COMUNICACION Y SOCIEDAD

A Comparative Study of Presentational Formats

Un estudio comparativo de los formatos de presentación

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ABSTRACT: As early as 1970, Ivan Illich predicted that in the future, there would be a move towards 'deschooling society'. At the outset of the new millennium, explosion in the production of information ignited a need for the shift from the significance of having 'what' to 'what to do' with the information. Indeed, developments in communication technologies not only facilitated and expedited reaching information but also enabled and ensured learning outside the schools - lifelong learning. After schooling, adults learn most of what they know from the media. The present paper challenges the adaptation of technology by media for raising awareness and learning the current issues and suggests that technology, indeed, should be used in media and education, however, after being challenged.

This study challenges the use of technology for receiving information. It presents the results of bicommunal research conducted in Cyprus upon the already existing and suggested presentational formats. The present study sets out to explore attitude of the tertiary students towards already existing and alternative media sources used for receiving the news. It is suggested that rather than adopting 'what is given' by the technology, if media education challenges and suggests new forms for presentation of the information, this will facilitate learning, particularly learning from the media, which is the main source of information for masses after formal schooling.

Keywords: Comprehension, remembering, convergence, news, tertiary students.

Stimulus is the message prepared in a variety of formats such as audio, video and text. Presentational format, on the other hand, is the type of presentation of the message through the instrument: whether it is radio, television, newspaper or the Internet. Presentational stimuli can be merely text, merely audio, or merely video in combinations of stimuli whatever the technological device is. Therefore, rather than which device or the characteristics of the instrument, the challenge for media and education is, which presentational format or combinations of formats that act as stimulus or stimuli is/are effective on comprehension, and hence, learning. In this study, the stimulus is the daily news.

Developments in communication technologies mostly originated for military purposes (such as the Internet); and later have also been adopted by the media and education. On the one hand, media has been considered as the fourth power, and as a result huge investments are made on the media. With this respect, technology has been used in order to make the message more attractive. On the other hand, education adopted technology used in the other fields depending upon the conditions and the wealth of the country. At the outset of the new millennium, media, however, stand as the ultimate provider of information. Not to mention that media is used in schooling, most of learning that takes place outside the formal education contexts is based on the media. The dilemma is, media does not challenge what is presented to them by technology. What is more, in the research conducted towards comprehension and remembering through media do not reach a consensus. In other words, the extent to which a variety of presentational formats lead to better comprehension is still a debatable and significant issue.

The superiority of one media tool over another has been the topic of many studies. Furnham and Gunter (1985), Robinson and Levy (1986), Wicks and Drew (1991), Defleur, Davenport, Cronin and Defleur (1992) draw our attention to the superiority of print over television and radio. On the one hand, Defleur and Defleur (1998) point out at the superiority of print over television, radio and the Internet. Yet, William and Oglive (1957), Neuman, Just and Crigler (1992), Beentjes, Vooijs and Voort (1993), Molen and Voort (1998, 2000) and Molen and Klijn (2004) mention the superiority of television over print. However, Stauffer, Frost and Rybolt (1981) indicate that reactions to print and television show no difference. Eveland Seo and Morton (2002) further suggest that recall from the news stories rate higher for television and print newspapers compared to online newspapers. Baning and Sweetser (2007) in a study

where undergraduate students participated explored the credibility of blogs online news and traditional news media and found out that there was no difference in terms of credibility.

Research carried out into comprehension and remembering of news also shows variety in relation to the type of the news. Neuman, Just and Crigler, (1992); Price and Zaller, (1993); and Althaus and Tewskburry, (2000) for instance, explore the presentational effects of the mass media tools on social issues such as the political news. Newhagen and Reeves, (1992), Lang, (1995), Lang and Newhagen (1996), on the other hand, investigated the aspect of violence in news and the use of negative video. In another study with undergraduate students, Diddi and LaRose (2006) conducted an online survey in order to check the uses and gratification of the undergraduate students for the news. They found out that tertiary students prefer the newspaper, the Internet and television for obtaining the news. In entertain themselves, they, however, show preference towards the Internet where they follow the comic news. The education level of the participants is one of the decisive factors on comprehension and remembering fro the media. In a recent study, Grabe, Kamhawi and Yegiyan (2009) explored how people with different levels of education process television, newspaper and web news. The lower education group proved better with the information they obtained from the television in comparison to newspaper and the web. The higher education group, on the other hand proved the opposite by obtaining better scores for remembering from the newspaper and the web rather than television.

