

The issue of perception: some educational implications

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Differences in perception are central to both the practice and research in education. It is thus necessary for educational practitioners to understand the reason for differences in perception in order to practice and do authentic research. It is therefore the aim of this article to touch on the complex nature of the perceptual process and influencing factors as well as provide three examples of educational phenomena in order to highlight differences in interpretation. In conclusion, a few practical guidelines will be provided in order to understand different modes of thinking and behaviour.

1 INTRODUCTION

As perceptions are central to both the practice and research in education (Johnson 1994:475), researchers, learners and practitioners of education very often have problems understanding why a person thought or behaved in a specific way (Lewis 1999:4-5). McGregor (1993:17) gives a practical example to illustrate the case in point: When fourteen-year-olds writing an experimental school exit test were asked to trace the shortest distance between two towns, white children got the answer "right" while black children got it "wrong". The reason being that the black township of Crossroads (situated close to Cape Town) is situated between the two towns in the example. Black

children perceived the township as dangerous and thus travelled around the settlement while “unpoliticized” white children, to whom the name Crossroads meant little, if anything at all, took the “correct” straight line. McGregor (1993:17) ascribes these differences to the “... many things in South Africa (which) are twisted by politics and totally different perceptions”.

In a country like South Africa, these different perceptions are very often simply attributed to differences between black people who represent an holistic, interdependent society and white people, who maintain a Western, independent cultural style (cf Markus & Kitayama 1991:224–253). Although this cultural generalisation is scientifically valid (cf Scherer & Walbott 1994:310–328; Scherer 1997:902–922; Choi & Nisbett 1998:949–960), the reasons for differences in perception are far more varied than that of a cultural explanation, a factor solely expounded by Bergen (1992:6–8).

Individuals or groups experience stimuli from the outside world to which they ascribe meaning. Although, in many instances these stimuli are experienced similarly, they may often be interpreted differently (Kearney 1984:41) due to a host of factors and may even lead to misunderstandings in some instances. Why is this so? Is it a case of naive realism or that people do not know how to take another’s point of view into consideration? These questions can initiate an endless debate, but a first step to understanding others would be to understand the perceptual process.

In the light of the above, it is the aim of this article to firstly touch on the complex nature of the perceptual process and influencing factors, and secondly to propose certain guidelines as to a better understanding of others.

2 DEFINITION AND ETYMOLOGICAL ROOTS OF THE TERM “PERCEPTION”

2.1 Definition

The study of human perception is a complex field (Cantril 1968:5; Matlin & Foley 1992:2) with definitions and theories of the term being highly interdisciplinary (McBurney & Collings 1984:1) and inconclusive (Johnson 1994:476,492).

However, what has come to light from a study of literature is that it is in the fields of Philosophy and Psychology that these definitions and theories have their stronghold and are not without their theoretical debates (Lewis 1999:30). In view of these observations a general definition of the term “perception” will be provided and will be viewed in this article as an understanding of the world constructed from information obtained by means of the senses (Shaver in Johnson 1994:476).

2.2 Etymological foundations

Etymologically, the term “perception” is derived from the Old French language term *perception* and literally referred to the collecting of rents by feudal landlords (Barnhart 1988, sv “perception”). Cutting (1987:62) observes that the present definition of the term has maintained a degree of this prior usage in that it refers to the collecting of information about the world by means of the senses (cf Simpson & Weiner 1989, sv “perception”). In a similar vane, the Latin terms *perceptio*, *percipiō* and *perceptiōnem* mean “to take possession of or to seize”, be it physically grasping something or mentally seizing something with one’s senses (Lewis & Short 1975, sv “perceptio”, “percipiō”). The latter explanation refers to the focus of this article.

3 FUNDAMENTAL ASPECTS OF, AND CONDITIONS FOR PERCEPTION

The act of perceiving consists of certain conditions and fundamental elements (Jordaan & Jordaan 1996:329–332). These conditions and fundamental aspects transcend the scholarly debates surrounding the perceptual process (Lewis 1999:34). As these debates will not be discussed in this article due to their complex and lengthy nature, suffice is to say that they have contributed to a better understanding of the act of human perception (Shaver & Tarpay 1993:16–17).

