

Application of Audiovisual Education Theories and Communication Models in Korean Speech Education*

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* This work was supported by Incheon National University Research Grant in 2023.

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I. Introduction

The ability to understand and utilize audiovisual materials is a key competency in media literacy, as it involves the capacity to express content and meaning through various forms such as text, images, photographs, charts, and graphs, known as multimodal texts. This skill is an essential aspect of Korean language and literature education proficiency. One of the most prominent examples of conveying complex data in a clear, concise, and persuasive manner is the use of information graphics. A representative case is Florence Nightingale's Rose Diagram, which visually depicts the causes of death among soldiers during the Crimean War, categorized by month (Nightingale, 1859). Through this graphic, Nightingale effectively illustrated that the primary cause of death among British soldiers during the war was disease, rather than battle wounds, highlighting the devastating impact of infectious diseases.

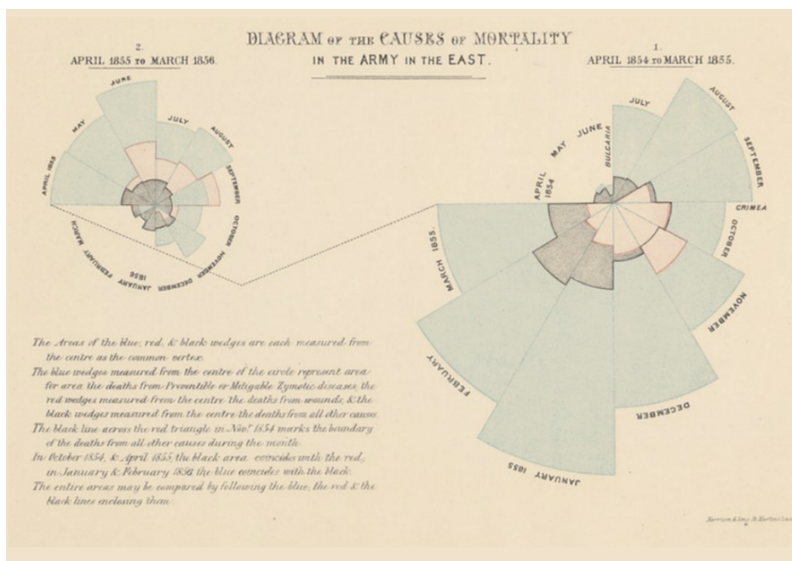


Figure 1. Nightingale's Rose Diagram (1859)

Since the 2020s, the rapid advancement of artificial intelligence technologies has significantly accelerated digital transformation. Traditional information graphics, which visually represent the structure of complex data, have evolved into motion graphics through integration with video content. Additionally, they have advanced into interactive content that responds in real time to user input. Motion graphics combine static visuals with graphic design and animation, dynamically conveying messages through visual motion, and are frequently used in video content alongside music. Interactive content has evolved further, becoming a personalized form of information and motion graphics. It dynamically changes or responds based on user input and is widely utilized across various digital environments.

As traditional texts rapidly shift into digital multimodal forms, digital communication is evolving in ways that conventional audiovisual education theories or communication models struggle to explain. In

Korean language and literature education, the importance of media literacy is emphasized, and multimodal texts are faithfully incorporated into the curriculum. However, at the level of textbooks and teaching-learning practices, implementation often remains limited to the basic application of audiovisual materials.

The communication model serves as a conceptual framework for visually explaining the communication process, encompassing both mass communication through media and interpersonal or small-group human communication. Despite being a fundamental theory that could be thoroughly covered in Korean speech education, communication models in speech textbooks are often limited to a basic introduction of Wilbur Schramm's model. Similar to audiovisual theories, these presentations rarely go beyond elementary content and methods.

The theoretical foundations of audiovisual education theories and communication models are expected to be covered in educational technology courses within teacher-training institutions. However, in the field of educational technology, these subjects are only briefly addressed within the historical context of educational technology, without in-depth discussion. This shift reflects the recent transformation of educational technology into a discipline focused more on instructional design than on audiovisual education theories and communication models. Educational technology began in the United States in the 1920s as a field addressing visual education, evolved into audiovisual education in the 1940s, explored audiovisual communication in the 1960s, and, from the 1970s onward, developed into a field emphasizing instructional technology and systems.

Today, information and communication engineering, educational technology, and communication studies are distinct academic disciplines, but in their early stages, all three fields developed from the communication model proposed by mathematician Claude E. Shannon. While the communication model in educational technology did not continue to advance and the field shifted towards instructional

design, in the social sciences, Wilbur Schramm further developed it into the field of communication studies. More recently, this field has evolved to focus on communication phenomena and specialized studies in journalism.

The purpose of this study is to provide a theoretical foundation that can be applied in Korean language education by analyzing audiovisual education theories and communication models, which are largely overlooked by domestic educational technologists, through the lens of foundational theories in information and communication engineering and communication studies. Additionally, the study critiques the misuse of the learning pyramid model, which lacks scientific basis but is often applied in Korean language education, and proposes strategies for applying communication models to speech and media education.

II. Prominent Audiovisual Education Theories

1. Hoban's theory of curriculum visualization

Hoban, who significantly influenced the audiovisual education movement in the United States after the 1940s, hierarchized visual media in 1937 from the most concrete “total situation” to the most abstract “words” (Hoban et al., 1937).

