Basic Communication Course Annual

1994

The Role of Performance Visualization in the Basic Public Speaking Course: Current Applications and Future Possibilities

Joe Ayres
Washington State University

Debbie M. Ayres
South Puget Sound Community College

Follow this and additional works at: http://ecommons.udayton.edu/bcca

Part of the Higher Education Commons, Interpersonal and Small Group Communication Commons, Mass Communication Commons, Other Communication Commons, and the Speech and Rhetorical Studies Commons

Recommended Citation

The Role of Performance Visualization in the Basic Public Speaking Course: Current Applications and Future Possibilities

Cover Page Footnote

The Role of Performance Visualization in the Basic Public Speaking Course: Current Applications and Future Possibilities*

Joe Ayres
Debbie M. Ayres

The first part of this essay considers performance visualization's ability to reduce speech anxiety and enhance performance. The second portion of the essay considers other possible uses of visualization in public speaking classes.

CURRENT APPLICATIONS

Nature of Performance Visualization

Performance visualization involves mental modeling of speeches. As presented by Ayres and Hopf (1993), performance visualization entails watching a videotape of a proficient speaker, making a mental movie of that speaker which is as detailed and vivid as the videotape itself, and eventually replacing the speaker on the tape with a vivid image of yourself as the speaker. Ayres and Hopf (1992) offer evidence that performance visualization of this nature reduces speech anxiety and enhances speech performance.

---

*Appreciation is extended to Frances Ayres for her help in preparing this manuscript.

These data contrast with their earlier data on visualization (Ayres & Hopf, 1985). In that data, Ayres and Hopf found that visualization reduced speech anxiety but did not enhance performance. Of course, performance visualization and visualization, as developed by these authors, are very different. Visualization involves listening to a script that describes an upcoming speech in positive terms, but does not involve viewing a speech nor seeing oneself as the eventual performer of that speech. Given the clear superiority of performance visualization, we will concern ourselves exclusively with its application in reducing public speaking anxiety.

Who Should Use Performance Visualization

Current evidence suggests that performance visualization enhances performance and reduces speech anxiety for most people who are exposed to it (Ayres, Hopf, & Ayres, in press). However, these data also suggest the procedure is most effective for people who are vivid imagers. A considerable amount of literature suggests there are substantial differences in individual's abilities to visualize. Some people report very minimal imaging ability and others report extremely vivid imaging ability (Betts, 1909). Accordingly, imagery based interventions tend to be more effective for vivid imagers than for less vivid imagers (Ayres, Hopf, & Ayres, in press). The implication of these data is that people exposed to performance visualization ought to be screened for imagery vividness. There is an excellent instrument for this purpose (Sheehan, 1967). The instrument contains 35 items and has been found to be quite reliable. Sheehan developed this instrument by selecting items from Betts' (1909) original 108 item instrument. Recent factor analytic work (Neumann, 1991) confirmed the worth of Sheehan's modifications.

People who score high on Sheehan's instrument are likely to benefit the most from performance visualization. Those who score low on imagery might profit more from procedures

Performance Visualization

that rely less on imagining and more on rational thinking, such as cognitive restructuring (Meichenbaum, Gilmore, & Fedoravicius, 1971).

FUTURE APPLICATIONS

Screening

While current data clearly indicate people to be exposed to performance visualization ought to be screened for imaging ability, it appears that another dimension of imaging ability ought to be involved in the screening process — control. It is well established that people differ in their ability to control the images they generate (Gordon, 1949). For instance, some people are able to imagine an old car with little difficulty. In turn, some people can quite readily see an elephant sitting on the car when asked to do so. On the other hand, some people are able to vividly imagine something but are unable to control the nature of the image once it is brought to mind. Asking a person who can generate vivid images but who is unable to control the nature of the images he or she generates may have disastrous consequences. The person may vividly envision a terrible speech and thus increase, rather than decrease, his or her speech anxiety. Until relevant data are available, we recommend screening people for their ability to control images as well as for their ability to generate vivid images. A reliable and valid instrument is available for this purpose (Gordon, 1949). Gordon's instrument contains 12 items and takes very little time to administer. We feel that people who report little ability to control images should not be exposed to performance visualization (or any other imagery based approach such as flooding [Marshall, Gauthier, & Gordon, 1979] or systematic desensitization [Wolpe, 1958]).

