On safety and security in education: Pedagogical needs and fundamental rights of learners

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Abstract

Taken in a narrow way, safety and security in education imply the absence of physical harm to learners and educators. However, growing attention is being paid in education law literature to broader aspects of safety and security such as problems of emotional insecurity (through bullying, for example) and pedagogical insecurity (through discriminatory teaching, for example). While there is formidable literature in education law and policy on the physical dimensions of safety and security, little is known about pedagogical security, particularly when viewed from the perspectives of those directly affected: the learners in the classroom. What is discomforting according to our empirical research is the lack of fit between the legal obligations to meet the pedagogical needs and fundamental rights of learners and the approaches to teaching and learning in the classroom. This research therefore aims to build awareness of stronger transdisciplinary collaboration between education law and teaching-learning.

Keywords: pedagogical needs; fundamental rights; school safety; school security.

Resumen. *La seguridad y la protección en educación. Necesidades pedagógicas y derechos fundamentales de los estudiantes*

En un sentido estricto, la seguridad y la protección en educación implican la ausencia de daños causados tanto a estudiantes como a sus educadores. No obstante, las últimas publicaciones sobre legislación educativa están prestando especial atención a aspectos más amplios en cuestión de seguridad y protección, tales como problemas de falta de seguridad emocional (por ejemplo, debida al acoso) y falta de seguridad pedagógica (por ejemplo, debida a una enseñanza discriminatoria). Si bien existe una importante cantidad de literatura en materia de legislación y políticas educativas con respecto a las dimensiones físicas de la seguridad y la protección, poco se ha investigado acerca de la seguridad pedagógica, especialmente desde el punto de vista de aquellos que se han visto directamente afectados:

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los estudiantes que ocupan el aula. Según nuestro estudio empírico, el aspecto más negativo es la falta de coherencia entre las obligaciones legales de cumplir las necesidades pedagógicas y los derechos fundamentales de los estudiantes, y los enfoques de enseñanza y aprendizaje en las aulas. Por tanto, este estudio pretende concienciar sobre la necesidad de forjar una colaboración transdisciplinar más sólida entre la legislación educativa y los procesos de enseñanza-aprendizaje.

Palablas clave: necesidades pedagógicas; derechos fundamentales; seguridad escolar; protección escolar.

Resum. *La seguretat i la protecció en educació. Necessitats pedagògiques i drets fonamentals dels estudiants*

En un sentit estricte, la seguretat i la protecció en educació impliquen l'absència de danys causats tant a estudiants com als seus educadors. No obstant això, les últimes publicacions sobre legislació educativa presten una atenció especial a aspectes més amplis en qüestió de seguretat i protecció, tals com problemes de falta de seguretat emocional (per exemple, deguda a l'assetjament) i falta de seguretat pedagògica (per exemple, deguda a un ensenyament discriminatori). Si bé existeix una quantitat important de literatura en matèria de legislació i polítiques educatives respecte de les dimensions físiques de la seguretat i la protecció, s'ha investigat poc sobre la seguretat pedagògica, especialment des del punt de vista dels que s'han vist directament afectats: els estudiants que ocupen l'aula. Segons el nostre estudi empíric, l'aspecte més negatiu és la manca de coherència entre les obligacions legals de complir les necessitats pedagògiques i els drets fonamentals dels estudiants, i els enfocaments d'ensenyament i aprenentatge a les aules. Per tant, aquest estudi pretén conscienciar sobre la necessitat de forjar una col·laboració transdisciplinària més sòlida entre la legislació educativa i els processos d'ensenyament-aprenentatge.

Paraules clau: necessitats pedagògiques; drets fonamentals; seguretat escolar; protecció escolar.

Summary

Introduction

Taken in a narrow way, safety and security in education are linked to eliminating physical harm. Yet an extensive interpretation reveals all risks concerning learners' welfare as a safety/security matter (De Waal & Grösser, 2009). Such an issue does not merely refer to a set of statistics as can be calculated regarding school crime and discipline (Duke, 2002). Researchers must therefore consider multiple angles when considering safety and security in education,

one of which is the sense of security learners experience concerning their intellectual development (De Waal & Grösser, 2009). One could argue that this is ultimately what South African legislation and policy have in mind.

One of the major characteristics of current classroom practice in South Africa is a paradigm shift regarding beliefs about learners, their learning styles, and teaching practices in classrooms: "a realisation that learners learn in different ways and at different paces" (Grösser & De Waal, 2006:17; De Waal & Grösser, 2009:697). The 1996 Constitution of South Africa guarantees the fundamental rights of all children and therefore of all learners. Moreover, the South African Schools Act 84 of 1996 protects both the legal rights and fundamental rights of learners.

The Education White Paper 6 (2001) describes how the education and training system must be transformed to build a caring and humane society (Dunbar-Krige & Van der Merwe, 2010), how it must change to accommodate the full range of learning needs, and the mechanisms that should be put in place to achieve these needs (Department of Education, 2001).

This is where inclusion comes in, since it involves acknowledging that all children have the right to education, can all learn and all need support (Department of Education, 2001). It is about respecting the fact that all learners are different in some way, and therefore it requires a change in the attitude, behaviour, teaching methodologies, assessment strategies, curricula and environments of educators (Department of Education, 2001). The focus is on teaching and learning activities, with the emphasis on the development of effective teaching strategies that will be of benefit to all learners (Walton, 2012), thus ensuring their pedagogical safety and security by catering for their diverse learning needs and advancing their fundamental rights (De Waal & Grösser, 2009).

