ABSTRACT
Among the debates current in training circles is the debate over whether teacher trainers should involve themselves in changing staff attitudes toward innovations or providing knowledge in relation to innovations. The four arguments related to this debate are discussed: 1. attitudes, then knowledge; 2. knowledge, then attitudes; 3. attitudes are unchangeable, therefore provide knowledge; and 4. there is no knowledge, therefore attitudes. A hierarchy of levels of attitude development reveals that there is an interactive relationship between knowledge and attitudes. Attitudes in the form of bipolar constructs can be changed only with hard knowledge. Credibility must be achieved for both the subject matter and the training style. Trainers must operate in an interactive mode with suitable knowledge being used to modify observed attitudes.
(JMF)
THE ATTITUDE-KNOWLEDGE CONTROVERSY

Ray McAleese

Department of Education
University of Aberdeen
Aberdeen
AB9 2UB

(limited circulation only)
INTRODUCTION

This is the first of a series of Working Papers on the general theme of training in tertiary education. The idea is to start a polylogue* and from the dissonant and at times consonant views expressed formulate some hypotheses. Hypotheses which may be tested in order that we might achieve a 'theory of training' eventually. Trainers or 'Trainers'** need to communicate at both a formal and informal level. This paper is an attempt to facilitate communication, generate comment and provide thought on one issue that concerns trainers.

It is hoped that readers will feel free to join in the debate by writing to me with their comments ... no matter how critical. After some time I will compile the various comments into a composite paper joint authored by all the contributors. The paper will then receive wider circulation.

Your views on the paper and the general idea are welcome!

Ray McAleese
August 1976

* monologue; dialogue; therefore polylogue (A many faceted discussion)
** an expression generated in Birmingham to avoid the use of the over worked word ... 'Trainer'. (Meaning, unclear).
Among the various debates that are current in training circles, one seems to cause most problems and generate most noise. This is the debate over whether trainers should involve themselves in changing attitudes of staff to innovations or providing knowledge in relation to innovations.

The argument has arisen, in the first place, due to a mistaken conceptualisation of the trainers job as being a 'Former of teachers'.

Secondly, due to a healthy self-critical examination of training policy and methods.

In the first case the trainer is seen as some super efficient shaper of novice teachers. The person who, armed with multimedia techniques and hard empirical evidence can provide better teachers for the system. The trainer takes probationers and at the end of a 'co-ordinated development programme' turns out effective teachers. A mistaken view if there was ever one.

The second case is much more reasonable. Trainers should be accountable and they should be self-critical if their accountability is to mean anything. Healthy self-criticism can lead to the creation of training models, something that I have argued elsewhere.

At recent meetings of those involved in training this question was either openly discussed or its implications were used to lay down policy. It is time that the components of the argument were given a more detailed examination. This paper attempts to bring the debate into the open and to allow for serious consideration to be given to its implications.

Put crudely the debate is characterised by a dichotomy. Either one creates favourable attitudes then one works on knowledge, or one attacks the knowledge problem first, leaving attitudes to subsequent attack or a process of maturation.

This paper sets out the arguments related to this debate and suggests that the basic dichotomy is both misleading and based on no known empirical or logical evidence. To begin with I would like to look further at the starting position. Instead of a dichotomy there should be four possible positions. The two suggested/
and in addition:

a. It is impossible to change attitudes in any case so the only alternative is to work on providing knowledge.

b. There is no such thing as 'Knowledge' about innovations, new methods etc., so attitudes are the only possible thing that trainers can attack.

I will take each of the four propositions and say why each is unsatisfactory in its present form.

1. **Attitudes then knowledge**

Of the four propositions this is the most satisfactory. We know that as a pre-requisite for learning to take place, the learner must be favourably disposed to both subject matter and teaching method. If we take as an assumption that staff are either ill-disposed or indifferent then we must remove the attitude barrier first. The policy would imply creating a favourable environment in departments and institutions and then providing knowledge in the form of courses, papers, workshops and so on. The main defect of this argument is that it is not an 'interactive' model, it is a 'consequent' model of the relationship between attitudes and knowledge. In other words if we do A then B will follow. I will argue below that this consequent model is not tenable. There is a definite interaction between knowledge and attitudes.

2. **Knowledge then attitudes**

At first sight this seems to be an obverse position to 1., that is an alternative strategy. In fact it is a fall back position that most trainers have to adopt when they encounter the intransigent member of staff who says, "I really have no time for what you are doing, I opposed your appointment in the first place, now what can you do for me or tell me that will change my mind"! To suggest that we can provide knowledge that will simply change attitudes, is to mis perceive both Knowledge and Attitudes. Stated in its simplest form this position is the least satisfactory of the four.
3. **Attitudes are unchangeable therefore provide knowledge**

At first glance this position has the most empirical evidence to back it up. We know that attitudes as bi-polar constructs cannot be changed. We are accepting the inevitable that some people will always be 'bloody minded'. The salient with this state is that given the consequent nature of the relationship (Attitude-Knowledge) if A can’t operate, then B can. If staff are so opposed to innovation then an amount of knowledge will break down the attitude barrier. It is simply wasting time to provide courses, seminars etc. if there is no attempt to change or modify attitudes.

4. **There is no knowledge therefore attitudes**

Reviewers of research on teaching methods are numerous. As with research related to instructional technology there can be no such thing as hard empirical knowledge. For every researcher to find a significant difference there is one to show an opposite difference and two to show no significant difference. Take for example what we know about the lecture as opposed to other methods as possible teaching strategies in providing cognitive outcomes. Using Bligh's summary it would seem that the ratio of 1:1:2 (more effective: less effective: no significant difference) is quite reasonable. How can a trainer faced by such overwhelming odds do anything else than say there is no such thing as hard evidence.