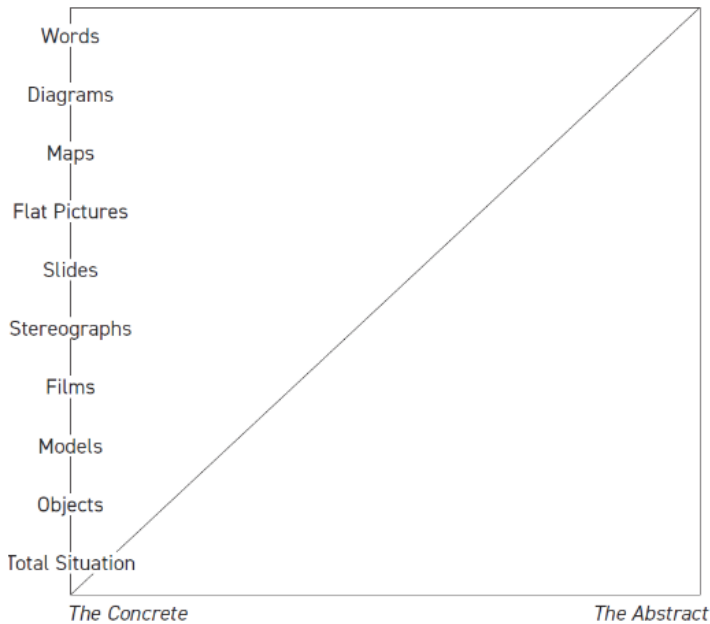


Figure 2. Hierarchy of visual materials (Hoban et al., 1937)

While the emphasis on the “total situation” was prominent in the United States during the 1930s, this argument may not necessarily apply in today’s context. Abstract representations can often foster a higher level of intellectual inquiry than direct experience. Therefore, rather than determining which medium is more desirable, it is more appropriate to recognize that educational media range in hierarchy from the most abstract to the most concrete. Thus, media selection should take into account both the learning content and the learner’s level.

2. Dale’s cone of experience model

In the field of subject education, Edgar Dale is generally known as an educational technologist who proposed the cone of experience model. However, he is a scholar who deserves greater attention for

his contributions to media literacy education. In the 1930s, Dale researched methods for viewing films (Dale, 1933) and film education (Dale, 1937); in the 1940s, he studied techniques for reading newspapers (Dale, 1941); from the 1940s to the 1960s, he developed audiovisual education methods (Dale, 1946, 1954, 1967); and in the 1970s, he focused on vocabulary education (Dale & O'Rourke, 1971, 1976). Thus, Dale was a pioneer in media literacy and media usage education, consistently engaging with these areas ahead of his time.

As early as the 1930s, Dale foresaw the impact media would have on society and emphasized the importance of teaching methods for critically evaluating content in radio, newspapers, and films, underscoring the significance of what we now call critical media literacy education (Dale, 1937). He was a pioneer in predicting the direction and content of media literacy education at a time when media was just beginning to develop in earnest.

Dale focused on how teachers could use audiovisual materials to provide vicarious experiences that promote continuous learning and, in 1946, proposed the cone of experience model. This model categorizes learning media into 11 levels, from the most abstract, "verbal symbols," to the most concrete, "direct, purposeful experience" (Dale, 1954). The cone of experience model becomes increasingly concrete from top to bottom and increasingly abstract from bottom to top. Unlike Hoban's curriculum visualization levels, which did not specify certain media, the cone of experience distinguishes among radio, recordings, and television, setting a hierarchy for audiovisual media.

After studying how knowledge is expressed and organized, Jerome Bruner categorized modes of representation into three types: (1) symbolic representation, (2) iconic representation, and (3) enactive representation (Bruner, 1966). In 1969, Dale applied Bruner's three modes of representation to his cone of experience model. Verbal and visual symbols were classified as (1) symbolic media; radio, recordings, photographs, films, and television as (2) iconic representation

media; and exhibitions, field trips, demonstrations, dramatized experiences, contrived experiences, and direct, purposeful experiences as (3) enactive representation media (Figure 3).

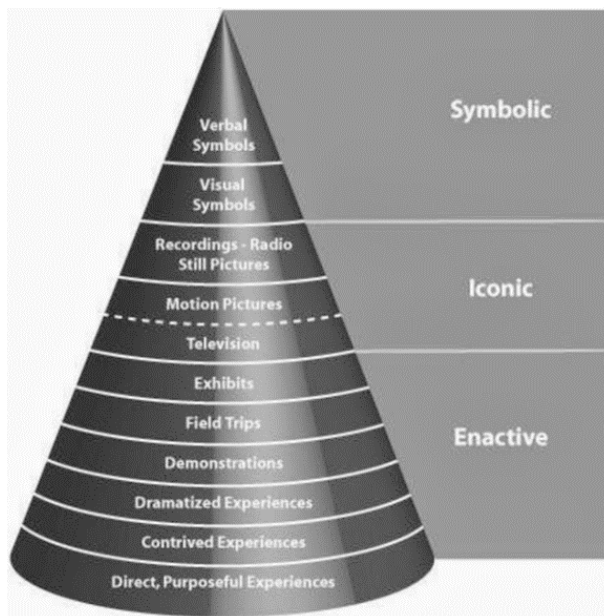


Figure 3. Cone of experience & modes of knowledge representation

Since Dale's cone of experience is a conceptual model, it requires empirical validation and further development into concrete instructional strategies. In fact, the hierarchy of the 11 levels of experience was not derived through scientific experimentation but reflects Dale's personal perspective. The stages specified in the cone of experience do not indicate a strict hierarchy of learning processes, nor are they arranged based on experimental evidence. Therefore, it would be misleading to interpret the model as suggesting that enactive representation is inferior to iconic representation or that iconic representation is less effective than symbolic representation. Over-reliance on enactive experiences can hinder advanced generalization processes,

while an excessive focus on symbolic representation can limit the creativity that emerges from concrete, sensory-based experiences.

III. Representative Communication Models

1. Linear communication models

1) Shannon’s communication model (1948)

Claude E. Shannon, the American mathematician and founder of information and communication theory, published a landmark paper in 1949 titled “A Mathematical Theory of Communication.” This paper outlines a method for measuring the entropy of information within signals based on probability theory. The mathematical communication model presented in Shannon’s paper is a pioneering example of a linear communication process model mediated by media, such as in telecommunications.

