

ASL TRANSLATION STANDARDS

AND VIDEO PRODUCTION



SIGN LANGUAGE TRANSLATION STANDARDS

These standards were compiled by sign-language linguists, educators, and media-production specialists in collaboration with Cirrus Inc. It is intended to serve as a reference for professionals working in American Sign Language (ASL) translation and related fields.

Although the examples and technical specifications in this edition focus on American Sign Language (ASL), the underlying principles are designed to be applicable to the translation of materials into any sign language.

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RESEARCH AND WRITING TEAM

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Introduction

This document contains four sections, six appendices, and a glossary of terms and roles. Its purpose is to define a set of standards that will help produce high-quality sign-language videos for a diverse deaf¹ audience.

ASL is the third most commonly used language in the United States, after English and Spanish.' (<u>1,2</u>) According to research done by Ross E. Mitchell & Travas A. Young² about 7 million people living in the U.S. use sign language.

In this introduction, we will answer commonly asked questions related to the need for high-quality American Sign Language (ASL) translation³. The standards outlined here have been developed to meet the critical need for high-quality ASL translation.

Why do deaf people need quality sign-language translations? Just as U.S. government officials recognize the need to use plain language to ensure written communications are clear and accessible to English speakers (see plainlanguage.gov), deaf people likewise need access to content in their native language. Translation of educational, medical, business, and entertainment content in ASL enables deaf individuals to important information in a language they clearly understand.

Why isn't written communication (such as captions) sufficient? The primary language for many deaf people is ASL. The Americans with Disabilities Act (ADA) protects the rights of deaf people to have access to content equivalent to what is available to the hearing population. Many spoken languages have access to translations in their language, but the availability of ASL translation is sorely lacking. In addition, acquiring English literacy is a lifelong challenge for many deaf people

¹ For the purpose of this document, the term "deaf" refers to persons who have hearing loss in the severe to profound range, communicate in American Sign Language, and otherwise demonstrate a sociocultural association with the American Deaf community.

² https://pubmed.ncbi.nlm.nih.gov/36423340/

³ The principles applied in this document can be applied to other sign languages but we will mainly use English as the source language and ASL as the target language.

since most arrive at school with no solid language base in English or ASL through which to learn how to read and write.⁴

This document focuses on "translation". Is this the same thing as utilizing an

interpreter? Interpreters are valuable resources when an in-person, real-time rendering of a message is necessary. However, interpreters have limited time to consider alternate renderings and are often not trained in translation techniques.⁵ In line with the differences in ASL translation and ASL interpreting, ASTM International, a globally recognized developer and publisher of technical standards for a wide range of services, has published two unique sets of standards: one for ASL translation and the other for ASL interpreting.

Whenever a rendering is needed that must be understood by a wide variety of deaf people and will be used over time, collaboration and cooperation with deaf professionals is necessary. This collaboration increases the odds that the deaf person is educated and included in the manner intended. This extra time for research, review, and revision makes translation the superior option when it comes to maintaining accuracy, dealing with complex terminology, or producing any trusted resource.

Why is following a translation standard necessary? Starting a sign-language translation project without clear standards can make the process longer, costlier, and less effective for deaf audiences. Drawing on established best practices helps you use time and resources wisely and gives your team the best chance of delivering a high-quality translation.

⁴ Pollard, R. Q. Jr. (2014, October 2). "What If Your Client is Deaf?" Atrium Experts Monthly Newsletter, 9(4).

⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8406595/

Under any conditions, simultaneous interpretation presents linguistic and cognitive challenges. The results sometimes suffer from inaccuracies...These difficulties occur not only in spoken language interpreting but during sight translation (on-the-spot translation from documents or directions provided during the visit) that are also interpreted...Translation tends to involve movement between a recorded form of one language into a recorded—not necessarily the same form— of another language. In this sense, "recorded" could include written text, audio recordings of spoken language, or video recordings of either spoken or signed languages.

How did these translation standards come about? These standards draw on decades of combined experience from deaf and hearing translators who have worked on thousands of signed-language projects. Over many months, that practical know-how was refined through research and collaborative review with the Cirrus Research and Writing Team (see page 1) and additional outside professionals. The result is a set of time-tested, community-vetted practices aimed at helping any team deliver translations that are accurate, culturally appropriate, and consistently accessible to Deaf audiences. These standards will reference internationally accepted standards from the book "Translation as a Profession" by Daniel Gouadec (2007, John Benjamins Publishing) and ASTM's F2575-23: "Standard Practice for Language Translation" (2023, https://doi.org/10.1520/F2575-23E02).

These standards propose four steps to a high-quality ASL translation: project coordination, translating, production or recording, and post-production.

Project Coordination is the beginning of a true partnership between the individual, customer or organization (herein referred to as "requester") and the project coordinator. This step includes the project's major decisions: your target audience, determining design and format, budget and time constraints. You will also be choosing your translation team and providing them with instructions, tools, and resources to complete the project.

Translation is best when it's the work of a qualified team of translators. This ensures that one person's bias or limited perspective does not negatively affect the translation. A team approach preserves the original message's intent, purpose, and tone in the ASL rendering. They ensure the final product is accurate, easy to understand, and expressed naturally.

Production involves setting up a recording studio, recording the final video of the ASL translation, and sending the video clips to the video editor for post-production.

Post-production is the final step where the video editor will use the recorded translation videos and other materials to create the final product.

