Utah State University*
University of Virginia
Wabash College
William & Mary College
University of Wisconsin
Washington University
Wright Junior College
Wayne State University
Yale University

B. Percentage of Students Attending High School
for the Deaf and High School for Hearing Students

When we look at the graduates, we find that 82 of the 634 deaf students entering colleges and universities for hearing students came directly from schools for the deaf. That is, ten percent of college students were from schools for the deaf. So about 90% of the college students came from high schools for hearing students. All of them entered senior high schools for hearing students after graduating from various schools for the deaf.

This may imply that college education is easier for those experienced learning among hearing students. In order to learn in colleges and universities for hearing students, most of the students (90 percent) attended elementary and junior high schools for the deaf and then senior high schools for hearing students. e.g. see p. 28, category 1.

School for the Deaf

High School for Hearing Students

College or University for Hearing Students

This tells us that some degree of language proficiency is required to enrollment in colleges and universities for hearing students. As early education has been emphasized and practiced, mainstreaming has also achieved success in the United States. This will probably cause an increase in enrollment in colleges and universities for hearing students.

At Central Institute for the Deaf, the educational sequence is emphasized.

C. Content of Support Received

I tried to find the content of supportive services given to deaf students among hearing students in the United States. This is a popular concern in colleges and universities for hearing students. I am interested here in the deaf student's problems and experiences. I examined the details of supportive services received by the deaf students by studying the data from the questionnaire given by The Volta Review. I have not indicated the number in each case. Regretably, some deaf graduates and undergraduates did not

fill in the data concerning major trends in supportive services. These are listed below.

1) Cases of parental support were common

This implies how important and indispensable their parents' positive and active cooperation was. The success of many deaf students, not only in Japan but in all countries, came as a result of parent's and sibling's cooperation.

2) Borrowing notes and Note-taking by friends

This is one of the most common supportive services. Lipreading is greatly affected by optical and accoustic conditions. In most lecture situations, these conditions are considerably less than ideal and thus lipreading is very difficult at the college lecture level. Therefore, since the deaf students cannot understand the lecture through lipreading, they need the help of hearing persons who can take notes for them.

3) Speech Training

Deaf students generally need more speech therapy in order to communicate among hearing students in colleges and universities. Without spoken language they are apt to be difficult to communicate with. Speech intelligibility is required to be in colleges and universities for hearing students.

4) Tutoring Service

There are quite a few deaf students who had tutors in high school, but very few who had tutors in college. It is very difficult for some of deaf students to fully understand the meaning of the lecture without additional explanation. As they are inclined to miss words in the lecture, they need some extra help.

5) Special assistance from college instructors

In order for this to take place, there must be cooperation and understanding on the part of instructors regarding the special problems of the deaf students. This is quite difficult in the case of big universities or big classes. It depends upon the size of the class or school, the situation, and many other factors. Such an interaction between instructors and deaf students is very desirable; however, in reality it is difficult to realize except in special cases.

6) Front Seats

According to their responses on the questionnaires, most of the deaf students tried to find and take seats near the instructor in order to lipread and hear what he said. Such a special consideration must come in every case. This is

a very simple thing, but we should realize how important this consideration is. The deaf student must take responsibility for coming to class in time to get one of the front seats.

7) Usage of Hearing Aids and Tape Recorders

Some deaf students hesitate to wear hearing aids. There might be several reasons for this: they may be embarrassed about wearing a hearing aid, or they may think that they receive no benefit from the aids. There is a great deal of benefit from wearing hearing aids. There must be a habit of wearing the aid since early in life. We must never forget to emphasize this.

Some deaf students tape record their daily lectures, but in order to make use of these tapes, he or she must get help of a hearing person, such as a parent or sibling, who can transcribe the tapes for the deaf students. This takes a lot of time, effort, and cooperation from all concerned.

Such cooperation depends upon family conditions. Not all deaf students are fortunate enough to have such a supportive family. An apparatus such as a tape recorder can be quite useful to a deaf college student, but must be accompanied by assistance from the hearing population. However, it is very

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important for deaf students in colleges and universities for hearing students to find out what kind of method is the most suitable for them when they study at colleges among hearing students.

8) Exemption from Tests

Such an exemption may not be practiced in colleges and universities nowadays. Mostly in this case, deaf students were exempted from tests of foreign language, such as German and French; however, such cases were very few. There is a certain limitation for the deaf students learning foreign languages and many deaf graduates had a hard time learning them. In such cases, I recommend that the deaf student talk with his or her instructor before each semester and discuss how he or she should study.

In the case of oral tests, some of the deaf students took oral tests just as the hearing students did. Some of them were also permitted to write instead of responding orally. A student's success in this situation depends on his effort as well as the understanding and cooperation of his instructors. Special help and guidance is required from the foreign language instructor.

9) Counselors and Interpreters

Many deaf students discussed their problems with their teachers, parents, and peers because there were no professional counselors available. This is a very common practice.

As many studies reported the importance of the counseling, this counseling seems to be indispensable to deaf students as well as hearing students.

It is easy to understand how, in most cases, the deaf students often do not notice happenings or affairs around them and they miss the processes of decision that are made about them. It is recognized widely that this is a very important phase and such knowledge is indispensable to deaf students in not only colleges and universities for the hearing but also in colleges for the deaf. When we think of the deficit of hearing sensitivity, still more we must realize the importance of providing a counseling system for those deaf students who are in college.

Only two people in The Volta Review questionnaire survey had asked someone to be an interpreter. Details were not given. The majority of deaf students in colleges or universities did not or

could not rely upon the interpreter.

On the contrary, most of the deaf students depended upon a note taker's cooperation including borrowing notes from friends. This seems to indicate that the services of a note taker are more easily available. This should be considered when planning and establishing a system of note takers.

In the case of sign language interpreting the interpreter cannot convey the specific details of the lecture; rather the general, overall meaning of the lecture is conveyed. This is due, in part, to the limited vocabulary of sign language. Expression through sign language is limited compared to expression through spoken language or written language. We should be careful to understand that interpreters cannot interpret everything in detail. The meaning conveyed through signs is a less exact meaning than that conveyed through spoken language.

Rachel Mayberry expresses in Hearing and Deafness, (1978, p. 407) as follows: "From our general discussion of ASL Chemic, lexical-semantic, and syntactic characteristics, it should be quite clear that ASL is not like English. It should be equally clear that many of the major differences between ASL and English result from modality effects.

Hand and arms do not operate like oral mechanisms and visual processes do not operate like auditory processes." However, further studies of the methods of interpretation in postsecondary education for the deaf are certainly needed.

10) Borrowing references and notebooks from Instructors

Some deaf students in small colleges and universities for hearing students borrowed materials such as reference books and notebooks. Such interaction or relation between the instructors and the students depends on how they communicate with each other and how close their relationship is.

If deaf students are fortunate enough to have such opportunities, then it is a very good situation. However, in reality, such situations in large colleges and universities may not be possible for most students.

One of the most important factors is to acquire language ability. I found in the questionnaires that some of the deaf themselves tried to master language in colleges and universities for hearing students. In such situations, the deaf

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have been obliged to acquire the method orally among the hearing students. To be sure, such situations make them use language more often. If the deaf student has a firm knowledge of language, he or she will be able to gain more complete knowledge.

We know for a fact that some deaf students graduated from colleges or universities without support. However, attendance in a college or university with hearing students depends on their degree of hearing loss, ability, will power, lip-reading ability, surroundings, the situation of the class in colleges or universities, characteristics of the instructors and many other factors. Their responses to the questionnaire, in general, indicate to us that deaf college students have to study the contents of each lecture more than hearing students do.

The most important factor influencing class attendance by the deaf students is the degree to which the student understands the lecture. To understand the lecture well, the deaf student has to master the language completely. He or she must also read many books concerning the course material prior to the lecture. The success of

understanding comes from preparatory reading to some extent. The great amount of time required for preparatory learning cannot be imagined by the hearing population.

We should never forget or underestimate the limitations of the deaf which stem from a deficit of hearing. Here, without support services, the help of parents, teachers, and peers is required. More than 99% of the deaf students relied on borrowing notes and friend's note taking. From this, we can surmise that many of the deaf students in colleges or universities need some support services such as "notetakers." We should study further how supportive systems could work in colleges and universities of different countries.

If a supportive system is realized, deaf students should be able to make use of it as they need to. The students should not be overprotected or forced to receive the support.

According to this study, in earlier days, each student had to find notetakers or borrow notes by himself. This supportive system is still valid for the more outgoing deaf student, encouraging friendships. A small amount of support may be needed to help these students find a notetaker

on their own.

However, if this kind of supportive system could come from a formal college or university department through a National Supportive Center, how courageous, efficient and meaningful this would be. In order to realize this goal, first some organization such as a National Supportive System must strongly encourage this kind of work.

