

In conclusion I would like to stress that sun exposure is a total cumulative package. There is some help from sunscreen products but without judicious precautions limiting exposure we can't expect to have a lifetime of trouble-free skin. Let's leave the sunlight to our plants chlorophyll and protect ourselves!

Getting the Message out

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COMMUNICATION THEORY

The diagram in Figure 1 was developed by Berlo (1960) to help explain the process of communication.

SOURCE	⇒	MESSAGE	⇒	CHANNEL	⇒	RECEIVER
Comm. skills		Content		Seeing		Comm. skills
Attitudes		Treatment		Hearing		Attitudes
Knowledge		Code		Touching		Knowledge
Social system		Elements		Smelling		Social system
Culture		Structure		Tasting		Culture

Figure 1. Berlo's model of the process of communication.

The source formulates the message and transmits it via a channel to the receiver. Berlo emphasises the need for the source to be in control of the process and know its pitfalls. For the process to be successful the source must understand the attributes of the receiver in order to select the correct message and channel.

THE SOURCE

The Australian nursery industry pays a levy on all containers used for growing plants for resale and part of this levy is used to fund research and development (R&D) for industry. The Australian Federal Government matches this money \$1 for \$1 so that in 1997-98 industry had access to nearly \$1 M for R&D. Projects are submitted for consideration to, or alternatively commissioned by, the Nursery Industry Association of Australia's (NIAA) Technical Committee and the Horticultural Research and Development Corporation (HRDC).

So the sources of information are HRDC, NIAA, and the R&D providers who are working on levy-funded projects. The R&D providers include mainly government organisations such as the *Institute for Horticultural Development*, in Victoria. Lets look at the characteristics of the people that work for these organisations.

Researchers often have good scientific written communication skills but poor verbal skills, their attitudes tend to reflect their academic and institutional backgrounds, they commonly possess high levels of specialised knowledge, and their social system and culture tend to be inward looking, focussed on their place of work rather than their clients. This assessment is naturally very broad and there are always exceptions, but I'm sure everyone here has seen elements of these characteristics in researchers they have met.

THE RECEIVER

NIAA's Technical Committee and HRDC have been very clear in their new 5 year R&D Plan about who the message is to be targeted at — the professional nursery industry. The 1993-94 survey by the Australian Bureau of Statistics, funded by the pot levy and HRDC, identified 3046 businesses involved in production and wholesaling of nursery greenstock.

Growers represent such a wide range of characteristics that the broad brush approach to describe them is fairly meaningless. Their communication skills range from brilliant to appalling, attitudes vary tremendously with age and background, they tend to be much more generalist in their knowledge, and often know what works without necessarily knowing why.

In terms of developing appropriate messages and channels to “get the message across,” knowing the diversity of our target audience isn't much use. Fortunately we have access to the results of a study commissioned in 1995, by NIAA and HRDC, on the information needs and wants of growers. The results of project NY531 “survey of nursery industry information needs” is available from HRDC and here are some of the relevant findings.

Growers were asked to rate a range of information sources in terms of how often they used them and their level of satisfaction with the information. Of those questioned 70% used personal networks and rated them as their most useful source of information. In addition 62% used and commented favourably about conferences, workshops, and trade days. Most (73%) said they wanted a nationally coordinated information network including magazines or newsletters.

Regarding published information on levy-funded projects, there were two clear findings. Firstly, there was a high demand for useful information from projects including financial implications. Secondly, there was a consistent criticism of the scientific style of presentation of the information they had seen from projects.

THE MESSAGE

A good example of how NIAA and HRDC are crafting the message is to be found in “The Nursery Papers”, consisting of a series of two and four A4 page leaflets published in *Australian Nursery Manager*. The authors and editors guide for “The Nursery Papers”(TNPs) says “The publication is designed to stimulate interest and provide enough information for nursery operators to be able to take some action to improve their business” (Atkinson, 1996).

Remember the growers wanted to see useful information from projects; this then determines much of the content of TNPs. Researchers are forced, partly by the format, to concentrate on the most useful and practical outcomes of their work, and discouraged from simply saying what was done. The treatment or style is “... more like a good magazine article and less like a (scientific) paper...”. This is often the hardest point for researchers and their peer reviewers to come to terms with as they have often spent years developing their scientific writing habits.