Project Coordination

Project Coordination is a vital part of translation. Before translators sit down with English content, they need critical information about the project and its intent. Experience shows that using a project coordinator helps facilitate a high-quality ASL translation. For smaller projects, the project coordinator may function as a translator as well.

The first step is to have the requester define the needs of the translation project: its purpose, target audience, budget, and timeline. You would then select a project coordinator. An effective coordinator is an experienced ASL translator as well as a good communicator, organizer, and project manager. They should have experience interacting with deaf people. They also should understand each step of the translation workflow. They will be responsible for organizing the project and selecting personnel, ensuring the project is completed on time and within budget, managing the flow of materials between different steps of the workflow, and maintaining communication with the work provider. (Gouadec pp. 60–62 and ASTM p. 3)

The project coordinator clarifies the project objectives and the needs of the target audience. This step will guide subsequent decisions related to selecting personnel, translation style, workflow, video layout, cost, and production time frame. Afterward, the project coordinator will select the translation team for the project.

The project coordinator is responsible for determining the following:

1. Project Planning and Scope

- Overall vision of the project and its purpose and intent
- Target audience (employees, patients, students, parents, etc.)
- Price estimate for the project based on a specific number of translators, production, and post-production staff
- Deadlines for the project

2. Source Preparation and Assessment

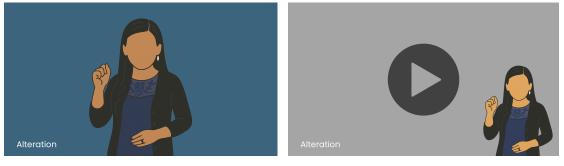
- Format of the source material (discharge papers, prescription information, forms, tutorial video, etc.)
- Careful analysis may reveal parts of the source material that can be condensed or omitted, thus reducing the amount of work involved and the cost of translation. An updated source text should be approved by the requester before translation begins.
- If the source material is a textbook or an exam, evaluate features such as images and charts. Consider how these may be presented in the ASL version. Images greatly increase the quality of the translation, especially with highly technical information. (ASTM p. 6) (Figure 1)



- Make sure images are available in the correct format and in high quality. If the images require permission to be used or edited, such permission needs to be obtained before translation begins. Because of the technical nature of this work, the requester could choose someone besides the coordinator to handle this.
- If the original format is audio or video (i.e., instructional video or podcast), a script should be provided so that content is accessible to deaf translators. Timestamps should be included to allow corresponding audio to be found quickly and enable translators to decide how much signing time can be allotted for a particular section.

- For audio or video content, consider timing restrictions for the translation. Ensure the signed translation will not exceed the length of the corresponding segments of the source material.
- Determine if certain terms should be presented in English to the target audience (i.e., deaf viewers need to see specific English terms and not just a sign with equivalent meaning). For these terms, on-screen text (OST) will need to appear alongside the ASL signer (Figures 2 & 3). The OST should appear at the same time the signer is referencing the key term and stay on-screen long enough for the viewer to read it.

Note: Text displayed on screen should not block the signer's signing space (face, hands and torso), nor should the signer cover the text or captions.







3. Team and Resource Management

- Who the translators will be to fill the various translation roles. (See glossary under Translation Team) For guidelines on recruiting talent for both translation and production teams see Appendix A: Selecting Team Members for best practices. (ASTM pp. 3, 6.2)
- What resources the requester will supply to assist the translators in understanding the source material. (ASTM pp. 8, 9.3.1)
- Prepare a contact list so that the project coordinator, subject matter experts, translators, signers, video editors, and technical support can reach out to one another.

4. Translation and Quality Control

- Decide how much authority translators will have to propose changes to the final product and how these suggestions need to be handled (i.e., OST, images, number of signers, etc.). Determine how they will be reviewed by the project coordinator.
- Determine how each member will collaborate, receive source material, and deliver translation files.

5. Production and Post-Production

- A production schedule outlining when agreed-upon sections will be completed and filmed.
- Follow any style guide or branding provided by the requester(logos, clothing, etc.). Some requesting organizations may have an established dress code.

6. Handling Future Revisions

 Develop a plan for how to handle future revisions to the source materials (i.e., textbooks, manuals, tutorials, etc.). The requester will provide the project coordinator with the updated materials and a breakdown of what sections need to be translated again. Ideally, the same translation team would be used to make the needed adjustments to the translation. An effort would be made to preserve the original look and feel when filming the updated video segments.

These decisions should be relayed to the translation and production teams. Gather the information requested above and use it to create a Project Information Summary to present to both teams.

Translation

At the core of these Standards is the process chiefly responsible for delivering high-quality translation: an iterative team process where each member has a specific focus. By having the team work synchronously, quality assurance is integrated into the translation process itself, enabling real-time reviews and ensuring greater accuracy and consistency from the start.

Team Kickoff Meeting

The project coordinator meets with the translation team for the project. They discuss the following:

- Review the Project Information Summary and all decisions made during the Project Coordination step. The project coordinator will note any questions from the team that need to be clarified by the work provider.
- Determine if a video glossary is needed to maintain consistency with any new or recurring ASL signs. For example, a video series with recurring names or terms should each be an entry with the English word and the ASL equivalent.
- Discuss how the final product will be presented:
 - For text-based (documents, books, etc.) or audio-only projects (podcasts, audio recordings, etc.), signers should be centered on a blank, neutral-colored background. (Figure 4)



Figure 4

 For videos, signers should be positioned off-center in front of the video using it as the background. Adjust the size and placement of the signers so as not to block content (Figure 5). Alternatively, it may be necessary to slightly reduce the size of the source video and move it into the opposite corner of the signer (Figure 6). This will create less overlap and less chance of blocking important visual information.



