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Enhancing pedagogical needs and fundamental rights at school by accommodating diverse learning styles

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Abstract

This article explores the extent to which educators exert themselves to align the various philosophies of classroom teaching and learning employed in Outcomes-Based Education with learners' fundamental rights and pedagogical needs.

Key words: fundamental rights; pedagogical needs; philosophies of teaching and learning; teaching styles; learning styles.

Orientation

One of the major characteristics of Outcomes-Based Education (OBE) is a paradigm shift regarding beliefs about learners and learning and teaching practices, notably a realization that learners learn in different ways and at different paces. The Constitution of South Africa, Act 108 of SA, 1996 (SA, 1996; hereafter 'Constitution') guarantees the fundamental rights of all children, and the South African Schools Act No. 84 of 1996 (SA, 1996; hereafter 'Schools Act') protects both the learners' legal and fundamental rights. Education White Paper 6 (SA, 2001; hereafter 'White Paper') outlines how the education and training system must transform itself to establish a caring and humane society, how it must change to accommodate the full range of learning needs and the mechanisms that should be put in place.

Inclusion is about acknowledging that all children have the right to education, can all learn and all need support. It is about respecting the fact that all learners are different in some way, and therefore it requires from educators a change in attitude, behaviour, teaching methodologies, assessment strategies, curricula and environments. The focus is on teaching and learning activities, with the emphasis on the development of good teaching strategies that will be of benefit to all learners (SA, 2001:17), thus ensuring that their pedagogical needs are enhanced.

Inclusion focuses on overcoming barriers in the system that prevent it from meeting the full range of learning needs. The Department of Education (2004:39) identifies the following barriers to learning:

- Pedagogical barriers, that call for sufficient educator support to all learners, fair assessment procedures, flexible curricula and linking teaching to the preferred learning style of the learner.
- Medical barriers that call for attention to sensory, physical and cognitive disabilities in the classroom.
- Societal barriers that call for support to learners coming from backgrounds characterized by severe poverty, abuse, crime and violence.
- Systemic barriers that call for adequate facilities at school, the availability of appropriate teaching and learning support material and proper attention to each learner.

This article will focus on determining to what extent educators are linking their teaching to the learning style needs of the learners, while adhering to the fundamental rights of all learners and thus enhancing the pedagogical needs of learners.

Philosophies of teaching and learning

Concern for learners is the foundation of all teaching (Gunter, Estes & Schwab, 2003:3). An important factor which impacts on the alignment of teaching practice with the needs of learners is the philosophy of teaching and learning that characterizes the way in which the educator views knowledge, his/her role in the classroom, the role of the learner and the choice of teaching methods and assessment strategies to meet the variety of learning style needs in the classroom.

Schraw and Olafson (2003:186) distinguish between the following philosophies:

The realist view assumes that knowledge is objective and unchanging and is best acquired through transmission. Learners are viewed as passive recipients of knowledge. The focus is on transmission of knowledge and educator-centred instruction. Learning becomes a process of replicating existing knowledge, rather than constructing knowledge that is novel. Realist educators are apt to use assessments that are summative in nature and therefore focus mainly on end-of-unit tests or exams.

The contextualist view assumes that learners construct shared understanding in collaborative contexts in which educators serve as facilitators (Schraw & Olafson, 2003:186; McCasin & Hickey, 2001). These educators are not concerned only with the type of knowledge that a learner constructs, but also with the process they use to construct the knowledge, and the degree to which that knowledge has authentic application. Contextualist educators tend to see themselves as collaborators in the learning process. They also assume that knowledge will change over time and that learners need skills to acquire knowledge on their own. They promote peer support and expert scaffolding in their classrooms. Contextualists are apt to use authentic assessment activities that match cooperative learning activities.

The relativist view assumes that each learner constructs a unique knowledge base that is different, but equal to that of other learners (Schraw & Olafson, 2003:186). It sees knowledge as subjective and highly changeable (Cobern, 2000). Knowledge must be constructed, rather than transmitted from the educator to the student.