For example, Supportive Volunteers (note-takers) are in reality very easy to reach to the deaf students in each college and university that deaf students attend. The interaction between the notetaker and the deaf student is very important.

Throughout a formal department in college or university, the need for a volunteer (note-taker) should be announced. Such propaganda must be prepared in each college and university. A formal support is sure to make deaf students more courageous, more positive, motivated, and helpful.

Now is the time for each college or university of hearing students to prepare minimum supportive systems such as volunteer notetakers by grace of a "National Supportive Center" which is associated with each special service department in colleges and universities for hearing students. After

establishing the supportive system, volunteers of notetaking would be realized not only by individual contact, and cooperation, but also through supportive systems in colleges and the National Supportive Center.

When we think of postsecondary education for the deaf in each country, we must recognize the necessity for a multifaceted construction including notetakers, counselors, hearing aids, interpreters and many other factors for the deaf population. We should try to do our best to produce such multifaceted necessities. Now let me summarize as follows.

Deaf students attending colleges and universities for hearing students, deaf students attending colleges for the deaf, and deaf receiving special services through a formal supportive system in colleges that is related to a National Supportive Center must be on the same starting line. Then most deaf students will not miss this golden opportunity of learning.

D. From this sample (The Volta Review Questionnaires), I selected 10 deaf graduates who had a Ph. D. before 1962.

I wanted to examine the educational experiences of these ten graduates in order to find out how their achievements were possible and how their potential was developed. I and many other hearing people find their achievements hard to believe, and we are curious about how these deaf students were able to do it.

There were ten deaf Ph. D. graduates from colleges and universities for hearing students, 9 from 1903 to 1951 and 1 from 1961 to 1962. There are probably many more than ten Ph.D. graduates.

Before I present the data, I must explain that The Volta Review used two ways to describe the student's degree of hearing loss. Prior to 1951, they used three categories: A, B, and C; since 1952, they have used four categories of hearing loss: A, B, C, and D.

Prior to 1951

- A. Able to hear loud speech at a few feet
- B. Able to hear loud speech at less than one foot
- C. Unable to hear speech

Since 1952

- A. Less than 40 dB
- B. 40-64 dB
- C. 65-89 dB
- D. 90 dB or more

- 1) Schools from which they graduated.

From high school for hearing students - 8 students
(school for the deaf - high school for hearing)

From high school for the deaf - 2 students

2) Degree of hearing loss

| <u>Degree of hearing loss</u> | <u>Number of Students</u> |
|-------------------------------|---------------------------|
| A | 1 |
| B | 0 |
| C | 7 |
| D | 1 |
| No response | 1 |

Except for one student, and one who did not respond, the majority seemed to be severely or profoundly deaf.

3) The Type of Schools

| | | | |
|-----------------------|-----------------------|-----------------------|-----------------------------------|
| <u>Elementary</u> | School for Deaf | School for Deaf | School for Deaf |
| <u>Secondary</u> | School for Deaf | School for Deaf | School for Hearing |
| <u>Jr. High</u> | School for Deaf | School for Deaf | School for Hearing |
| <u>Sr. High</u> | School for Deaf | School for Hearing | School for Hearing |
| <u>Post-Secondary</u> | College or University | College or University | College or University for Hearing |

4) Age at Onset of Hearing Loss

| <u>Age</u> | <u>Number of Students</u> |
|------------|---------------------------|
| 1 | 2 |
| 2 - 5 | 1 |
| 3 | 1 |
| Unknown | 1 |
| Congenital | 2 |
| At birth | 1 |
| Infancy | 2 |

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5) The average length of time taken to get Ph. D.
Median = 27.7 years

6) Occupation

| <u>Occupation</u> | <u>Number Students</u> |
|-------------------|------------------------|
| Company | 1 |
| Chemist | 2 |
| Business | 1 |
| Teacher | 2 |
| No Respondent | 4 |

In the book Family and Mental Health Problems in a Deaf Population, Lissy, Feingold, Jarvik et al. say the following (1963, p. 133) "However, an outstanding accomplishment of this kind should not be interpreted as encouraging the deaf in unrealistic vocational goals. Aspirations toward occupations contingent upon verbal facility are likely to remain unfulfilled and would merely lead to frustration and feelings of inadequacy."

And Jerome D. Schein says in The Deaf Community, (1968, p. 97): "To expect the average deaf child to achieve as much as the average hearing child is as fantastic as to expect a man to walk on the moon."

We must be aware of these cautious words. However, I want to emphasize here strongly that many of the deaf have tremendous potentials.

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As I have said, the deaf population is not a homogeneous one; there is a wide range of ability and, hence, potential among the deaf.

Therefore, we educators should never forget the possibilities and potentials of the deaf and we should nurture them and educate them as far as possible from pre-school education to postsecondary education.

E. INTRODUCTION OF CID GRADUATES

- 1) From contacts with CID graduates
- 2) From Dr. Helen S. Lane's Study

Here I would like to introduce some information about CID graduates and cite Dr. Lane's study. Since I came to St. Louis, I tried to find opportunities to touch not only young pupils at CID but also CID deaf graduates through their alumni meetings which are held every other month. I was really lucky to have contact with them and I learned a lot from them. I wanted to find out something useful and referential from the graduates of CID who were educated with the aural-oral method. I wanted to get their ideas and opinions about the results of their education and how it has affected their adult lives.

This information might then be fed back into

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current educational programs. In short, it is very important to see how they live, think, and talk in their daily lives. I was impressed by how many of them talked and talked. As a result of learning language and vocabulary at CID, they have positive attitudes toward talking and this is also really impressive to me. From these real facts, I recognized the necessity and importance of oral education.

I also asked them to fill out a questionnaire for me. Here I would like to introduce some of their comments. Perhaps we can learn a lesson from them.

Miss Mary Helen Pearl who was born deaf says the following: "It is imperative that deaf children be given a chance to learn to speak and lipread for good job opportunities before they learn sign language. But if the child is unable to progress satisfactorily in the oral program, then he should learn through the other methods available to him. I think being a strong oralist has enabled me to enjoy a wider scope of the world, including hearing friends. But of course, I am slowly learning sign language to speak to other deaf people who do not lipread well. I just hope the controversy over

the methods of communication will subside one of⁵²
these days. Many factors are involved in educating the deaf children; parents, education, etc. I am doing all I can to help parents who may be doubtful of their deaf children's future."

Her words express something courageous, significant, and provocative. She really emphasized living in a wider scope of the world and the necessity of acquiring oral language. Acquiring language opens the door to the wider world of post-secondary education and later job opportunities.

2) From Dr. Helen S. Lane's Study

I wish to express my deepest appreciation to Dr. Lane at CID from whom I cited the information in regards to graduates of that school.

(The Volta Review 1976, p.338)

"The profoundly deaf: Has Oral Education Succeeded?"

"A study was made of data concerning 731 orally educated deaf adults enrolled at Central Institute for the Deaf between 1914 - 1969. Results indicate that oral success could not be attributed to 1) age at onset of deafness, as 82% were deaf before the acquisition of speech (age 1 year); 2) amount of residual hearing, as only 0.7% had mild losses and 83% had a profound or

severe loss in the better ear; 3) superior intel⁵³-
ligence, as the average of the medians of performance
quotients was 108.

Evidence of academic success of this population
is indicated by 54.7% who were integrated into
schools for the hearing; 47.6% who graduated from
high schools for the hearing, and 37.5% who enrolled
in college (24% in colleges for the hearing and
13.5% in colleges for the deaf). These percentages
would be higher if records of those who transferred
to other schools were complete.

Subjective evidence of oral success expressed
in letters and conversations cannot be tabulated,
but a few examples are cited. Oral education has
been successful for a majority of this group, al-
though the factors contributing to success are not
indicated in the data."

This presentation was made at the Alexander
Graham Bell Association Biennial Convention,
June 1976, Boston, Massachusetts. (See p. 54)

| | | |
|--|--------------------------------------|-----|
| | | 54 |
| <u>Colleges for The Hearing</u> | Still enrolled | 10 |
| | Attended 1 - 4 Years | 59 |
| | Graduated, bachelor's degree | 106 |
| | Postgraduate Study | 27 |
| | Graduate Degrees | |
| | Master's degree | 16 |
| | Doctorate | 1 |
| <u>Gallaudet</u> | Still enrolled | 6 |
| | Preparatory | 7 |
| | Attended 1 - 4 Years | 10 |
| | Graduated, bachelor's degree | 30 |
| | Graduate Degree | |
| | Master's degree | 1 |
| <u>Colleges for The Deaf</u> | Still enrolled | 26 |
| | Attended 1 - 4 Years | 2 |
| | Associate of Art Degree | 4 |
| | Graduate, bachelor's degree | |
| | Rochester Institute of Technology | 1 |
| Other colleges with Special Programs for the Deaf | | |
| | Enrolled | 9 |

NTID

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From Dr. Lane's study at CID, we learn and recognize how many CID deaf alumni graduated from colleges and universities for hearing students. Here we find the number of deaf graduates from colleges and universities for hearing students is larger than from colleges for the deaf. In fact, this surely gives us educators and the deaf a good lesson and stimulates us. Statistics also indicate how many of the deaf are compatible with hearing students in colleges and universities.