3.1 Fundamental elements of perception

Fundamental to perception is that there is an experiencing person or perceiver; secondly, that something is being perceived (either an

object, person, situation or relationship); thirdly, there is the context of the situation in which objects, events or persons are perceived and finally, there is the process nature of perception starting with the experiencing of multiple stimuli by the senses and ending with the formation of percepts. Although it may appear from the above-mentioned to be a separated and slow process, cognisance must be taken that the formation of percepts takes milliseconds to complete and are not fragmented (Jordaan & Jordaan 1996:332).

3.2 Conditions for perception

Certain conditions have to be met before any act of perceiving can take place. To Jordaan and Jordaan (1994:329–332) the first condition is that there must be a sensory system that functions normally (cf Tibbetts 1969:1); secondly, that the sensory system be subjected to basic sensory stimulation and thirdly, that the stimulation be in a constant state of flux, both physiologically and psychologically.

4 THE PERCEPTUAL PROCESS AND INFLUENCING FACTORS

In order to understand how humans give meaning to their world, one has to understand the perceptual process as well as the various influencing factors. With regard to the latter, Cantril (1968:5) sees any perception as “an awareness that emerges as a result of a most complicated weighing process ... tak[ing] into account a whole host of factors or cues”.

What follows is *a* conceptualisation of the perceptual process, a mere understanding of the process, and not *the* conceptualisation – a finality cast in stone. Several authors (cf Griffin & Moorhead 1986; Randolph & Blackburn 1989; Jordaan & Jordaan 1996) see the process of perception as following a pattern and conceptualise the perceptual process by means of a model. Although McBurney and Collings (1984:5) disagree with the use of a model portraying the perceptual process for certain reasons, Randolph and Blackburn’s (1989:83–95) model is presented to show the process so as to gain a clearer understanding.

4.1 Senses

As the definition of perception implies, the first step in the perceptual process is the experiencing of multiple stimuli by means of the five senses (Matlin & Foley 1992:2). Already one notes that physiological differences and deficiencies in individuals may cause them to perceive differently. In this instance, Coren, Ward and Enns (1999:2) note that "...your world is what your senses tell you. The limitations of your senses set the boundaries of your conscious existence".

4.2 Observation and selection of focus

The sheer amount of information observed by the human senses places restrictions on the human's ability to process everything at once (Baron & Byrne 2000:80,136). The continual bombardment of the senses by phenomena implies that humans will select those which they want to notice due to a range of factors. Randolph and Blackburn (1989:85-89) conceptualise this aspect of the perceptual process as the "observation and selection of focus". To them, after stimuli are observed, humans choose their point of focus due to a range of factors within the perceiver, the perceived target and the situational context in which the perception is made (cf Robbins 1991:125-126). The following include some factors within the perceiver, the target and context which affect perception:

- **The Perceiver**

Various researchers identify and emphasise certain characteristics of the perceiver which can modify perception. Randolph and Blackburn (1989:87) identify three such factors, namely that which the individual has previously learnt, as well as the motivation and the personality of the perceiver, while Coren *et al* (1999:532-550) see physiological, gender as well as personality and cognitive differences as contributing to differences in perception. Robbins (1991:129) sees the attitudes, interests, motives, experience and expectations of the perceiver as having an influence on that which is perceived while Johnson (1994:479) argues in favour of Forgas and Melamed's (1976) categorisation. These latter authors include firstly, the influence of social experience and cultural background (cf Choi & Nisbett 1998:949-960);

secondly, the impact of the perceiver's values (cf Postman, Bruner and McGinnies 1948:142-154), attitudes and personality; thirdly, the dynamics of person perception and lastly the perceptions of causality in social events as having an influence on that which affects the perceiver's perception.

• The perceived object/subject

If one looks at an object or subject, you form perceptions of what you see due to it having certain characteristics. Randolph and Blackburn (1989:85-86) categorise these characteristics as physical and/or dynamic.

Physical elements may be size or physical appearance (cf *The Sunday Independent*, 7 January 1996:15), intensity (an object's brilliance or a person's resonance), contrast (objects or persons which stand out against their background) and novelty (unfamiliarity).

Dynamic elements may include motion (moving objects or people are more likely to be focussed on), repetition (stimuli that are repeated often receive more attention) and the arrangement of the target.