Improving Performance Visualization

Current research (Ayres & Hopf, 1992) has examined how well performance visualization works when an outstanding speaker (in this case Barbara Jordon) is used as a model. It seems likely that models particularly suited to a particular student's difficulty would prove to be even more effective. The situation seems analogous to the use of performance visualization in athletics. Athletes who use performance visualization do not use general models (Garfield, 1984). They focus on very specific aspects of performance. A tennis player having trouble with his or her backhand does not imagine another player's entire game, but focuses instead specifically on the player's backhand. Similarly, speakers who have trouble with vocal variety probably ought to be exposed to a speaker whose vocal variety is excellent and asked to focus on that aspect of the speaker's delivery.

Other types of models ought to be considered. Several students commented to us that they had trouble relating to Barbara Jordon (not that they didn't think she was an excellent speaker but that they could not envision themselves in her place). It may well be that excellent student speeches would serve better in classroom speaking situations than "great speeches."

Another improvement would be to build in a cue associate with visualization. In most circumstances, one cannot perform a visualization exercise in the minute or two immediately prior to delivering a speech. Anecdotal evidence suggests that if one uses a cue (such as making a fist) at the start of each visualization session, the cue will become associated with the feelings of relaxation developed during the visualization exercise. If one develops this associative pattern, using the cue just prior to speaking can help one feel positive about the pending speech. This effect has been well established by behavioral scientists but has not been documented vis a vis

Performance Visualization

visualization. People who have tried this with visualization report that it is quite effective however.

It is undoubtedly stretching things considerably but modern technology offers an intriguing potential extension of visualization. We refer to the emergence of virtual reality devices. Current applications suggest that virtual reality projections are indistinguishable from real sensory input (Biocca, 1992). If so, anxious (as well as non-anxious) speakers may benefit from this technology. If we understand the technology correctly, the person him or herself could be the speaker projected via the virtual reality device. That is, the speaker could see him or herself delivering a speech. The speech could be perfected by the use of editing techniques. In effect, then, the person can be exposed to the perfect model — him or herself. At present, these applications have not been developed but the potential of these devices is tantalizing, albeit prohibitively expensive at this date.

I (JA) was asked the other day what I felt was the major source of speech anxiety. I was surprised to find myself saying "Lack of preparation." Upon reflection, I recalled that almost every speech anxious student I had ever encountered told me that he or she spent considerable time and energy preparing his or her speech. At the same time, the performances I have observed by speech anxious people seem to reflect a lack of preparation. When you ask speech anxious people questions about material they read in preparing a speech, their answers are often vague and unresponsive. So what's going on, are all these students lying? I doubt it. I think they are working very hard at preparing their speeches, but anxiety is interfering with their preparation activities. They are thinking about the dreaded speech and not about the articles they are reading. Related research indicates that people have limited cognitive capacity and seem able to focus on but one issue at a time (Booth-Butterfield, Cooke, Andrighetti, Casteel, Lang, Pearson, & Rodriquez, 1994). If this speculation is correct, we

ought to be helping people cope with their speech anxiety during the preparation phase of their speeches.

Performance visualization seems unlikely to be very helpful in this situation. We would suggest instead training people to use relaxation exercises like those employed in systematic desensitization (Wolpe, 1958). A tape developed by James C. McCroskey for this purpose is available from the Speech Communication Association. We would approach this problem by training students to relax and advising them to employ these relaxation exercises whenever they start feeling anxious about an upcoming speech — especially when they are trying to research the speech. We do not know if this particular approach will be helpful, but it appears we do need to develop and validate procedures that will help people cope with speech anxiety during the preparation phase of developing their speeches. We urge research into this aspect of speech anxiety.