Inclusion focuses on overcoming barriers in the education system that prevent it from meeting the full range of learning needs (Department of Education, 2001). According to the National Department of Education (2004) and Nel et al. (2012:14-24), the following barriers to learning can be identified:

— Pedagogical barriers that call for sufficient educator support to all learners, fair assessment procedures, flexible curricula, linking teaching to the preferred learning style needs of the learner, the tempo of teaching and the content that is taught.
— Medical barriers that call for attention to health problems, sensory impairments, physical impairments and cognitive impairments in the classroom.
— Socio-economic barriers that call for support to learners coming from backgrounds characterised by severe poverty, abuse, crime and violence.
— Systemic barriers that call for adequate school facilities, the availability of appropriate teaching and learning support material, mother-tongue instruction and proper attention to each learner.

For the purpose of this article, we focused only on the pedagogical barriers. Moreover, we set out to determine the extent to which educators link their

choice of teaching strategies to the learning styles and needs of learners, thereby adhering to learners' fundamental rights and enhancing their pedagogical security. As stated in the Preamble to the Constitution, teaching and learning should, among other things, meet the fundamental human rights of learners, thus "Improv[ing] the[ir] quality of life … and free[ing] the[ir] potential". Furthermore, according to the guiding principles of the National Education Policy Act 27 of 1996, the education of all learners should be directed at advancing and protecting their fundamental rights, "achieving an integrated approach" in education and allowing learners to develop to their full potential by "recognizing the[ir] aptitudes [and] abilities" (§ 4(b), (f), (h)). These rights are grounded in the fundamental rights of learners in South African classrooms.

I. The meaning of pedagogical security

Together with international efforts for the constitutionalisation of human rights, a dynamic, worldwide movement has aimed at recognizing the fundamental rights of children and therefore of learners in the classroom (Grösser & De Waal, 2006).

While section 29(1) of the Constitution provides that every child has the right, among other things, to basic education, section 28(2) enhances this right by pointing out that children's best interests are of supreme importance in all matters that affect them. Although it would seem that the state is primarily responsible for upholding these rights, the responsibility of the state is complementary to that of parents or their substitutes and would arise only if the parent or substitute (such as the educator) is unable to do so (Robinson, 1995). It is therefore clear that South African educators need to acknowledge the fundamental rights of learners.

Moreover, the South African Schools Act 84 of 1996 aims at upholding the rights, among others, of all learners. Various sections of the act refer to taking into account learners' rights (§§ 5(6), 34(1)), the best interests of the learner (§ 4(1)), consulting the learner (§ 8(1)), protecting the interests of the learner (§§ 8(5), 9(3)(c)), and providing quality education for the learner (§§ 8(2), 20(2), 36). These aspects are all aimed at laying a strong foundation for the development of all South Africans' talents and capabilities in accordance with the preamble to the Constitution.

Section 3 of the Norms and Standards for Educators (27 of 1996) stipulates the seven roles of educators. For the purpose of this paper, the following five norms and standards that are central to enhancing pedagogical security are highlighted:

— The educator will mediate learning sensitive to learners' needs.
— The educator will pace the learning sensitive to learners' needs.
— The educator will demonstrate responsiveness to learners' changing needs.
— The educator will uphold the Constitution.

— The educator will know and use the different approaches to teaching and learning appropriately.

It is clear, therefore, that classroom teaching and learning must not only respect the pedagogical needs of learners, but also their fundamental human rights. The South African legislative directives emphasise the right of learners to quality education which mediates learning that is sensitive to their changing needs by using different philosophical approaches to teaching and learning. Such approaches would ensure psychological integrity, uphold human dignity, and satisfy outcomes-based educational objectives. This would ensure learners' sense of being intellectually cared for, auguring well for a "society based on democratic values, social justice and fundamental human rights," according to the preamble of the Constitution.

In order to achieve pedagogical security that will advance learners' fundamental rights, it is important to be aware of the pedagogical needs of learners, firstly by consulting the existing literature on the topic and later by analysing the findings of the empirical study reported in this article.

II. Pedagogical needs of learners

Pedagogical needs are related, among other things, to linking teaching to the preferred learning style of the learner (Nel et al., 2012). Human beings are different and unique individuals and each individual has his/her unique way of doing things (Kruger & Adams, 2002; Visser et al., 2006). When faced with the same situation, people will react differently to it and therefore peoples' perceptions and interpretations of the same event are hardly ever identical (Grösser & De Waal, 2006). This understanding also holds true for learners in any given teaching and learning situation given the differences between them: some learners tend to focus on facts; some are more comfortable with theories; some respond strongly to visual forms of information such as pictures, diagrams and schemas; some get more from verbal forms such as written and spoken explanations; some prefer to learn actively and interactively; and some learners function more introspectively and individually (Kolb, 1984; Lawrence, 1994; Felder, 1996; Burke & Dunn, 2003; Nieman & Pienaar, 2006). If educators teach exclusively in a manner that favours their learners' less-preferred learning styles, the learners' discomfort level may be high enough to interfere with their learning. On the other hand, if educators teach exclusively in their learners' preferred modes, the learners may not develop the mental dexterity they need to reach their potential for achievement in school and as professionals (Kolb, 1984; Lawrence, 1994; Felder, 1996; Burke & Dunn, 2003; Nieman & Pienaar, 2006).