Figure 5

Figure 6

 In videos with multiple characters conversing in a scene, it may be necessary to use a separate signer for each character to help clearly identify who is talking (Figure 7). This same principle can be applied to text (i.e., questions/answers or content with two opposing views).



Figure 7

 Discuss options for the on-camera signer(s) role(s). Translators may help fill these roles; however, it is preferred to use a deaf person as the on-camera signer(s).

Analyze the Source Material

Translator(s) individually review the source material to:

- Analyze the target audience, tone, theme, and purpose.
- Identify how chapters or sections relate to each other. This will allow the translators to maintain the original document's consistency and coherence.
- Identify any technical terms that might not be readily known or familiar to deaf audiences. Use printed or online ASL dictionaries (i.e., ASLcore.org or SignASL.org) to find established signs for these terms. (Gouadec pp. 71-72) If no established signs exist, you may use the addition or expansion techniques of translation, using multiple signs to fully express a concept that is succinctly expressed or implied in the target language.
- If it has been decided that a video glossary is necessary, identify terms to add to it.

Pre-Translation Discussion

The translation team aims to harmonize their understanding of the source material and identify questions or challenges before beginning translation. This discussion should address the following:

- Review findings from the source material analysis and confirm all are in agreement.
- Address possible solutions to problematic terms or cultural adaptations. Take into account what would be unfamiliar to your audience.
- Discuss what register will be used based on the tone of the source material and target audience.

Note: Register indicates the level of formality and the relationship between the speaker and the audience. It is a variation of language used for a particular purpose or in a specific social setting.

- Consider the use of on-screen text (OST), images, or other visual aids. Contact the project coordinator with any image requests.
 - It may be helpful to create storyboards for each segment of the translation that shows how these visual aids will appear in the final video. (Figure 8)



Figure 8

Note: Decide how videos and pictures will appear on the final video at this stage so that the initial translation will be correct for the on-camera signer(s)'s eye gaze, pointing, position, etc. (Figure 9).





- During review of the source materials, some content may be unclear or foreign to the translation team. If translators are unsure of the meaning or intent, they would contact a subject matter expert to avoid any inconsistencies, errors, or delays while translating.
- For specific considerations based on media type (text, video, etc.), see Appendix C: Media Considerations.

Team Translate

Although there are a limited number of solo translators who can produce a high-quality translation for a small project, best practices are to have a three-member team, each with a specific role: lead translator, English reviewer, and ASL reviewer. The team will perform the following steps:

1. Divide the source material into smaller sections

 Text sources would be divided by paragraph and video sources divided where a new point is made. Do not take on so large a chunk of information that the team cannot effectively process it.

2. Translate as a team

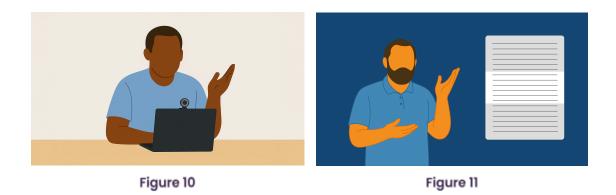
 Focusing on the first section, the lead translator signs a complete translation. The English reviewer can ask to have it repeated, and using the source material, identifies inaccuracies of meaning, intent, or tone. An effective strategy to determine the accuracy of sign choice is to ask the ASL reviewer to explain a particular concept from the initial translation through the eyes of the deaf audience. If the English reviewer does not have a translation solution for a piece of feedback, the lead translator provides ideas. (ASTM p. 9, 9.7)

3. Review

 Once the English reviewer is satisfied, the ASL reviewer reviews clarity, naturalness, intended impact, and any cultural sensitivities that need to be addressed. The team works at solutions. These steps are repeated until the entire team is satisfied. It is this quality assurance loop that produces a high-quality translation. (Gouadec pp. 75-79)

4. Record

 When the team agrees on the section's translation, they record it. This is not the final recording but the initial recording. Film the initial translation with sufficient quality so that later, in the production step, the on-camera signer(s) will be able to easily copy the signed translation in the studio. (Figures 10 & 11)



5. Review the initial recording clip

• Check for accuracy, clarity, and naturalness. If necessary, re-record it.

6. Upload

• Make all initial recording clips available for the final recording team per the Project Information Summary instructions.

7. Media Needs.

 Communicate any OST or image needs to the project coordinator and/or video editor.

For more tips on working together as a translation team, see Appendix B: Translating Efficiently and Effectively.

Quality Assurance Check

The project coordinator will perform a quality assurance (QA) check on the translation as it is completed. How and when this will be done can be determined by the project coordinator. These checks may be at certain predetermined time intervals or when certain amounts of content have been translated. (Gouadec pp. 81-82) The completion of these QA checks would be communicated to the work provider. (Gouadec pp. 79-80)

Production

Studio Setup

Setting up a professional recording studio is the best execution method for recording high-quality video. The studio should include the following:

- Video equipment
- Lighting
- Prosumer or professional camera
- Tripod
- Video capturing device
- A backdrop
- Computer with recording software

For details on the technical specifications for setting up a recording studio, please see Appendix E: Recording Room Setup.

Pre-Recording Preparations

Before final recording begins:

- The number of signers should be decided on.
- The project coordinator and translation team will determine the deadline for completing the recording.
- Using the deadline, a filming schedule with daily goals is prepared to keep the final signing on schedule. This schedule should include any rest days needed by the on-camera signer(s)(s). If the filming begins to fall behind schedule, notify the project coordinator.