Based on the above discussion, it is evident that a specific view will favour a specific way of teaching and conducting assessment, thus favouring a particular learning style. However, a normal classroom will accommodate learners with many different learning styles or a combination of learning styles. Educators thus need to understand the variety of learning styles and adapt their teaching to suit the learning style needs of all the learners in the classroom in order to adhere to the pedagogical needs of learners.

Learning styles

Human-beings are different and unique individuals. Each has his/her unique way of doing things. Confronted with the same situation, people will react differently, their perceptions and interpretations of the same event seldom being identical. This understanding holds true for learners in any given teaching and learning situation.

Very little attention has been given to differences among learners. Educators often claim that they teach all learners in the same way (Kruger & Adams, 2002:213). This, they believe, is an accepted professional way of showing that they are not biased, nor segregative. Much as this is a socially accepted principle, research has shown that treating learners uniformly does not always yield good and successful results (Kruger & Adams, 2002:215). It appears as if matching teaching with the preferred learning style of a learner is an effective form of teaching and learning. The authors further assert that because every learner has unique talents, potentials, abilities, as well as shortcomings, it is necessary for educators to recognize, acknowledge and cater for these assorted needs in order to promote learner performance and competency.

Kruger and Adams (2002:215) advise that educators need to characterize learners in such a way that their individual characteristics are adequately addressed. They advise that, in order to do this, educators should acknowledge the differences that exist among learners; recognize that such differences may impact on how learners learn; and plan and implement learning programmes which respond to these differences. This identification should be made 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.

According to Kolb, Rosenberg, Whitaker, Seeler, Gardner, Dunn, Mc Carthy & Tilstone (quoted by Grosser, 2001) and Maja, (2006), learning styles refer to orientations towards approaching learning tasks and processing information in different ways. One of the central ideas behind OBE is that learners learn differently and one cannot expect all learners to achieve outcomes in the same way. A broad understanding of learning styles will help educators to understand and support learners throughout learning processes.

Educational psychologists have studied several differences in learning styles. This study utilizes the model of David Kolb (1984), an American psychologist, who 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/does prefer to learn by trying things out and are willing to take risks. They prefer practice to theory and enjoy learning activities that enable them to do something, such as projects, tasks, discussions and similar activities.

Although learners may have a preference for a particular learning style/style it is necessary that teachers expose learners to all the different ones. This is important, because for the successful achievement of learning outcomes learners should be required to see, feel, think and do (Kolb, 1984).

Balancing the philosophies of teaching with learning styles

In order to enhance the pedagogical needs and fundamental rights of learners, it is important to balance the philosophies of teaching with the different learning styles. The realist, contextualist and relativist philosophies of teaching differ in a variety of important ways. The three views suggest three distinct ways of teaching and learning. Table 1 indicates, in summary form, the types of teaching and learning activities and assessment methods that a specific philosophy of teaching will focus on, as well as the type of learning style they will address. It is clear from the table that all three philosophies should form part of the teaching and learning situation, as each philosophy accommodates a specific learning style. Focusing on one philosophy of teaching only will imply that only certain learners will be accommodated during teaching.

Table 1: Linking three philosophies of teaching and learning with learning styles

Philosophy	Teaching and learning activities	Assessment activities	Learning style
Realist view	Transmission Educator-centred instruction Lectures, presentations, drill and practice, demonstrations	Tests Exams	Converger/Sensors Diverger/Watchers
Contextualist view	Transactional Group-centred Facilitation style Peer support Co-operative learning Research projects Assignments Crossword puzzles Discussions Problem-solving Surveys Design-and-make activities Debates Role plays and simulations	Authentic assessment Self assessment Discovering Exploring Experimenting Practical applications Group discussions Action, moving around Research Investigations Presentations Performance	Accommodators/Doers
Relativist view	Autonomous Individual-centred instruction Concept maps Case studies Debates Oral presentations Brain-storming activities Worksheets	Analyzing Synthesizing Assignments Graphs Diagrams Mind maps	Assimilators/Thinkers

The consequent question now arises: do these philosophies of teaching and learning comply with the learners' fundamental rights, in order to enhance their pedagogical needs?

