

การผสมผสานแพลตฟอร์มการสื่อสารสำหรับการสัมภาษณ์ออนไลน์
ผู้สมัครที่พิการทางการได้ยินในสถานการณ์แพร่ระบาดของโรคโควิด-19
Mixed-Platform Online Admission Interviews for Candidates
with Hearing Disabilities: An Adaptation Under the COVID-19 Pandemic

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บทคัดย่อ

บทความนี้มุ่งเผยแพร่วิธีการผสมผสานแพลตฟอร์มการสื่อสารออนไลน์เพื่อสัมภาษณ์ผู้สมัครที่พิการทางการได้ยินของหลักสูตรศิลปศาสตรบัณฑิต (หุหนวกศึกษา) วิทยาลัยราชสุดา มหาวิทยาลัยมหิดล ภายใต้สถานการณ์แพร่ระบาดของโรคโควิด-19 ระบบนี้ประกอบด้วย 2 แพลตฟอร์ม ได้แก่ 1) แพลตฟอร์ม LINE ใช้สำหรับการสื่อสารแบบ 1:1 ระหว่างผู้สมัครกับหนึ่งในสองของล่ามภาษามือ ที่ทำหน้าที่สื่อสารด้วยภาษามือกับผู้สมัคร เรียกว่า ล่ามภาษามือ A และ 2) แพลตฟอร์ม ZOOM Cloud Meeting ใช้สื่อสารระหว่างคณะกรรมการสัมภาษณ์ ล่ามภาษามือทั้งสองคน คือ ล่ามภาษามือ A และล่ามภาษามือ B (ทำหน้าที่แปลภาษามือเป็นคำพูด) การเชื่อมต่อระหว่าง 2 แพลตฟอร์มเกิดขึ้นจากการที่ล่ามภาษามือ A สื่อสารกับผู้สมัครผ่าน LINE Video Call แล้วแชร์หน้าจอตั้งกล่าวมายัง ZOOM Cloud Meeting เพื่อให้คณะกรรมการได้สังเกต สื่อสาร และประเมินผู้สมัครคล้ายการได้สัมภาษณ์แบบ face-to-face กระบวนการที่เกิดขึ้นคือ ล่ามภาษามือ A แปลคำถามของคณะกรรมการไปยังผู้สมัครผ่าน LINE Video Call เมื่อผู้สมัครตอบคำถาม ล่ามภาษามือ B จะแปลภาษามือของผู้สมัครเป็นคำพูดไปยังคณะกรรมการ และคณะกรรมการสามารถประเมินผู้สมัครผ่านหน้าจอที่แชร์มาจากล่ามภาษามือ A ดังนั้น ในการสื่อสารนี้ ผู้สมัครจะมองเห็นและสื่อสารกับล่ามภาษามือ A ผ่าน LINE Video Call เท่านั้น ในขณะที่คณะกรรมการจะมองเห็นทุกคนที่เกี่ยวข้องผ่าน ZOOM Cloud Meeting ระบบดังกล่าวนี้ช่วยให้การสัมภาษณ์แบบออนไลน์มีประสิทธิภาพและทำได้ง่ายในทางปฏิบัติ เนื่องจากผู้สมัครสามารถสื่อสารผ่าน LINE Video Call ที่คุ้นเคย โดยไม่ต้องติดตั้งโปรแกรมประชุมออนไลน์เพิ่มเติม

คำสำคัญ: การผสมผสานแพลตฟอร์ม, ผู้พิการทางการได้ยิน, ZOOM Cloud Meeting, LINE, โควิด-19