Concern for learners should be the foundation of all teaching (Gunter et al., 2003), yet very little attention has been given to the differences among learners up to now. Moreover, educators often claim that they teach all learners in the same way (Kruger & Adams, 2002), believing that this is an accept-

ed professional way of showing that they are not biased or segregative. Much as this is a socially accepted principle, research shows that treating learners uniformly does not always yield good and successful results (Kruger & Adams, 2002). It appears as if matching teaching with the preferred learning style of a learner is an effective form of teaching and learning (Grösser & De Waal, 2006). Moreover, we confirm previous research (Grösser & De Waal, 2006) in asserting that because every learner has unique talents, potentials, abilities, as well as shortcomings, it is necessary for educators to recognise, acknowledge and cater to these assorted needs in order to promote learner performance and competency.

Educators need to design their instructional practices in such a way that the individual characteristics of learners are adequately addressed. To do so, educators should (Grösser & De Waal, 2006):

— acknowledge the differences that exist among learners;
— recognise that such differences may impact on how learners learn; and
— plan and implement learning programmes which respond to these differences.

An outcome of education should be to help learners build skills in both the preferred and less preferred modes of learning (Felder, 1996). Learning style models that categorise these modes provide sound frameworks for designing instruction with the desired breadth. The goal is to ensure that the learning needs of learners in each model category are met at least part of the time. This is referred to as 'teaching around the cycle' (Felder, 1996) or experiential learning (Kolb, 1984).

Learning styles should be identified within the prescriptions of supporting and promoting learning and should not aim at labelling and stigmatizing learners. Educators should take serious note of this or they might fall into the trap of stereotyping or favouring some learners at the expense of others.

Learning styles refer to orientations towards approaching learning tasks and processing information in different ways (Grösser & De Waal, 2006). A broad understanding of learning styles will thus help educators to understand and support all learners throughout their learning processes, and thus foster a sense of intellectual security which can lead to better achievement of potential.

Educational psychologists have studied several differences in learning styles. Some of the most effective learning style models (De Waal & Grösser, 2009) provided the theoretical framework for our article. These models are described below.

(a) The Myers-Briggs Type Indicator (MBTI)

This model classifies learners according to their preferences on scales derived from psychologist Carl Jung's theory of psychological types, indicating that learners may be (Lawrence, 1994):

— extraverts who try things out, focusing on the outer world of people or introverts who think things through, focusing on the inner world of ideas;
— sensors who are practical, detail-oriented, focusing on facts and procedures or intuitors who are imaginative and concept-oriented, focusing on meanings and possibilities;
— thinkers who are sceptical, making decisions based on logic and rules or feelers who are appreciative, making decisions based on personal and humanistic considerations; or
— judgers who set and follow agendas, seeking closure even with incomplete data or perceivers who adapt to changing circumstances, resisting closure to obtain more detail.

These preference types may be combined to form different learning style types.

(b) Kolb's learning style model

Kolb (1984) maintains that learners can be divided into four major categories according to their preferred style of learning:

— *Convergers/sensors and feelers* prefer to learn by intuition and by being sensitive to feelings and atmosphere. They like to see, hear and feel in order to learn. They rely on experience and intuition.
— *Divergers/watchers* prefer to learn through perception and observation. They like lectures, demonstrations and similar activities where they observe.
— *Assimilators/thinkers* prefer to analyse logically and create understanding for themselves. They like to read theory and study well by themselves.
— *Accommodators/doers* prefer to learn by trying things out and are willing to take risks. They prefer practice to theory. They enjoy learning activities that enable them to do something, such as projects, tasks, discussions and similar activities.

(c) Hermann Brain Dominance Instrument (HBDI)

This method classifies learners in terms of their relative preferences for thinking in four different modes that are based on task-specialised functioning in the brain (Hermann, 1990):

— **Quadrant A**: (upper left brain) These learners are logical, analytical, quantitative, factual and critical. They prefer precise to-the-point information, theory and logical rationales, proof of validity and textbook readings (Maree & Fraser, 2004).
— **Quadrant B**: (lower left brain) These learners are sequential, organised, do thorough planning and structure their work. They prefer an organised

and consistent approach to classroom teaching with clear instructions and expectations (Maree & Fraser, 2004).
— **Quadrant C**: (lower right brain) These learners tend to be emotional, interpersonal, sensory and kinaesthetic. They prefer group discussion, sharing and expressing ideas, and hands-on learning (Maree & Fraser, 2004).
— **Quadrant D** (upper right brain) These learners tend to be visual, holistic and innovative. They prefer discovery and exploration during learning and opportunities to experiment (Maree & Fraser, 2004).

(d) The Felder-Silverman Learning Style Model

This model classifies learners as follows (Felder, 1996):

— Sensing learners who are concrete, practical and oriented towards facts and procedures or intuitive learners who are conceptual, innovative and oriented towards theories and meanings.
— Visual learners who prefer visual representations of presented material or verbal learners who prefer written and spoken explanations.
— Inductive learners who prefer presentations that proceed from the specific to the general or deductive learners who prefer presentations that go from the general to the specific.
— Active learners who learn by trying things out and working with others or reflective learners who learn by thinking things through and working alone.
— Sequential learners who tend to be very linear and orderly and learn in small incremental steps or global learners who tend to be holistic systems thinkers who learn in large leaps.