The fundamental rights of learners

Together with the international attempt at striving towards the constitutionalisation of human rights, a dynamic movement has aimed at recognizing the fundamental rights of children and therefore of learners. While it is generally known that section 29(1)(a) of the Constitution (SA, 1996a) grants everyone the right to a basic education, section 28(2) enhances learners' right to education by stipulating their best interests as of paramount importance in every matter relating to them. Moreover, the preamble of the Schools Act (SA, 1996c) points out that the national system for schools is aimed at, *inter alia*, providing an education of progressively high quality for all learners, which helps lay a strong foundation for the development of all South Africans' talents and capabilities.

Furthermore, according to the directive principles found in section 4 of the National Education Policy Act (SA, 1996b; hereafter Education Policy Act), this policy is directed at *inter alia*, enabling the education system to contribute to the full personal development of each student, providing opportunities for and encouraging life-long learning and encouraging independent and critical thinking. In the last instance, the Code of Professional Ethics (SA, 2000) provides general stipulations that include pointing out that educators acknowledge their calling to educate and train learners, that they acknowledge that *inter alia*, the attitude and dedication of the teaching profession determine the quality of the education in the country, and that they acknowledge, uphold and promote basic human rights, as embodied in the Constitution (SA, 1996a).

Section 29(1) of the Constitution provides that every child has the right, *inter alia*, to basic education. Although it appears that the State is primarily liable to provide these rights, in view of the fact that it is the party against whom fundamental rights are generally directed, Robinson (1995:108) and Van der Vyver (1997:306) maintain that the State's responsibility is complementary to that of the parent/s or their substitute/s (such as the educator), and would arise only if the latter were unable to do so. It is therefore clear that South African educators need to acknowledge the fundamental rights of learners.

Section 3 of the Norms and Standards for Educators, as found in the *Education Policy Act* (SA, 1996b), states the seven roles of educators. For the purpose of this article, the following five are highlighted. The educator will:

- mediate learning sensitive to the learners' needs;
- pace the learning sensitive to the learners' needs;
- demonstrate responsiveness to the changing needs of the learners;
- uphold the Constitution;
- know and use appropriately the different approaches to teaching and learning.

Given the above-mentioned, it is clear that classroom teaching and learning need to accommodate different approaches in order to comply with the pedagogic needs of learners, as well as with their fundamental human right to learn according to their own style.

Statement of the problem and research aims

Emanating from the above, the following questions are raised:

- To what extent are educators' teaching practices compatible with the pedagogical needs and fundamental rights of learners?
- Do learners have a preference for particular learning style/styles?
- Are educators able and empowered to meet the pedagogical needs and fundamental rights of all learners in their classrooms?
- If this is not the case, how can educators be assisted to meet the pedagogical needs and fundamental rights of the learners in their classrooms?

This article arises from the aims of an exploratory research, to establish the extent to which educators see themselves as addressing the pedagogical needs and fundamental rights of learners in their classrooms. In addition, the research aimed at determining the compatibility of teaching practices with the pedagogical needs and fundamental rights of learners by means of a questionnaire distributed to educators. It sought to discover if learners have a preference for a particular learning style/styles by means of a questionnaire to learners, and whether educators are empowered to meet the pedagogical needs and fundamental rights of the learners in their classrooms, by means of a questionnaire distributed to educators. Arising from this, recommendations were to be made to assist educators in meeting the pedagogical needs and fundamental rights of the learners in their classrooms.

Research design

The researchers undertook a preliminary exploratory study which was quantitative 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, learning styles, teaching methods and assessment strategies, to meet the pedagogical needs of all learners in a classroom. Furthermore, the researchers also explored the importance of acknowledging the fundamental rights of learners and determined learner preference for a particular learning style/styles.