Abstract

This article aims to publicize the means of using online communication platforms to make possible, under the COVID-19 pandemic, the admission interview for candidates with hearing disabilities of the Bachelor of Arts Program in Deaf Studies, Ratchasuda College, Mahidol University. This newly developed mixed-platform system featured two online communication platforms: (1) LINE, in which each candidate would be put into a one-on-one Video Call session with one of the two sign language interpreters (hereinafter referred to as interpreter A), and (2) ZOOM Cloud Meetings, in which the admission committee, interpreter A, and the other sign language interpreter responsible for translating sign language exchanges into spoken Thai language (hereinafter referred to as interpreter B), would have a ZOOM Meetings session. The link between the platforms, formed by interpreter A sharing their simultaneously ongoing LINE Video Call with each candidate into the ZOOM Meetings session using ZOOM's built-in Share Screen feature, allowed the admission committee to observe, communicate with and evaluate each candidate as they would in in-person interviews. The committee's questions spoken in Thai were translated to sign language for the candidates by interpreter A via their LINE Video Call, while the candidates' sign language responses were recited by interpreter B and observed by the committee through the ZOOM Meetings' shared screen. The candidate would only see and communicate with, and hence, only focus on, interpreter A, while the committee could see everyone involved. This mixed-platform system maintained the efficiency of traditional admission interviews, and proved to be practical, as letting candidates do the interview via the familiar LINE application removes the difficulty of learning a new online meeting platform.

Keywords: mixed-platform operation, hearing disabilities, ZOOM meetings, LINE, COVID-19

Introduction

The COVID-19 pandemic has led to the New Normal way of living, with which humans have to adapt in several ways in order to stay safe, for example; wearing masks outdoors, washing their hands more often and keeping social distances. In Thailand, the second and third waves of the pandemic have been much worse than the first. Thus, several safety measures of higher levels were issued to prohibit activities such as travelling,

moving around big numbers of people or unnecessary gatherings, which promote greater transmission of the disease. However, under careful regulations and with required adaptations, certain activities still have to be carried out, including the TCAS admission interview in order to select the new batch of undergraduates.

TCAS or the Thai University Center Admission System is the system of selecting high school graduates to attend university. It was put in use since 2018 and was designed by the Council of University Presidents of Thailand. The TCAS accepts students through a total of 4 rounds of selection (Thai University Central Admission System, 2021):

Round 1: Portfolio

This round is for those who stand out from the rest. The evaluation is on the student's portfolio. An interview may be conducted as well.

Round 2: Quota

This round focuses on accepting students who live in specific areas as decided by the university or students who come from the university's affiliated firms. The university can operate their own admission and define their own criteria, for example: evaluating the candidate's background, specializations, or using the standard test scores including O-NET, GAT/PAT and the 9 Common Subjects.

Round 3: Admission

This round is for regular students and is the only round which the selection is administrated by the central admission system- mytcas.com. Scores will be taken from TGAT, TPAT, A-Level, GPAX or each university's admission test.

Round 4 Direct Admission

This round accepts students who have not been accepted by any university. Each university can come up with their own selection criteria.

Rachasuda College, as Mahidol University's specialized sector for learners with hearing disabilities, also has this obligation to select and accept students into its only offering program for the undergraduate years which is the Bachelor of Arts Program in Deaf Studies. As mentioned above, the fundamentals of the portfolio round are the evaluation of the portfolio and the interview. With students with hearing disabilities, the interview is of great importance because it will determine their ability to use the sign language, which is a big deciding factor in the selection process. If their sign language is poor and cannot be

used to efficiently communicate with the sign language interpreter, who would be the only means of the communication between them and the instructors, they will struggle through the whole course of education. As presumable, learners with hearing disabilities' greatest obstacle lies in communication, because they cannot hear or speak, have to mainly use the sign language to communicate, and are unable to understand the written language to the level which hearing people do. This results in the extreme difficulty in communicating with them via written texts, which would have been one of the main communication channels under the pandemic. With their lack of literacy skills comes heavy limitations to their capability to learn new things, as well as to the likelihood of successfully teaching them new things. Therefore, there is a need for the college's admission committee to come up with a simple and practical New Normal means of operating the admission interview-one that does not require the candidates to learn any online meeting platforms which they have never used before.⁶

Keeping in mind that it is impossible to successfully teach every candidate an online meeting platform they have no experience with, the committee has to choose a platform that they are familiar with, or better, a platform that they use in their daily lives. On the other hand, the platform must also allow everyone in the admission committee to participate equally and share their opinions freely throughout the interview process. These requirements of simplicity on the candidate's end and a level of complexity on the committee's end pose a struggle in finding only one online communication platform that will do the job. Therefore, a mixed-platform means of the online interview operation was developed.