General Applications

Performance visualization was developed by reference to work in athletics and business (Garfield, 1984). The people in these contexts were not anxious. They simply wanted to perform better. It seems quite likely that non-speech anxious students can profit from performance visualization as much or more than speech anxious people. We have had numerous non-speech anxious people tell us that they use visualization as a normal part of speech preparation. These students report vividly imagining themselves delivering the speech and envisioning the speech in a variety of ways, finally settling on the most satisfying. When they envision the speech in this way, they report being particularly attentive to trouble spots. These trouble spots indicate sections of the speech that require more work. Performance visualization may help non-speech anxious people perfect their imaging ability. As with

Performance Visualization

speech anxious people, we would suggest screening non-speech anxious people for imaging and control abilities.

SUMMARY

Performance visualization seems to be a tool that can be used to help people cope with speech anxiety. We suggest people be screened for their imaging ability since vivid imagers receive more benefit than less vivid imagers from performance visualization.

We went beyond the available evidence to suggest that people should also be screened for their ability to control images before exposing them to performance visualization. It seems logical to infer that vivid imagers who cannot control the nature of the images they conjure up may be harmed more than helped by performance visualization.

We also speculated that performance visualization could be more effective if models closer to the student's domain are employed. Targeting specific behaviors rather than exposing people to an entire speech might enhance the effectiveness of performance visualization.

We also pointed out that inadequate preparation was an important but largely undocumented source of speech anxiety. We doubt that performance visualization can be of use in this regard. Interestingly, no interventions we are aware of target the preparation phase of speech making. We suggested relaxation training as one possible intervention.

We also suggested that performance visualization may be useful to non-speech anxious people. This suggestion was based on anecdotal evidence that non-speech anxious people have shared with us. Performance visualization may help these people perfect their visualizing ability.

FUTURE DIRECTIONS

In this section of the essay, we move from facts to speculation. At present, visualization plays a minor role in our basic public speaking course. We think there is reason to believe it ought to play an expanded role. Before we consider the role visualization can play in the basic public speaking course, let's consider its present role. Aside from reducing speech anxiety, visualization is of little import in public speaking courses at present. To be sure, we point out that speakers should use visual aids and vivid words. These suggestions invariably presume that words carry the primary message and that the right words will evoke relevant images or that a timely visual aid can be used to enhance a primarily verbal message. This approach makes a tacit but obvious assumption about the relationship between sequential linear information (i.e., verbal) and simultaneous, non-linear (i.e., non-verbal) information. Public speaking texts presume verbal information is the primary way to engage audiences, with non-verbal information relegated to a secondary, supportive role.

This "verbal first" mentality is not a universally accepted explanation for the way people process information (Paivio, 1971 and Paivio, 1986). In fact, it is generally agreed that very young children use a "non-verbal first" approach (Piaget, 1952, 1962, 1981; Vygotsky, 1962). However, these authors go on to argue that people move from "non-verbal first" to "verbal first" over time. Our field's adoption of Piaget and Vygotsky's views, as well as our tradition of western rationality, probably explains why basic public speaking courses place a primary emphasis on verbal messages.

However, Paivio (1986) offers a compelling contrary dual-coding explanation of how we process sequential (verbal) and simultaneous (nonverbal) information. He feels that information from both spheres is received, stored, and recalled differently. Some non-verbal cues may elicit verbal elements,

Performance Visualization

some verbal cues may elicit certain non-verbal elements, and of course, some information will be primarily verbal and some primarily non-verbal.

If Paivio is correct, and we believe his position makes considerable sense, we ought to seriously reconsider the way we view information processing in basic public speaking courses (and other spheres as well). It would seem that some audiences (small children) and some occasions (eulogies?) and some topics (music?) may be well suited to presentations organized around nonverbal rather than verbal structures. We are reminded of a joke we recently heard about a father and son riding along with the radio tuned to a rock station. The father asked his son what the song was about. The son replied that he did not know because he hadn't seen it on MTV yet! Anyone who watches MTV knows the producers use a "non-verbal first" approach. We suspect "non-verbal first" speeches will follow similar structural transformations.