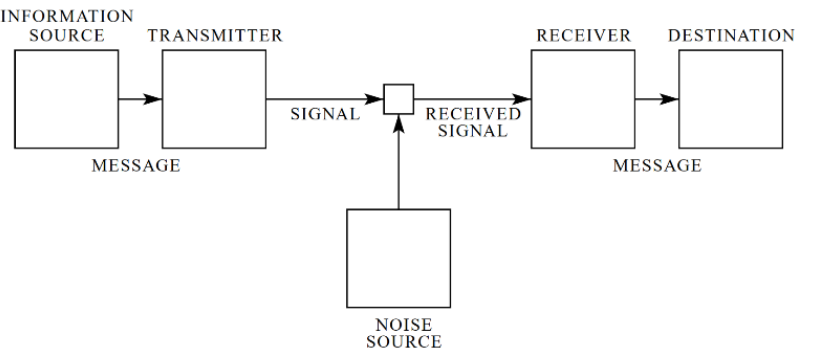


Figure 4. Shannon’s communication model

In Shannon’s mathematical communication model, the “information source” functions as a gatekeeper, selecting an appropriate

message from a set of possible messages and thereby regulating the quantity of information. The “transmitter” converts the chosen message into a “signal” that can be sent to the “receiver” through the communication channel. During the transmission, unintended “noise” may be added to the signal—interference not introduced by the source. Shannon identified noise as a key factor in the success or failure of communication, presenting a mathematical model to quantify and control it. In this model, noise is physical interference, such as sound distortion in telephony, static in radio broadcasts, or distortions of shape and brightness in television.

For instance, in telephone communication, the information source is the caller, the transmitter is the microphone that converts sound to electrical signals, the channel is the telephone line, and the signal is the current transmitted through the line. The receiver converts the current back into sound, and the destination is the intended recipient of the message—the person answering the call.

A key principle of Shannon’s model is calculating the “amount of information” in a signal based on probability. Here, “information” does not refer to data volume but rather to the “degree of surprise” or informational content gained when an event occurs. Rare events carry more information than frequent ones. In Shannon’s model, “information” is not about the message’s content but about the number of confirmations needed to resolve uncertainty, thus relating to probability.

Typically, it is the average information amount across all potential events in the communication process that matters. This average is called “entropy,” representing the quantified degree of uncertainty, or the “average degree of surprise.” Entropy is highest when events are equally likely and hard to distinguish. Thus, entropy represents the number of questions needed to resolve uncertainty, and information is what reduces entropy.

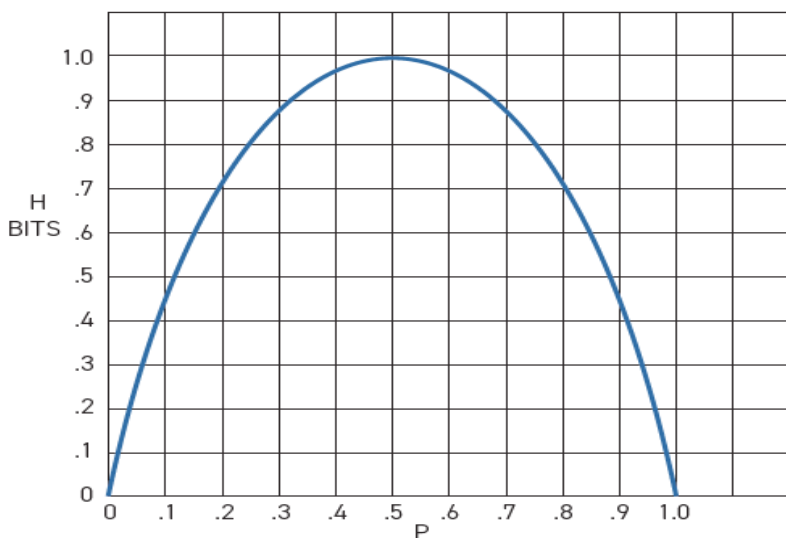


Figure 5. Entropy variation based on event probability

Redundancy is a concept that ensures system stability by providing more elements than are strictly necessary to convey information without errors. To achieve clear communication, entropy—representing uncertainty—must be reduced, which involves lowering the information content during transmission. However, when information content is reduced, redundancy naturally increases. Increasing redundancy to lower entropy can make the message easier for the receiver to understand, but it also increases the communication load, thus reducing efficiency. Through mathematical reasoning, Shannon proposed that the efficiency of communication could be optimized by balancing entropy and redundancy.

2) Shannon-Weaver communication model (1949)

The Shannon-Weaver communication model was not a joint creation by Shannon and Weaver but rather an interpretation and enhancement of Shannon's original 1948 model by Weaver in 1949. Shannon's mathematical communication model (1948) primarily ad-

dressed the technical aspects of communication within transmission settings. However, Warren Weaver extended this model to cover semantic and effectiveness issues, broadening its application to interpersonal communication as well (Shannon & Weaver, 1949).

Table 1. The level of communication (Weaver, 1949)

Level	Problem	Tasks to be resolved
LEVEL A	The technical problem	How accurately is the symbol conveyed?
LEVEL B	The semantic problem	Has the intended meaning of the sender been transmitted?
LEVEL C	The effectiveness problem	How effectively does it influence the behavior of the receiver?

An important feature of the communication model refined by Weaver (1949) is the addition of “semantic noise,” alongside traditional “technical (physical) noise.” Semantic noise arises when the sender and receiver assign different interpretations to the same message. To achieve effective communication, it is essential to minimize noise—not only physical noise, such as sounds or low lighting in the communication environment, but also “semantic noise,” including biases or preconceived notions that hinder accurate message interpretation.