For the **Literature study**, primary and secondary sources were utilized to gather and explore information regarding teaching philosophies, teaching methods, learning style needs, assessment methods and the fundamental rights of learners. The **data collection instrument** was a questionnaire, required from educators to reflect critically on their teaching practice. The questionnaire comprised seven main sections, namely:

- Section 1: Biographic information
- Section 2: Teaching styles
- Section 3: Teaching methods
- Section 4: Learning styles
- Section 5: Assessment strategies
- Section 6: Emerging philosophies of teaching and learning
- Section 7: The importance of the fundamental rights of learners

It was important to determine educators' choices of teaching styles, teaching methods, learning styles and assessment strategies, as all of these aspects constitute the teaching and learning situation. This would also provide comprehensive evidence for determining the extent to which classroom practice meets the pedagogical needs of learners.

A learner questionnaire requiring learners to reflect on the teaching practice of their teachers comprised the same sections as the questionnaire for the educators, but was adapted to suit the responses requested from the learners. For the purpose of the article only section 4 of the learner questionnaire will be utilized. This section requested learners to provide an indication of their preferred learning style/styles. It was deemed important for the article to determine whether

learners do prefer particular learning style/styles in order to support the argument that educators need to adapt their teaching to accommodate diverse learning styles.

The population and sample was drawn from the D7 district (Vereeniging, Meyerton, Sharpeville and Heidelberg) 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 respondents: schools (n = 18); (9 primary schools, and 9 secondary schools); educators (n = 244) and learners (n = 520).

Before the questionnaires were administered to the sample, a pilot study was conducted with a selected number of respondents from the target population, regarding its qualities of measurement and appropriateness and to review it for clarity. The groups did not experience any difficulties in understanding what the questions requested them to do.

According to the authors' discretion, the instruments complied with reliability and validity criteria. A Cronbach Alpha test was utilized to determine the reliability of the questionnaires before it was administered. The calculated value (0.877) for the educator questionnaire and (0.85) for the learner questionnaire, indicated that the questionnaires complied with reliability criteria. Validity was arrived at by considering both content validity and construct validity. The content validity is supported by the specific test items being constructed strictly according to the definition of each section. The construct validity is underpinned by the fact that although the test focuses on different sections, they all deal with aspects which are important in meeting the pedagogic needs and adhering to the fundamental rights of learners.

Data analysis and interpretation

Educator questionnaire

The biographical information indicates that the majority of the educators are well qualified and experienced. One could assume that they will possess adequate knowledge regarding teaching and learning and the learners they teach. Disturbing, however, is the fact that a number of educators (32.08%) are only in possession of a Std 10 certificate. This could imply a lack of adequate knowledge and skills that could seriously impact on the quality of teaching and learning.

Teaching styles

Educators were requested to indicate the % of time which they normally spend using the following teaching styles:

Table 2: Transmission reception style - educator lectures, explains and demonstrates

	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Less than 10%	0	2	7	17	27	38	20	24	18	6
%	0	1.26	4.40	10.69	16.98	23.90	12.58	15.09	11.32	3.77

Table 3: Facilitation style - learner involvement, discovery, inquiry and independent work

	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Less than 10%	0	5	5	12	18	37	37	18	16	11
%	0	3.14	3.14	7.55	11.32	23.27	23.27	11.32	10.06	6.92

The responses concerning the utilization of a particular teaching style indicate that teachers are trying to balance the transmission-reception style of teaching with the facilitation style of teaching. Both of these styles are utilized on a fairly equal basis during teaching. Against the background of the new curriculum, this indicates the ideal teaching and learning situation. Furthermore, it implies that the entire spectrum of world views regarding teaching and learning is represented during teaching and learning, and that the variety of pedagogical needs will thus be met.

Teaching methods

Educators were requested to indicate how often they utilize a variety of teaching methods during their teaching.