The Steps in Developing the Mixed-Platform Operation of the Admission Interviews

1. A meeting for planning the process

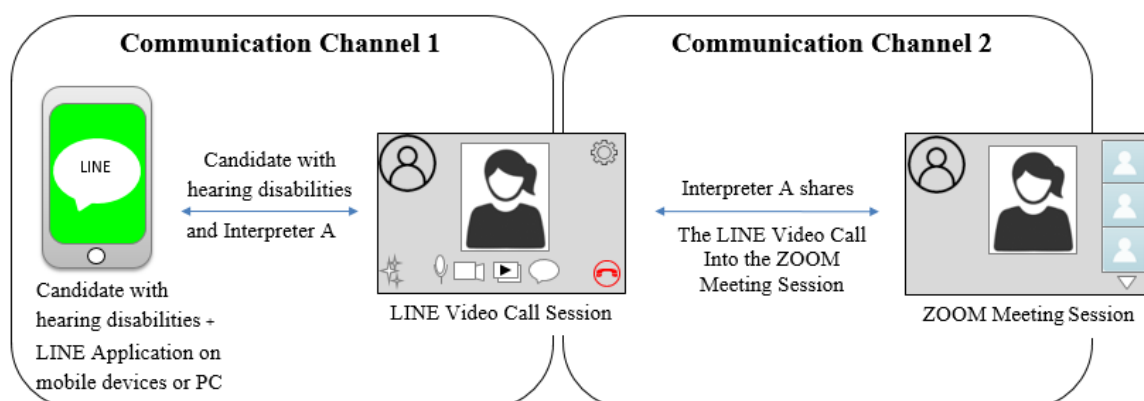
In the beginning, the admission committee needs a system that supports meetings over distances, as most members have to work from home following Mahidol University's rules during the pandemic. The committee agreed on using an online meeting platform that supports sharing of resources, so everyone will be able to access a common resource and hold effective discussions on it. In the end, ZOOM Cloud Meetings was chosen for the operation of the admission interviews. However, the committee also believe that most candidates will have no experience using ZOOM Cloud Meetings or any other online

meeting platforms and, as stated above, will find great difficulty in learning one. Therefore, they should be interviewed via a platform that they are already familiar with, which is the LINE Application and its Video Call feature.

The conclusion of the planning stage sums up that the interview will comprise 2 communication channels. Communication Channel 1 is the communication between the interviewed candidate and interpreter A via a one-on-one LINE Video Call. Communication Channel 2 includes the LINE Video Call screen showing Communication Channel 1 as shared into the ZOOM Meetings session, as well as the communication amongst the admission committee. Note that interpreter A have to be on a PC to be able to share their LINE Video Call screen with the rest of the admission committee in the ZOOM Meetings session.

2. Technical Design

With the ideas finalized, the admission committee has coordinated with technicians to try setting up the system to create a clearer layout of the mixed-platform system's operation, as shown in picture 1.