- Prepare materials for the on-camera signer(s). Provide the on-camera signer(s) with the initial translation ahead of time so they can watch and begin practicing. Clearly indicate which roles and sections they will be signing. They should be ready to ask questions on anything they do not understand. Though they may make suggestions, they typically would not try to re-translate the initial translation but rather work to enhance it with delivery (i.e., facial expressions, pausing, emphasis, etc.).
- Decide on wardrobe/hairstyle for each signer. See direction below under the heading "Signer's Clothing, Accessories, and Hair Styling."
- Decide where signers will appear on the final video. If signers will be looking or pointing at specific video elements, a preview TV with live green screen would help them see where to point. Otherwise, before final recording, a test clip would be recorded and put into the editing software to help the signer know where to look or point.
- Create a shot list. This helps organize the filming process by specifying which signers will be filmed in what order based on the project's requirements. It includes details about the number of lines each signer will deliver, the sequence in which they will be filmed, and any specific shots or angles needed. It ensures that all necessary footage is captured, minimizes disruptions like wardrobe changes, and reduces the risk of missed lines. Additionally, a shot list helps in tracking and saving the footage systematically, making it easier to review and edit the material later.
- Have a pre-recording meeting. The on-camera signer(s) and the translation team will meet to discuss overall tone, purpose, audience, etc., as well as the availability of the on-camera signer(s).

Signer's Clothing, Accessories, and Hair Styling

It is vital that clothing, accessories, and hair styling choices are selected prior to filming to ensure the signer is clear to the viewers and avoid problems during video editing. Solid color clothes should contrast with skin tone. Avoid busy patterns, white, bright, and green colors. Clothing should not bunch or pull while signing and should be clean and neat, without sweat or other stains. A on-camera signer(s) should have several different clothing options available in case one does not work well. Hair should be neat and should not cover facial expressions. Longer hair may require small clips or ties in a neutral color. Avoid visually distracting jewelry, long fingernails, and any white, bright, or green nail colors.

Having the signers wear clothing of similar style and color to the on-screen character or speaker helps the viewer to easily identify who is speaking and helps to reduce confusion and distraction (Figure 12). The translation and production teams can work together to decide on colors and wardrobe. The project coordinator may have input from the work provider. (See Organizing step, point 5.)



Figure 12

Also consider if the signer's clothes should reflect the nature of the source material. For example, if the source material is a courtroom video with attorneys in suits, the signer may also wear a suit. (Figure 13)



Figure 13

Note: Signers should wear solid colors that contrast with their skin tone. The deaf audience may be distracted by clothing that reveals too much skin, certain jewelry, or hairstyles that shift during signing. This distraction may extend to other more permanent features such as visible tattoos, facial piercings, nail art, etc. Decide whether or not to allow these in the final translated video.

Final Recording Process

Before beginning a new recording project, review Appendix F: Recording Session Checklist.

Sometimes the on-camera signer is not part of the core translation team—especially when a well-known Deaf presenter or an exceptionally skilled signer is chosen to elevate the final product. When this happens, at least one translator from the team should serve as a recording coach, guiding the signer and ensuring the performance aligns with the approved translation.

- Coaches briefly review the tone and purpose of each section with the signer.
- The on-camera signer(s) will watch and practice signing the translation.
- Coaches advise the signer on ways to improve clarity and/or naturalness. Some minor adjustments can be made, but these should not affect the accuracy or intent of the source material. Coaches should be careful not to demand perfection. Continuing to record the same section repeatedly looking for a "perfect" recording will often result in wearing the signer out and losing naturalness.
- The signer should know where videos and pictures will be shown on the final video, as this will affect their eye gaze, pointing, position, etc. The technician or video editor will provide support to ensure these sections are recorded properly.

- Although the translation team may have agreed on where to put breaks in the final video, they should be mindful of the on-camera signer(s)(s) and recognize if they would benefit from more breaks to produce a higher quality product. The signer(s) and any coaches will work with the technician to decide on where to modify the breaks. If breaks are added, verify that the overall message of the translation remains clear and cohesive.
- When the signer completes a video clip, the coaches review it together, and if necessary, have them sign it again to ensure the final clip is accurate, clear, and natural. Coaches should keep track of all completed takes whether they are approved or not. Use specific file names to indicate which clips are incomplete, will be kept as a backup, or are approved for the final video. Clear file names are important so that the video editor can easily identify the approved clips to use for the final video.

Technical Troubleshooting

The technician should be knowledgeable about the studio equipment and will be responsible for troubleshooting most studio technical problems. The video editor can help make sure the final clips are of good quality. If a technician is not available, the video editor may be able to help with some studio equipment problems.

Post Production

Edit The Final Video

Effective editing is strongest when the editor is comfortable with both post-production techniques and the signed language featured on screen. Familiarity with ASL, for example, helps the editor make precise timing and framing choices, while solid technical skills ensure a polished visual result. If one person does not bring both strengths, the project manager may choose to pair a skilled video editor with a fluent signer so that linguistic accuracy and production quality are addressed together.

The project coordinator will provide the video editor with the necessary items to create the final video(s) and additional target material if required. These items will include: the project information summary, final approved clips from the recording sessions, and any document or files that contain translation decisions that may affect the format, signer placement, etc., of the final video. During the editing process, the editor should contact the project coordinator with any questions.