The goal of CID has always been the placement of their graduates into schools for the hearing. In the case of CID, 54.7 percent (from both early and 8th grade integration) of the total number (731) had been integrated into school for hearing pupils.

At CID, the maximum use of residual hearing plus speech, lipreading and language development has been stressed since its establishment in 1914.

Here we educators must think of the possibilities, potentials, and abilities of the deaf population who are able to compete among colleges and universities for hearing students.

F. Deaf Graduates from Universities for Hearing Students Dr. Latham H. Breunig (The Volta Review 1937, p. 205)

Age deafened - 3
Degree of Deafness - C
School for Deaf attended - Clarke School for The Deaf
High School for hearing students -
College - Wabash College (1934) - A.B.
Johns Hopkins University(1938) -Ph. I

Special assistance or privileges received in college - Copied notes from other students in classes
Occupation: Research Chemist

In the 1937 issue of The Volta Review, he wrote about some of the difficulties of the deaf in educational situations.

In the case of lip-reading and note taking, he expressed his own experience. As to lip-reading he could follow fairly well the lips of two of the six professors. However, it was almost impossible to follow a complete continuity of thought for long periods, even when the speaker's lips were easy to read. The difficulties came from: the professor's facing the blackboard, facing the window, standing with their faces in a shadow. As to taking notes, he also added, "Taking notes would be next to impossible."

He found it both time-consuming and awkward

to follow the lecture and then copy the notes later. This would mean spending twice the normal amount of time.

We should pay special attention to his statement that even though lectures might be very difficult for the deaf, it is worthwhile to attend the lectures. He gave several reasons for this. First of all, by attending the lectures, one can follow the development of the subject. Next, in the lecture, one can get quite a bit of extra information from professor's blackboard demonstrations. Also one can get a chance sentence from his lips here and there.

In comparing attending classes to taking correspondence courses, he concluded that taking regular courses was apt to be more beneficial to one than taking a correspondence course. One reason given was that he could rely on notes copied during the lecture from a student sitting at his left or right hand. The practice of copying notes is supplemented by a large amount of textbook work and to some extent, by personal conferences with professors. How encouraging it is that he overcame such difficulties step by step!

In his writing, he looked back upon the

variety of laboratory work, stiffness of examination requirements, difficulties of seminars and the importance of living arrangements and concluded as follows, "I would say that I fully believe that actual attendance at recognized institutions of learning is often more valuable than a correspondence course in view of the personal contacts gained. One's interests are widened, one meets those who in the future, will be leaders in one's field."

What he emphasized from his own experience of college days was the personal contact. This contact is the most important factor.

Mr. Chauvenet Louis Russell(The Volta Review,
1943, p. 679)

Age deafened - 10
 Degree of Deafness - C
 School for Deaf attended - CID(1930-33),Wright
 Oral School
 School for hearing students attended - high
 school
 College - Boston College (1938-1940) - A.B.
 University of Virginia (1940-43)
 B.S.
 Occupation - Control Chemist
 Calico Chemical Company

He wrote of his precious experiences in college attendance at Boston College and University of

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Virginia in the 1943 issue of The Volta Review.
On page 679 of the article, "On life and the deaf
and college days", he emphasized the importance
of what he feels are two requirements for the deaf
who want to have higher education. They emphasize
the importance of the basic friendliness towards
other human beings, and the necessity of preparing
oneself for attending classes with hearing stud-
ents. He suggested that "The first requirement
is a complete willingness to work harder than
the average student." This is important not only
to those who can not hear but also to hearing col-
lege students. "The second necessity is a general
idea of what you want out of life and why you want
to go to college." Then he added, "If you are
willing to work hard, and have some idea of what
you want to work for, a college education will be
extremely worthwhile."

To be sure, without a definite aim, no one
can perform his work well. Mr. Russell suggested
that expert lip readers in the first row cannot
lipread the average college lecture. Of course,
in college lectures, there is much technical term-
inology. The deaf student needs to rely on note-
taking of other students. Throughout my checking

in the list of deaf graduates in colleges or universities for hearing students, I found that most of college deaf students had to borrow notes from fellow college students.

Even though he had to borrow notes from any students who accidentally sat next to him in class or in dining hall, a roommate, a team-mate or fellow hobbyist, he tried to make an effort to make lasting friends with each person. He encouraged others not to forget the necessity for this friendliness towards fellow human beings. Though it seems to be difficult for those who cannot hear to have intercourse with hearing students, it is very important and significant to avoid an inclination towards introversion. Only upon a base of human interaction between the hearing and the deaf will there be mutual understanding. I believe, from such interaction, a spirit of cooperation will appear.

In his summary, this man gave us these valuable words, "While every one knows that it is possible for a deaf man or woman to earn a college degree, perhaps it has not been emphasized enough how very simple it is for any intelligent deaf person to be strikingly successful, both scholastically and socially while in college. It can be done, it has

7. COLLEGES FOR THE DEAF, COLLEGES AND UNIVERSITIES WITH SUPPORTIVE SYSTEMS

In this section, I will consider two types of colleges for the deaf (Gallaudet College and NTID) and colleges and universities with supportive systems. We educators must know that there is as wide a range of intelligence in the deaf population as in the hearing population and we educators must move to open the doors of colleges and universities for deaf students as well as hearing students.

In most cases, we have not paid much attention to the supportive system in colleges and universities in Japan. If such a supportive system is available, many of the deaf population are able to learn at colleges and universities. Many of the deaf are unable to understand lectures completely without special services. Supportive systems give the deaf more opportunities and encouragement for learning at colleges and universities for hearing students.

Choosing one's college or university depends upon one's ability, intelligence and many other factors. Prior to choosing, there should be a wide variety of colleges and universities avail-

been done, and you can do it."

I must add, we should remember that he wrote these words in 1943. Even though many years have passed, I believe that these words lived, they still live and will live strongly in the future. It is worthwhile to think about this.

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able to the deaf. With this wide variety available, the deaf would be able to choose the college or university most suited to their abilities and needs.

There are three types of colleges and universities for the deaf in the United States. Here I divide postsecondary education for the deaf into three categories.

- A. College for the deaf ---Gallaudet College
- B. College(Institute) for the deaf in contact with college for hearing students ---
National Technical Institute for the Deaf (NTID)
- C. Deaf students in colleges and universities with supportive systems ---- California State University, Northridge, Riverside City College, etc.

A. Gallaudet College

It used to be said that Gallaudet College was the only college for the deaf in the world. It has been over a century since it was established. The first graduates from the college were three men in 1869. Since then, many deaf students (more than 5,000) have graduated. At Gallaudet, mostly academic fields have been adopted as opposed to Technical fields at NTID.

Dr. Edward C. Merrill, Jr., President of Gallaudet College, says about the color of the college, (JRD, Vol.8 No.4 April 1975 pp 15-17),:

"Gallaudet College is different from other colleges in two major respects. The college endeavors to accomplish and to cope with the language deficiencies of deaf students by a preparatory program, tutoring assistance, and a language sensitive curriculum throughout the four years of college. Students entering Gallaudet College lag behind the normative scores of high school graduates from 12 to 15 percentage points in almost any language test (vocabulary, grammar, composition); yet normative scores of students entering Gallaudet College are equal to the normative scores of other college sophomores in non-verbal intelligence. Thus, Gallaudet College accepts intelligent students with deficiencies in language and assists them in remedying these problems as they pursue a typical college education.

Secondly, Gallaudet College accepts the best mode of communication with deaf students - simultaneous (or total) communication. Instructors must speak, using the syntax, sign and fingerspell in the classroom and at all college functions.

As 25 percent of the faculty of Gallaudet College are deaf themselves, this policy also applies to deaf instructors. In the event a deaf instructor

cannot use his voice, he must form the words with ⁶⁵
his lips, using syntax, sign and fingerspell.

A student at Gallaudet College is as well or better informed about college, community, and national affairs as a student on any other campus. All students feel that they are "in" on everything and that they have as much information as any other person."