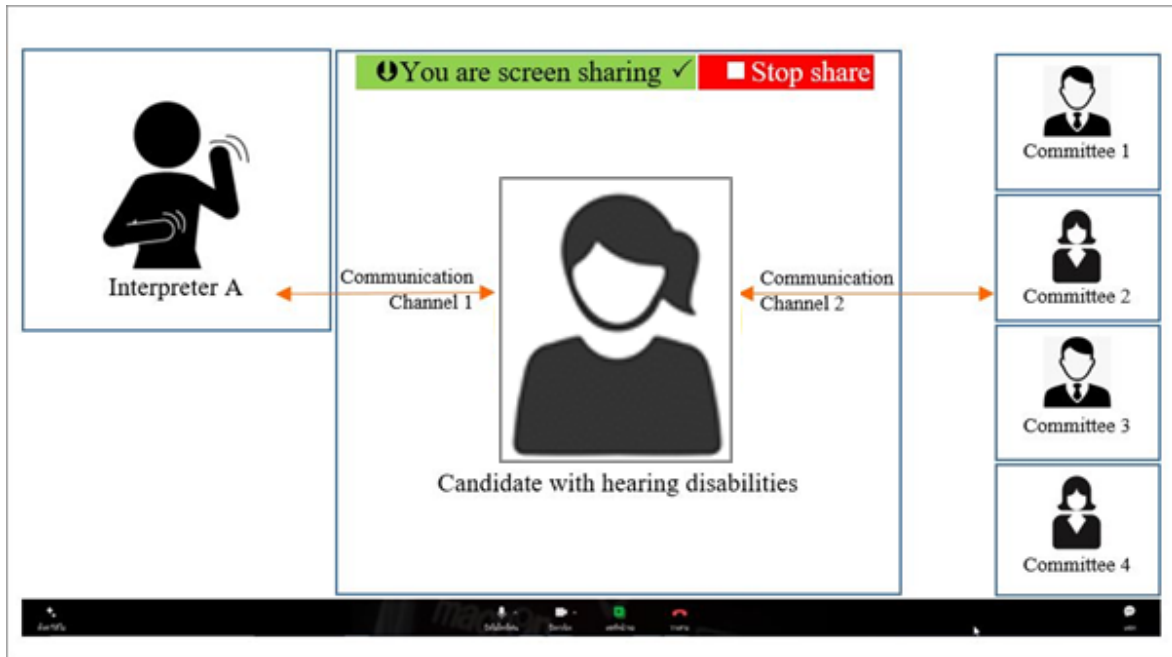


Picture 1 Layout of the mixed-platform interview system

From picture 1, Communication Channel 1 shows the LINE Video Call between interpreter A who is on a PC, and the interviewed candidate who can use a device of their preference as it makes no difference to the screen sharing process. Interpreter A has shared their LINE Video Call screen with the admission committee in the ZOOM Meetings session. The interviewed candidate will not see the admission committee nor have to join the ZOOM Meetings session. Communication Channel 2 mainly shows the ZOOM Meetings session. Everyone in the admission committee will get to talk to the candidate through the

interpreters and see the candidate's response, including their sign language skill level through the shared screen.