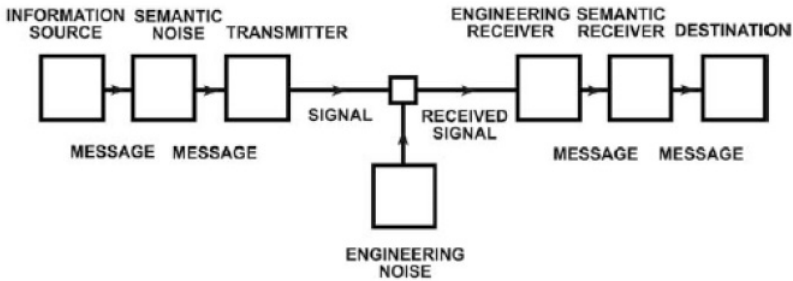


Figure 6. The mathematical communication model refined by Weaver (1949)

In the model refined by Weaver (1949), the “information source” is the speaker’s “brain,” and “semantic noise” refers to the semantic distortions occurring during the speaker’s articulation process. The “transmitter” corresponds to the speaker’s “mouth,” which produces sounds. The communication channel is the air, and the signal is the voice with soundwave energy that vibrates through the air. The “technical receiver” is the listener’s “ear,” which physically receives the sound, while the “semantic receiver” involves the process where the listener derives meaning from the sound, introducing potential semantic distortion. The “destination” is the listener’s “brain.” Despite the model’s explicit incorporation of semantic noise, Weaver’s refined model (1949) remains relatively unknown. The communication model widely recognized today as the Shannon-Weaver model is based on the original model presented by Shannon (1948). Another reason for the limited recognition of Weaver’s model is the widespread dissemination of Schramm’s communication model (1954), which considered semantic noise and gained popularity alongside the establishment of communication studies.

2. Cyclical communication model

1) Osgood and Schramm’s cyclical model (1954)

Wilbur Schramm, the founder of communication studies, initially developed a linear model but later proposed a cyclical model that incorporated Charles E. Osgood’s semantic theory. The cyclical model represents not only communication within a transmission context but also the interpersonal communication process, including scenarios where individuals engage in internal dialogues within their own minds.

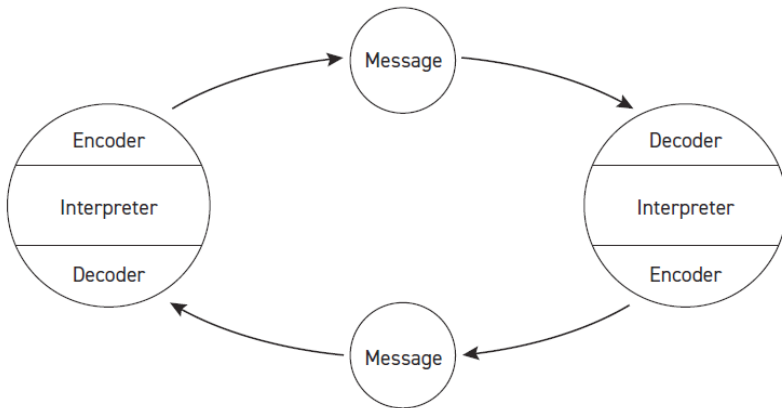


Figure 7. Osgood-Schramm's cyclical model (Schramm, 1954)

The cyclical model describes a process in which the “sender” and “receiver” engage in feedback, simultaneously performing “encoding [writing, coding]” and “decoding [reading, decoding].” In this process, a certain degree of “redundancy” is inevitable. The Osgood-Schramm’s cyclical model aims to explain interpersonal communication and serves as a transitional model leading to Schramm’s final model, which will be discussed later. While the Osgood-Schramm’s cyclical model does not explicitly indicate “physical noise” or “semantic noise,” this limitation can be advantageous in the context of rhetorical education for understanding human communication processes. Critiquing the Osgood-Schramm’s cyclical model allows learners to recognize the importance of noise factors in the communication process.

Students do not need to study linear communication models and cyclical communication models in detail. However, since Schramm’s final model is built upon these two models, understanding them can provide valuable insights into issues such as information quantity and semantic noise.

2) Schramm's revised communication model (1954)

Recognizing that the cyclical model did not make “noise” visibly apparent, Wilbur Schramm presented a final model in 1954 that integrated the original Shannon-Weaver mathematical communication model with his cyclical model. In Schramm's new model, communication is represented as occurring within a “field of experience” shared by both sender and receiver, and with the model's evolution, a feedback loop was also incorporated. The concept of the “field of experience” reflects Kurt Lewin's field theory.

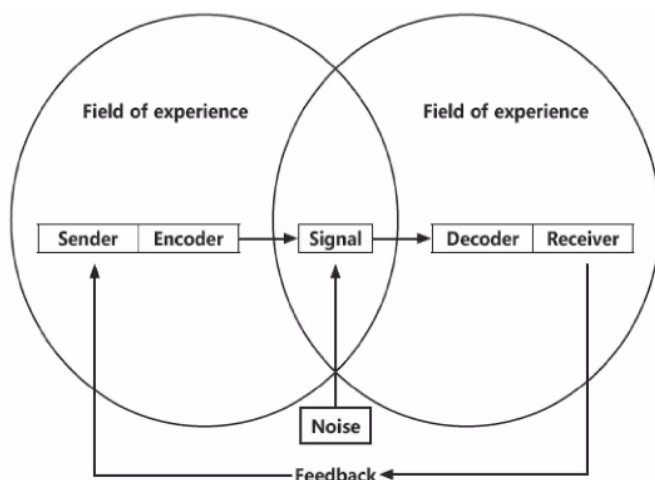


Figure 8. Schramm's communication model

According to Schramm's communication model, effective communication occurs when there is a substantial overlap in the fields of experience of the sender and the receiver. The sender transmits a message from within their own field of experience, and the receiver's comprehension improves when the message aligns with their own experiential field. When applying this communication process model to teaching and learning contexts, the effectiveness of instruction is maximized within the overlapping experiential areas of teachers and

students.