According to Gallaudet College's 1977-78 Catalogue (p. 39) its history is as follows:

"Gallaudet College had its beginnings in 1856 when Amos Kendall, who had been Postmaster General during the administration of Andrew Jackson, established a school for deaf and blind children. He donated two acres of land and a house located on one corner of his estate in Northwest Washington. Early in 1857, he persuaded the Congress to incorporate his Kendall School as the Columbia Institution for the instruction of the Deaf and Dumb and the Blind. The President of the United States (then James Buchanan) was the school's patron. Congress also agreed to pay the expenses of poor children from the District of Columbia to attend the school.

Following Congress' action, Kendall hired

Edward Miner Gallaudet to be Superintendent of the Institution. Gallaudet was the son of Thomas Hopkins Gallaudet, founder of the first school for the deaf which still exists in the United States. Both Gallaudets believed that a National college should be established for deaf students. In 1864, Congress, persuaded by Edward Miner Gallaudet and Amos Kendall, voted to authorize the Board of Directors of the Columbia Institution "to grant and confirm such degrees in the liberal arts and sciences as are usually granted and conferred in Colleges." President Abraham Lincoln signed the bill and became the first patron of the National Deaf Mute College. Edward Miner Gallaudet became president of both the Institution and the College.

In 1865 the blind students attending the institution were transferred to the Maryland School for the Blind and the word "blind" was dropped from the institution's title.

The first class to take the entire college course was graduated in 1869. The diplomas of the three graduates were signed by President Ulysses S. Grant. Since that time, all Gallaudet diplomas have been signed by the President of the United States.

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Women were first admitted to the college in 1887. In 1891 a graduate department was started to prepare hearing graduates of other colleges to become teachers of deaf children.

At the request of the Alumni, in 1894 the Board of Directors renamed the college Gallaudet College in honor of Thomas Hopkins Gallaudet. The total corporation (including Kendall School) continued to be known as the Columbia Institution until 1954 when Public Law 420 of the 83rd Congress changed the name of the entire institution to Gallaudet College.

Public Law 420 also stated Congress' intent to continue adequate financial support of Gallaudet College and affirmed the importance of higher education for deaf persons. This increase in federal support made it possible to increase and strengthen the faculty, enrich the curriculum and improve facilities so that in 1957 the College was granted Accreditation by Middle States Association of Colleges and Secondary Schools. Every ten years the college is re-examined by the Association.

Enrollment at Gallaudet College has grown from under 400 students in 1960 to more than 1,000

students in the 1970's. The number of faculty members has grown proportionally with student enrollment. College facilities have been expanded and improved.

Although Gallaudet College receives substantial federal financial support, it continues to be a private institution. It is also still the only liberal arts college for deaf students anywhere in the world. In 1975, for example, 107 students came from other countries.

Dr. Edward C. Merrill, Jr., became President of Gallaudet College in 1969. The college has had only three other presidents: Dr. Edward Miner Gallaudet, 1864 - 1910; Dr. Percival Hall, 1910 - 1945, and Dr. Leonard M. Elstad, 1945 - 1969.

Gallaudet College has the following major programs. (Dr. Edward C. Merrill, JRD, Vol.8, No. 4 April 1975)

- (1) The Undergraduate College of Liberal Studies (approximately 1,000 students)
- (2) The Graduate School (approximately 200 students preparing to be teachers and counselors for the deaf or audiologists)
- (3) The Centre for Continuing Education (approximately 1,200 students)
- (4) Pre-college programme (two demonstration schools of National significance serving approximately 300 students)

(5) The Research Programme (consisting of the Sensory Communications Laboratory, the Linguistics Laboratory, the Cued Speech Project and the National Survey of Hearing Impaired Children and Youth)

(6) The Public Service Programme

From the above introduction we know the historical stream and present aims of the college. To be sure, the topic of "To be isolated or not" has been developed as a college for the deaf. The college has sent many graduates into the world. It may be hypothesized that Gallaudet College has played the major role as the forerunner in providing postsecondary education for the deaf over a span of many years in the United States. However, we must be reminded that if it were not for government support, Gallaudet today would not have enjoyed its prosperity, successfulness, and longevity. This implies to us that colleges for the deaf cannot accomplish their purpose without support from the National government. This fact has real implications that we must bear in mind as we think about a future college for the deaf in Japan.

B. National Technical Institute for the Deaf

President, Dr. William E. Castle

National Technical INSTITUTE FOR THE Deaf,

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(NTID), was established in 1968 as a unique college which cooperates with Rochester Institute of Technology, an institution made up of nine colleges:

- (1) National Technical Institute for the Deaf,
- (2) College of Business, (3) College of Engineering, (4) College of Science, (5) Institute College,
- (6), College of Fine and Applied Arts, (7) College of Graphic Arts and Photography, (9) College of Continuing Education.

Prior to the present NTID, I would like to cite the summary of the Bill, by Senator Lister Hill, from the Committee on Labor and Public Welfare (May 25, 1965). When we look at this summary, we can understand how an institution such as NTID was established.

Testimony explaining the aims and purposes of the NTID Act. (The Volta Review 1965, p. 487)

"The Secretary of Health, Education, and Welfare would be authorized to enter into an agreement with an "institution of higher education" for the establishment, construction, equipping, and operation of a National Technical Institute for the Deaf for the purpose of providing a residential facility for postsecondary technical training and education for persons who are deaf in order

to prepare them for successful employment. A 12-member National Advisory Board on the Establishment of a National Technical Institute for the Deaf would be appointed by the Secretary to review proposals from institutions of higher education which desire such an institute, to make recommendations to the Secretary concerning such proposals, and to make such other recommendations concerning the establishment and operation of the National Technical Institute as may be appropriate. The Commissioners of Education and of Vocational Rehabilitation would be ex officio members of the Board.

Need for the Legislation

There are approximately 3,000 deaf students above the age of 16 who leave or graduate from state and local schools and classes for the deaf each year. A large number have indicated their intense interest and desire for further educational opportunities. Dr. Leonard M. Elstad, President of Gallaudet College, the only institution for higher education for the deaf in the world, in his testimony reported that over 600 student applications were received and reviewed this year. He reported that 275 of these students will be admitted in September, 1965.

The other 325 students who could not meet the entrance requirements of the college, by the very act of submitting an application expressed their desire for further education. This number coupled with some 75 to 100 annual withdrawals from the college at various levels from freshmen to seniors, in addition to numerous other deaf persons among the unemployed or underemployed who desire further training, indicates that well over 400 students each year would be eligible for a program that could be offered in a National Technical Institute for the Deaf.

The recent report on the "Education of the Deaf" prepared by the National Advisory Committee on Education of the Deaf in 1964, appointed by the Secretary of Health, Education, and Welfare, stated that "five-sixths of our deaf adults work in manual jobs as contrasted to only one-half of our hearing population." If the door to further educational opportunity is not opened for the group who could not be admitted to Gallaudet College, including other qualified students, they have almost no other alternative than to join the ranks of the non-skilled labor force."

As we consider the purpose of the Bill, we

see that some type of postsecondary education for the deaf was emphasized strongly among related persons and educators. Further, as to the establishment of NTID, the following affairs were considered, program objectives were as follows: (The Volta Review, 1965, p. 489).

"The principal objective of the institute should be the employment of the student upon completion of a prescribed educational and training program. The environment of the school, the curriculum, and general living conditions, along with health and recreational services, should be designed to help the student achieve a high degree of personal development and a sense of social responsibility. The educational and training program should be supplemented by varied civic and social group activities to provide the proper environment for developing concepts of responsible citizenship and social competence.

The focus of effort of the entire faculty on behalf of the students attending the Institute should be directed toward the goals of successful employment and preparation for full participation in community living."

And as to the Location, it was said as follows:

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"The National Technical Institute for the Deaf should be located in a large metropolitan industrial area so that it could be designed to serve the special needs of deaf youth from any community in the Nation.

The area should also have a wide variety of nationally representative types of industrial activities in order to make it possible for the student to return to his home for eventual employment. The Institute should be affiliated with a major university for the administration of the program. This would facilitate securing the medical, audiological, psychological and psychiatric services needed to supplement appropriate guidance and counseling services provided by the Staff of the Institute.

The community where the Institute is located should be able to offer a variety of opportunities for training and experience in a wide range of modern industrial settings. The community should be one that would generally be receptive to a program of this nature and be sympathetic with training needs of the deaf."

As we consider the process of the establishment of NTID, location was one of the important

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factors. New frontiers were emphasized for the development of postsecondary education for the deaf, most of which had never been tested before. In every point, reasonable considerations were expressed. This implies how the National Technical Institute for the Deaf should be applied to the range of interests and abilities of the deaf population.

As to curriculum, the following indicates the flexibility of NTID in meeting the needs of a diverse deaf population.