Some researchers (for example, Price and Zaller (1993); Eveland, Seo, Marton (2002)) do not take inconsistencies in the generalizability and validity of these studies into consideration. Some others, (such as Gunter, Furnham and Gietson, 1984; Price and Zaller, 1993; Defleur and Defleur, 1998; and Berry, 1999) suggest poor comprehension and remembering taking place as a result of learning from the media. Gümüş and Özad (2011) mention that parallel to an increase in number of stimuli of the presentational media comprehension and remembering also increases.

In a nutshell, there is a considerable body of research into mass media that seeks to find the best solution to enhance comprehension and remembering from the media sources. Studies on comprehension and remembering of news stories are around for 60 years. In the first 30-35 year period, studies focused on the comparison of media instruments, namely newspaper, radio and television as single medium or double or triple media. In the last 10 -15 year period, the Internet has been added to the comparison of comprehension and remembering from the former three media instruments. However, the result of the studies in the field failed to reach a consensus. The challenge at this point, is whether these studies will ever be able to reach a common ground. The answer is ambiguous. What is more, it seems that efforts in the same direction would lead to a futile strenuous use of energy. Unfortunately, up to now, media have not designed or conceptualized any presentational tool or format for sending its messages. The incentive about this topic depends upon the developments realized in different technological areas, mostly defense. Media only adopted the use of what is produced in these areas and meaninglessly directed towards measuring the effects of these products or comparing them. In other words, the media, up to now, either in terms of instrument or in terms of presentational format, have followed the technology. This concept of following technology has been de facto of development in media sector. On the other hand introducing new technology has its own difficulties. Indeed Van Heekeren (2010) conducts a research into the "News in 'New Media': An Historical Comparison between the Arrival of Television and Online News in Australia". In the article two periods of in Australian news media history,

1956, the arrival of television news and 1995, the introduction of online newspapers in 1995. The paper points of the reactions of newspapers to both novelties.

In order to find a solution to this problem, firstly compound effects of the text, audio and visual presentational aspects of the media according to the preferences of the users should be examined for developing a conceptual presentational format that would maximize the level of comprehension and remembering of the audience. Only after this point, cooperating with technology, it will be possible to realize such a presentational tool or the presentational format of the existing technologies. The present study aims at presenting the audience and in this study: tertiary students, with an array of choices as presentational format for receiving the news.

In measuring the effects of comprehension and remembering in order to reach the correct solution, text, audio and vision which are accepted as natural stimuli, should be processed as a whole (compound stimuli). Indeed, it is needed that searching and putting forward the preferences of the audience on the presentational formats of the compound stimuli that can be presented at the same time on the technological media (the nearest technological devices that provide this opportunity in the existing situation). Apart from this, there is a need to explore the already existing attitudes of the audience on these preferences related to the present mass media instruments and the Internet. Among the existing mass media tools in determining the preferences of the audiences', television and the Internet are the most suitable since all three stimuli are present in these tools simultaneously. Indeed, despite Kirschner and Kaprinsky's (2010) observation that today's youths have the ability of multitasking, they observe that when facebook users are engaged in using facebook, they have lower GPA than nonusers.

1. *Research Questions*

Audio and visual stimuli are natural for humans. Sign and text, as a means of expression and communication are almost as old as the human history. In other words, parallel to the studies conducted up to now, separating these stimuli from each other means breaking the whole. Therefore, without damaging the nature of the whole, in this study, the answers to the following questions have been sought;

RQ 1: What are the attitudes of the tertiary students towards the already existing presentational formats for receiving the daily news?

RQ 2: Would there be a difference between the preferences shown to the already existing presentational formats provided that new alternatives are given?

The two questions mentioned above have been explored through a sample. The sample of the study however, is chosen from two different societies. Hence the third research question is.

RQ 3: Is there a statistically significant difference between the Turkish and Greek Cypriot's attitudes towards the alternative presentational formats?

