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Overcoming Constraints on Communicating: Pointers from Constructivist Theory

What do we do when students (or indeed, professional colleagues) persist in holding negative views on people with disability? In the debate on integration, for example, polarised views can lead to destructive exchanges. Constructivist theory can provide illuminating and helpful insights into resolving conflict and constraint in communicating.

HUGH GASH is a psychologist and a lecturer in Education at St. Patrick's College of Education, Drumcondra, Dublin.

INTRODUCTION

In a previous paper I considered how Piaget's type of constructivist theory can be used to diminish prejudice towards children with special needs (Gash 1992a, 1992b). I had moved from an earlier project designed to lower children's levels of gender stereotyping (Gash, 1991), to thinking about what would be involved in trying to promote more positive attitudes towards children with disability. My concern here is to try to concentrate to a greater extent on some of the practical strategies which teachers can use. I will give a brief introduction to the theory of constructivism before discussing the teaching strategies.

THE THEORY

The central idea is that what we know is a construction built according to a process outlined by Piaget (1970). What is experienced and learned is constrained by both our biology, our past experience, and our intentions at the moment. What is communicated is also inevitably dependent on these constraints.

I have taught about constructivism for many years. I feel that some of my objectives have not been met. For example, the teachers who I teach continue to teach largely by giving information. In this their teaching strategies strongly resemble their own histories of being taught, that is, they were taught largely by being given information. I would be happier if I could devise ways in which students could become more visibly concerned with learning.

This shows that one central constraint in communication is the cognitive structure of the listener, or to put it more practically, the expectations which the listener has about the communication. The concept of assimilation is introduced to explain this in Piaget's (1970) psychology. There is nothing unsettling about this to teachers because the notion of moving gradually, of paying attention to difficulty levels is commonplace. Without some surprise, or conflict, or anxiety there is no need to change. To persuade people to change I believe I need to attend to, and persuade others to attend to, the consequences of these ideas to a greater extent.

UNDERSTANDING DIFFERENT REALITIES

Recently I have pursued these ideas more vigorously in the hope of becoming more successful at explaining why I find the ideas exciting, ultimately to communicate them in a more effective and challenging way. In a recent paper entitled "Gender and Peace" (Gash, 1992c) some of the key elements in my presentation were the idea that constructivism provides a basis for understanding different realities, that (while I would desire to avoid stereotyping) there was some currency in the association between "male" and the competitive and between "female" and the cooperative. And further, that the cooperative involved a form of mutual respect of different points of view which facilitated peace. In the lively discussion which followed that paper I was struck by the difficulties evoked by the notions of different valid realities. The status of the "real" is a central puzzle in communicating about constructivism, and the possibility of different realities ranges from the exotic (e.g., foreign cultures and holidays; virtual realities in computer video games) to the genuinely disturbing (e.g., the worlds of autistics). The real in this constructivist view is what is constructed by an individual in their social medium. What this implies is that descriptions of experience are always made by observers with particular histories and intentions. What it does not imply, is that anyone can construct whatever they desire, and I will return to this point.

SEEKING INSIGHTS INTO HOW THINKING WORKS

Initially in communicating, teachers need to take into account the constraints on the listener; later teachers need to recognize that there are also constraints on the speaker. We all have our constraints, our assumptions, and our blind spots. To begin to translate this into teaching strategies means searching for ways to attend to how thinking works, in the learner, in oneself; and to encourage more reflexivity in our classrooms about the statements we and our pupils speak and write in our classes. In the writings of Irving Sigel (1992) and Humberto Maturana (1991) are a number of insights into various ways in which teachers may provide genuinely non-coercive and child centred communicative encounters. The techniques in their work suggest ways in which some of the constraints can be removed and in which realities can be explored.

SIGEL AND THE CONCEPT OF DISTANCING

(Distancing is) a construct that is used as a metaphor to denote the psychological separation of the person from the immediate, ongoing present. The distancing metaphor suggests that individuals can project themselves into the past or into the future or can transcend the immediate present. This process of distancing is conceptualized as critical in the development of representational thinking. Sigel (1982)

Sigel (1986) developed his work on distancing because he noticed that disadvantaged lower class black children in the United States experienced difficulty with classifying pictures, and with engaging in dramatic play. At issue here was the child's ability to deal with material symbolically. He found that parents differed in their ability to provide their children with opportunities to distance themselves from their immediate experience. Since Sigel's early writings about distancing (e.g. 1970) his work in this area has extended into very practical applications of these ideas in nursery schools, and into investigations of distancing in family discourse. More generally, Sigel has described his work on distancing as being about the socialization of cognition.