A critical analysis and synthesis of various learning style models as discussed above, as well a number of other models not included in the scope of this research, clearly indicate that the way a learner learns relates to brain dominance (Nieman & Pienaar, 2006), as well as to a number of other factors as summarised below, namely:

— Physiological aspects related to perceptual preference (sensing, feeling, observing or doing) during learning (Kolb, 1984; Honey & Mumford, 1992; Schurr, 1994; Felder, 1996; Leider, 1997).
— Personality aspects related to the learner, namely **extraverts** who try out and experiment with things, introverts who think things out by focusing on the inner world of ideas, **sensors** who are practical and **intuitors** who are imaginative (Lawrence, 1994).
— Stimuli imposed by the environment which relate to some learners having a preference for sound versus quietness, lighting, temperature and formal and structured versus informal environments (Burke & Dunn, 2003).
— Emotional factors which affect motivation and concentration (Burke & Dunn, 2003).

— Sociological factors which focus on the social and collaborative nature of learning as opposed to taking individual responsibility for learning, namely working alone, in pairs, with pairs, as part of a team or with an adult who is either authoritative or collegial (Burke & Dunn, 2003).
— Styles to process information refer to the level of dependency during teaching and learning (Nieman & Pienaar, 2006). Field-dependent learners prefer a well-structured and guided, global and holistic approach to learning as opposed to the field-independent learner who prefers a less structured, independent, analytical and systematic approach to learning (Nieman & Pienaar, 2006).
— Task functioning in the brain (Hermann, 1990). Learners can be upper left-brain thinkers who think logically and analytically and like working with precise information. Some learners are lower left-brain learners who prefer sequential, organised, planned and structured ways of working. Lower right-brain learners tend to be emotional, interpersonal, sensory and kinaesthetic. They like hands-on learning and working with others. They enjoy group discussions where they can share and express ideas. Finally, upper right-brain learners prefer visual, holistic and innovative learning by means of discovery, exploration and experimentation (Maree & Fraser, 2004).
— Intelligence (Armstrong, 2000; Gardner in Nieman & Pienaar, 2006). In this regard, a distinction can be made between learners who like to think in words, learners who like reasoning, learners who like to think in images, learners who think rhythmically according to pitch or melody and in tunes, learners who think through action and movement, learners who like co-operative and group activities, learners who think best alone, and naturalistic learners who notice the patterns in the environment and enjoy nature activities.

Constructivism, an educational theory that has been prominent in South African classrooms since 1994, takes a specific view regarding learning, namely that it should be experiential in nature. Kolb (1984) developed a model for experiential learning, which indicates that the learning process involves four stages that link directly with four learning styles, namely concrete experience (sensors/feelers), reflective observation (watchers), abstract conceptualisation (thinkers) and active experimentation (doers). For the purpose of this article, which focuses on research conducted in South African classrooms where teaching and learning are constructivist and experiential in nature, we decided to utilise Kolb's model due to its strong focus on perceptual preference during learning as a frame of reference. In line with Kolb's conceptual framework, we argue that in order to provide learners pedagogical security, educators need to meet the pedagogical needs and ensure the fundamental rights of learners by, among other things, balancing teaching styles, teaching methods and strategies and assessment activities with the perceptual preferences of learners.

III. Balancing teaching strategies with perceptual preferences as learning styles

Educators' beliefs about knowledge and knowledge acquisition influence the way they think and make important instructional decisions (Grösser & De Waal, 2006; Chan, 2008; Muis & Sinatra, 2008). These instructional decisions include the choice of teaching styles, teaching methods and strategies, and the choice of assessment activities. According to Schraw and Olafson (2003), the most frequently used terms in the literature to describe educators' beliefs about knowledge and knowledge acquisition refer to 'realist', 'contextualist' and 'relativist' beliefs.

According to Weinert and Helmke (1995) and Schraw and Olafson (2003), the realist worldview assumes that there is an objective body of unchanging knowledge that is best acquired through experts via transmission and reception. Educators with a realist worldview teach actively to learners who are viewed as passive recipients of pre-established knowledge (Schraw & Olafson, 2003). Realist educators are apt to use norm-referenced assessment such as standardised tests because they want to determine how much of the pre-established curriculum has been learned (Schraw & Olafson, 2003). This type of assessment focuses on recognizing facts, rather than generating own answers.

According to McCaslin and Hickey (2001) and Schraw and Olafson (2003), the contextualist worldview assumes that learners construct shared understanding in collaborative contexts in which educators serve as facilitators. Contextualists assume that knowledge will change over time and that learners need skills to acquire new knowledge on their own. They prefer to use authentic assessments that match cooperative activities (Schraw & Olafson, 2003). It is therefore more likely that contextualist educators would use alternative assessments such as portfolios and performance-based assessment.

For Cobern (2000) and Schraw and Olafson (2003), the relativist world view assumes that each learner constructs a unique knowledge base that is different, but equal to that of other learners. Knowledge is subjective and changeable. Educators with relativist world views deny the primacy of their own knowledge and emphasise their role in creating an environment where learners can learn to think independently. These educators rely on criterion-based assessments tailored to each learner's individual needs and include assessment practices that demonstrate learner achievement through the use of written, numerical, oral, visual, technological or dramatic media (Schraw & Olafson, 2003).