A number of studies realized up to now in order to measure the effects of the media instruments on the audience related to comprehension and remembering either in the experimental environments or as field studies, without taking into consideration the media preferences of the participants for having news in their daily lives, researchers tried to test the level of comprehension. It is also known that, while communicating, an individual brings along values, meanings, attitudes and thoughts from the society in which s/he lives. In this

case, the sample of the study is chosen in Cyprus which consist of two societies, Turkish and Greek Cypriots. In these societies, despite the relation of living in the same geography of a Mediterranean island, two different languages, namely Turkish and Greek are spoken. What is more, the majority of these two societies belong to two different religions –Muslims and Orthodox Christians.

2. *Methodology*

For the present study, data have been collected through a questionnaire. The questionnaire is conducted to 240 undergraduate students studying in 5 different universities in North Cyprus and 240 students studying towards a degree in Greek Cyprus. In selecting the sample, disproportional stratified random sampling strategy was used. This strategy was favored because the number of tertiary students studying in the North is far more in number than the ones in the South. In order to make a fair comparison, both groups sought to be represented equally.

It is assumed that students studying at the Faculties of Communication and Media Studies are conscious about the news sources and were left out of the sample on purpose. The survey was administered to the students outside the universities at the large supermarkets. All participants' informed consent was obtained and it was ascertained that participants had no audio or visual disabilities before the questionnaire was applied. The survey was applied during the daytime and it took each participant approximately 8-10 minutes to complete the questionnaire.

The survey which was conducted between October 2004 and January 2005 consisted of three sections. Section one sought to provide information about the face sheet variables such as the gender, age, and nationality of the participants. Section two included questions about the daily use of mass media instruments and the attitude questions to investigate the use and the trust felt to the national and international news given by these media instruments. For the five-point attitude scale questions, the value scale extended between one (strongly disagree) and five (strongly agree). In section three, a multiple choice question was asked to explore students' evaluation of presentational formats with different ratio of different stimuli: merely the text as the stimulus, audio-video or audio-video-text stimuli in different ratio and forms. These alternatives included merely text, merely audio-visual and 10 other presentations, 12 in all where the given screens were horizontally and vertically divided into two parts with different ratios for text and audio-visual stimuli. Ratios were either half to half or one-third to two-third (see Appendix A).

3. *Findings*

224 (46.7%) of the participants are male and 256 (53.3%) are female. 240 (50%) is from the North of Cyprus and 240 (50%) from the South of Cyprus. Since the participants are pursuing their higher education, their ages are mostly between 17 and 24. Only a few are above 24 years of age.

Table 1. Age of the participants

	Frequency	Percent
17-18	92	19.2
19-20	134	27.9
21-22	130	27.1
23-24	104	21.7
25 Above	20	4.2
Total	480	100.0

The average of the duration of watching television, listening to the radio, time spent on reading newspapers, and time spent on the Internet show similarities between the North and the South (Table 2).

Table 2. Average duration of following the media (in hours)

Location in Cyprus		TV	Radio	Newspaper	Internet
North	Mean	3.25	2.25	2.20	2.94
	N	240	240	240	240
South	Mean	3.22	1.87	2.14	2.97
	N	240	240	240	240
Total	Mean	3.23	2.06	2.17	2.95
	N	480	480	480	480

Table 3. Means of media channels used for obtaining national and international news and trust felt towards them

	North		South		Average	
I watch national news on the television	3.69	A	3.17	U	3.43	U
I watch international news on the television	3.52	A	3.07	U	3.30	U
I trust the information I obtained from TV	3.29	U	2.89	U	3.09	U
I listen to the national news at the radio	2.38	D	1.88	D	2.13	D
I listen to the international news at the radio	2.28	D	1.90	D	2.09	D
I trust the information I obtained from radio	2.63	D	2.13	U	2.38	U
I read national news on the newspaper	4.31	A	4.43	A	4.47	A
I read international news on the newspaper	3.92	A	4.11	A	4.02	A
I trust the information I obtained from the newspaper	3.72	A	3.77	A	3.75	A
I read national news on the Internet	3.52	A	3.87	A	3.73	A
I read international news on the Internet	3.42	U	3.53	A	3.48	U
I trust the information I obtained from the Internet	3.48	U	3.47	U	3.48	U

As Table 3 indicates, responses of tertiary students towards which media channels they used for obtaining national and international news and trust felt towards them show similarities between the members of two societies living on the North and South Cyprus. The responses of the students from the North and South Cyprus merely differ with respect to four questions: 'I watch national news on the television'; ''I watch international news on the television'; 'I

trust the information I obtained from the radio'; 'I read international news on the Internet'. Preliminary analysis of the data obtained from the study indicates that there is no statistically significant difference in relation to the gender and age of the participants. The reliability of the five-point attitude-scale questions is: alpha=0.69 and mean=3.34.