PRACTICAL APPLICATIONS OF DISTANCING

I find it useful to think about distancing using the distinction which constructivists use between experience and explanation. Distancing is about asking questions to children, to people, which will provide them with opportunities to understand more about their experience, and to express this understanding in the domain of language and explanation. This seems a practical

basis on which to communicate with others in a way genuinely respectful of the way they see things. The examples of low level distancing given by Sigel (1986) are describing, labelling, demonstrating, observing. Tell me what you are looking at? What do you see there? Describe it more fully? What does it look like to you? Show me how you did that? Do you have a name for that? One critical element in distancing is that the questions are intended to challenge the learner to reflect about his or her experience to come up with novel information. Distancing is the antithesis of asking for the ready made answer; rather it is the experimental probing for new information from the pupil by an experienced and sensitive teacher.

LEVELS OF DISTANCING

Somewhat more complex thinking is required for the next set of distancing strategies: medium level distancing. These have to do with finding similarities and differences among the experiences described as the lowest level of distancing. These forms of questions have to do with putting experiences into order, with estimating and with telling how to reproduce things which have been made. A list of the different levels with examples is presented in Table 1.

The most complex levels of distancing strategies in Sigel's (1986) classification have to do with evaluation (what did you like about the film you saw?)/ (what do you think is going to happen if you post the letter today 7/5/92 (postal strike) / does this envelope (stampless) need anything else in order for it to reach its destination?)

Distancing strategies, then, are about those sorts of probing questions which help children (and learners in general) come to reflect on their experience and move them towards new understandings through social discourse. As a result of these sorts of questions the learner's constraints are moved towards greater mutual understanding between those communicating in this way. Another constraint on distancing which must not be forgotten is the constraint imposed by the teacher's habitual way of interacting in class with children. This can be very hard to change. I recommend writing out questions which are taken from these tables and which fit your class plans. Once one forms a new way of asking questions it will be easier. However in the process of learning how to use such questions a very concrete plan is likely to be needed. I also recommend you do reflexive action research on your own lessons, either with a colleague reciprocally or with a tape recorder, to see how they work and to see if you can learn from what actually happened.

TABLE 1
MENTAL OPERATIONAL DEMANDS ON THE CHILD
THROUGH PARENT DISTANCING STRATEGIES

High level distancing	Medium level	Low level
evaluate consequence	sequence	label
evaluate competence	reproduce	produce information
evaluate affect	describe similarities	describe, define
evaluate performance	describe differences	describe interpretation
evaluate necessary and or sufficient	infer similarities	demonstrate
infer cause-effect	infer differences	observe
infer affect	symmetrical classification	
infer effect	estimating	
generalize	asymmetrical classification	
transform	enumerating	
plan	synthesizing within classifying	
confirmation of plan		
conclude		
propose alternatives		
resolve conflict		

MATURANA AND OBJECTIVITY IN EXPLANATIONS

Maturana's (1991) theory on explaining provides another form of insight into what we do when teaching. Maturana (1988,1991) has categorized explanations in two ways: explanations which assume objectivity (**X is the case**), and explanations which put objectivity in parenthesis (**from where I am observing and with my intentions - X is the case**). Explanations are reformulations of experiences which are accepted according to some criterion of acceptability. It is in the examination of the criterion of acceptability that one comes to identify the type of explanation being offered. Key distinctions between these two ways of thinking about thinking include those listed in Table 2. I will attempt to give a brief outline here.

TABLE 2	
SOME KEY IDEAS IN MATURANA'S (1988) THEORY	
OBJECTIVITY	"OBJECTIVITY"
Cognitive abilities assumed, their limits ignored	Cognitive abilities acknowledged as limiting
Things exist without our knowing them	We cannot talk about things other than by operating
What doesn't correspond to reality is an illusion	One cannot know illusions until after they appear
Disagreements threaten the known reality and entail conflict	Disagreements imply different coordinations of distinction & imply possible coexistence
Ethics of truth & domination	Ethics of mutual respect.

In those explanations which assume **objectivity**, people assume phenomena exist independently of themselves, and so do not notice the role of the observer in the process of knowing. When truth is known, all else is an illusion and a threat to truth. So claims for knowledge are demands for obedience.