In speech education, the ability to analyze the audience and understand the relationship between speaker and listener—skills that are often emphasized—can be viewed as the capacity to encode messages within the overlapping field of experience. According to Schramm’s model, the teacher, as the sender, must encode learning content in a way that it can be effectively decoded within the learner’s field of experience. Once the signal is transmitted by the teacher, the feedback from the learner allows the teacher to compare their understanding of the student’s experience with the actual experiential field of the student. Through repeated feedback processes, the teacher can refine the selection of instructional content to align with the shared experiential field of both teacher and student.

3) Westley and Maclean’s communication model

The communication model developed by Bruce Westley and Malcolm Maclean provides a framework for explaining both interpersonal and mass media communication (Westley & MacLean, 1957). This model is similar to Schramm’s communication model in its detailed emphasis on feedback between the sender and receiver. However, it differs in that it does not take noise variables into account.

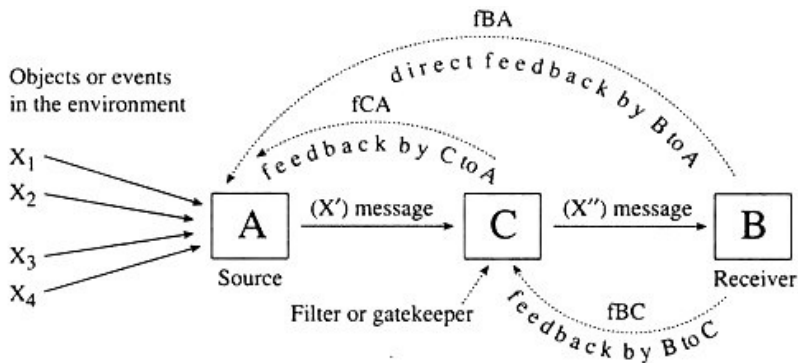


Figure 9. Westley and Maclean’s mass media communication model

Among various events ($X_1 \sim X_n$), when a message (X') captured by the information source (A) is delivered to the receiver (B), the receiver communicates by providing feedback [fBA] to the information source (A) regarding the message (X'). A notable feature of Westley and Maclean's model is the view of the sender as "the message creator and sender" influenced by a range of surrounding events.

In Westley and Maclean's mass media communication model, a mediator (C) representing the press is introduced between the sender and receiver, incorporating the gatekeeping theory in which the message is filtered by the mediator. "Gatekeeping," a term first introduced by psychologist Kurt Lewin, describes the process by which news editors select and filter news content. Kurt Lewin originally used gatekeeping to describe decision-making processes involved in food reaching the dining table.

In Westley and MacLean's communication model, feedback refers to the information sent back to the sender by the receiver of the message. Feedback is a critical element in the communication process as it enables the sender to verify whether the message has been accurately conveyed and how it has been interpreted by the receiver. While feedback may not always be immediate, it can manifest through audience or reader responses such as comments, evaluations, or consumption patterns.

The role of feedback can be summarized as follows: First, feedback facilitates interactive communication rather than one-way message delivery. Second, it allows the sender to assess the effectiveness of the message and make any necessary adjustments or improvements. Third, feedback reflects the receiver's understanding, emotions, and attitudes. Fourth, it sustains the flow of communication; without feedback, communication risks becoming unidirectional and disconnected.

Feedback is equally significant in human communication. Direct feedback includes verbal responses, nodding, or other explicit actions, while indirect feedback encompasses behavioral changes, facial

expressions, or silence.

IV. Application of Audiovisual Theories and Communication Models

1. Critical reception of the learning pyramid myth

Since the 1970s, Dale's cone of experience has been conflated with the poorly substantiated learning pyramid model and widely disseminated. The faulty theory, which presents learning effectiveness in percentages (%) based on Dale's model, began to proliferate (Dwyer, 1978). As previously mentioned, the learning pyramid model has no direct correlation with Dale's cone of experience, and thus, it is inappropriate to misuse Dale's model as an evaluation of media effectiveness. Although Dwyer (1978) began to point out these issues, the learning pyramid model has become something of a myth and continues to circulate widely to this day.

Anyone has likely encountered statements such as “We remember only 10% of what we read, 20% of what we hear, and 30% of what we see” at least once. Although the precise memory retention differences by multiples of ten are highly questionable, the idea that retention varies depending on the mode—listening, reading, or viewing—became a common rhetorical expression found in various articles and lectures from as early as the 1910s.

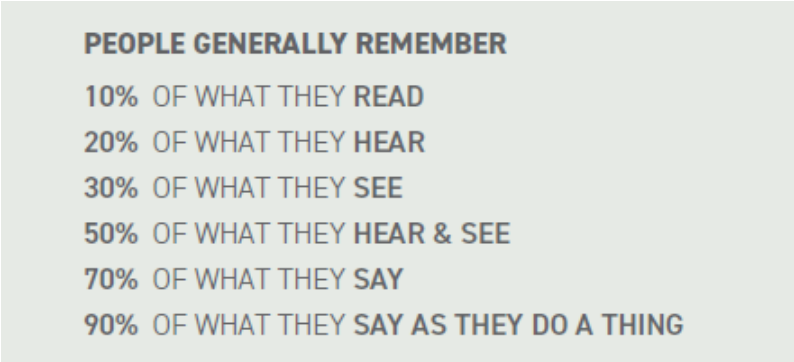


Figure 10. Human memory retention capacity (Treichler, 1967)

Since the 1970s, information on memory retention began to appear not only as rhetorical expressions but also as cited references in various journals. The first documented instance presenting specific figures with a scientific basis appeared in an article by an American oil company employee in 1967 (Treichler, 1967) (Figure 10). The data cited at that time were based on the “learning pyramid model” from the “National Training Laboratories” (Figure 11).