• The situational context

The context or situation in which objects or events are perceived influences subsequent thoughts and behaviour (Randolph and Blackburn 1989:87). Aspects such as the cultural context (Scherer & Walbott 1994:310-328; Scherer 1997:902-922), the social situation as well as the location and time of an incident (Randolph & Blackburn 1989:87; Robbins 1991:129) all have a profound influence on that which is being perceived.

4.3 Frame of reference filter

After stimuli of a person or object have been experienced by the senses within a specific situation or context, they are processed through what Randolph and Blackburn (1989:89-92) term a "frame of reference filter". To these authors, this is the initial phase of the attribution of meaning to the experienced phenomena.

In this frame of reference process, the characteristics of the perceiver become dominant with past and present experiences rendering a major role. Past experiences are associated with particular emotions and cognitions and when similar present experiences are encountered, humans tend to rely on past feelings and thoughts to interpret the perceived phenomena (Lewis 1999:42). Present experiences also play an important role in the perceptual process and may even modify and influence past thoughts and feelings “except where [humans] consciously resist their prejudicial influence” (Johnson 1994:481).

4.4 Allocation of meaning

To Randolph and Blackburn (1989:92-94), the final step in the perceptual process is the assignment of meaning to the perceived phenomena that have been selected and processed through the previously mentioned frame of reference filter. In order to understand others’ and our own behaviour, the process of attribution comes into operation.

With reference to a social context, while observing other humans in specific situations, humans make judgements about others and attribute meaning based on observed behaviour (Cushner *et al.* 1992:32; Finchilescu 1992:210; Baron & Byrne 2000:49). Several theories have been proposed to explain the attribution process (Baron & Byrne 2000:49-57), and although they invariably differ, they all depart from the premise that a person’s behaviour was either caused internally (eg motives and intentions), externally (some aspect of the social or physical world) or due to a combination of the two (Tyson 1987:328-329; Robbins 1991:129-130; Finchilescu 1992:210; Baron & Byrne 2000:49-57). Cognisance must be taken of the fact that although attribution models are generally valid, Tyson’s (1987:331) caution must be observed where he notes that “... there are systematic biases which exist and which can lead to serious errors in the judgements we make”. Cushner, McClelland and Safford (1992:61) agree and note that in many instances certain attributions may be incorrect as not all the information is considered when attributing a cause to a specific behaviour. Tyson (1987:332) offers a possible answer to this problem by noting that much research in this field has been conducted in

Western cultures, with little being done in non-western settings. Westerners, to Tyson, may approach behaviour in a more individualistic and independent manner, while non-western cultures may or may not be more interdependent, holistic and collective in their approach (cf Markus & Kitayama 1991:224–253).

However, errors in attribution can and do occur. Common errors in attribution may be the fundamental attribution error (also known as the correspondence bias) and the self-serving bias. The fundamental attribution error is the tendency to overestimate the influence of internal factors and underestimate the influence of external factors when judging others' behaviour, while the self-serving bias is when individuals attribute internal factors to their own successes, while blaming their failures on external factors. To Baron and Byrne (2000:60) the strength of both these errors tends to be stronger in independent or individualistic cultures than in interdependent or holistic cultures.

Errors in the perceptual process may also occur due to an information overload (cf Baron & Byrne 2000:86). In this instance, strategies are applied by humans in making sense of so much information, as accurately as possible. These strategies or shortcuts are referred to as heuristics.

5 HEURISTICS: MENTAL SHORTCUTS

Humans develop strategies or shortcuts, referred to as heuristics, when perceiving. Heuristics are used as the exposure to information is tremendous and strategies are needed to simplify the process. In many instances these heuristics are valuable, but may very often lead to perceptual errors (Baron & Byrne 2000:80). Although authors differ in their categorization of these strategies (cf Sears *et al* 1985:54; Johnson 1994:482; Baron & Byrne 2000:86–89), only three such strategies and their potential to digress will be discussed in this article.

5.1 Stereotypes

Stereotyping is a generalised assumption attributing identical characteristics (real and imagined) to all members of group or class to which individuals belong (Reber 1985, sv "stereotype"; Tyson 1987:341; Johnson 1994:482).

Stereotypes can be either positive or negative (Botha *et al.* 1993:60). In the case of the former, stereotyping facilitates easier assimilation of large amounts of information, while in the latter sense generalisations can become so common, despite them having no bases and credibility, leading to inaccurate perceptions (Lewis 1999:46-47) and prejudice (Baron and Byrne 2000:229-230). Prejudices and negative stereotypes can therefore hamper intergroup relations (Tyson 1987:341-343), especially in a country like South Africa.