"The curriculum of the Institute should be flexible so as to permit a variety of adaptations to meet the needs of individual students without the absolute necessity to conform to traditional accreditation standards, such as course credits, fixed period scheduling and other curriculum restrictions. Courses of study should be available to meet the needs of students attending the Institute. Upon successful completion of a proscribed curriculum, each student should receive a Certificate or other formal recognition that would attest to what has been accomplished. The standards and quality of training offered in all areas will have to be high enough to meet the usual requirements as

recommended by labor, industry and professional associations, including certifying and licensing agencies.

The program offered should be broad enough to include a basic or preparatory curriculum of a remedial nature in such subjects as English, reading, science, and mathematics as may be required to prepare deaf students to take the postsecondary courses intended to increase their educational and work skills to enable them to become qualified candidates for employment at levels commensurate with their ability and training. A supplementary curriculum including such courses as humanities, government, history and economics should be offered to properly prepare students for living in a modern urban society. A comprehensive supporting curriculum in such subject areas as physics, chemistry, biology, and higher mathematics, should be offered where required as prerequisites for training in technical areas."

The above statement shows us that NTID itself is trying to find and maximize the potentials of its deaf students.

NTID appeared as a new approach to education of the deaf compared to Gallaudet College. It

focused on cooperating with Rochester Institute of Technology, a college for hearing students, as well as having supportive systems available. It is of prime importance in any college, however, that a system be devised to bring out each student's full potential. Each staff member must meet the needs of the deaf in order to draw out their potentials through the process of education in The Institute.

Robert Frisina expressed the process of NTID in the Report of the Proceedings of the 46th Meeting of the Convention of American Instructors of the Deaf. (1973, pp 243-258) as follows:

"...NTID has just completed its fifth interim year. Since opening its doors to a charter group of some 70 deaf students in September of 1968, NTID has demonstrated a variety of ways to help deaf students become increasingly independent persons, contributing to their communities and earning taxable incomes of note. Narrow-ranged employment choices, unemployment, underemployment and job frustration in a modern society were precursors to the establishment of NTID. A clear need for such a national institution was manifest and accordingly it was established to serve three fundamental pur-

poses; to prepare deaf citizens for direct technical employment and for full participation in community living, to train professional personnel to serve the deaf nationally, and to improve training and career placement of deaf citizens through applied research. Public Law 89 - 36 created NTID to do these things.

The postsecondary students who have come to NTID have entered essentially with elementary school levels of achievement necessitating unique educational and training methods in order for them to pursue certificate, diploma and degree programs. By focusing on developing technical, personal, social and communications skills in these young deaf people, NTID assists its students to gain competency- technical and social - essential for satisfying and rewarding careers. As history demonstrated, these same students would have little chance of entering conventional postsecondary institutions to gain these skills.

Through the Rochester Institute of Technology, the sponsoring institution for NTID, deaf students may pursue advanced programs with NTID providing support services for them. NTID is thus able to provide a wide range of educational

opportunities and, in addition, to investigate⁷⁹ methods by which a primarily hearing institution can accomodate a large number of deaf students within its educational community."

And purpose of Technical education is as follows: "NTID's Technical Education programs are designed to provide postsecondary deaf students with opportunities to prepare for and pursue successful careers as technicians, semi-professionals, or professionals in science, technology, and applied arts, making it possible for them to be independent members of society."

NTID had its tenth-year anniversary on April 13-14, 1978. With its unique approach to education for the deaf, to be sure, many of the deaf could avail themselves of this opportunity and learn according to their abilities. Such a type of postsecondary education for the deaf should have appeared earlier. Regretably, little attention was paid to this issue. However, the United States came to realize that this new type of postsecondary education for the deaf was necessary through the efforts of educators, and persons related to this field. This type of postsecondary educational institution for the deaf must be established in

Japan, as well as colleges and universities with supportive systems.

C. Colleges and Universities with Some Supportive Systems for the Deaf.

Thirty-nine colleges, universities and special institutions have special services (1975), e.g. California State University, Northridge, Riverside City College, etc. Under these conditions, deaf students are able to utilize special services. Year by year, the number of these types of institutions must be increased. If such were the case, many deaf would be able to go to colleges or universities in their own communities. They also would be able to learn among hearing students. Hundreds of facilities would be available to the deaf college population. The more colleges and universities that have special services, the more the deaf will be able to choose majors as they would like to. The increase in the number of these colleges or other institutions having special services is desirable.

Dr. Ray L. Jones, Director, Center on Deafness, says in The Hearing Aid Journal (August 1977):

"Since 1964 when the first deaf students came to campus, CSUN has developed and refined a model a model of education which has successfully served about 700 deaf college students and hundreds more community deaf persons in special workshops. The model is mature and there is a growing body of evidence that it is highly effective.

In the final analysis, a support services model offers a deaf student a wider choice of a curriculum, or of particular colleges and universities he may wish to attend. Since these choices are normal ones in the life of a nonhandicapped individual, we see no reason why such choices should not be available also to deaf persons across America."

Dr. Ray L. Jones and Dr. Harry J. Murphy expressed on Integrated Education for Deaf College Students, in Phi Delta Kappan, April, 1974 as follows:

"California State University at Northridge (CSUN) located in suburban Los Angeles, offers a model of integrated, postsecondary education for deaf college students. Through the use of such support services as interpreting, notetaking, and tutors, deaf college students compete with

25,000 hearing peers in an urban, liberal arts university setting.

The key to the program is interpreting. Forty part-time interpreters, half of whom are hearing children of deaf parents, translate college lectures into "the language of signs," or sign language, as it is most commonly called. Fellow students further support the deaf students by slipping a piece of carbon paper under their notes and giving the extra copy to the deaf person at the end of class.

Professors and hearing students alike soon get used to the "extra student" who sits in front of the deaf student, off to one side of the room, giving an added dimension to a lecture by representing it in a graphic, physical, and beautiful form.

The interpreter gives visibility to deafness, an otherwise "invisible" handicap. We come to know the problems of blindness because of the visible symbols - white canes and dogs. So it is with deafness that the interpreter calls attention to the handicap at the same time the method is used to overcome it.

In 10 years of this special service, CSUN

has awarded a score of bachelor's degrees and an even 100 master's degrees to deaf students.

Today, approximately 120 deaf students, (60 undergraduate, 60 graduate) from across the nation pursue their education in the mainstream of college life at Northridge.

These benefits accrue to the deaf students: Western residents have access to a program nearer their home; at CSUN there is a diversity of curriculum and academic majors, literally from A to Z (Anthropology to Zoology); deaf students have daily contacts with the non-handicapped, and they compete academically, earn the same degree, and form lifelong friendships with non-handicapped persons.

Often overlooked, however, are the benefits which accrue to the non-handicapped as a result of their daily contact with deaf college students. In the past, society has placed the responsibility for adjustment on the handicapped individual. A deaf person was taught to communicate like a hearing person by speechreading and by using speech. Too few deaf persons acquired these skills, and too few were integrated.

What has not been probed is the willingness

of hearing persons to adjust. In the case of the deaf, sign language was thought to inhibit integration because of its singular nature. Ironically, sign language is the great facilitator of integration at CSUN. Many hearing students are quite willing to learn it. Classes in sign language and interpreting are offered for credit and are so popular that we find more hearing persons enrolled in sign language classes (175) than there are deaf persons needing interpreters (120).

A non-handicapped person studying alongside a handicapped person forms a perception of him that removes the cloak of ignorance about handicapped persons. He comes to realize their special talents and limitations. He comes to expect and accept an integrated occupational situation following the college years. It would appear that the historic patterns of "putting the handicapped away" has denied non-handicapped persons a significant learning experience.

The climate at CSUN has led to the natural conclusion that there should be faculty members who are handicapped working alongside those who are non-handicapped, and today deaf instructors teach in the departments of geology, special edu-

cation, and drama.

In their classes are students who can hear, some who cannot, and some who are handicapped in other ways. This makes sense to us."

The United States has 39 colleges and universities with supportive systems. Yet colleges and universities for hearing students should be developed for helping the handicapped students even more extensively in the United States.

Japan, too, must consider the urgent need for appropriate postsecondary education for the deaf.