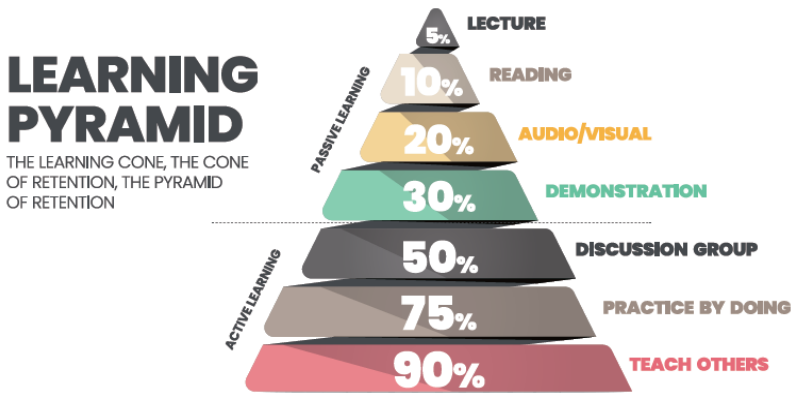


Figure 11. The learning pyramid: misuse in various forms across the world

Since then, the learning pyramid model has been presented alongside the National Training Laboratories in discussions about differences in learning effectiveness based on language usage. However, the National Training Laboratories has never released experimental data controlled for variables, nor has it published concrete findings under the “learning pyramid model.”

Common sense suggests that discussing and practicing content helps retain lesson material longer than merely reading textbooks or listening to lectures. The learning pyramid is not a conceptually sound model backed by scientific evidence but merely a rhetorical expression of obvious facts, quantified without substantiation. Therefore, teachers should avoid presenting the learning pyramid model with ambiguous sources and specific percentages to students.

The reason this learning pyramid myth persists is due to the tendency of writers and researchers to cite sources without verifying them thoroughly. In the case of Korean language teachers, many habitually cite the learning pyramid model when explaining that listening, viewing, discussing, and teaching others aids memory retention better than just reading a book. However, as this pyramid model is an unclear and dubious concept, it should never be cited in classes or academic papers.

2. Application of the concepts of entropy and redundancy in Korean language education

The “levels of communication (level A, B, C)” proposed by Weaver naturally connect with the levels of linguistics. Technical issues involving physical noise pertain to the sub-syntactic level, while semantic noise is an issue at the semantic level. Issues at the effectiveness level are linked to pragmatics (Table 2).

Table 2. Noise according to levels of communication and linguistic layers

Communication level	Noise	Layers of linguistics
LEVEL A The technical problem	Physical noise	Syntax
LEVEL B The semantic problem	Semantic noise	Semantics
LEVEL C The effectiveness problem	Semantic noise	Pragmatics

Through Shannon and Weaver’s communication model, we can understand that managing noise and information content is essential to improving communication between individuals. For effective communication, both physical and semantic noise must be minimized. Additionally, adjusting the message’s information content is necessary to maintain an appropriate balance between entropy and redundancy. Ultimately, to control noise and information content, various communication channels should be secured to increase the overall volume of communication (Table 3).

Table 3. Balance of entropy and redundancy

Entropy & Redundancy	Situation
Entropy (Uncertainty) + Redundancy (Certainty) -	<ul style="list-style-type: none">- A situation in which a message is conveyed that the receiver cannot easily predict.- The receiver experiences a high cognitive load in attempting to understand the message.- In the worst case, the receiver may abandon the communication altogether.
Entropy (Uncertainty) - Redundancy (Certainty) +	<ul style="list-style-type: none">- A situation in which a predictable and obvious message is conveyed to the receiver.- The receiver does not actively engage in the communication.- In the worst case, the receiver may miss the sender’s underlying intent and end up with only a superficial understanding.

The concepts of entropy and redundancy related to information content provide a quantitative framework for approaching communi-

cation, in contrast to “principles of conversation” such as the Cooperative Principle (Grice) and the Politeness Principle (Leech), which are based on pragmatics. For example, the statement “a dog bit a person” carries low information content as it describes a common event, while “a person bit a dog” carries high information content as it describes a rare occurrence.

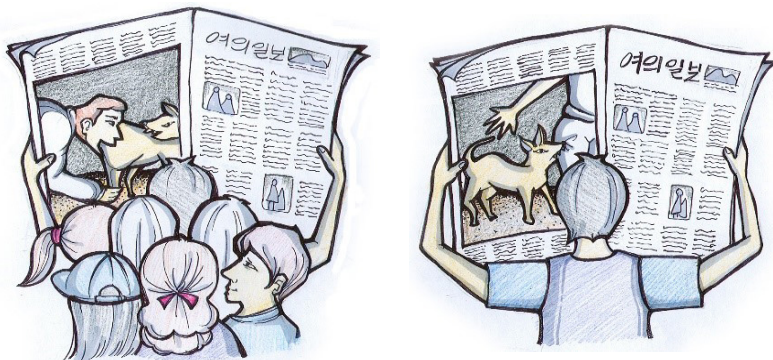


Figure 12. Event with high information content (left) and low information content (right)

The writer and speaker should adjust the balance of entropy and redundancy by considering the background knowledge and interests of readers and listeners. For example, repeating the same word multiple times in conversation to ensure the listener’s understanding is a case of intentionally increasing redundancy to lower entropy. However, excessive repetition of obvious information, resulting in high redundancy and low entropy, can be problematic (Figure 13). Conversely, overusing foreign or technical terms, leading to low redundancy and high entropy, can also pose issues (Figure 14).



Figure 13. Writing with high redundancy and low entropy



Figure 14. Utterance with excessively high entropy

An example of overcoming “physical noise” in the communication process through “redundancy” is the use of the phonetic alphabet or phonetic code. While students may not engage in wireless communication, it is meaningful to explore strategies for adjusting infor-

mation content to reduce communication errors caused by physical noise.