The above-mentioned beliefs differ in a variety of important ways and entail three distinct ways of teaching and assessment, which in turn impact on the learning styles that are addressed through teaching and assessment.

Based on the above discussion, we illustrate, in summary form, our view on how teaching beliefs influence teaching styles, the choice of the various types of teaching and learning methods and strategies, as well as assessment activities to ultimately accommodate a particular perceptual preference as learning style (Fig. 1).
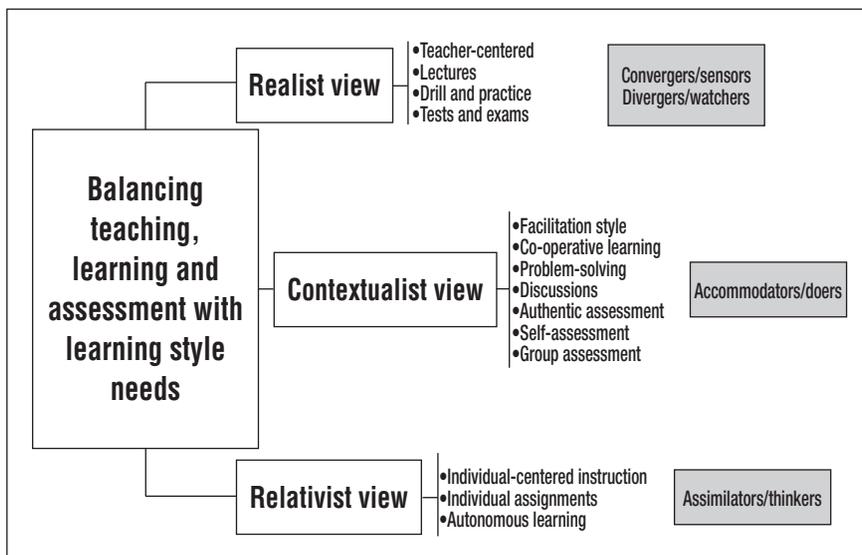
Figure 1. Balancing teaching, learning and assessment with learning styles.
Source: Grösser and De Waal (2006) and De Waal and Grösser (2009)

In essence, teaching styles refer to certain manners in which learning activities are presented to learners in order to achieve learning outcomes (Mabena, 2004; Kramer, 2006). The transmission and reception style of teaching implies that the educator takes a central role and is the source of learning (Kramer, 2006; Arends, 2009). Learners are seen as passive receivers of information (Gunter et al., 2010). The facilitation style paves the way for learners to take a central role, participate in constructing meaning and understanding and undertake tasks by themselves (McCaslin & Hickey, 2001; Borich, 2003; Kramer, 2005; Gunter et al., 2010). Knowledge is seen as subjective and highly changeable (Cobern, 2000).

It is clear from Figure 1 that the choice of teaching methods, teaching strategies and assessment activities accommodates a particular teaching style. This, in turn, accommodates a specific learning style. In order to accommodate all the learning styles, teaching methods and strategies as well as assessment activities need to be varied in order to accommodate perceptual preference as a pedagogical need in the classroom.

This brings us to the following question: to what extent does the choice of teaching and learning strategies accommodate a variety of perceptual preferences in order to promote pedagogical security and in doing so respect learners' fundamental rights?

IV. Aims of the research

By means of a questionnaire distributed to educators (Grösser & De Waal, 2006; De Waal & Grösser, 2009) and a questionnaire distributed to learners, we attempted to determine: (1) the degree to which participating educators saw themselves as addressing perceptual preferences as pedagogical needs and fundamental rights of learners in their classrooms; (2) the compatibility of teaching practices with learners' perceptual preferences as pedagogical needs and fundamental rights; (3) whether participating educators were empowered to meet learners' perceptual preferences as pedagogical needs and fundamental rights; and (4) the degree to which participating learners perceived the classroom practice of educators as compatible with their perceptual preferences as pedagogical needs and fundamental rights. For the sake of this article, we will focus on learner perceptions, and the second and fourth aims mentioned above.

V. Research design

We undertook a preliminary exploratory study framed within a positivist research paradigm that was quantitative and descriptive in nature to gain practical knowledge of and insight into the emerging philosophies of teaching and learning, and to link these to the variety of teaching styles, teaching methods and assessment strategies employed to meet the perceptual preferences as pedagogical needs of all learners in a classroom. Furthermore, we also explored the importance of acknowledging the fundamental rights of learners in the classroom by doing a document analysis of the relevant legislative acts and subordinate legislation, backed by an advocacy approach.

(a) Data collection instrument

The data were collected by means of two comprehensive researcher-developed and self-administered questionnaires for educators and learners which required them to reflect critically on teaching practice in the classroom. The questionnaire for the educators comprised seven sections, while the questionnaire for the learners' included six sections:

— Section 1: Sociodemographic data
— Section 2: Teaching styles (built-in consistency: personal evaluation)
— Section 3: Teaching methods (Cronbach's alpha to measure consistency)
— Section 4: Perceptual preferences as learning styles (built-in consistency: personal evaluation)
— Section 5: assessment strategies (Cronbach's alpha to measure consistency)
— Section 6: Emerging philosophies of teaching and learning (only educator questionnaire; Cronbach's alpha to measure consistency)
— Sections 7 (educators)/6 (learners): The importance of learners' fundamental rights (weighted ranking)

The relevant literature provided the basis for developing sections 2-6 of the questionnaire, while the relevant legal documents provided the basis for developing sections 7 (educators)/6 (learners).