An emphasis on non-verbal, simultaneous processing has been commonplace in far-eastern cultures for centuries (Samuels & Samuels, 1975). Aspects of these cultures almost seem to reverse our "verbal first" to a "non-verbal first" stance. These cultures stress meditation to decommission rational thought in order to reach a higher plane of existence (Samuels & Samuels, 1975). We are not arguing here for the superiority of one system over the other. We point out this pattern as an instance of cultural difference. Speakers who encounter audiences with this frame of reference will not fare well unless they understand and adapt to the "non-verbal first" nature of people with these cultural backgrounds.

We doubt this essay will do much to alter our approach to basic public speaking courses. We do think it raises some issues that need to be explored. If the rising emphasis on intercultural diversity in basic public speaking texts is a sign of things to come, it may signal a willingness to reconsider our almost universal acceptance of verbal language as the fundamental means by which people process information.

REFERENCES

Ayres, J., & Hopf, T. (1985). Visualization: A means of reducing speech anxiety. *Communication Education, 34*, 289-296.

Ayres, J., & Hopf, T. (1992). Visualization: Reducing speech anxiety and enhancing performance. *Communication Reports, 5*, 1-10.

Ayres, J., & Hopf, T. (1993). *Coping with speech anxiety*. Norwood, NJ: Ablex Publishing Corporation.

Ayres, J., Hopf, T., & Ayres, D. (In press). An examination of whether imaging ability enhances the effectiveness of an intervention designed to reduce speech anxiety. Accepted for publication by *Communication Education.*

Betts, G. H. (1909). *The distribution and functions of mental imagery*. New York: Teachers College, Columbia University.

Biocca, F. (1992). Virtual reality technology: A tutorial. *Journal of Communication, 42,* 23-72.

Booth-Butterfield, S., Cooke, P., Andrighetti, A., Casteel, B., Lang, T., Pearson, D., & Rodriquez, B. (1994). Simultaneous versus exclusive processing of persuasive arguments and cues. *Communication Quarterly, 43,* 21-35.

Garfield, C. (1984). *Peak performance*. Los Angeles: Jermey P. Tarcher, Inc.

Gordon, R. (1949). An investigation into some of the factors that favour the formation of stereotyped images. *British Journal of Psychology, 39,* 156-167.

Marshall, W. L., Gauthier, J., & Gordon, A. (1979). The current status of flooding therapy. *Progress in Behavior Modification, 7,* 205-275.

Performance Visualization

Meichenbaum, D., Gilmore, J., & Fedoravicius, A. (1971). Group insight versus group desensitization in treating speech anxiety. *Journal of Consulting and Clinical Psychology, 36*, 410-421.

Neumann, D. R. (1991, November). *Factor analysis of Betts' questionnaire upon mental imagery and Gordon's test of visual imagery control.* Paper presented at the annual meeting of the Speech Communication Association, Atlanta, GA.

Paivio, A. (1971). *Imagery and verbal processes,* New York: Holt, Rinehart, & Winston, Inc.

Paivio, A. (1986). *A dual coding approach.* New York: Oxford University Press.

Piaget, J. (1952). *The origins of intelligence in children.* New York: International University Press.

Piaget, J. (1962). *Play, dreams and imitation in childhood.* New York: Norton.

Piaget, J. (1981). *Intelligence and affectivity. Their relationship during child development.* New York: Norton.

Samuels, M., & Sarnuels, N. (1975). *Seeing with the mind's eye.* New York: Random House, Inc.

Sheehan, P. W. A shortened form of Betts questionnaire upon mental imagery. Journal of Clinical Psychology, 1967, 23, 386-389.

Vygotsky, L. S. (1962). *Thought and language.* Cambridge, MA: The MIT Press.

Wolpe, J. (1958). *Psychotherapy by reciprocal inhibition.* Palo Alto, CA: Stanford University Press.