In addition to the materials from the project coordinator, the video editor will set up any necessary video production assets (backgrounds, images, custom effects, OST, logos, etc.). Then the video editor edits the final video and exports to the preferred file format (file size, resolution, file type, etc.).

Edit Video Quality Assurance Check

The video QA checker is responsible for quality assurance of the technical aspects of the final video product. The checker should be proficient in sign language and an experienced video editor. Although they will not be reviewing the translation itself, they need to make sure video elements do not conflict with the signing. For example, only a QA checker proficient in sign language would know that a video clip is in the wrong place in the timeline or that OST is coming on at the wrong time. The checker confirms that all video elements are placed correctly in the timeline and checks the following:

- Chroma key
- Color and lighting
- Signer positions
- Transitions
- OST and graphics spelled correctly and appear/disappear at the appropriate times
- Correct background media
- Client's preferred video format has been used

Delivery and Distribution

Once finalized, the project coordinator delivers the target materials to the work provider.

Archive

Once the project is complete, the project coordinator determines what project materials should be kept and for how long. Compress the materials and put them in long-term storage. We recommend keeping the project information summary, final recording clips, the editing project, and the final delivered videos.

Appendix A - Selecting Team Members

Translation Team

Begin by forming a pool of translators and signers. There are many advantages to using native ASL translators; meaning translators who are deaf or the children of deaf adults (CODAs). Any non-deaf candidates should be fluent in both English and ASL. All candidates should be experienced with deaf culture and community. They should also be familiar with this translation process and workflow. The project coordinator will make selections for each project based on translators' skills as well as linguistic and cultural experience.

While auditioning each candidate, the project coordinator looks for each candidate's strengths and weaknesses. For example, a candidate may be adept at producing excellent translations from the source material but lacks the "acting skills" to feel comfortable in front of the camera. This individual would serve well in a translation role but not as the on-camera signer(s) of a video. Another candidate may have little to contribute while translation is happening but is skilled at making a good translation better through their facial expressions and prosody. They would be best used as an on-camera signer(s). Keep in mind some candidates may just need some focused training to expand their skill set.

If the candidate is a fluent English speaker, prior to meeting with the project coordinator, they should be given a sample of the English text or videos to translate that reflect the type of content your project would include. The candidate would translate the sample on their own and record themselves. This would be their audition and would be sent to the project coordinator.

If a deaf candidate is fluent in ASL but not English, they should be given signed videos and be asked to improve the language of the videos, making it easier to understand and more natural. They could also be asked to copy the signing of certain ASL videos. Their rendering of the message should be recorded and will serve as their audition. The following are the essential criteria to use when evaluating the candidate's audition video and during the recruitment interview:

ASL Proficiency: Look for fluency, clarity, and accuracy in their signing. They should demonstrate a strong understanding of ASL grammar, syntax, and vocabulary.

English Proficiency: The candidate should demonstrate the ability to comprehend complex English texts and accurately translate them into ASL, ensuring that the original meaning, tone, and intent are preserved. Strong English skills are essential for interpreting nuances and delivering a faithful ASL translation.

Expressiveness: Evaluate the individual's ability to convey emotions and nuances through their signing. They should be able to effectively communicate the intent and tone of the content they are signing.

Note: A candidate may be a skilled translator but not have all the expressiveness necessary to serve as a on-camera signer(s).

Cultural Competency: Consider the candidate's understanding and respect for deaf culture and community as well as any social or ethnic communities. Look for cultural sensitivity, awareness of deaf community norms, and respect for cultural nuances in their signing.

Adaptability: Assess the individual's ability to adapt their signing style and pace to different types of content, whether it is designed for children, seniors, women, men, etc. They should also be able to adjust their signing to fit the tone and style of the source material.

Collaborative Skills: Consider the individual's ability to work collaboratively with other team members, including directors, producers, and other signers. They should be open to feedback and able to incorporate changes or adjustments into their signing as needed. **Professionalism**: Look for punctuality, preparedness, and a positive attitude during the audition and interview process. They should demonstrate a commitment to delivering high-quality work consistently.

Previous Experience: Consider any previous experience the individual may have in ASL translation or productions. For example, if a on-camera signer(s) has experience in acting or performing arts, this would be beneficial.

Audition Performance: Look for confidence, stage presence, and the ability to engage the audience through their signing.

Production Team

During video production, you will need a on-camera signer(s), translation language advisor(s), filming technician, and in some instances, an interpreter. One or two of the translators will serve as translation language advisor(s) to assist the on-camera signer(s) in expressing the translation accurately and naturally. The filming technician is experienced with video production and will assist with the initial setup of the recording equipment. They operate the camera and lighting equipment or train the translators to handle this work throughout the filming.

If some of the personnel on the production set are not fluent in sign language, an interpreter may be needed. The interpreter would only be used for on-set communication and would not be used as a on-camera signer(s).

Post-Production

The video editor should have the necessary equipment, software, and skills to edit the final recordings into the target material following the project decisions made earlier in the workflow. Additionally, an edit QA checker will be assigned to check the editor's work against the instructions, project decisions, and standards set forth by the other team members earlier in the workflow process. This role requires proficiency in sign language and high attention to detail.

List of Personnel Required

Job Title	
Project Coordination	Project Coordinator
Translation	Lead translator, English Reviewer, ASL Reviewer, Subject Matter Expert*
Production	On-camera signer(s), Translation Advisor(s), Technician, Interpreter*
Post Production	Video Editor, Edit QA Checker

*When needed

^Translator(s) can be the On-camera signer(s) or Language Advisor

Appendix B - Translating Efficiently and Effectively

Translators are encouraged to keep the project's goals—and the clarity of the message—at the center of their decisions, setting personal preferences aside when necessary. When differing ideas emerge, look for ways to weave them together; combining perspectives often leads to an even stronger solution that satisfies the whole team.

