

Readability of Parent and Staff Special Needs Training Manuals Produced in Ireland

How inviting and “user friendly” are training manuals accompanying instructional packages? Materials produced in the USA and Britain have frequently been found to be of little interest and too technical. A recent study looks at some Irish produced manuals using the criteria of readability, text design and human interest.

JOHN McEVOY is Service Development Manager of Solihull Healthcare and Learning Difficulties Research Group, University of Birmingham.

INTRODUCTION

The 1970s and 80s witnessed a proliferation of staff and parent training manuals aimed at overcoming the difficulty of providing cost-effective training for groups of care staff and parents in the field of Learning Difficulties.

In Ireland, in particular, three instructional video-courses were developed at St. Michael's House Research by Roy McConkey and colleagues (McConkey, & O'Connor, 1982; McConkey, McEvoy & Gallagher, 1982; McEvoy & McConkey, 1991). These video courses: *Putting Two Words Together*, *Let's Play* and *Count Me In* were based around the effectiveness of minicourse instruction with teachers and other professional groups (Borg, 1970; Katz, 1976; Robson 1981) and were widely distributed throughout the Republic of Ireland and Great Britain. The courses included specially made video programmes illustrating models of teaching, which parents and staff can emulate, and a number of observational exercises. Evaluations of these courses, prior to distribution, found them to be successful in bringing about changes in parent, staff and child behaviour. In the main, the courses were described as enjoyable and useful and provided new ideas about the topic area. Typical evaluations involved follow up research which further indicated a maintenance of positive attitudes to the courses (McConkey & O'Connor, 1982; McConkey et al., 1982; McEvoy & McConkey, 1991).

EARLY EVALUATION

Borg's (1971) model of the mini-course is a self contained instructional package employing a combination of written and video-taped instructional materials with practical activities and self evaluation. Initial evaluation of the Irish produced 'packages' concentrated on the video-taped instructional materials and participants' opportunities to develop new skills, with the suitability of the written materials largely being ignored. This is unfortunate, as readability (Ley, 1982), text design and layout (Hartley, 1985) are elements which may affect user comprehension, text processing, satisfaction and compliance.

ARE MANUALS EASILY READ?

Furthermore, although instructional manuals are intended for parents and care staff, they may be difficult for intended users to understand easily (O'Farrell & Keuthen, 1983). For example, although parents rated the *Let's Play* handbook relatively positively (McConkey et al., 1982), McEvoy & McConkey (1991) report that "only one teacher admitted to reading the *Count Me In* Handbook occasionally" and "two of the teachers remarked that the handbook took time to read". Sturmev & Crisp (1986) presented an analysis of text readability of Portage materials which showed them to be difficult to read by parents. And in a wide ranging assessment of goal planning manuals frequently used with parents, McGaw & Sturmev (1989) discovered that readability and human interest levels were variable and often below those of reading materials available to the general public. They went on to criticise the manuals for lack of real life practice opportunities. Frequently, many leaflets aimed at parents are written in a language which is difficult for people to understand (Reed, et al., 1993).

In the light of these findings and in view of the fact that the absence of readability measures from the original instructional evaluation might be regarded as a serious omission, an analysis was made of the readability of the three instructional training manuals accompanying the *Putting Two Words Together*; the *Let's Play* and the *Count Me In* video courses.

HOW THE MATERIALS WERE EVALUATED

Written materials associated with each of the three video instructional courses were selected. All written materials were analysed including participant and user manuals and any associated checklists.

Random samples of approximately 1,000 words were selected from each text. These were analysed for readability and human interest using the Flesch Formula, (1948, 1949). The readability formula (Flesch, 1948) assesses the readability of text by counting the number of syllables per word and the number of words per sentence. Text with short sentences and short words are deemed easier to read. In addition, human interest scores were also calculated, using the combination of two measures: the proportion of personal sentences (Ps) and the proportion of personal words (Pw). Personal sentences directly address the reader and give instructions, while personal words imply gender, include pronouns referring to people and phrases collectively referring to people.

RESULTS OF THE STUDY

The results of the Flesch formula calculations concerning readability are illustrated in Table 1.

TABLE 1: READABILITY OF IRISH TRAINING MANUALS AND COMPARISON MATERIAL				
MANUAL	INTENDED READER	FLESCH SCORE	PROPORTION WHO CAN COMPREHEND	MINIMUM IQ
'Putting Two Words Together'	Care-Staff, Parents	73	80%	87
'Lets Play'	Care-Staff	66	75%	90
'Count Me In'	Teachers, Classroom Assistants	61	75%	90
'Parent Readings'	Parents	63	40 - 80%	96

Calculations involving personal sentences and the proportion of personal words were carried out to determine levels of human interest. The results are illustrated in Table 2.