D. There are 39 institutions, colleges and universities which have some kinds of special services:

(A Guide to College/Career Programs for Deaf Students) 1975

- 1) California State University, Northridge
Center on Deafness, Northridge, California
- 2) El Camino College
Disabled Student's Program - Hearing-Impaired
Division, Torrance, California
- 3) Golden West College
Hearing Impaired Program & Disabled Student
Services, Huntington Beach, California
- 4) Los Angeles Pierce College
Special Service, Woodland Hills, California
- 5) Ohlone College
Department for the Hearing Impaired
Fremont, California
- 6) Pasadena City College
Hearing Impaired Program, Pasadena, Calif.
- 7) Riverside City College
Program for the Deaf, Riverside, California
- 8) San Diego Community Colleges
Resource Center for the Handicapped
San Diego, California
- 9) Valley Vocational Adult School
Deaf Program, Industry, California
- 10) Community College of Denver
Programs for the Hearing Impaired
Denver, Colorado
- 11) St. Petersburg Junior College
Program for the Deaf, Clearwater, Florida
- 12) University of South Florida, Tampa, Florida
- 13) Floyd Junior College
Paraprofessional Training Program in Deaf
Education, Rome, Georgia

- 14) College of Southern Idaho
Program for Deaf, Twin Falls, Idaho
- 15) Northern Illinois Univeristy
Program for Speech & Hearing Impaired
DeKalb, Illinois
- 16) Waubensee Community College
Waubensee Hearing Impaired Program (WHIP)
Sugar Grove, Illinois
- 17) William Rainey Happer College
Hearing Impaired Program, Palastine, Ill.
- 18) Iowa Western Community College
Program for the Hearing Impaired
Council Bluffs, Iowa
- 19) Johnson County Community College
Hearing Impaired Program, Overland Park, Ks.
- 20) Jefferson State Vocational Technical School
Jeffersontown, Kentucky
- 21) Delgado Junior College
Program for the Deaf and Hard of Hearing
New Orleans, Louisiana
- 22) Charles Stewart Mott Community College
Program for Hearing Impaired
Flint, Michigan
- 23) State Technical Institute & Rehabilitation
Center, Deaf Services, Plainwell, Michigan
- 24) St. Paul Technical Vocational Institute
Program for Deaf Students
St. Paul, Minnesota
- 25) New Hampshire Vocational-Technical College
Vertibule Program, Claremont, New Hampshire
- 26) New York University
Deafness Research & Training Center
New York, New York
- 27) Central Piedmont Community College
Post Secondary Program for the Deaf
Charlotte, North Carolina

- 28) Columbus Technical Institute
Technical Education Programs for the Deaf
Columbus, Ohio
- 29) Portland Community College
Special Educational Services
Portland, Oregon
- 30) Community College of Allegheny County
Supportive Service
Monroeville, Pennsylvania
- 31) Community College of Philadelphia
Program for Hearing Impaired Students
Philadelphia, Pennsylvania
- 32) Chattanooga State Technical Community College
Educational Program for the Hearing Impaired
Chattanooga, Tennessee
- 33) Tennessee Temple Schools
Tennessee Temple School for the Deaf
Chattanooga, Tennessee
- 34) Eastfield College
Services for Handicapped Students
Mesquite, Texas
- 35) Lee College
Hearing Impaired Project
Baytown, Texas
- 36) Tarrant County Junior College District
Service Center for Opportunities to Overcome
Problems, Fort Worth, Texas
- 37) Utah State University
Facilitative Program for the Hearing Impaired
Logan, Utah
- 38) Seattle Community College
Program for Deaf Students
Seattle, Washington
- 39) North Center Technical Institute
Program for the Hearing Impaired
Wausau, Wisconsin

E. Deaf Students have been taking such courses at the college (institution) for the deaf and at the institutions, colleges and universities for the hearing (with supportive systems) (1975)

| 1) Agriculture | <u>Number of Students</u> |
|------------------------------------|---------------------------|
| Farm Diesel Technology | 3 |
| Horticulture | 2 |
| Machinery & Water Management | 2 |
| Animal Health Technology | 1 |
| 2) Business and Office | |
| Key Punch | 74 |
| Accounting | 63 |
| Official Practices | 59 |
| Business Administration Accounting | 58 |
| Data processing | 52 |
| Business Administration | 42 |
| General Business | 20 |
| Secretarial | 19 |
| Computer System | 16 |
| Computer Science | 15 |
| Clerical | 15 |
| Computer Operator | 11 |
| Typing | 10 |
| Bookkeeping/Accounting | 8 |
| Computer Programming | 4 |
| Business Management Accounting | 4 |
| Office Technician | 4 |
| Clerical Office Machines | 3 |
| Machine Operator | 1 |
| Bookkeeping | 1 |
| Data Clerical Processing | 1 |
| Management Technology | 1 |
| 3) Communication and Media | |
| Graphic Arts | 51 |
| Applied Photograph | 41 |
| Drafting | 30 |
| Printing Technology | 25 |
| Printing | 6 |
| Graphic Reproduction | 5 |
| Graphic Design | 5 |
| Commercial Art | 5 |

| | | 90 |
|----|---|-----------------------|
| | | <u>Number of Stu-</u> |
| | | <u>dents</u> |
| 3) | Communication and Media(Cont.) | |
| | Telecommunications | 4 |
| | Photography | 4 |
| | Photo Illustration | 2 |
| | Drafting and Design | 2 |
| | Communication and Media | 2 |
| | Photo Management | 1 |
| | Technical Illustration | 1 |
| | Media Technology | 1 |
| | Sign Art | 1 |
| | Audio-Visual | 1 |
| | Production Art | 1 |
| | Applied and Commercial Art | 1 |
| 4) | Construction | |
| | Architectural Technology | 31 |
| | Carpentry | 9 |
| | Cabinet Making | 8 |
| | Civil Technology | 8 |
| | Architectural Drafting | 4 |
| | Architecture | 3 |
| | Plumbing | 2 |
| | Cabinet Making & Millwork | 1 |
| | Architectural Engineering Techno- logy | 1 |
| | Air Conditioning | 1 |
| 5) | Consumer & Homemaking Education | |
| | Home Economics | 33 |
| | Creating Clothing | 5 |
| | Apparel Arts | 2 |
| | Clothing and Textile | 2 |
| | Fashion Design | 2 |
| | Painting & Decorating | 2 |
| | Interior Design | 1 |
| | Custom Apparel and Fashion Design | 1 |
| | Tailoring | 1 |
| 6) | Environment and Natural Resources | |
| | Landscape Gardening | 12 |
| | Drafting and Landscape Architecture | 2 |
| | Geology | 1 |
| | Surveying | 1 |
| 7) | Fine Arts and Humanities | |
| | Fine and Applied Arts | 51 |
| | Psychology | 43 |
| | Sociology/Social Work | 38 |
| | Art | 30 |
| | English | 29 |

| Fine Arts & Humanities (Cont.) | <u>Number Students</u> |
|--------------------------------|------------------------|
| Sociology | 27 |
| Math | 22 |
| Psychology/Social Work | 19 |
| History | 15 |
| Biology | 15 |
| Arts and Science | 14 |
| Chemistry | 13 |
| Bible | 9 |
| Dramatic Arts | 9 |
| Government | 7 |
| Political Science | 5 |
| Social Philosophy | 5 |
| Christian Education | 4 |
| Economics | 4 |
| Music | 2 |
| Physics | 2 |
| Social Sciences | 2 |
| Theatre | 2 |
| Fine Arts | 2 |
| Geography | 1 |
| Foreign Language | 1 |
| Anthropology | 1 |
| Education Psychology | 1 |
| General Science | 1 |
| Zoology | 1 |
| Humanities | 1 |
| Journalism | 1 |
| Life Science | 1 |

8) Health

| | |
|----------------------------------|----|
| Medical Laboratory Technician | 38 |
| Medical Records Technician | 18 |
| Medical Technology | 7 |
| Dental Technology | 6 |
| Nurse's Aide | 6 |
| Health | 3 |
| Optical Technician | 3 |
| Health Science | 3 |
| Social and Mental Health Service | 3 |
| Nursing | 2 |
| Dental Laboratory Technician | 2 |
| Medical Laboratory Assistant | 2 |
| Orthotics and prosthetics | 2 |
| Medical Dietetics | 1 |
| Occupational Therapy Assistant | 1 |
| Medical-Clerical | 1 |
| Mental Health/Social Services | 1 |
| Radiological Technology | 1 |

| | 92 |
|-----------------------------------|------------------------|
| Health (Cont.) | <u>Number Students</u> |
| Laboratory Technician | 1 |
| Public Health | 1 |
| Licensed Practical Nurse | 1 |
| Medical Laboratory | 1 |
| 9) Hospitality and Recreation | |
| Physical Education | 28 |
| Recreation Technology | 8 |
| Food Service | 4 |
| Recreational Leadership | 3 |
| Food Preparation | 2 |
| Cafeteria Service Worker | 1 |
| Hospitality and Recreation | 1 |
| Baking | 1 |
| Fitness Instructor | 1 |
| Hotel and Restaurant Cook | 1 |
| Pastry Chef | 1 |
| 10) Manufacturing | |
| Technology | 37 |
| Welding | 33 |
| Machine Tool Operator | 28 |
| Machine Tool Processes | 18 |
| Machine Technology | 12 |
| Industrial Drawing | 9 |
| Electrical Technology | 9 |
| Electro-Mechanical Electronics | 7 |
| Tool and Die | 5 |
| General Machinist | 5 |
| Engineering Graphics | 4 |
| Mechanical Drafting | 3 |
| Design Technology | 3 |
| Mechanical Engineering | 3 |
| Electrical Engineering | 3 |
| Chemical Technology | 3 |
| Manufacturing Technology | 3 |
| Machine Shop | 3 |
| General Engineering | 2 |
| Mechanical Technology | 2 |
| Industrial Electricity | 2 |
| Industrial Electronics Technology | 2 |
| Industrial Arts | 2 |
| Sheet Metal | 1 |
| Metal Processes | 1 |
| Numerical Control | 1 |