Apart from the difficulty of providing hard empirical knowledge there is also the problem of specificity of knowledge. We know that visual images are more important to medical teachers than to philosophers. But in medicine not even the most addicted audio-visual freak will depend solely on visual images without verbal or textual input. We are left with the situation where evidence collected in one subject cannot be applied to another. This problem does not even touch on the variation in student or teacher input which also make knowledge very specific. One can't change attitudes by using training charisma as the only input. **Attitude change is not possible on its own.**
One of the main problems with the four positions discussed is that subsumed in the argument is the premise that if something, or someone opposes a course of action it or they must be changed or removed. I would suggest that before we decide on outcomes we need to know about causes, the nature of events and take into account the further question, "Should we change attitudes?" Attitudes or perhaps more correctly "opinions" about innovation tend to be in the form of bi-polar constructs. "I am prepared to use innovative methods ... what's wrong with what I am doing?". These attitudes of teaching must in general terms be related to general attitude traits (Hard: soft, Progressive: reactionary, etc.) They are not often formed consciously, but usually in response to situational incidents and general opinion about new teaching methods and innovation. They are amorphous in nature and I would suggest that attitude to innovation can be be seen as a hierarchy. The following is suggested:

A Heirarchy of Levels of Attitude Development

Level 1 Polar terms
' I like the idea: That's rubbish'

Level 2 Diversity of opinion
allowed but hard evidence is needed
'I will accept that if you can prove it works'

Level 3 Soft knowledge
acceptable ... just!
'O.K. but is there any evidence that supports the idea

Level 4 All knowledge is contextual
'In what circumstances does it work?'

Level 5 Able to make commitment
'I'll give it a try and see if it works'

Level 6 Knowledge is an unfolding activity and commitment is an ongoing organic process
'O.K. we will give it a go and see what happens, I'll let you know, and we can take it from there'

(I am grateful to Perry, W.G., (1970) Intellectual and Ethical Development for the idea of the heirarchy)
As can be seen from the classification the hierarchy is an 'interactive' description of the relationship between attitudes and knowledge. It also emphasises the variety of knowledge available (Hard, soft, contextual, etc.)

How does the analysis so far help the training problem?
I suggest that it does so in the following way.

1. Attitudes in the form of bi-polar constructs are the most difficult to change. If we encounter such views then no argument (rational:emperical) will be successful unless the knowledge is hard. As we encounter less firm attitudes, then the nature of our knowledge can reflect the state of the teacher's attitudes. This does not give the trainer carte blanche with regard to avoiding finding evidence, it does suggest that we may have to use different arguments with different individuals.

2. We must attempt to achieve a credibility for our subject matter. If we are challenged over the reliability, validity or relevance of our evidence, then we will not achieve success commensurate with our aims. We need to achieve, in the long run, controlled replicability for our knowledge. A far off goal...!
Perhaps, but only when we can deal with hypotheses and theories in a similar fashion to scientific hypotheses etc. (this gives some latitude!) can we achieve an adequate level of credibility.

3. Not only must we achieve credibility in our knowledge but we must also achieve it in our training style.

4. We must operate in an interactive mode with suitable knowledge being used to modify observed attitudes.

It is too simplistic to ask: the question .... Which should we do, Change attitudes or provide knowledge? We must be aware of the complexities of the variables we are dealing with.

2. The two meetings referred to are a. June 9-11, Committee for the Training of University Teachers, *Discussion on the AUT/UAP agreement on probation* b. June 23-25, University of Sussex, Centre for Educational Technology, *Curriculum Development in Higher Education*.

3. On one or two occasions I am forced into using the phrase 'we know'. I do this, conscious of the fact that at the same time I am challenging the credibility of some knowledge. The knowledge I refer to must be treated in the same way as other knowledge. It doesn't, I suggest, negate the argument if instead of 'we know' I should put 'we think'.

4. The most recent example of this 'knowledge' is that given by Gordon Miller in his report on *Staff Development in Universities and Polytechnics*. University of London, University Teaching Methods Unit, 1976.

5. By 'environment' I mean, creating events and information about teaching methods and courses on teaching methods. A "favourable environment" is one where interest is taken in the activities of those involved in training and the activities themselves.

6. I am indebted to a colleague who gave me this first hand account of a meeting with a head of department in a university. I am also indebted to the head of department who must remain anonymous ...

7. I am aware that I am using the term 'attitude' very loosely. Also the term 'opinion' (see text). "Then I use the term 'attitude' I mean "... A disposition attributed to an individual, according to which his thoughts, feelings and actions are organised with respect to an object or idea ... "


14. The question "should we change attitudes?" is not dealt with here. I don't find evidence for the power: coercive model of change. However, I think that a mild authoritarian role for the trainer is a suitable one in special circumstances. At times the trainer should have the 'authority of his subject' to support him.

15. A good example of a 'situational incident' happened on a Teaching Methods Course. An expert from the Television Service gave a very interesting introduction to a 'Demonstration on the use of CCTV in teaching'. Unfortunately, due to technical problems, he was totally unable to demonstrate any use of CCTV. He found himself saying "... if I could have shown you this clip, it would have been a good example of this use ..."!

RETURN THIS SHEET TO:

Ray McAleese, Department of Education, University of Aberdeen, AB9 2UI

WORKING PAPER ..... Number 1

The Attitude-Knowledge Controversy

Your Name: ........................................
(Block letters)
Address: ........................................
........................................

COMMENTS:

(Use additional sheets if necessary)

THANK YOU VERY MUCH!