In section three of the questionnaire, 12 different alternatives were presented to the participants. Among these alternatives participants mostly preferred choice 'G' (F=128), then 'C' (F=80) and thirdly they preferred choice 'K' (F=62).

Among the 480 participants only 3.8% of them selected either merely audio-visual presentation (F=14) or merely text presentation (F=4). On the other hand, 51.3% of the participants either strongly agreed or agreed that they got the national news from the television, 88.3% from newspapers or 61.7% from the Internet. Similarly, 42.3% of the participants either strongly agreed or agreed that they obtained international news from television, 76.7% from newspaper and 52.5% from the Internet. Moreover, for the choice 'G' where 2/3 of the given media (upper part) is for audio visual presentation and the rest is text presentation, for choice 'C' the upper half is for audio-visual and the lower half is for the text stimuli, finally for choice 'K' 2/3 of the horizontally divided media is for audio-video stimulus (left part) and the right is for text stimuli. Therefore, although the participants mostly prefer text (print) or audio-visual (television) stimuli alone in obtaining news from the present media instruments, when opportunities are provided, they chose alternatives where all stimuli are presented at the same time.

The media instruments that the audience uses to obtain the news, and thus, the interest and attention given to these instruments mostly depend on culture, economical conditions and social environment of the audience. The analysis of variance shows that the habits of media use in the two societies in question show statistically significantly difference. According to the multiple comparisons test in having national and international news, the television use of the members of two societies show statistically significant difference (between groups factor yield for national news, $F(1,489)=30.142$, MS=1.097, $p<0.01$ and for international news $F(1,479)=25.595$, MS=0.985, $p<0.01$)). In newspaper use for the national news there is no statistically significant difference between Greek Cypriot and Turkish Cypriot participants ($p=0.118$). For the Internet use in having national news, there is a statistically significant difference between the Turkish Cypriot and the Greek Cypriot participants ($p=0.003$). Finally for the radio use, there is a statistically significant difference between the Turkish Cypriot and the Greek Cypriot participants ($p<0.01$) at the level of alpha=0.05. For having the international news, there is a statistically significant difference between the members of two societies in the Internet use (Between group factor yield $f(1,479)=1.799$, MS=1.799, $p<0.181$). For the newspaper use there is a statistically significant difference between the Greek Cypriot and the Turkish Cypriot participants ($p=0.033$).

On the other hand, the result of the multiple comparison tests show that, among the members of two societies there is no statistically significant difference in selecting the multiple-stimuli alternatives ($F(1, 479)=1.643$, MS=8.226, $p=0.227$). Thus, it is concluded that although the media preferences for having the news are different for the members of each society, they show preference towards the same presentational format. Moreover, in trust felt towards the television in terms of the news, there is a statistically significant difference between the Turkish Cypriot and the Greek Cypriot participants ($p<0.001$). Similarly, statistically significant difference exists for the radio use between the Greek Cypriot and the Turkish Cypriot ($p<0.001$) participants. In trusting to the newspapers and the Internet there is a

significantly significant difference is observed between the Turkish Cypriots and the Greek Cypriots (p=0.605 and p=0.907 respectively). It is also important to note that for this question 50.0% of the participants are undecided for trusting the newspapers and 40.0% of the participants are undecided for trusting the Internet. On the other hand, the analysis of variance test shows that there is no statistically significant difference among the members of two societies in terms of television use (F(1, 479)=0.189, MS=0.707, p=0.664), newspaper use (F(1, 479)=0.077, MS=0.275, p=0.224) and the Internet use (F(1, 479)=0.077, MS=0.973, p=0.781) whereas for the general radio use there is a statistically significant differences between the Greek Cypriot and the Turkish Cypriot participants at the p<0.01 level.