| | <u>Students</u> |
|--------------------------------|-----------------|
| 11) Marketing and Distribution | |
| Advertising Art | 2 |
| 12) Public Services | |
| Special Education | 36 |
| Community Education | 28 |
| Education | 27 |
| Social Work | 23 |
| Deaf Education | 14 |
| Counseling | 14 |
| Deafness Rehabilitation | 9 |
| Child Development | 8 |
| Developmental Education | 7 |
| Administration & Supervision | 6 |
| Early Child Education | 5 |
| Custodial Training | 4 |
| Teacher Aides | 4 |
| Library Science | 3 |
| Instructional Aide | 3 |
| Mental Retarded Counselor | 3 |
| Early Childhood Assistant | 3 |
| Social Worker Aide | 2 |
| Library Technology | 2 |
| Education Associate | 2 |
| Pre-Education | 2 |
| Resident Counselor | 2 |
| Social Services | 1 |
| Vocational Rehabilitation | 1 |
| Paraprofessional with Deaf | 1 |
| Human Service | 1 |
| Public Administration | 1 |
| Nursery Aide | 1 |
| Counselor Education | 1 |
| Criminal Justice | 1 |
| 13) Product Services | |
| Upholstery | 14 |
| Power Sewing | 14 |
| Sewing | 5 |
| Radio and TV Repaid | 4 |
| Small Engine | 3 |
| Trades | 3 |
| Floor Covering | 1 |
| 14) Transportation | |
| Auto Body Repaid | 30 |
| Auto Mechanics | 14 |
| Automotive Technology | 13 |
| Diesel and Heavy Duty | |
| Mechanics | 5 |

| Transportation (Cont.) | <u>Number Students</u> | 94 |
|-------------------------------|------------------------|----|
| Brake and Wheel Alignment | 4 | |
| Transportation | 4 | |
| Motorcycle Repair | 2 | |
| Automotive Service Technology | 2 | |
| Auto Vehicle Maintenance | 1 | |
| Diesel Mechanics | 1 | |

8. WHICH COLLEGE OR UNIVERSITY WOULD BE BETTER ⁹⁵
FOR THE DEAF?

Before discussing this issue, I would like to comment that the deaf population and the hearing population similarly vary in achievement levels ranging from below average academic levels to above average academic levels. Therefore, we should never stereotype the deaf population.

Here I have listed four categories of post-secondary education that is available for the deaf in the United States.

- A. Colleges and Universities for Hearing Students
(No Supportive System)
- B. Colleges and Universities for Hearing Students
(With Supportive Systems)
- C. College (Institute) for the Deaf
(a college for the deaf affiliated with a college for the hearing)
- D. College for the Deaf
(Majority of the students are deaf)

In order to decide and choose a certain college or university, every student must ask himself the following questions:

What does he or she want to study?

What college or university does he or she want to attend?

Does he or she need special services or not?
(If the answer to this latter question is YES, then the student will choose B, C, or D above. If the answer is NO, he may choose A.

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In choosing a college or university a student should consider the following factors: his lip-reading ability, financial status, future job opportunities, degree of hearing loss, etc. Most importantly, the student should assess his academic and communication abilities.

Ideally, there should be an educational system that combines hearing and deaf students. In other words, a unified system. However, in reality, because of the deaf student's limitations, separate educational facilities do exist. Naturally, because the deaf have a hearing deficiency, they will have difficulty performing on the same level with the hearing students unless supportive services are provided for the deaf. For example, the deaf students will have some minor difficulties understanding classroom lectures. To alleviate this problem, notetakers, counselors and other helpers need to be involved. When we view this realistic world of the deaf students, we find that some of them need certain special services within the colleges and universities because of several limiting factors, associated with their handicap. However, some deaf may not need special services.

The deaf population vary among themselves in

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academic abilities. Some deaf may not need special services. Some deaf may need a very small part of special service. Some deaf with the support of special services are able to perform as well as their hearing peers do, to some extent.

Here I want to emphasize that the most important and necessary point is to encourage deaf students to meet the challenges of attending colleges and universities for hearing students. In other words, those who have abilities, those who are able to compete with hearing students, those who would like to try to learn among hearing students, should choose colleges or universities for hearing students so that these deaf students can enter the wider world of the hearing population. If a college or a university for hearing students eventually provides supportive services, the deaf students in attendance will benefit even more. We must acknowledge the fact that if the deaf students need some special service, we should provide a supportive system or special services for their use.

There should be various choices of postsecondary education for the deaf, so that the deaf population can take advantage of these opportunities.

From an overall educational point of view, the whole deaf population must be more educated and more trained.

Mr. Dennis B. Gjerdingen expresses his opinion on postsecondary education as follows: (The Volta Review 1977, p. 113).

"....available to these students has been the rich variety of higher educational opportunities our society has created - educational opportunities that contribute significantly to our intellectual, vocational and social fulfillment."

At the present time, in the United States, the deaf population can freely choose which college or university to attend.

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9. COMPARING POSTSECONDARY EDUCATION OFFERED TO THE DEAF IN THE UNITED STATES TO THAT WHICH IS AVAILABLE IN JAPAN.

The education offered to the deaf in Japan (pre-primary through high school) is comparable to that which is offered at these same levels in the United States. However, in Japan at present, there is no educational door after high school, particularly for the above average deaf student. Only for the very few superior deaf students who can compete with hearing students, is there the chance of further education. Some high schools for the deaf in Japan offer an additional course of vocational study after the completion of the regular high school curriculum. However, this is not comparable to a college education.

Perhaps the origin of this special course came about because there is no postsecondary education offered to the deaf with the supportive services needed by them (e.g. note-taker, counselor, interpreter and so forth). Such supportive services were in existence at NTID (National Technical Institute for the Deaf), California State University and over thirty other colleges and universities for hearing students across the United States.

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This special course in Japan seems to exist for two reasons. First, it supplements the high school education. Second, it gives the student an opportunity to explore more specialized areas such as printing, hair styling, tailoring, dental technology, furniture making and other courses. To be sure, this seems to be a step towards a kind of postsecondary education. However, the fact remains that this type of special course has not been recognized as being at college level and even after students graduate from this course, they cannot always expect a salary comparable to one earned by a college graduate except in a few cases. If these courses had been recognized as being college level, there would be no difference in salaries today.

So the question is "Why do high schools for the deaf need special courses like this?" The answer is, they need these special courses because there is no college level institution. The parents of deaf children have been worried about their children's futures after high school for the deaf. They want their children to be independent in the "real" world and be able to contribute to it. Therefore, they want them to be able to acquire the furthest academic knowledge or specialized

vocational or technical skills that will allow them to compete with hearing students at the college level.

It appears then that these special courses were added to meet educational needs. However, parents and teachers continue to be concerned about the fact that these courses are not college accredited. If there were postsecondary educational opportunities similar to those in the United States, these special courses might not be necessary.

Of course, we must admit the benefit of the special course, because we have not provided special postsecondary education for the deaf, such as college level in the United States.

Community colleges and local vocational institutions in the United States also seem to have successfully bridged this gap. The facilities and faculties are generally more than adequate but even more, the curriculums are designed so that it leads the students smoothly into a specialized area and later into a specific job. It can be said that where there is inadequate postsecondary education for the deaf, there are few job opportunities.

The fact that deaf students in the United States have the opportunity to go to colleges or universities for hearing students, colleges for the deaf, community colleges and vocational or technical institutions, allows them to plan their futures with some assurance. Therefore, some comments which can be heard include:

Mr. A. "My son will choose his own course in a college or university for hearing students aided by supportive services."

Mrs. B. "My son will take a vocational course in a local vocational technical school or in a community college."

Mr. C. "My daughter is going to a university for hearing students."

Mr. D. "My daughter will go to a Technical Institute for the Deaf."

Mrs. E. "My son would like to go to a College for the Deaf."

These comments have evolved from myriads of circumstances, of course.

From observing the successful implementation of these programs in the United States, we as educators of the deaf in Japan should consider such learning opportunities. The deaf must be allowed

to direct their futures and realize their dreams. We must build up the system of postsecondary education for the deaf. We must begin at the preschool level and re-evaluate the curriculum followed from pre-school through high school that will make the transition from pre-school to elementary to high school to postsecondary work, academic or otherwise, one smooth process.