Working as a team: Mutual trust lays the groundwork for productive collaboration. When the lead translator receives feedback, a brief pause to explore why the suggestion arose can be illuminating: What gap or ambiguity might it highlight? Could a blended solution satisfy everyone and even strengthen the original idea? If reviewers can show how the current wording might be read another way, that insight points to a genuine need for refinement. By recognizing how a line could be interpreted—or misinterpreted—the team can preserve the intended message and tone. Put accuracy first, clarity next, and natural flow after that.

Naturalness: Instead of replacing the original translation idea outright, take a moment to consider whether a small refinement might achieve the desired clarity. Often, a subtle tweak is all that's needed to enhance understandability. Aim for the precision of a scalpel—fine-tuning what works—rather than the broad strokes of a shovel.

Timing Considerations: Timing constraints may at times be necessary. One example could be a school administering a written test. The requester may desire that Deaf students spend no more time watching the signed version than their hearing peers spend reading the written text. In such cases, timing is managed primarily in the translation phase. Experienced translators apply techniques that could include using an economy of signs or omitting non-essential details so the signed rendition conveys the critical points within the desired timeframe.

Appendix C - Media Considerations

The type of source material will influence your translation decisions. We have selected a few examples below for you to consider.

Written Material

Be careful of any implied meanings in the source text. Text formatting features can convey various meanings to the reader, such as structuring content with titles and headings, helping to enhance comprehension and emphasize important information. Some text formatting features that have meaning to the reader include:

- Font size and styles
- Bullet points and numbering
- Indentation
- Hyperlinks
- Text effects
- Whitespace

Understanding the intent of these features will help translators determine an equivalent rendering in the ASL translation. Equivalent features in the translation could include:

- OST or symbols such as chapter and paragraph markers
- ASL indexing (signing "1st," "2nd," "3rd," etc.)
- Use of different video transitions. For small transitions between paragraphs, have the signer dissolve and then reappear while keeping the background visible. For a subheading or chapter ending, fade both the signer and background to black
- A secondary signer to sign footnotes or tangential information

• Reference to other parts of the document or video

Additionally, the ASL translation video of the document can have the original document displayed beside the signer with the current paragraph or sentence highlighted or enlarged. (Figure 14)



Figure 14

Audio/Video

Hearing audiences can simultaneously process visual and auditory information, such as watching a newscaster while listening to their voice. In contrast, deaf viewers must switch their gaze between the ASL interpreter and the video, risking missing information. Translation teams should consider methods to ensure deaf viewers can follow both the action and dialogue by: condensing the translation to essential information, timing it to show before or after the action, or integrating the dialogue with the action scene, prompting viewers to watch the scene when the signer does.

The translation may need to fit timing constraints. For example, when the ASL signer is superimposed with a video as their background, the translation team should remember to leave time before and after each line or section for the signer to fade in and out. In the recording phase, the final translation video should line up with the source video.

Determine how to handle any audio information not represented visually. For example, a loud crash heard from an unknown source would need to be narrated; however, non-essential dialogue happening in the background may be distracting and thus omitted. In a documentary or interview, the video may cut away from the original speaker and another individual may begin speaking while still off camera. The signer would explain that a new person is speaking before signing their lines.

Appendix D - File Management and Confidentiality Standards

File Management

File management is crucial to ensure the target material reaches completion by the determined deadline. From receipt of the source material to delivering the target material, there should be a system in place to save and transfer needed files. Having a standardized folder structure and naming convention will allow seamless collaboration from each part of the team, from the organizers to the translators to the signers to the editors.

No matter the applications, programs, or drives used, the team will need access to the source material, translation materials, recording files, and target material. This shared system allows for a collaborative workflow and, in case someone is filling in for someone else, they can easily keep the work moving.

Confidentiality Standards

Confidentiality standards for handling materials from vendors, especially in the context of translation, editing, and content production, are crucial to maintaining trust and integrity in business relationships. Here are some key confidentiality standards you might consider implementing:

- Non-disclosure Agreements (NDAs): Have vendors sign NDAs before they gain access to any sensitive materials. NDAs legally bind them to keep the information confidential and prevent them from disclosing it to third parties.
- **Limited Access**: Restrict access to sensitive materials only to those individuals who need it to perform their duties. Implement secure access controls, such as password protection and encryption, to prevent unauthorized access.

- **Data Encryption**: Utilize encryption techniques to protect sensitive data during transmission and storage. This ensures that even if the data is intercepted, it remains unreadable to unauthorized parties.
- **Secure Storage**: Store sensitive materials in secure locations, both physically and digitally. Use secure servers, cloud storage solutions with strong encryption, and physical security measures to prevent unauthorized access.
- **Employee Training**: Provide comprehensive training to employees and vendors on the importance of confidentiality and the proper handling of sensitive materials. Ensure they understand the consequences of breaching confidentiality agreements.
- **Regular Audits and Monitoring**: Conduct regular audits and monitoring of systems and processes to ensure compliance with confidentiality standards. Monitor access logs, review security protocols, and promptly address any potential vulnerabilities or breaches.
- Secure Communication Channels: Use secure communication channels, such as encrypted email and messaging platforms, when sharing sensitive information with vendors. Avoid using unsecured channels that could be vulnerable to interception.
- **Document Destruction**: Implement policies and procedures for the secure destruction of sensitive materials once they are no longer needed. Use shredding services for physical documents and secure data deletion methods for digital files.
- **Vendor Oversight**: Maintain ongoing oversight of vendors to ensure they adhere to confidentiality standards. Conduct periodic reviews of their practices and performance, and address any concerns or issues that may arise.