4. *Discussion and Conclusion*

In the study, the media use of the tertiary students with respect to the newspaper, radio, television and the Internet has been explored. With respect to the research question one, data presented in Table 2 indicate that when the time spent on each media instrument is taken into consideration, the members of two societies (Turkish and Greek living in Cyprus) show similarities. In relation to five-point Likert Scale questions, the respondents from the two societies show difference with respect to merely four questions out of 12. These are: 'I watch national news on television' and 'I watch international news on the television'. To these two statements, average of the responses from the North is 'Agree' and average of the responses from the South is 'Undecided'. The third statement where a difference of attitude is found is the statement 'I trust the information I obtained from the radio' with which the average of responses from the North corresponds to 'Disagree' whereas the average of the responses from the South is 'Undecided'. The fourth statement that showed variance in of the respondents from the two societies attitude is 'I read international news on the Internet'. With this statement, the mean of the responses of the respondents from the North is 'Undecided'; on the other hand, the mean of the responses of the respondents from the South is 'Agree'. Although the differences among the means indicate different attitudes, the differences are not very big. Yet, it indicates that the television is more preferred for obtaining the international news on the North but the Internet is more preferred for obtaining the international news on the South.

With respect to the research question two, respondents were provided with twelve presentational format alternatives. The respondents found the presentational format G and then choices C and K most useful for obtaining the news. The results of the study indicate that tertiary students show preference towards obtaining the news from the media where all stimuli are present. The most popular two choices include audio-visual stimuli on the top of the screen (either as 2/3 or 1/2) and lower part (either as 1/3 or 1/2) allocated to the text stimuli. In this research, traditional media formats such as the newspaper in which the stimulus material is presented merely as the text and the radio in which the stimulus material is merely presented as audio rated lower preference. Even the television in which the stimulus material is presented as audio-visual stimuli rated very low.

In relation to the third research question, statistically significant differences have been found in relation to the use of the radio and the newspaper by the respondents from the North and South of Cyprus. Also in obtaining the national and international news, statistically significant

differences have been found based on the responses of the respondents from the two societies. However there is no statistically significant difference found in relation to selecting multiple stimuli alternatives.

Furthermore, the analysis of the data obtained from the survey shows that only 5.2% of the total respondents show preference towards the presentational formats appropriate to the present media instruments (as either merely text or merely audio-visual). Rather, in their preferences, although in different proportions, the use of all stimuli at the same time has been stressed. Therefore, the consistency in preferring multiple stimuli presentational formats among the societies and the differences in the preferences of the media instruments in having te news, trust in obtaining the news and the daily use of these media prove that the users follow what is presented to them. Hence, according to the results of the study which include two different societies, individuals have restricted access according to the presentational formats of the present media instruments. In other words, audience follows what is presented to them by these instruments. Therefore, attempting to measure the effects of the present media in terms of comprehension and remembering means to measure the effects of this trial. Moreover, such studies, as it was before, yield different results because of the different societies of the individuals participating in the studies, their educational levels, age differences and economical conditions.

The present study, with its content, population and method, has certain limitations. It is limited in terms of the target audience, because the results that will be obtained by the research, applied to the university students. Another limitation of the study is that all the universities have Internet facilities provided for the students. This widespread use of the Internet among the students may not be possible for the other individuals of the societies. Although the societies in question have some social, cultural and economical differences, they all carry the characteristics of the Mediterranean region. Therefore, there is a need to repeat such a study not only the other members of these societies but also to the other societies in the other geographical areas. In line with the research conducted by Grabe, Kamhawi and Ygiyan (2009) a variety of educational levels can be taken into consideration. In addition to literacy in the traditional sense, in the use of the media, technological literacy also plays a significant role. Thus, in addition to the education level of the participants, in the future in addition to literacy of the participants technological literacy of the research participants can be taken into consideration.

Research in the future, by considering and removing the mentioned limitations will contribute and cause more evident outcomes. Moreover, further studies should test the level of comprehension and remembering for the most preferred choices with different individuals and in different societies and thus, results will provide suggestions for developing the technology to meet the requirements of the audience in such a way that presentational formats the media use would maximize comprehension and remembering.