(b) Population and sample

The research was conducted in the D7 district (Vereeniging, Meyerton, Sharpeville, Heidelberg and Nigel) of the Gauteng Department of Education, and involved all primary and secondary schools in the district (N = 83).

The randomly selected sample comprised the following participants:

— schools (n = 18); (9 primary schools, and 9 secondary schools);
— educators (n = 244); and
— learners (n = 520).

The study was bound to one geographical area, which poses a limitation on the generalizability of the research findings.

(c) Pilot study

Before administering the questionnaire to the entire sample, a pilot study was conducted with a selected number of subjects from the target population to assess the reliability and validity of the questionnaire items.

Cronbach's alpha coefficients were calculated to determine the internal consistency of sections 3, 5 and 6 of the educator questionnaire and sections 3 and 5 of the learner questionnaire. Cronbach's alpha is a reliability coefficient that calculates the extent to which items, such as those found in a questionnaire, are correlated positively to one another (Akbaba, 2006). The reliability coefficients calculated to test the internal consistency of the two questionnaires sections are shown in Table 1. The pilot study, as well as the actual study, indicated that the questionnaire complied with reliability criteria. Validity was arrived at by considering both content validity and construct validity. The content validity was supported by the fact that we constructed the specific questionnaire items strictly according to the definition of each section. The construct validity was underpinned by the fact that although the test focused on different sections, they all dealt with aspects which were important in meeting the pedagogical needs and ensuring the fundamental rights of learners.

Cronbach's alpha measures consistency among individual items on a scale (Simon, 2008). According to Sekaran (2000), the internal consistency reliability increases when Cronbach's alpha moves closer to 1. Our reliability coefficients were higher than 0.7, thus indicating that the items of the questionnaire had good internal consistency. The inter-item correlations also revealed acceptable results (0.15-0.5).

Table 1. Reliability coefficients

		Learners			
		Pilot study		Completed study	
Sections	Headings	Cronbach's alpha	Inter-item correlation	Cronbach's alpha	Inter-item correlation
Section 3	Methods	0.78085	0.27776	0.73088	0.15203
Section 5	Assessment strategies	0.73832	0.21657	0.78219	0.1949

Source: De Waal and Grösser (2009)

VI. Data analysis and interpretation

The response rate for the learner questionnaire was 506 learners (97.30%) out of a possible 520 learners. Questions which were left unanswered have been omitted from the data shown in the tables.

The sociodemographic information indicates that the learners were representative of a variety of grades and phases (except the Foundation Phase (Grades 1-3)) and various age groups (ranging from 8-21 years of age).

(a) Teaching styles

Learners were requested to indicate the percentage (%) of time that their educators normally spent on using the following teaching styles in the classroom. These responses are shown in Table 2.

The responses concerning the use of a particular teaching style indicated that there was a strong focus on the transmission-reception style of teaching. Against the background of accommodating diverse learning style needs, this response did not indicate that teachers create an ideal teaching and learning situation, where learning style needs are addressed in a balanced way. Both the transmission-reception style of teaching and the facilitation style of teaching needed to be used on a fairly equal basis during teaching. The perceived situation implied that the entire spectrum of world views regarding teaching and learning was not represented in teaching and learning and that the variety of pedagogical needs was thus not met.

Table 2. Teaching styles in the classroom (learner responses)

	Always	Often	Sometimes	Never
Educator talks most of the time	36.22%	42.52%	20.28%	0.20%
Learners are involved, they discover and inquire	26.77%	33.27%	37.40%	1.38%

Source: De Waal and Grösser (2009)

(b) Teaching methods

Learners' responses on how often their educators used a variety of teaching methods while teaching are shown in Table 3.

The learners' responses indicate that the educators used a variety of teaching methods. Yet a closer examination of the responses reveals a strong tendency to use methods that fit into a realist world view, namely questioning (69.49%), demonstrations by educators (35.63%) and presentations by educators (33.66%). This is closely in line with the previous responses, which indicated that educators focused strongly on the transmission-reception style of teaching. Learners were therefore apparently viewed as passive recipients of pre-established knowledge and there seemed to be an emphasis on deliberate practice. There is, however, some indication that the relativist and contextual world views were also accommodated to some extent during teaching through the use of worksheets (37.40%) and cooperative learning (30.51%).

Table 3. Teaching methods used in the classroom (learner responses)

	Always %	Often %	Sometimes %	Never %
Lectures	16.93	29.33	35.58	14.57
Drilling	24.02	17.32	38.78	19.49
Worksheets	37.40	41.14	19.88	0.59
Presentations by educator	33.66	35.24	25.39	3.74
Demonstrations by educators	35.63	30.12	29.53	2.56
Constructing concept maps	6.30	25.39	50.39	15.55
Case studies	16.93	35.24	39.57	6.10
Making posters	9.25	17.52	57.68	14.96
Oral presentations by learners	14.96	37.20	43.50	2.95
Role playing	11.42	20.67	53.15	13.39
Designing activities/tasks	9.45	20.08	49.02	19.69
Projects	19.29	36.22	36.42	7.28
Field trips	3.54	6.10	48.03	40.94
Experimenting	5.31	27.17	46.46	19.29
Questioning	69.49	20.28	9.25	0.20
Debates	12.60	15.94	48.62	21.85
Surveys	4.33	22.24	44.49	25.79
Crossword puzzles	5.91	15.16	59.06	19.29
Cooperative learning	30.51	31.10	33.66	3.15
Demonstrations by learners	8.46	26.38	52.76	11.22
Brainstorming	24.41	31.30	34.45	8.46

(c) Perceptual preferences as learning styles

Learners were requested to indicate how frequently their educators accommodated the four major perceptual preferences as learning styles through their teaching. These responses are indicated in Table 4.