THE CHANNEL

The choice of medium is important if we are to achieve the best results with our target group. The most favoured mediums in the survey were, in order of preference; personal networks, workshops, and magazines.

The 5-year R&D Plan has as an outcome under the heading of Communication and Technology transfer “strong, focussed, and adequately resourced networks that

encourage the seeking and sharing of knowledge aimed at improving business profitability and professionalism.” So we will be making use of mediums such as I.P.P.S. conferences and workshops to get the message across.

One recent example of our use of networks and workshops is the successful series of “WaterWork” workshops conducted throughout Australia. These hands on workshops required growers to use nearly all their senses, except taste unless delicious morning teas can be counted! This successful series is now moving into its third phase of training new presenters and developing distance education packages to allow even more growers to partake. WaterWork is also being used as the model for development of future workshops.

In the publications area NIAA have completely refurbished *Australian Nursery Magazine* including the recent name change to *Australian Nursery Manager*. Not only has it been the vehicle for publishing “The Nursery Papers” but the general content has been improved to better meet the information needs of growers and other sectors.

Never shy of new opportunities, NIAA and HRDC have also embarked on the famous or infamous Internet. The two main aims of this project are to:

- 1) Create a worldwide web site for the provision of information to the Australian professional nursery industry.
- 2) Encourage and facilitate use of the Internet and World Wide Web as a major information resource within the Australian nursery industry.

We have again concentrated on the information needs of industry and resisted the temptation to use all the bells and whistles. Our World Wide Web site at www.niaa.org.au is deliberately a simple but effective site concentrating on quality content not flashy style.

FEEDBACK

Like all models Berlo’s has its drawbacks and its critics. Probably the most obvious omission is the lack of a feedback channel. So I suggest we redraw it because without feedback from you as users, we can easily get lost.

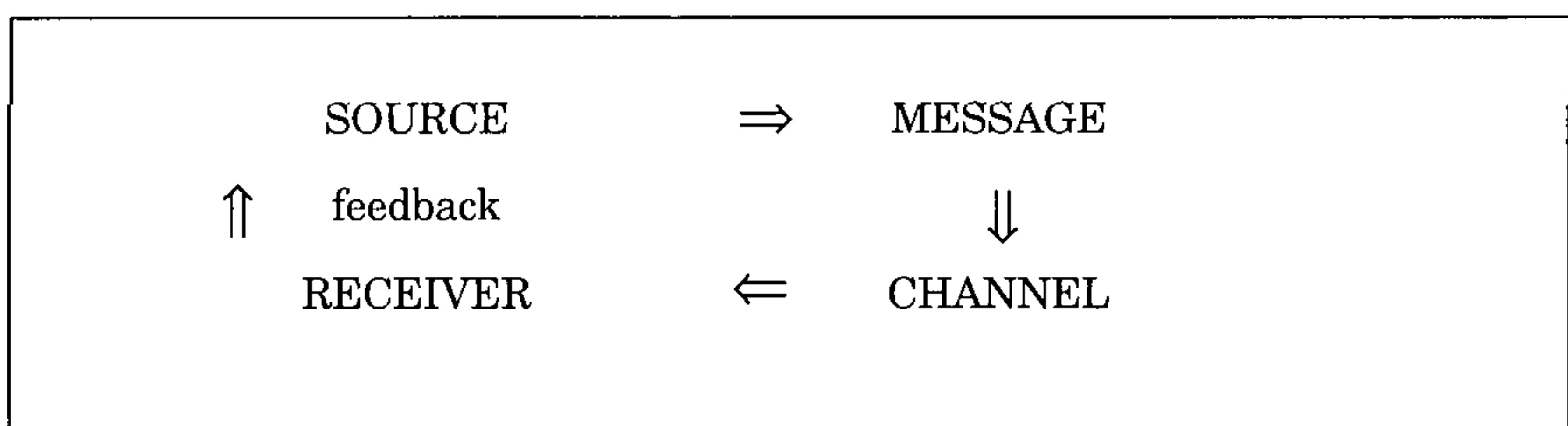


Figure 2. Modified model.

We need your feedback, both formally and informally, in order to fine tune our efforts. Formal feedback may be in the form of fax or phone surveys, so if you are asked to participate then please give it some thought and effort because you will be representing your peers. Informally if you see something useful in a TNP or something wrong on the web site please send me or NIAA a fax or an e-mail message so we know how are efforts are going.

LITERATURE CITED

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