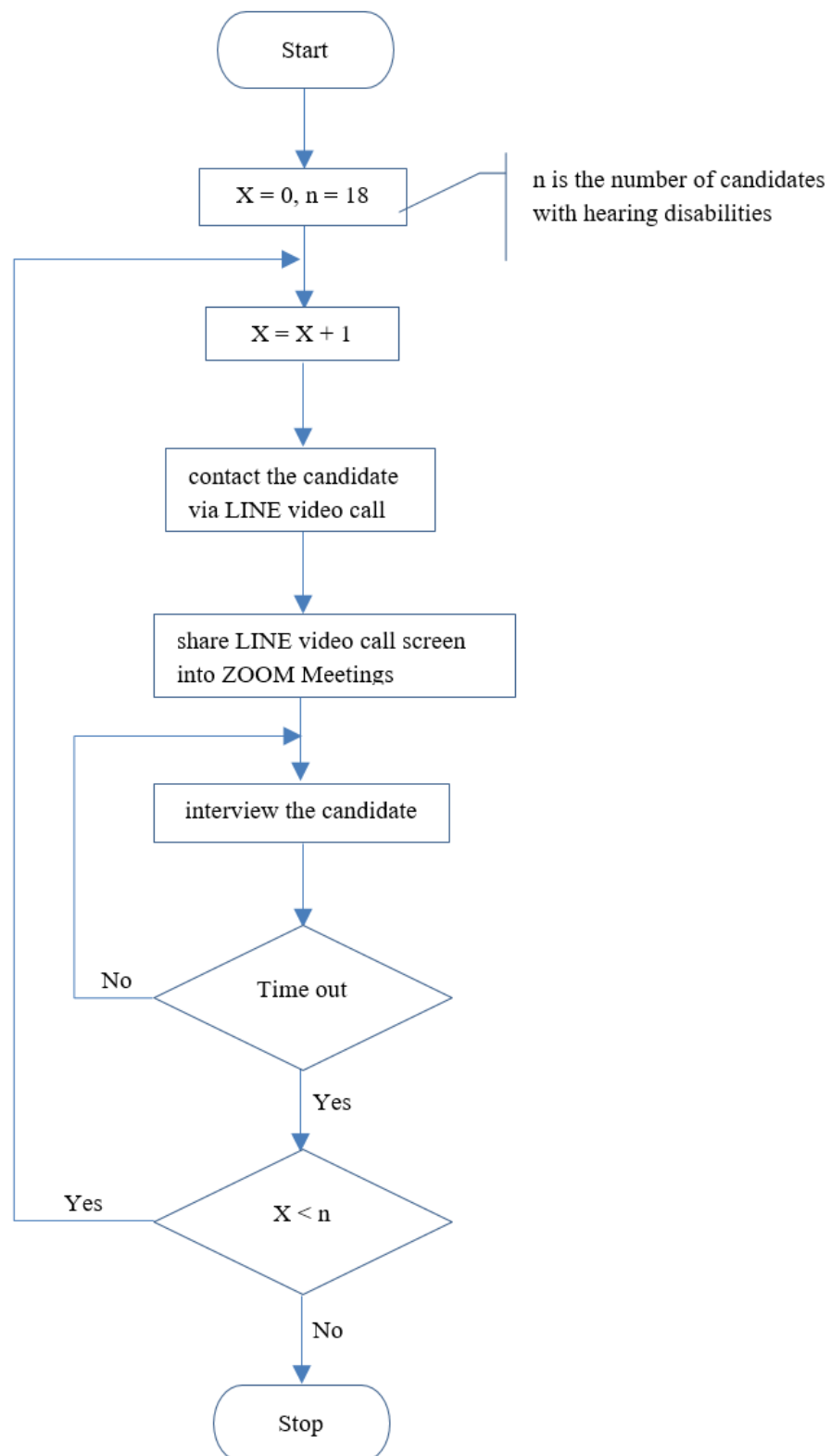
Picture 2 shows a sample screen of the communication that happens within the mixed-platform interview system, which will be further tested on actual devices.



Picture 2 A sample screen showing the interactions of involved persons

Note. the interactions between the admission committee, the interpreter A and the candidates with hearing disabilities, from the ZOOM Meetings session's point of view

The flowchart in picture 3 shows the steps in operating the mixed-platform interview system for candidates with hearing disabilities. To further elaborate the flowchart; the head count of students with hearing disabilities is at 18 and the time out period is approximately 30 minutes. Interpreter A will be tasked with contacting each candidate via LINE video call and sharing their video call screen into the ZOOM Meetings session.