Although all the perceptual preferences were indicated as being accommodated during teaching, the responses to this section clearly supported the relativist world view due to the fact that the learning style most often accommodated during teaching was that of the thinker (48.23%). This implied that the focus was on learners who like to learn by analysing things and creating understanding for themselves. The responses to these questions contrasted strongly with the responses to the previous two sections where a strong focus on the realist worldview during teaching was observed. This discrepancy could perhaps be due to learners' misunderstanding that the concept of reading automatically implies the application of thinking skills.

Table 4. Accommodating perceptual preferences as learning styles (learner responses)

	Always	Often	Sometimes	Never
Sensors and feelers: Learning by seeing, hearing and feeling.	214	103	137	52
	42.13%	20.28%	26.97%	10.24%
Watchers: Learning by watching and observing others. Prefer lectures and demonstrations.	142	187	133	44
	27.95%	36.81%	26.18%	8.66%
Thinkers: Learning by analysing things and creating understanding on their own. Prefer to read theory and study individually.	245	143	110	8
	48.23%	28.15%	21.65%	1.57%
Doers: Learning by preferring practice to theory. Prefer to complete projects.	147	174	158	27
	28.94%	34.25%	31.10%	5.31%

Source: De Waal and Grösser (2009)

(d) Assessment strategies in the classroom

Learners were requested to indicate how often their educators provided them the following variety of assessment opportunities. The responses are shown in Table 5.

Table 5. Providing learners different assessment strategies (learner responses)

	Always %	Often %	Sometimes %	Never %
Analysing/breaking up into parts	22.24	36.81	36.81	3.35
Synthesizing/grouping things together	12.20	28.15	44.09	12.60
Planning	29.33	37.60	26.18	5.51
Providing precise, to-the-point detail	20.87	31.30	41.73	5.12
Discovering and exploring	10.63	36.42	36.02	15.35
Experimenting	11.22	24.41	45.28	18.11
Practical applications	15.35	32.28	42.32	8.46
Group discussions	29.13	27.17	37.99	4.92
Action, moving around	25.20	17.32	36.02	20.08
Research	24.61	36.42	34.45	3.54
Investigations	17.72	27.76	45.87	7.87
Assignments	38.78	31.10	27.76	1.18
Tests/Exams	61.81	23.43	13.39	0.39
Presentations and performances	25.00	28.54	42.52	2.36
Translation tasks: graphs, diagrams, mind maps	16.34	23.43	50.20	8.07

In line with the dominance of the realist world view indicated in two of the previous sections, it was not surprising that the most widely used assessment methods were tests and exams (61.81%). Assessment strategies in support of the relativist world view, namely assignments (38.78%) and planning (29.33%), and group discussions (29.13%) that supported the contextualist world view were also indicated as assessment strategies used by educators.

It was evident that there was an imbalance between the three world views in the educators' choice of assessment strategies. This implied that there was a stronger focus on assessment strategies favoured by learners who were convergers and divergers.

Faced with demands for increased classroom control, educators may increasingly begin to plan instruction and choose assessment strategies in order to discourage classroom misbehaviour, rather than aiming at promoting learning and meeting the needs and rights of learners (Kagan, 1992).

(e) The importance of the fundamental rights of learners

As reflected in Table 6, learners were requested to rate specific statements in order of priority in the classroom on a scale of 1 (the most important) to 15 (the least important). We ranked the fifteen statements in expected order of importance based on stipulations of the legislation, which is indicated in Table 6 as the *expected rating*. The ranking process comprised sections from the Constitution as the supreme law of the country. Specifically, section 29(1)(a), which relates to the right to basic education and section 28(2), which refers to the best interests of the child as of paramount importance. Moreover, sections from the Schools Act 84 of 1996 were used as an example of education legislation. Specifically, section 4(1), which refers to taking the best interests of the learner into consideration; section 5(1) which refers to serving the educational requirements of learners without unfair discrimination; section 8(2), which refers to the maintenance of the quality of the learning process; section 8(7), which refers to never unfairly discriminating against learners; and section 20(1)(a), which refers to promoting the best interests of the school and ensuring its development by providing quality education to all learners. The ranking process also comprised sections from Policy Act 27 of 1996 as an example of educator specific legislation: section 4(a), which refers to advancing the fundamental rights of every learner in terms of the Constitution; section 4(a)(i) and (ii), which refer to the right of every learner to be protected against unfair discrimination and the rights of every learner to basic education; section 4(f), which refers to achieving an integrated approach to education; section 4(h), which refers to, among other things, the need to recognise the aptitudes, abilities and interests of learners; and section 4(i), which refers to encouraging independent and critical thought.