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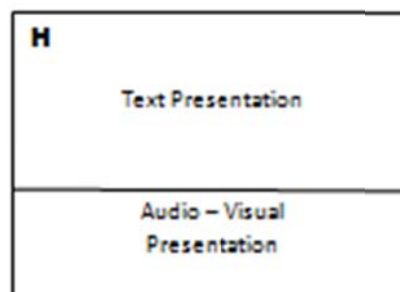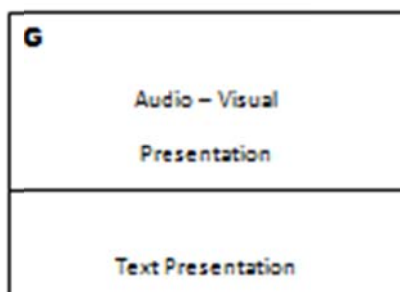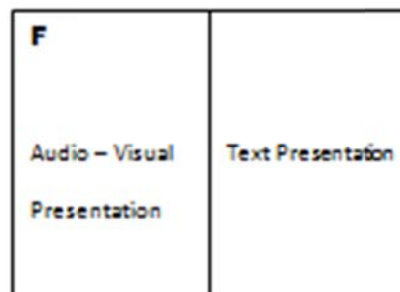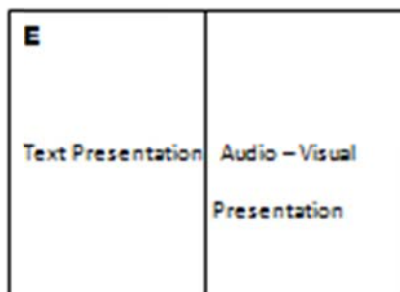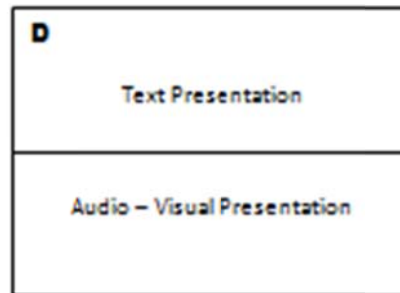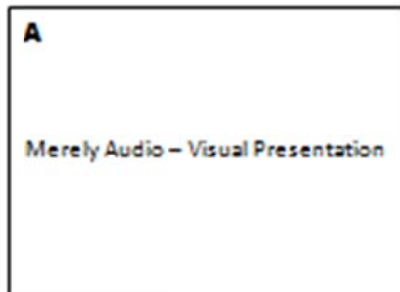
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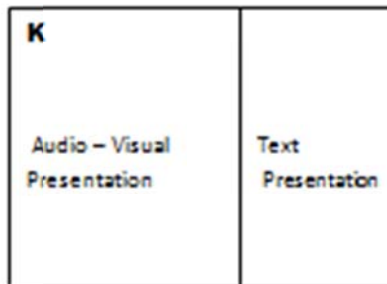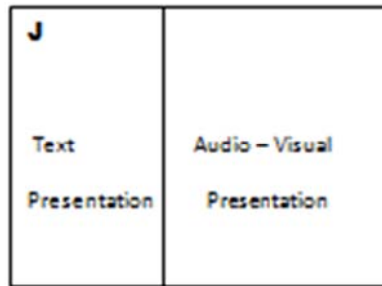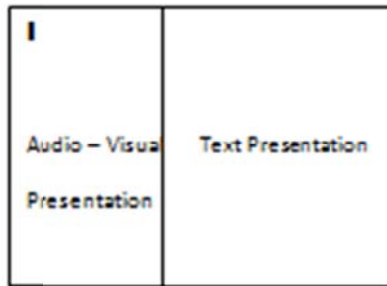
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APPENDIX A

1- Assume you watch a news program on the TV or the Internet. The same news is sent to you in two different formats as audio-visual and text. Assume the screens presented below are computer or TV screens. In these screens, the news in the format of text or audio-video are presented to you in different ratios and formats When you read any news, choose the option that would help you to understand it better and help you to remember it.

A

Merely Audio – Visual Presentation

B

Merely Text Presentation

C

Audio – Visual Presentation

Text Presentation

D

Text Presentation

Audio – Visual Presentation

E

Text Presentation | Audio – Visual Presentation

F

Audio – Visual Presentation | Text Presentation

G

Audio – Visual Presentation

Text Presentation

H

Text Presentation

Audio – Visual Presentation

I	
Audio – Visual Presentation	Text Presentation

J	
Text Presentation	Audio – Visual Presentation

K	
Audio – Visual Presentation	Text Presentation

L	
Text Presentation	Audio – Visual Presentation

If you have any suggestion different from those mentioned above, please indicate by drawing.