**TABLE 2:
HUMAN INTEREST RATINGS OF IRISH TRAINING MANUALS**

MANUAL	FLESCH SCORE	Ps.	Pw.	RATING
'Putting Two Words Together'	52	5%	14%	Interesting
'Lets Play'	79	7%	21%	Interesting
'Count Me In'	67	5%	18%	Interesting

DISCUSSION: MAKING THE MANUAL 'READER FRIENDLY'

This brief investigation has shown that in contrast to many British and American training manuals the Irish materials can be understood by the majority of the population and have been written in a style similar to that employed in digest or slick fiction quality. Recently Reed, et al., (1993) in a study of parenting and health related leaflets estimated that parents would need an IQ of 104+ to understand all leaflets except for one.

Clearly, text which makes an effort to include human interest, graded exercises and examples of activities for parents would seem to be more effective in the training context. Indeed McGaw & Sturmev (1989) demonstrated that the reduction of reading difficulty in text led to a greater parental knowledge of behaviour therapy. The Irish produced materials are notable in that they include many personalised sentences, illustrations and cartoons, frequent summaries and exercises and a variety of checklists. These manuals have the added advantage of being used as support materials for video programmes which provide a full explanation and demonstration of many of the topics discussed. This is in contrast with much of the American and British material e.g. Portage in which the training manuals are offered as standard items (Sturmev & Crisp, 1986).

CONCLUSION

All the Irish materials were rated as being particularly interesting. This is encouraging, as poorly written materials may discourage staff and parents from

carrying out exercises or implementing what is being taught. Finally, it is suggested that educationalists considering the development of training manuals should give careful consideration to text design and readability. In addition, it may be advisable to keep sentences fairly short and replace long words with short ones during revision. The inclusion of personalised sentences and frequent use of summary statements is advisable. Texts in which there are many references to people and which directly address the reader and contain plenty of speech in quotations have high human interest.

REFERENCES

- Borg, W.R. (1971). The Mini Course: A Milestone on the Road to Better Teaching. *British Journal of Educational Technology*, 2, 14-23.
- Flesch, R. (1948). A New Readability Yardstick. *Journal of Applied Psychology*, 32, 221-233.
- Flesch, R. (1949). *The Art of Readable Writing*, New York; Harper & Roe.
- Hartley, J.R. (1985). *Designing Instructional Text 2nd Edition*, London: Kegan Paul.
- Katz, G. (1976). Use of the Mini Course Instruction with Student Teachers of Educatable Mentally Retarded Children. *Journal of Educational Research*, 69, 355-360.
- Ley, P. (1982). Satisfaction, Compliance and Communication. *British Journal of Clinical Psychology*, 21, 241-254.
- McConkey, R. & O'Connor, N. (1982). A New Approach to Parental Involvement in Language Intervention. *Child: Care, Health & Development*, 8, 163-167.
- McConkey, R., McEvoy, J. & Gallagher, F. (1982). Learning through Play: The Evaluation of a Video Course for Parents of Mentally Handicapped Children. *Child: Care, Health & Development*, 8, 345-359.
- McEvoy, J. & McConkey, R. (1991). Self Instructional Video Courses: A Cost Effective Approach to In-service Training of Teachers in Special Education. *British Journal of Educational Technology*, 22, 164-173.

- McGaw, S. & Sturmey, P. (1989). The Effect of Text Readability and Summary Exercises on Parental Knowledge of Behaviour Therapy; The Portage Parent Reading. *Educational Psychology*, 9, 127-132.
- O'Farrell, T.J. & Keuthen, N.J. (1983). Readability of Behaviour Therapy Self Help Manuals. *Behaviour Therapy*, 14, 449-454.
- Reed, J., Coneely, J., Gorham, P. & Coxhead, S. (1993). Assessing the Written Information given to Families prior to their Attendance at a Child Development Centre. *Child: Care, Health & Development*, 19, 317-325.
- Robson C. (1981). A Mini Course in Structured teaching. *Special Education; Forward Trends* 8, 26-27.
- Sturmey, P. & Crisp, A.G. (1986). The Portage Guide to Early Education: A Review of Research. *Educational Psychology*, 6, 139-157.