In the last instance, the ranking process comprised the seven roles of educators taken from the Norms and Standards for Educators in section 3 of the Policy Act 27 of 1996. While these roles have been mentioned above, it should be noted that the fourth role specifically refers to educators upholding the Constitution, while developing a supportive and empowering environment for learners and responding to their educational needs.

Table 6 compares the expected ranking of the statements, based on legal stipulations, in order of importance with the actual ranking made by the learners themselves. The actual ranking indicates the rank order from 1-15 and the percentage of learners who indicated that a particular statement was most often featured in the classroom.

It was disconcerting to note from the responses that some of the most important aspects in dealing with the pedagogical needs of learners, such as pacing learning according to different needs of learners (ranked 15th), responding to the educational needs of learners without discrimination (ranked 13th), and using different approaches to teaching and learning appropriately (ranked 9th) were not ranked higher in order of priority in the classrooms. These outcomes were supported by the fact that the choice of teaching

Table 6. Rating learners' fundamental rights (learner responses)

Expected rating: based on stipulations		Actual learner rating	%
2	Safeguarding the interests of the learner	5	5.51
6	Protecting the dignity of all learners	10	2.17
13	Enforcing school rules	8	3.56
14	Coping with the work	2	21.26
15	Adhering to practices that have been proven	1	24.61
10	Organising the portfolios of all learners	10	2.17
11	Maintaining the workload efficiently	12	1.77
12	Managing personal stress levels	7	3.94
9	Advancing the diverse cultures of learners	13	1.57
4	Protecting learners' rights to education	3	7.87
3	Upholding the fundamental rights of learners	4	7.28
5	Pacing learning according to the different needs of learners	15	1.38
8	Responding to the educational needs of learners, no discrimination	13	1.58
7	Using different approaches to teaching and learning	9	3.35
1	Protecting the best interests of the child	6	4.93

Source: De Waal and Grösser (2009)

methods and assessment strategies noted by the learners seemingly favoured the needs and interests of a particular group of learners only.

Another disturbing aspect of the learner responses in Table 6 was observed in their ranking of educators' adhering to practices that have been proven (ranked 1st) and their coping with the work (ranked 2nd) as the two most important features in classrooms. Moreover, managing stress levels (ranked 7th) and enforcing school rules (ranked 8th) were ranked higher than educators' using different approaches to teaching and learning in the classroom. These outcomes could point to a mismatch between the legal obligation to uphold the fundamental rights of all learners and meet their pedagogical needs by adapting and changing approaches to teaching and learning in the classroom to accommodate all learners.

In the final analysis, we found the most disturbing aspect of these learner responses to be the ranking of educators' pacing learning according to the different needs of learners at the least important level (ranked 15th). What seemed to be a contradiction in terms was that, although the learners ranked protecting their right to education in third position, upholding their fundamental rights in fourth position, safeguarding their interests in fifth position and protecting

the best interest of the child in sixth position, the specific statements that would prove these experiences in the classrooms (protecting their dignity, advancing diverse cultures, pacing learning according to different learner needs, responding to learners' educational needs, and using different approaches to teaching and learning) did not support these four responses. This seeming contradiction might be explained by the fact that South African learners frequently hear and read about these aspects as being protected by the Constitution and might have believed that these fundamental rights were being advanced in the classrooms, although their ranking order suggested the opposite.

Once more, confirming our previous research publications (Grösser & De Waal, 2006; De Waal & Grösser, 2009), these outcomes indicated a mismatch between the South African legal obligations to uphold the fundamental rights of all learners and meet their pedagogical needs, and approaches to teaching and learning in the classroom.

VII. Conclusions

Although exploratory in nature, this research voiced a number of concerns from learners regarding classroom teaching and learning.

The first aim of this study was to determine the compatibility of teaching practices with pedagogical needs (accommodating perceptual preferences as learning styles) and the fundamental rights of learners. This study indicated that teaching practices were not yet compatible with the emerging pedagogical needs and fundamental rights of learners. In the context of the research, it was the pedagogical needs of the converger/senser and the diverger/watcher in particular that were accommodated. The danger of teaching according to one strategy could result in a classroom situation where some learners would always enjoy lessons and do well, while others would struggle and feel ill at ease all the time. In time, some learners could then be seen as good, dedicated and talented, while others could be labelled as slow, bored or difficult. This does not augur well for pedagogical safety and security in classrooms. It is recommended that by understanding how to cope with learning styles, educators would be able to avoid the aforementioned problems, promote learner performance and competency, and enhance the pedagogical security of learners. In this way the fundamental rights of learners would also be upheld.

The second aim of the study was to determine whether educators were empowered to meet the pedagogical needs and fundamental rights of the learners in their classrooms. This study indicated that educators appeared not to be empowered to do so. The strong focus on adhering to practices that have been proven and coping with the work implied that the fundamental rights of learners were neglected in practice. According to the data, the pacing of learning according to the different needs of learners and using different approaches to teaching and learning appropriately were ranked much lower than expected. These results sound a warning that inclusive education might, in time, become an unrealised dream. To prevent this from occurring, educa-

tors should be trained in the importance of meeting the pedagogical needs and fundamental rights of all learners and practise the skill if they are to face this challenge more successfully than is apparently happening in classrooms today.

Pedagogical safety and security linked to accommodating perceptual preferences as learning styles in education will not be enhanced and/or improved in South Africa if the strategies for teaching and learning are not balanced with the pedagogical needs and fundamental rights of all learners.

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