OBJECTIVE EXPLANATIONS AND PERSONAL EXPERIENCE

In contrast, in explanations which put objectivity in parenthesis, “objectivity”, the participation of the knower in the knowing is acknowledged as central. In this case the different ways in which people may construe experience are acknowledged as inevitable constraints. It is acknowledged that one cannot talk about any experience without making it the subject of one’s concepts and so the description is constrained by one’s history and one’s intention. Truth is not the central issue as it was in the former way of knowing. What is at issue is what works. Different points of view can be acknowledged and disagreements can be invitations to come to an understanding of the source of the disagreement.

Consider the question: “does the tree in the forest make a noise if no one hears it?” When “objectivity” is in parenthesis the answer is put in terms which acknowledge that the notion of noise is an idea whose meaning depends on sense receptors which are animal sense organs: therefore, if there is no one to hear it, it makes no noise! When objectivity is taken for granted, then the idea that there might not be a noise is ridiculous!

CONSTRUCTIVISM AND THE VALIDITY OF PERSONAL VIEWS

In a constructivist theory each person’s view is valid and people’s views differ because of their histories and their experiences which are uniquely theirs and inevitably valid for them. Further, their experiences are deeply embedded in their culture, in their language and in their ways of seeing. It is because of this embeddedness in our social, cultural and linguistic worlds that no one has the capacity to construe the world as they please. So the critique of relativism, which is sometimes levelled at constructivism, cannot exist. Constructions are constrained by their long history of development in the individual and in his or her culture. One can say that an individual’s constructions are ontogenetically valid within a culture. In different cultures different opinions have priority over others; it is for this reason that the word viability is used to mark the practical side to ideas - to what works, rather than to what is true.

INSIGHTS INTO DISAGREEMENTS AND CONFLICT

In disagreements what is required is an account of the process by which one got the result one maintains. The process can be examined and found wanting. In teaching, the focus will be on the way a child has come to her conclusion. The aim will be to apply the insight that one’s constructions are steps along a road

rather than truths which are immutable. Maturana's (1991, p.31) account of explanations: gives a model: he describes explanations as requests for reformulations of an experience which are accepted according to some criterion. Differences between realities can be seen as due to the fact that the people are operating in different domains. Maturana talks about operating in a different emotion. In more logical language others talk about the different premises in the positions taken by antagonists in arguments. However to call attention to the different emotional frames involved in arguments to my way of thinking, underlies the essentially irrational element which may be present in arguments. It is here that I find the division of explanations into Maturana's two categories very insightful. We know well that in some cases we can be persuaded to see the point of view which is different from our own: but there are other cases when we cannot but feel threatened by the other point of view.

APPLYING DISTANCING: PROMOTING CO-OPERATIVE EXCHANGES

Apply this to distancing questions. The teacher in applying distancing strategies, is attending to the process by which the learner gives an account of an experience, to the manner in which the learner puts together what is spoken, and also to the criteria which are being used to accept (or reject) the spoken account of the experience. What is being asked for in distancing strategies is a reformulation of the process by which the phenomenon occurred. This is what is at the heart of explanations which involve putting objectivity in parenthesis. It is what happens when the emotion between discussants is one of mutual respect. This emotional position is one which requires acceptance of different points of view and as such is cooperative and not competitive. It is for this reason that recently van Glasersfeld (1991) has expressed the hope that constructivism will be taken seriously - so that its ethical implications can be appreciated and applied.

CONCLUSION

In conclusion, I would like to draw attention to Bateson's (1979) comment that the appropriate biological unit of survival is a "system in a medium". When Vygotsky is compared with Piaget, one of the critical comparisons is of the greater relative importance of the social domain, or the fit between the system and the medium, in Vygotsky. For many years my own interpretation of Piaget's theory was radically constructivist e.g. Gash & Van Glasersfeld (1978): I was focusing on the fundamental importance of the learner's interpretation of events, on the conservation of the identity of the system, because I felt and still feel that

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this is so easy to overlook. However, in recent times, I have undergone something of stage change. Today, I am enjoying the emphasis which is placed by writers such as Sigel and Maturana on the ways in which ideas grow and develop can be brought out in social interaction. Some of the insights which are embedded in their theories are now being seen to have profound significance on the way we treat each other and communicate with each other.

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