By implementing these confidentiality standards and procedures, you can help safeguard sensitive materials and maintain the trust and confidence of your clients and partners.

Appendix E - Recording Room Setup

Studio Setup

Here are the technical needs when setting up a space for sign-language recording:

- Distance between green screen and camera: 10-18 feet (3-5.5 meters)
- Width of green screen: At least 6 feet (2 meters)
- Distance between camera and signer: 8-13 feet (2.75-4 meters)
 - CAUTION: If the distance is less than 8 feet (2.75 meters), the signer's hands will appear distorted on the final recording.
- Distance between backdrop and signer: 2-5 feet (60cm-1½ meters)
 - CAUTION: If the distance is less than 2 feet, shadows could appear on the backdrop and cause problems in video editing.
- Mark the floor where the signer should stand. (Figure 15)

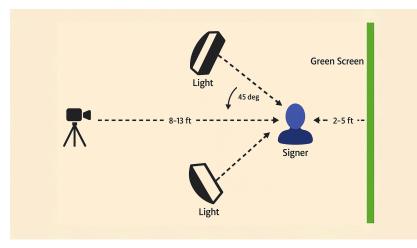


Figure 15

Equipment Requirements

Camera

Specifications:

- Prosumer or professional camera capable of at least 1080p recording at 30 fps or 60 fps.
- Clean HDMI output is needed if capturing to a computer. This means no camera icons, setting graphics, or data indicators are displayed on the output video.
- Manual adjustment of Shutter Speed, Iris, and White Balance.
- Optical Zoom. Digital zoom will reduce the video quality and should not be used.
- Phone cameras do not often have the necessary features and should be avoided. However, if a phone is the only option, it should be one with optical zoom, and a professional camera app that allows for adjustments to white balance, shutter speed, and iris should be used.
- Set on a tripod and adjust height to eye level.
- Keep the camera plugged in rather than using batteries.
- Use a video capturing device connected to a computer with capturing software via HDMI cable, or use an SD card to record clips.

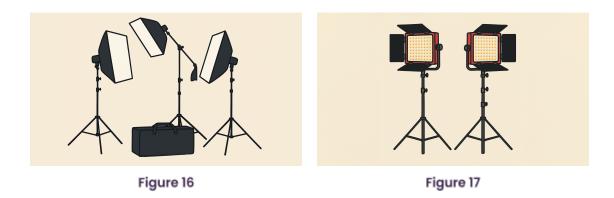
Camera Settings

Camera settings should be readjusted 1) at the start of the recording session, 2) when a different signer is used, and 3) if the camera loses power.

- Set to manual mode.
- Set the Shutter Speed:
 - 1/60 minimum for 30 fps recording
 - 1/120 minimum for 60 fps recording
- Set the Iris to 0db. Increasing the iris could add "grain" to the video.
- Set the white balance. Do not use auto white balance because it will change the color tone in the middle of the recording.
- Some cameras allow you to manually set the color temperature. Set it to the same color temperature as the recording lights.
- Cameras without this feature should be able to lock the white balance to a white object.
 - Hold/place a white cardboard or paper where the signer will stand.
 - Zoom in so the white object fills the picture.
 - Select the option on the camera to set the white balance to the white object. A message should appear that the operation is complete.
- Frame the signer: The top of the frame should be a few inches above the signer's head and the bottom of the frame should be at the waist.
- Set the focus so the face and eyes of the signer are clear.
 - Select auto focus, wait a few seconds, then switch to manual focus.
 - <u>Do not leave auto focus on</u>. The recorded clips will become blurry as the signer's hands move and the camera "hunts" for something to focus on.

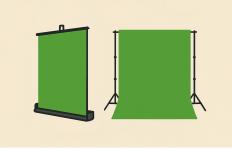
Lights

- The goal is to have soft, even light on the subject and reduce distracting shadows.
- Use 2 or 3 LED lights with diffusion on light stands.
 - Option 1: Softbox lights. The fixture should have sockets for 5 or 7 bulbs to allow for the most flexibility in lighting options. (Figure 16)
 - Option 2: LED panels with diffusion. While not required, some models allow for adjustments to color temperature and lumens. (Figure 17)
 - Color temperature: Daylight. 5000K or 5600K.
 - Lumens: Approximately 30,000 lumens for all lights combined. An example: 3 softbox lights with a 7-bulb head should use bulbs with about 1,500 lumens each.
 - Make sure each light is adjusted the same: lumens, color temperature, brightness, etc.
- Position the lights about 3 feet (1 meter) from the signer at 45-degree angles.
- Point the lights slightly up as needed to reflect off the ceiling for additional diffusion.
- Keep the lights plugged in rather than using batteries.
- Prepare temporary blackout shades for any windows.
 - CAUTION: Do not use natural sunlight. This will cause variations in brightness and cause problems later during video editing.



Backdrop

- Use a green screen at least 6 x 6 feet (2m x 2m). Larger green screens are recommended.
- Use a simple kit with stands to hold the green screen up. (Figure 18)





- Avoid wrinkles. If a cloth backdrop is folded and stored between recording sessions, use a clothing steamer at the start of each recording session.
- Remove shadows. Additional lights can be used to reduce shadows.