Picture 3 The steps in the operation of the mixed-platform interview system for candidates with hearing disabilities

3. Testing the system on actual devices

After the mixed-platform interview system for candidates with hearing disabilities was designed, it was operated on actual devices to be tested out before the day of the admission interview. Improvisations were made to the sound and pictorial systems to enhance the communication between the admission committee, the sign language interpreters and the candidates to the highest efficiency. The record function of the ZOOM Meetings was used to record the interviews and kept as evidences of the operation. Picture 4 shows the system testing process. The first picture shows the setup of the interview room, and the second picture shows the ZOOM Meetings screen during the interview session. The ZOOM Meetings screen's components include interpreter A at the top left, the interviewed candidate at the center (since this was not the real admission interview day and no candidates were yet involved at this step, a person with hearing disabilities was asked to fill up candidates' position), and the admission committee on the right. It can be seen that only a few committee members were together in the interview room, while the candidate and the other committee members were at different places, however, everyone can participate in the online interview as set up according to the planned mixed-platform system.



Picture 4 The interview room setup and the ZOOM Meetings screen on an actual device during the system testing process

4. Actual Use on the Admission Interview Day

After the mixed-platform system was tested out, the last step is to put it to use. The following is the system's step by step operation:

4.1 The admission committee and the sign language interpreters sign in to the ZOOM Meetings session. At this step, everyone has check if their sound and pictorial system is functioning right. Everyone should be in a quiet area with no noise disturbances or possible interruptions (DERBYSHIRE County Council, 2021). After everyone signed in, the screen will appear as shown in picture 5.



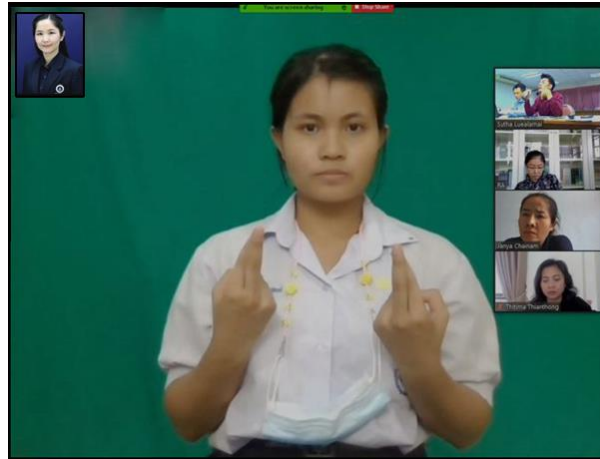
Picture 5 The admission committee and the sign language interpreters sign in to the ZOOM Meetings session

4.2 Interpreter A contacts one candidate at a time via LINE Video Call using LINE PC as shown in picture 6. Note that both interpret A and the candidate have to make sure that they can see each other, especially each other's hands, clearly. Therefore, they will be able to communicate effectively, as is very important in an admission interview. This can be helped with good lighting from the front and an opaque background with no windows where light can shine through from behind (Susan, 2020).



Picture 6 Interpreter A contacting a candidate via LINE Video Call in LINE PC

4.3 Interpreter A shares the LINE Video Call screen into the ZOOM Meetings session, as shown in picture 7.



Picture 7 The ZOOM Meetings session's screen after interpreter A has shared the LINE Video Call screen

4.4 The admission interview begins. The committee members take turns to ask questions to the candidate. Interpreter A listens to the questions and delivers them in sign language to the candidate in the LINE Video Call. The candidate will reply in sign language to their only interlocutor which is interpreter A, however, as the Video Call screen is being shared into the ZOOM Meetings session for everyone else to see, interpreter B will be able to translate and recite their answer for the admission committee. The ongoing admission interview is shown in picture 8



Picture 8 On-site atmosphere of the admission interview using the developed mixed-platform system

Screen Views of the People Involved in the Admission Interview

At the end of the means above, there is a total of three screen views for the people involved in the admission interview.

1. Interpreter A's screen view: While also in the ZOOM Meeting to link the communication between the candidates and the admission committee by sharing the screen and listening to the committee's questions, interpreter A's sight-focus will only be on the candidate in the PC LINE Video Call, who they will translate the questions for.

2. Candidates with hearing disabilities' screen view: The candidates with hearing disabilities will have been contacted only by interpreter A via LINE Video Call, therefore, they will only be able to see interpreter A.