Example of communication confusion due to physical noise in telephone conversations

Speaker 1: How popular is BTS? [☞ Physical noise occurs]

Speaker 2: Sorry, did you say GPS? [☞ Communication error due to physical noise]

Speaker 1: Bravo, Tango, Sierra. [☞ Increases redundancy]

Speaker 2: B... T... S... Oh, you mean Bangtan Sonyeondan (BTS). [☞ Successful communication]

In challenging communication environments, such as inside a helicopter or during heavy rain, it is often difficult to accurately hear numbers or letters over radio or telephone. In these cases, using phonetic alphabets can facilitate communication. Many people have seen scenes in movies or TV dramas where soldiers or pilots use phonetic alphabets like alpha, bravo, Charlie, and delta to communicate. In the widely used NATO phonetic code, A stands for alpha, B for bravo, C for Charlie, D for delta, and E for echo, and so forth. Korean phonetic letters follow the same principle. When someone on the other end of a radio cannot understand the word “강” (river), using Korean phonetic substitutes like “기러기” (ㄱ), “아버지” (ㅏ), and “잉어” (ㅇ) can help communicate the intended meaning without interference from noise.

Table 4. Phonetic alphabet in English and Korean

A	Alpha	N	November	ㄱ	기러기	ㅏ	아버지	0	공
B	Bravo	O	Oscar	ㄴ	나폴리	ㅑ	야자수	1	하나
C	Charlie	P	Papa	ㄷ	도라지	ㅓ	어머니	2	둘
D	Delta	Q	Quebec	ㄹ	로마	ㅕ	연못	3	삼
E	Echo	R	Romeo	ㅁ	미나리	ㅗ	오징어	4	넷

F	Foxtrot	S	Sierra	ㅂ	바가지	ㅅ	요지경	5	오
G	Golf	T	Tango	ㅅ	서울	ㅌ	우편	6	여섯
H	Hotel	U	Uniform	ㅇ	잉어	ㅠ	유달산	7	칠
I	India	V	Victor	ㅈ	지게	ㅡ	은방울	8	팔
J	Juliett	W	Whiskey	ㅊ	치마	ㅣ	이순신	9	아홉
K	Kilo	X	X-ray	ㅋ	키다리	ㅍ	앵무새 엑스레이		
L	Lima	Y	Yankee	ㅌ	통신	ㅍ			
M	Mike	Z	Zulu	ㅍ	파고다 한강				
				ㅎ					

Phonetic alphabets and communication numbers exemplify a strategy for addressing noise factors in communication by establishing systems to reduce noise effectively. This approach uses increased redundancy to lower the entropy caused by physical noise. Although increasing redundancy (certainty) also increases communication load, it is an essential choice for ensuring clear communication.

3. Application of gatekeeping and feedback in Korean language education

The concepts of gatekeeping and feedback, as applied in the communication model by Westley and MacLean, serve as useful conceptual frameworks in speech education as well as in media language education. Gatekeeping is a concept first introduced by Kurt Lewin, a pioneer in social psychology, when he analyzed food distribution processes. During World War II, Lewin observed that decisions about food distribution in American households relied more on the gatekeeper’s choices at each distribution stage than on the food ingredients themselves. Ultimately, even the selection of a family’s meal menu was decided not by all family members, but rather by the housewife as the gatekeeper, a process he referred to as gatekeep-

ing (Lewin, 1943). In subsequent research, Lewin highlighted that, much like the housewife influences family dietary preferences by determining the household menu, group decision-making processes could also be significantly shaped by the personal preferences of a gatekeeper (Lewin, 1947). This concept emphasizes the influence of situational factors over individual variables and reflects the decision-making mechanisms of groups rather than individuals.

Following Lewin’s introduction of gatekeeping, the concept was also applied to the processing of news in journalism. David Manning White’s gatekeeping theory illustrates this phenomenon, where a selection of news items (N1–N4) from various sources (N) undergoes gatekeeping, filtering some items (N1, N4) and delivering only selected pieces (N2, N3) to the audience.

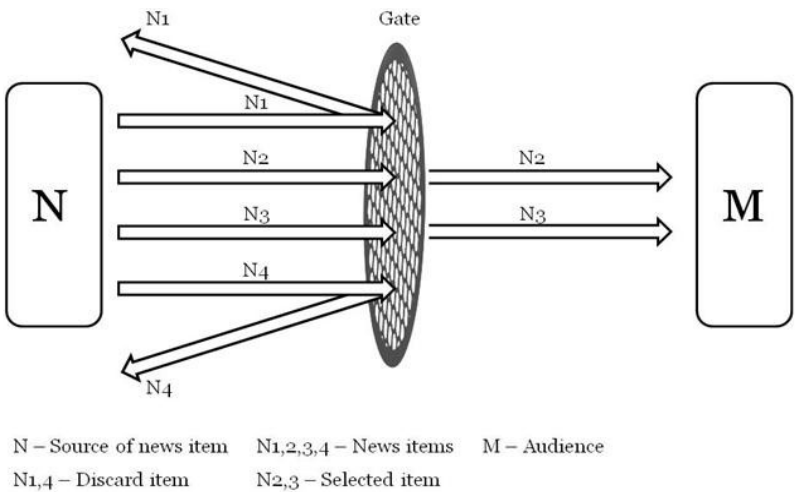


Figure 15. Media gatekeeping model

Table 5. Comparison of gatekeeping in news reporting and meal decision-making processes

Element	News Reporting	Meal Menu
Message	News	Food
Gatekeeper	Editor	Housewife
Audience	Viewers	Family
Source	News Material	Food Ingredients

A gatekeeper is a decision-maker who determines which information is important enough to be widely shared and which information should be discarded. Due to their subjective judgment, gatekeepers hold significant social influence. In mass media, gatekeepers include newspaper editors and, in the case of broadcast news, news directors or individuals known as the “desk.” They decide which news should be shared and which is unnecessary to report.