Regretably, there has been no similar opportunity for the deaf in Japan as in the United States. Under the present circumstances, most of the students have to choose jobs immediately after high school without the opportunity for postsecondary education. Furthermore, even though they have jobs, many of them are apt to change jobs often. At the same time, teachers in high schools have difficulties in finding jobs in suitable places after students graduate from school in Japan. Such difficulties in suitable job placement is one of the biggest problems in high school for the deaf.

In fact, there are limited chances for the deaf in Japan, especially for those above the median intelligence level. Only those special cases are able to avail themselves of appropriate postsecondary education. Some special type of postsecondary

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education for the deaf in Japan is thus extremely important. When I compared education for the deaf in Japan to the educational system in the United States, I concluded that there are some types of postsecondary education for the deaf in the United States which cannot be seen in other countries. Under these circumstances, most of the deaf high school graduates in the United States are able to realize their own future dreams in jobs and professions while they are in high schools for the deaf or high schools for hearing students. In short, they are able to choose according to their abilities, desires, efforts and many other factors. These dreams motivate them while they learn at school.

10. CONCLUSION

From this study, I concluded as follows: i.e. The establishment of a college for the deaf which is not isolated, establishment of a National Supportive Center which relates to colleges and universities for the hearing as well as encouraging deaf student's attendance at colleges and universities for the hearing, must be realized. At the same time a National Job Cultivation Center which relates to colleges, universities and other organizations must be established.

As I emphasized so often, the deaf population is not a homogeneous one, there is a wide range of ability in the deaf population as well as in the hearing population. With these conclusions in mind, we must advance the following things:

- A. To create a National Supportive Center in Japan.
- B. To encourage the deaf students to attend colleges or universities for hearing in Japan.
- C. To establish postsecondary education for the deaf in Japan - A deaf college which is not isolated.
- D. To develop a National Job Cultivation Center in Japan.

A. National Supportive Center

If there is a National Supportive Center which

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encourages, helps or gives information to the deaf students and colleges where there is not any supportive system on campus when deaf students attend, such a Center is sure to function smoothly and efficiently as a link between the deaf students and the college or university. By grace of a National Supportive Center, many of the deaf students at colleges and universities for hearing students would be encouraged and supported by their peers. The aim of a "National Supportive Center"

This National Supportive Center works mainly with colleges and universities for the hearing that have no supportive system and aids deaf students who really need some help to be able to learn there and other supportive centers in colleges and universities.

Furthermore, this center should always keep contact with every related organization, promote supportive systems and cultivate study, e.g.:

- 1) To keep constant contact with schools, colleges and universities.
- 2) To publish through a pamphlet, and provide to the deaf some courageous examples of academic success.
- 3) To research, study, guide and advise the deaf,

colleges and universities, and related organizations.

- 4) To disseminate information to the deaf, colleges and universities, and related organizations.
- 5) To keep contact with the schools that the deaf college students attend.
- 6) To give some kind of periodic orientation.
- 7) To provide formal notes for notetakers (with carbon).
- 8) To guide and advise as the deaf college student needs.
- 9) To set guidelines for parents of the deaf.
- 10) To keep contact with some local volunteer groups.
- 11) To set up guidance for the colleges and universities.
- 12) To cooperate in organizing a supportive system for the deaf in colleges or universities for hearing students.
etc.

B. To encourage the Deaf students into Colleges and Universities for Hearing Students.

We know about the potential for learning and achievement of the deaf college students in universities for hearing students (See Chapter 6). The deaf student could make use of many facilities

available in colleges for hearing students that may not be found in colleges for the deaf. A wider range of educational and vocational training may be attainable in colleges and universities for hearing students. With the establishment of a National Supportive Center, we educators would work to open the doors of the colleges and universities in Japan.

C. To Establish Postsecondary Education for the Deaf - Deaf College which relates to College or University for Hearing Students.

There are many graduates who graduated not only from colleges and universities for hearing students but also graduated from college for the deaf in the United States. Many of the deaf had to rely on some special services. A wide range of abilities can be seen in the deaf population as well as in the hearing population. Naturally, we should provide widely for the deaf population to match their different abilities.

The establishment of the college for the deaf which has some relation to colleges for hearing students must be realized. This is an urgent problem in Japan.

D. To make a National Job Cultivation Center

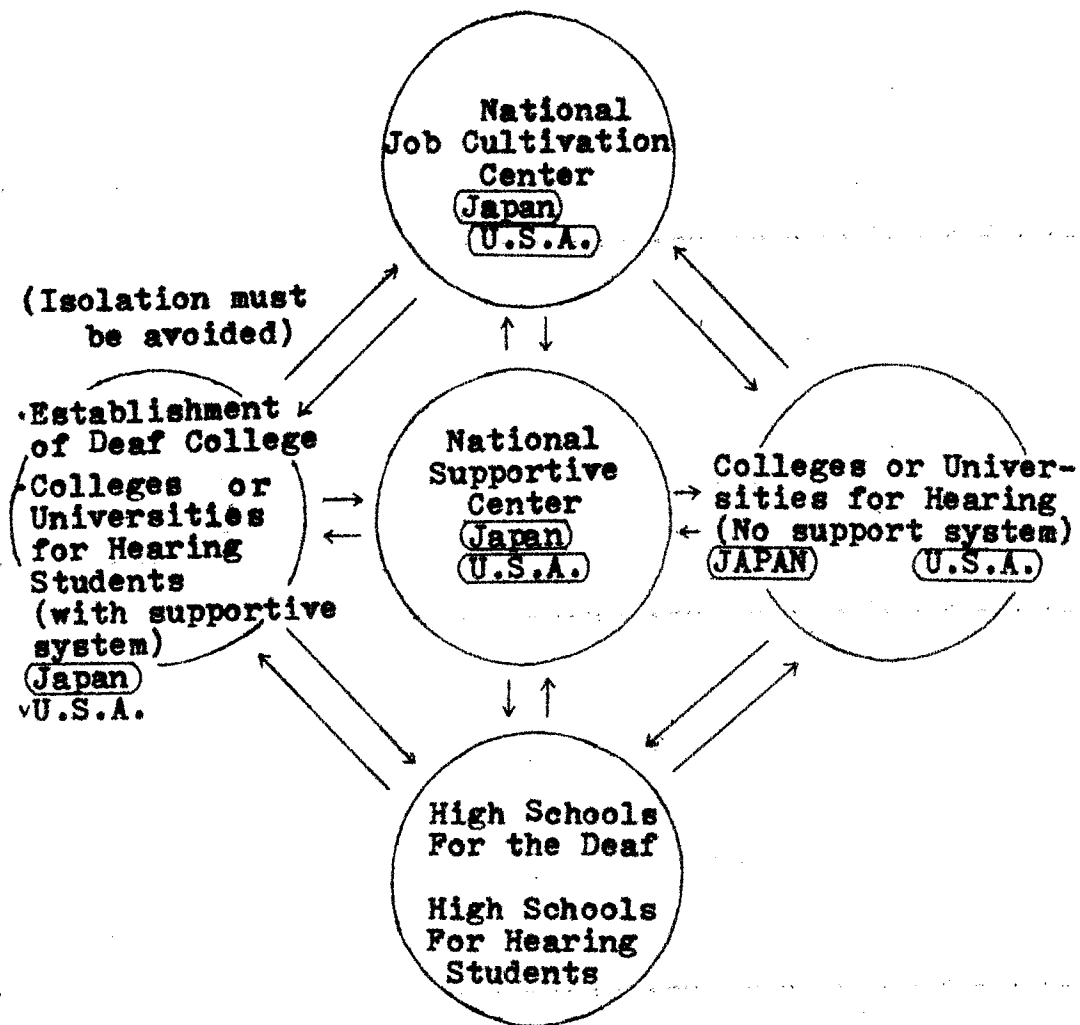
From this research, I learned that many graduates from colleges and universities for hearing students had problems in finding jobs. We have to consider what comes after the postsecondary education for the deaf. Their abilities or potentials must be utilized widely in this world after their graduation from colleges or universities.

This kind of Center may not seem to relate to the postsecondary education for the deaf. However, without this, the real spirit of the postsecondary education for the deaf would not be alive.

When we think seriously of developing the potentials of the deaf, we must provide a setting which takes into account their degree of handicap, i.e. reasonable considerations must be given the deaf before they can be expected to function independently. The deaf person has a handicap and therefore, it is important for us to plan suitable educational settings in order to minimize this handicap.

As I expressed, when we consider the postsecondary education, we cannot, should not judge from one facet of the deaf. It is not a healthy

idea to consider support in only one facet. Multi-faceted policy or thought must come first in our minds. I conclude with this scheme.



mark = undeveloped system

✓ mark = developed or being partially developed system

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