BHARATHIDASAN UNIVERSITY

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Centre for Differently Abled Persons

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Unit IV

Features of Indian Sign Language



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CENTRE FOR DIFFERENTLY ABLED PERSONS

Features of Indian Sign Language

Visual and Spatial Language:

- ISL uses gestures, handshapes, facial expressions, and body language to convey meaning.
- It relies on spatial relationships and visual elements rather than auditory signals.

Grammar and Syntax:

- ISL has its own grammar that differs significantly from spoken Indian languages.
- It often follows a Subject-Object-Verb (SOV) word order, which can vary depending on context.

Regional Variations:

- While ISL is becoming standardized, there are still regional variations due to linguistic and cultural diversity in India.
- Efforts are underway to unify and promote a common ISL framework.

Fingerspelling:

 A manual alphabet is used in ISL for spelling out words, especially for proper nouns or technical terms.

Indian Sign Language (ISL) in Specific Fields

1. Education

 The use of ISL in education is critical for inclusive learning, especially for students who are Deaf or hard of hearing.

Applications:

Deaf Schools:

- ISL serves as the primary mode of instruction in many schools for the Deaf, enabling students to fully participate in the learning process.
- Teachers trained in ISL create lesson plans that align with the linguistic needs of Deaf students.

Indian Sign Language (ISL) in Specific Fields

Inclusive Education:

- Some inclusive schools integrate ISL interpreters to facilitate communication between Deaf and hearing students.
- Peer learning is encouraged by teaching basic ISL to hearing classmates.

Teacher Training:

- Training programs certify educators in ISL, ensuring they can effectively teach Deaf students.
- Organizations like ISLRTC conduct workshops for teachers.

Digital Resources:

- E-learning platforms offer video-based lessons in ISL.
- Educational apps and ISL dictionaries help students learn complex subjects like science and math in their native language.

Challenges in Education field

- Shortage of ISL-trained teachers.
- Limited access to ISL learning materials in rural areas.
- Over-reliance on oral or written teaching methods in some schools, which can alienate Deaf students.

ISL in Healthcare

Access to healthcare can be life-saving, and ISL plays a crucial role in bridging communication gaps between Deaf patients and healthcare providers.

Applications:

Medical Interpreters:

- Hospitals and clinics are increasingly employing ISL interpreters to assist Deaf patients.
- Interpreters convey medical advice, diagnoses, and treatment options.

ISL in Healthcare

Telemedicine:

ISL-enabled telehealth platforms allow Deaf individuals to consult with doctors remotely.

Video calls with ISL interpreters or signing doctors ensure accurate communication.

Health Awareness Campaigns:

Public health messages, such as those about COVID-19 precautions or vaccination drives, now include ISL interpreters on TV and digital platforms.

Training Healthcare Workers:

Workshops train healthcare professionals in basic ISL, empowering them to communicate directly with Deaf patients.

ISL in Healthcare

Challenges:

Limited availability of ISL interpreters in rural healthcare settings.

Lack of awareness among healthcare providers about ISL and Deaf culture. Few medical professionals fluent in ISL.

Technology

Technology is a powerful enabler for the Deaf community, and ISL has seen significant advancements in this domain.

Applications:

Sign Language Recognition Systems:

Al-based tools are being developed to recognize ISL gestures and translate them into spoken or written language in real-time.

Examples include hand-tracking apps and wearable devices.

Educational Apps:

Apps like **SignAble** and **Sign Learn** teach ISL vocabulary and grammar to both Deaf and hearing individuals.

Interactive games make learning ISL engaging for children.

Video Platforms:

Platforms like YouTube and social media feature ISL-based content, including news, tutorials, and entertainment.

Video calling apps now include features for better visibility and clarity for signing.

Digital Accessibility:

Websites and government portals are incorporating ISL videos to make them accessible.

Virtual assistants with ISL capabilities are under development.

Innovations:

Gesture-to-Speech Tools:

Prototypes are being tested to convert ISL gestures into audio output for seamless communication.

Virtual Reality (VR):

VR simulations are used for ISL learning, providing an immersive experience.

Sign Language Avatars:

Digital avatars capable of signing in ISL are being developed for automated customer support and public service announcements.

ISL In the Workplace

•Training Programs:

- •Train employees in basic ISL to communicate with Deaf colleagues.
- Conduct sensitivity and awareness workshops on Deaf culture.

Accessible Meetings:

- Provide ISL interpreters during meetings and training sessions.
- Use captions and ISL videos for internal communications.

•Customer Service:

- Equip customer-facing employees with ISL skills.
- •Introduce ISL-enabled customer service desks or video assistance.

ISL in Public Spaces

In Public Spaces

- Sign Language Interpretation:
 - •Include ISL interpreters at public events, conferences, and cultural programs.
 - •Ensure ISL interpretation for announcements in transportation hubs like airports and train stations.

Accessible Signage:

- Add ISL visual guides in museums, parks, and tourist attractions.
- •Use QR codes linked to ISL videos for information boards.

Libraries and Resource Centers:

- Stock books, videos, and digital resources on ISL.
- •Organize community events like ISL storytelling sessions.

ISL in Media and Entertainment

In Media and Entertainment

- •Television and Online Media:
 - •Include ISL interpreters in news broadcasts, government announcements, and shows.
 - •Encourage ISL captions for digital content, movies, and advertisements.

• Sign Language Films and Theatre:

- •Support Deaf actors and ISL-based productions.
- Promote ISL storytelling and performances in mainstream cultural events.

•Social Media:

- •Create and share ISL content on platforms like YouTube, Instagram
- •Raise awareness by hosting ISL challenges or campaigns.

ISL in Personal Life

• Family Learning:

- Encourage families of Deaf individuals to learn ISL.
- Practice ISL at home for everyday conversations and interactions.

•Community Engagement:

- •Attend Deaf community events to practice and understand ISL in real-life settings.
- •Join local or online ISL learning groups.

Government and Legal Systems

Government and Legal Systems

- •ISL in Public Services:
 - •Train government employees to communicate with Deaf citizens.
 - Provide ISL interpreters for legal proceedings and government offices.
- Awareness Campaigns:
 - •Include ISL in public safety messages, like disaster management and road safety campaigns.

Challenges:

High costs of developing advanced ISL technologies.

Limited standardization in ISL gesture recognition systems.

Low digital literacy among some segments of the Deaf population

Way Forward

Way Forward

Policy Support:

Mandatory ISL interpretation in critical services like education, healthcare, and government programs.

Funding for research and development of ISL technology.

Training and Awareness:

Training programs for educators, healthcare workers, and tech developers in ISL.

Public campaigns to raise awareness about ISL and its importance.

Integration of ISL into Daily Life:

Teaching ISL in schools for both Deaf and hearing students.

Encouraging businesses to adopt ISL in customer service and workplace communication

Benefits of Integration

Benefits of Integration

- •Inclusion: Ensures equal participation for Deaf individuals in all aspects of life.
- Awareness: Promotes understanding and respect for Deaf culture.
- •Communication: Reduces barriers, improving relationships between Deaf and hearing communities.