The information conveyed by the news includes not only objective facts but also the perspectives of those who deliver it. From the multitude of events happening in society, only those deemed newsworthy are selected, and in the process of conveying these selected events within limited time, the perspectives of the creators inevitably influence the news.

In Korean language and literature education, gatekeeping can be discussed in connection with media literacy topics related to the characteristics of media language. Explaining that not every event in the world becomes news, but only those events considered important by newsmakers, can help students understand the concept of gatekeeping. Furthermore, the importance of gatekeeping can be used to teach students that those reporting the news should strive to maintain a balanced view of events and report them fairly and objectively.

In mass communication, gatekeeping refers to the process of selecting and filtering information based on specific criteria before it is delivered to the audience. A similar phenomenon occurs in interper-

sonal communication.

In human communication, gatekeeping is primarily applied to the selection and filtering of information. Individuals consciously or unconsciously choose what information to convey, emphasizing or omitting certain elements. For instance, when discussing a recently watched movie with a colleague, one might not recount every event but rather share details or highlights that are deemed interesting or important to the listener.

Gatekeeping also involves adapting the way information is conveyed based on social norms, cultural backgrounds, and situational contexts. For example, in a formal work-related conversation, personal stories might be omitted, and only work-relevant information is shared. In this case, social norms and context serve as criteria for selecting information.

Psychological factors such as emotions, values, and personal interests also influence the gatekeeping process. Actions such as withholding unpleasant experiences, exaggerating, or downplaying certain information can be considered forms of gatekeeping. For instance, concealing a mistake or presenting information in a way that portrays oneself more positively are examples of this phenomenon.

Gatekeeping further extends to adjusting information based on the characteristics of the audience. If the audience is unfamiliar with a topic, additional explanations might be provided, or information perceived as irrelevant might be omitted entirely. For instance, when addressing a general audience, using simple terms instead of complex technical jargon is also a form of gatekeeping.

V. Conclusion

Since the 1970s, the cone of experience model has been widely combined with the learning pyramid model, which lacks scientific

basis. In the area of Korean language usage skills, understanding this error can serve as material for critical reading to explore the formation of such myths. Although the learning pyramid model is a conceptual framework concerning the characteristics of media, it has been misused as a learning model to evaluate the effectiveness of listening, reading, writing, and speaking. In the fields of listening and speaking education or media education, utilizing communication models would be far more effective.

Audiovisual communication is a field within educational theory and practice related to the design and use of messages that control the learning process. Communication models that contributed to defining the concept of educational communications in 1963 serve as conceptual frameworks for explaining media and human communication processes.

The communication model is significant in that it elevates media from a mere “supplemental tool” for learning to a “communication system.” Since teaching and learning are based on communication between teacher and student, they can also be explained using communication models. Communication models can be applied as effective strategies in native language education, particularly in teaching speaking skills at the secondary level and beyond. In Korean language education for non-native speakers, these models are particularly suitable for teaching communication strategies to advanced learners, such as university students.

Various communication models not only provide a theoretical foundation for Korean speech education, grammar education, and media language education, but also offer a perspective for understanding teaching and learning models from a communication standpoint. Therefore, it would be inappropriate to merely touch upon these communication models as a historical overview in educational technology or dismiss them as irrelevant to Korean language education simply because they are covered in communication studies. Korean language education requires a more in-depth exploration of

communication models.

In particular, Westley and MacLean's communication model can be used effectively in Korean speech and media language education, as it explains both interpersonal and mass media communication and incorporates elements of gatekeeping and various forms of feedback. Gatekeeping in human communication is a natural process aimed at facilitating the efficient delivery of information. However, it also carries the risk of information distortion due to the subjective judgment of the communicator and the influence of social context. This phenomenon affects the quality and transparency of communication, highlighting the need to address and utilize the gatekeeping process within Korean language education.

Shannon and Weaver's mathematical communication model suggests that to improve communication, both physical and semantic noise must be minimized, and information entropy and redundancy should be adjusted to maintain an optimal level of information. The concepts of entropy and redundancy can be addressed from the perspective of text and discourse-level Korean usage strategies, potentially serving as strategies for understanding and expressing complex multimodal texts.

In conclusion, examining the human communication process from a macroscopic perspective through communication models and employing strategies to regulate the amount of information by considering entropy represent valuable gatekeeping strategies that should be addressed in speech and media education.

* Submitted 2024.10.29.
 First revision recieved 2024.11.14.
 Accepted 2024.11.16

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ABSTRACT

Application of Audiovisual Education Theories and Communication Models in Korean Speech Education

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The purpose of this study is to analyze audiovisual education theories and communication models, focusing on foundational theories in information and communication engineering and communication studies, to provide a theoretical framework applicable to Korean language and literature education. To this end, the study critiques the learning pyramid model, which continues to be misused despite lacking scientific evidence, and proposes strategies for applying communication models in speech and media education.

Since the 1970s, the cone of experience model has been widely combined with the unsubstantiated learning pyramid model. In the domain of Korean language skills, understanding this misconception offers material for critical reading exercises, exploring how such myths are formed. Westley and MacLean's communication model can be effectively applied in Korean speech and media language education, as it explains both interpersonal and mass media communication and incorporates elements of gatekeeping and various forms of feedback. Additionally, the concepts of entropy and redundancy proposed in Shannon and Weaver's mathematical communication model can be addressed as Korean usage strategies at the text and discourse level, and can be utilized as strategies for understanding and expressing complex multimodal texts. The concepts of entropy and redundancy are also useful when discussing the optimal amount of information in digital textbooks.

KEYWORDS Audiovisual education theory, Communication model, Cone of experience, Digital textbook, Gatekeeping, Learning pyramid model