3. Admission committee's screen view: All members of the admission committee, working on site or online, who signed in to the ZOOM Meetings session will be able to see everyone involved in the admission interview. The shared LINE Video Call screen will always appear big and clear, taking up most parts of the screen. This is due to ZOOM Meetings' feature of "pinning" the shared resource.

The candidate's screen view helps the candidate focus on their only interlocutor which is interpreter A. The "pinned" shared LINE Video Call screen in the admission committee's screen view makes the admission interview process convenient. This is one major benefit of integrating the LINE Video Call feature, as the one-on-one LINE Video Call screen between interpreter A and any candidate that take turns to come in for the interview, will, for the whole time, be displayed for the whole admission committee to see without having to actually be pinned. After all, the avoided process of having each candidate join the ZOOM Meetings session and pinning them to see them clearly; as ZOOM Meetings' gallery view will show only small thumbnails of the participants, and more participants means smaller thumbnails, making it difficult to see the candidates, will be a very inefficient process. There are many candidates and they will have to take turns to come into the meeting, meaning that every committee member will have to re-pin a new candidate after every interview. The candidate and interpreter A will also have to pin each other, or else, they will not be able to see each other clearly. With the means the committee has chosen, the one-on-one LINE Video Call communication channel between interpreter A and the candidates, is independent of the ZOOM Meeting's gallery view no matter how many times the interlocutor pair changes.

Upsides of the Developed Mixed-Platform System

Under the COVID-19 pandemic, all admission interviews have to be operated online. Most candidates with hearing disabilities have no experience with online meeting platforms but are familiar with LINE Video Call, which they commonly use for every-day communication. Therefore, the integration of LINE's Video Call feature with an online meeting platform became a necessity. Letting the candidates with hearing disabilities use only the LINE application from their end allows them to do the admission interview without having to understand any online meeting platform, as the complications of the online meeting platform will happen on the admission committee's end alone.

Outcomes of the Online Interviewing System on Candidates with Hearing Disabilities

This is considered the first time that an online university admission interview was operated for candidates with hearing disabilities. The Mixed-Platform System is a newly developed means with emphasis placed on its simplicity and practicality to especially answer to the candidates' limits-bound communication. The LINE and ZOOM Cloud Meetings' integration was crafted to facilitate the candidates' communication with the admission committee through the sign language interpreter. With the everyday-used LINE application being the only technology on the candidates' end of the interview, they were able to focus on the interview without having to handle any extra burden. From the admission committee's observation, all candidates were able to use the system. Furthermore, the system was able to support every party's communication well in the following ways:

1. The candidates with hearing disabilities were able to see and understand the sign language of interpreter A, as well as to reply and response correctly.
2. Both sign language interpreters could see the sign language of the candidates clearly, making it easy to translate their message into a vocal form for the committee. The committee's voice can also be heard clearly, making it also easy to translate it into sign language for the candidate.
3. Everyone in the admission committee could observe the candidates' sign language and gestures clearly, and could hear the interpreter's voice clearly.

Limitations of the Mixed-Platform System and Suggestions for Further Improvisation

The efficiency of this mixed-platform system relies greatly on the stability of the WIFI signal, as it effects the clarity of the pictorial (sign language) and sound (vocal translations) signals. Therefore, all committee members must make sure that they are in an area with a stable WIFI connection. However, it is hard to control this factor with the candidates with hearing disabilities, because they may live far away or lack financial stability, making the WIFI signal something that they may not have the access to or not be able to afford. In some cases, where they use their cellular data which has unstable signal strength, the committee will not be able to see their sign language skill clearly or smoothly. In order to avoid such limitations, in the future, the interview questions may be given to the candidates as a video clip of the interpreter delivering them in sign language. The candidates will be required to record a video clip of their response and send it back within a given amount of time, which is a simple task that can be done on typical mobile phones. This way, the committee will be able to observe the candidate's sign language skill clearly without any interruptions.

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