5.2 Projection

Projection occurs when the perceivers' own characteristics, traits, emotions and dispositions are attributed to those of other people. This implies that people's perception of others is influenced more by what the observer is like, than by what the person being observed is like (Robbins 1991:133).

5.3 Selective perceptions

Selective perceptions takes place when people selectively interpret what they perceive based on their own interests, background, experience and attitudes (Griffin & Moorhead 1986:77). This implies a failing to take the whole picture into account when drawing inferences. As the perceiver sees what he or she wants to see, due to their bases of interpretation, unwarranted conclusions from an ambiguous situation can be drawn (Robbins 1991:132).

6 THE INTERSUBJECTIVE NATURE OF PERCEPTION

What has transpired from this cursory overview of the perceptual process is that, due to the uniqueness of each human being, there should be as many "subjective realities" as there are people in this

world (cf Rock 1975:5; Jordaan & Jordaan 1996:397–404). Common sense however refutes this claim, as there are instances where different groups and individuals perceive similarly, for example, perceptual agreement amongst cultural groups (cf Bergen 1992:6).

When different people or groups have (more or less) reached consensus about a certain perception, they have reached what Jordaan and Jordaan (1996:397) term “intersubjective agreement”. To these authors: “Intersubjectivity ... ensures that our perceptions of reality and the appropriateness of our behaviour can be verified through *consensual validation* (italics in text)” (Jordaan & Jordaan 1996:400). However, not all people within a certain cultural group agree with each other and there is even a degree of consensus amongst people with totally different cultural backgrounds, an example being agreement amongst academics with regard to a certain topic.

Contributing factors to this phenomenon are legion and include amongst other things, the influence of media (Wiehahn 1987:12), as well as cultural norms (cf Bergen 1992:6) and learning (Lewis 1999:53).

The importance of the intersubjective nature of perception is that it gives one an idea what perceptions prevail in society as well as a means of understanding and taking such perceptions into account. As Jordaan and Jordaan (1996:401–402) point out regarding its importance to conflict resolution:

If we knew what sort of intersubjective categories govern the behaviour of a particular person or group of people, we would better understand the reality they perceive. We would, for instance, argue less about what a particular matter means because we would know that we probably see it differently.

In the light of the aforesaid, three examples will be discussed briefly in an attempt to highlight the reality of perceptual differences within education in South Africa.

7 EXAMPLES OF EDUCATIONAL PERCEPTIONS IN SOUTH AFRICA

Given the dynamic and developmental nature of the perceptual process and influencing factors, one can expect varied perceptions of certain educational aspects. Very often, perceptions are used to create negative and misleading images of South African education and educational policies thus creating a warped image of the educational reality (De Vries 1992:36-37). One such example being South Africa's perceived education crisis.

7.1 The perception of an education crisis

The word crisis is derived from the Greek word *κρίσις* meaning "turning point" (Fowler & Fowler 1976, sv "crisis"). The Chinese word for crisis is *wei-chi*, *wei* meaning danger and *chi* meaning an opportunity (Cushner *et al* 1992:17). Both the Chinese and Greek thus perceive the concept as not only posing a threat, but also creating an opportunity of improvement from this threat.

As a result of perceptual differences, people view the handling of a crisis differently. One perception is that it is experienced negatively, others view it as a challenge. This is especially so in the education system of the country.

South African society has been characterised over the past decade by accelerated changes. These changes have not been without problems and uncertainties. These problems and uncertainties in turn create the idea or perception that South African society is facing an irreversible breakdown or crisis. Cushner *et al.* (1992:17) note that many Americans often think of the term "crisis" in a negative sense – implying an upset. This perception is also very evident in South Africa, especially when referring to the education system.

Reasons why South Africans perceive education in a negative sense are legion. Possible contributing factors are the role of the media (Wiehahn 1989:12) with newspaper journalists using the concept mainly negatively in newspaper headings when referring to a perceived problem in

the educational situation (*Die Burger*, 17 Mei 1993:18). Political parties also use the term in election rhetoric and propaganda in national newspapers to canvass votes with promises of addressing this so-called problem (*Sunday Times*, 30 May 1993:14; *Rapport*, 31 Desember 1995:2).