Table 4: Utilizing teaching methods in the classroom

	Always	%	Often	%	Sometimes	%	Never	%
Lectures	37	23.27	60	37.74	36	22.64	9	5.66
Drilling	27	16.98	59	37.11	47	29.56	13	8
Worksheets	54	33.96	69	43.40	30	18.89	2	1.26
Presentations by teacher	53	33.33	75	47.17	25	15.72	2	1.26
Demonstrations by teacher	42	26.42	78	49.06	33	20.75	2	1.26
Constructing concept maps	11	6.92	41	25.79	64	40.25	24	15.11
Case studies	5	3.14	51	32.08	66	41.51	26	16.35
Making posters	9	5.66	42	26.42	79	49.69	22	13.84
Oral presentations by learners	18	11.32	61	38.36	70	44.03	5	3.14
Role-plays	10	6.29	46	28.93	60	37.74	35	22.01
Designing	6	3.77	40	25.16	73	45.91	27	16.98
Projects	10	6.29	80	50.31	63	39.62	1	0.63
Field trips	1	0.63	10	6.29	76	47.80	64	40.25
Experimenting	8	5.03	35	22.01	68	42.77	37	23.27
Questioning	66	41.51	75	47.17	11	6.92	2	1.26
Debates	6	3.77	52	32.70	66	41.51	25	15.72
Surveys	1	0.63	35	22.01	77	48.43	34	21.38
Crossword puzzles	3	1.89	28	17.16	78	49.01	44	27.67
Co-operative learning	29	18.24	66	41.51	51	32.08	6	3.77
Demonstrations by learners	12	7.55	58	36.48	74	46.54	8	5.03
Brainstorming	16	10.06	59	37.11	70	44.03	10	6.29

It appears as if educators are utilizing a variety of teaching methods during teaching. A closer examination of the responses indicates a strong tendency for the utilization of methods that fit into a realist world view, namely lectures (60.24%), drilling (53.41%), presentations (79.50%), demonstrations (74.53%) and questioning (87.57%). Learners are therefore viewed as passive recipients of pre-established knowledge, and there is an emphasis on deliberate practise. This implies that all learning style needs will not be met, and that there is a tendency to accommodate learners who favour learning through sensing and watching, more than any of the other learning styles.

Learning styles

Educators were requested to indicate how frequently the four major learning styles are accommodated through their teaching.

Table 5: Accommodating learning styles of learners

	Always	%	Often	%	Sometimes	%	Never	%
Sensors and feelers	36	22.64	70	44.03	44	27.67	9	5.66
Watchers	35	22.01	86	54.09	34	21.38	4	2.52
Thinkers	38	23.90	79	49.69	36	22.64	5	3.14
Doers	40	25.16	66	41.51	49	30.82	3	1.89

Although all the learning styles are indicated as being accommodated in teaching, the responses to this section clearly support the realist world view further in that the learning style accommodated most in the teaching is that of the diverger/watcher (75.15%). This implies that the focus is on learners who like to learn through perception and observation, therefore favouring lectures, presentations and demonstrations.

Assessment strategies

Educators were requested to indicate how often they expose learners to the following variety of assessment opportunities:

Table 6: Exposing learners to different assessment strategies

	Always	%	Often	%	Sometimes	%	Never	%
Analysing	35	22.01	83	52.20	34	21.38	2	1.26
Synthesizing	8	5.03	72	45.28	60	37.74	7	4.40
Planning	37	23.26	79	49.69	38	23.90	1	0.63
Providing precise, to-the-point information	38	23.90	75	47.17	33	20.75	1	0.63
Discovering and exploring	24	15.09	82	51.57	45	28.30	4	2.52
Experimenting	14	8.81	56	35.22	61	38.36	18	11.32
Practical applications	33	20.75	84	52.83	34	21.38	3	1.89