Calibrating the Equipment and Troubleshooting Problems

- The video editor should check test clips on the editing software 1) at the initial installation of the studio, and 2) whenever the equipment is adjusted.
- Picture is too dark:
 - Try increasing the brightness of the lights.
 - Softbox lights with multiple bulbs: Add bulbs.
 - LED panels: Increase the brightness.
 - Try adding a light.
 - Try repositioning the lights so they point more directly toward the signer.
 - Sometimes the lights become too bright and uncomfortable for the signer. In this case, reduce the lights until comfortable, then make very small increases to the camera's shutter speed and iris.
 - WARNING: Too many adjustments to the shutter speed and/or iris will cause "grain" in the video.

Computer and Video Capture Device

- Minimum 16 GB RAM
- Video capture device:
 - Option 1: HDMI to USB capture device. This is a good option for notebook computers.
 - Option 2: PCI video capture card installed in the PC. This is a good option for desktop computers.
- Make sure you have an HDMI cable to connect the camera to the capture device.

- Software:
 - Open Broadcasting Software (OBS)
 - QuickTime (Mac Only)
- Capture at minimum 1080 progressive and 30 fps. Prevent dropped frames.

Appendix F - Recording Session Checklist

Did you:

- Check your wardrobe, hair, and accessories?
 - □ Wardrobe contrasts your skin color
 - 🗌 Wardrobe is clean, neat, and does not pull or bunch
 - □ Hair does not hide facial expressions? In place so it won't fall?
 - Remove distracting accessories? (Jewelry, long nails, bright colors)
 - □ If using a fan, is it causing movement on clothing, hair, or backdrop?
- Check camera settings and frame the signer?
 - □ White balance
 - □ Focus
 - □ Top of the frame is a few inches above the signer's head
 - Bottom of the frame is at the waist
- □ Turn on recording lights? Check for any burned out bulbs?
- □ Turn off all other room lights?
- □ Black out the windows?
- Record a short clip, using several large signs in high, medium, and low positions?
- Send the test clip to the editor and get approval to proceed?

Glossary

Terms

Initial Translation - The original translation video made by the translation team. This differs from the final translation video that would be recorded later in a studio.

Final Translation - The version of the translation produced in the studio. This version will be made available to the work provider.

Interpret - Convey messages between sign language and spoken language. Interpretation is generally used for one-time communication access between parties. Since it is usually performed simultaneously, it is considered of lower quality than translation.

Project Information Summary - A summary of the project created by the project coordinator. After consulting with the work provider, they compile the summary and provide it to the translation team.

Source Material - The original material that will be translated into ASL. Format may vary (e.g., textbooks, exams, videos, podcasts, etc.).

Target Material / Final Video - The final ASL video. Format may vary (e.g., signer on a neutral background, signer in front of the source video, etc.).

Translate - Express the sense of words, text, or other content in another language. Translation produces a high-quality target text with the goal of cultural and linguistic equivalency.

Translation Team - The team is typically made up of three translators. The lead translator presents the first idea for the section being translated. The English reviewer verifies the message's intent and tone are preserved. The ASL reviewer provides feedback to make the translation easy to understand and natural.

Video Glossary - A collection of reference videos for a project that give the ASL equivalent for recurring terms, names, or places.

Roles

ASL Reviewer - Translation team member fluent in ASL and skilled in understanding deaf culture and various deaf audiences. The ASL reviewer is preferably deaf. This team member will assist the signer to sign clearly, accurately, and naturally.

Edit QA Checker - Responsible for quality assurance of the technical aspects of the final video product (e.g., correct transitions, OST spelled correctly, correct background media, client's preferred video format has been used, etc.). Preferably proficient in ASL and an experienced video editor.

English Reviewer - Translation team member who is an experienced translator responsible for checking accuracy of the signed translation and suggesting adjustments to the translator.

Filming Technician - Assists with setup of the recording equipment. Operates camera and recording and lighting equipment.

On-camera signer(s) - Preferably a deaf person who is a role model or leader in the deaf community and who can connect with the target audience. They work in the studio as a part of the production team.

Lead translator - On the translation team, this translator develops the initial translation ideas and then implements the feedback of the English and ASL reviewers.

Interpreter - Responsible for communication needs between any non-signing and deaf team members. This person is not used for recordings. It is preferred that all team members be fluent in ASL whenever possible.

Project Coordinator - An experienced translator fluent in ASL and English. They are responsible for keeping the project on time and within budget. They organize the project and personnel and manage the flow of materials between each step of the workflow (Project Coordination, Translation, Production, Post-Production). They would also be responsible for approval of the final translation. They make sure any necessary artwork/photo credits are obtained and included in the target material.

Recording Coach - One or more members of the translation team that will advise the on-camera signer(s) in the recording studio. They will give feedback based on the project's purpose and tone, the target audience, and overall clarity of the message.

Subject Matter Expert - Professional in the field related to the source content. Does not need to know ASL. Available to the translation team as a resource for answering content questions.

Translator - Fluent in either English or ASL and skilled in the translation process with an understanding of deaf culture and the deaf community.

Video Editor - Responsible for compiling all elements for the target video and combining the signed clips with any other media to produce the final video product. If possible, they should be proficient in sign language.

Requester- Produces, or comes into possession of, material which needs to be translated in part or in whole (the material may be produced by the work provider, produced on their behalf, or received from some other source). Generates the specific translation requirements, often including an outline of the budget.