However, to state that all South Africans perceive the concept in a negative sense would be a blatant generalization. Archbishop Desmond Tutu (1995:26) creates what appears to be a balanced impression when stating that "as South Africa enters the second year of ... liberation ... we have inherited a mess: an educational crisis". However, he does present a case for opportunity by stating that South Africans should become responsible for their own destiny by putting "their shoulders to the wheel". How and when remain unanswered questions, but to perceive the education system as an irreversible situation only creates negative thoughts and behaviour. The answer lies in perceiving it not only as chaos, but also as a challenge and opportunity.

Another concept that has and is subject to diverse interpretations is the notion of democracy.

7.2 A varied perception of democracy

Since the 1994 democratic elections, all aspects of South African society have reflected the idea of a democracy, with education being no exception.

However, this term has been subjected to varying perceptions with individuals and groups giving their own specific interpretation to the term due to a host of factors. Hartshorne (1992:19) agrees and notes that "democracy means different things to different people, and in recent years the word has been used by those who have little understanding of it or desire to practise it".

Not only does the concept of democracy lack a universally accepted definition, but attempts to define the term are generally "resisted from all sides" (Nguru 1995:59) giving rise to various perceptions of the concept. According to Nguru (1995:60):

Many definitions of democracy tend to be tailor-made to fit specific types of regimes or systems. They are often little more than exercises in political marketing to sell those particular regimes or systems.

Even in South Africa, the term has been subjected to many interpretations, possibly because the undemocratic ideology of Apartheid in South Africa prevented certain groups' access to democratic structures (Hartshorne 1992:94). Another reason noted by Retief (1994:39) is that those in the Liberation Movements exiled in Communist-Socialist countries were led to believe that those societies reflected and upheld democratic principles.

In the last example a prevalent perception regarding freedom and authority will briefly be discussed:

7.3 The perception of freedom and authority

To many observers, the authority in many South African education institutions has fallen into a state of disarray. Tutu (1995:26) sees the reason as being that "too many people still mistake freedom for licence" thus ignoring the role and significance of authority and of importance, the need to strike a magical balance between the two concepts.

Charney (1995:55) and Pityana (1994:22) cite various reasons for this lack of discipline: students being too politicised, lack of respect for teachers, lack of disciplined behaviour by teachers and a lack of morals and values by teachers and learners alike, all leading to a culture of intolerance, violence and disregard for authority.

Given these contributing factors, one cannot forget that freedom cannot exist without authority and although they exist as polarities, they imply one another. To Venter (1992:37-39), freedom derives its true content from authority, while authority, on the other hand, is only true if it promotes and protects freedom. One factor contributing largely to this magical balance is that of the development of self-discipline. Venter (1992:38) views this as follows:

If the individual submits himself [or herself] to inner authority, he [she] becomes his [her] true self, gains the good life and acquires spiritual freedom and true happiness.

8 CONCLUDING REMARKS

The aim of this article was to show, in a reasonably elementary fashion, how human beings make sense of their world. What has transpired is a complex, dynamic and developmental process which acknowledges that humans will and very often do differ in their interpretation of that which is perceived.

It is in the light of the above that certain guidelines and recommendations will be made in order for educational practitioners and researchers to be more aware of others' thoughts and actions. These being that:

- By keeping in mind the complexities of the perceptual process, as well as taking cognisance of influencing factors, perceptual errors may be minimised through an increased openness to more information.
- Perceptual errors can be minimised and differences resolved by communicating with people of different cultures, backgrounds and training.
- Educational stakeholders should be understanding and sensitive to others' points of view.
- Perceptual errors may be overcome if there is a willingness to change one's perceptions when encountering new and relevant information.
- Because perceptions are dynamic, people should realise that previously held and current perceptions that were seen as correct, may be changed due to the emergence of new and valid information.
- Several factors are responsible for differences in perception and an understanding and sensitivity to these factors should be borne in mind when interpreting others' thinking and behaviour.

- Although cultural factors play a large role in the difference in perception, all their members will not necessarily think and behave in a certain uniform way.

In conclusion, it is maybe fitting to note Johnson's (1994:487) observation regarding the importance of knowledge of perceptual theory in the educational context:

Educators and others may utilize their knowledge of perception theory more personally to improve their perceptual skills and interactive behaviour in order to approach their daily tasks and social interaction more fully and more accurately informed.

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