	Always	%	Often	%	Sometimes	%	Never	%
Group discussions	27	16.98	78	49.06	45	28.30	3	1.89
Action, moving around	31	19.50	30	18.87	65	40.88	26	16.35
Research	11	6.92	63	39.62	76	47.80	5	3.14
Investigations	14	8.81	71	44.65	58	36.48	8	5.03
Assignments	42	26.42	75	47.17	34	21.38	3	1.89
Tests/Exams	53	33.33	81	50.94	20	12.58	1	0.63
Presentations and performances	22	13.84	78	49.06	42	26.42	9	5.66
Translation tasks: graphs, diagrams, mind maps	12	7.55	61	38.36	70	44.03	10	6.29

In support of the dominance of the realist world view in the previous sections, it is not surprising that the most utilized methods of assessment are tests and exams (84.27%).

Although educators indicated strong beliefs about the importance of a learner-centred teaching and learning environment, they often revert to a more traditional transmission style of teaching. This is clearly indicated in the discrepancy between the responses concerning teaching styles versus teaching methods, learning styles and assessment strategies. Educators mainly indicated that they balance transmission-reception teaching with student-centred teaching, but their teaching methods, accommodation of learning styles and assessment strategies indicate the opposite, namely a strong focus on transmission-reception teaching.

This could be ascribed to factors such as time limits which have to be adhered to, lack of experience or knowledge, lack of a supportive school structure and demands placed upon them by the school principals and the school district. Faced with demands for increased classroom control, educators may begin to plan instruction to discourage misbehaviour, rather than to promote learning and meeting the needs and rights of learners (Kagan, 1992).

Philosophies of teaching and learning

This section involved statements regarding teaching and learning that could be classified according to the three main philosophies on teaching and learning. The statements were clustered as follows:

Table 7: Comparing the incidence of the three philosophies of teaching and learning

Philosophy	Statements	Educator responses %
Realist	1,6,7,8,12,16,17	95.03
Contextualist	5,10,13,14,15,18	78.92
Relativist	3,2,9,11,19	66.59
Realist, Contextualist and Relativist	4	94.97

Although all the philosophies of teaching and learning are evident in the teaching practices of the educators who took part in the research, the majority tend to favour the realist philosophy of

teaching and learning (95.03%), with 78.92% in favour of the contextualist philosophy of teaching and learning and 66.59% in favour of the relativist philosophy of teaching and learning. This supports the findings where it was evident that educators selected teaching methods and assessment strategies supportive of the realist philosophy of teaching and learning.

One of the statements combined the three philosophical approaches, requesting educators to determine the importance of teaching in order to develop learners holistically. Educators had to agree or not agree to the fact that teaching practice needs to involve a variety of experiences in order to achieve holistic development and simultaneously to meet the needs of a variety of learners. It is interesting to note that although 94.97% of the educators supported this statement, their practice proved the opposite.

Disturbing is the revelation that the relativist philosophy of teaching and learning is underestimated by educators. Independent learning is viewed as successful by only 55.35% of the educators. Furthermore, only 49.68% of the educators indicate that learners need to be given choices regarding what and how to learn, and only 10.31% indicate that learners can be trusted to define their own goals.

The importance of the fundamental rights of learners

Educators were requested to rate the following aspects in order of priority on a scale of 1 (the most important) to 15 (the least important). The researchers ranked the fifteen statements in order of importance based on stipulations from legislation, indicated in Table 8 as *expected rating*. The ranking process comprised sections 29(1)(a), the right to education (SA, 1996a), section 28(2), the paramount importance of the best interests of the child (SA, 1996a), the directive principles for educators in section 4 (SA, 1996c), the Code of Professional Ethics (SA, 2000) and the seven roles of educators (SA, 1996c).

Table 8: The expected rating of learners' fundamental rights to that of the educators

Expected rating	Actual rating	%
2	12	7.55
6	7	4.40
13	12	7.55
14	5	3.14
15	10	6.29
10	4	2.52
11	13	8.18
12	10	6.29
9	13	8.18
4	8	5.03
3	6	3.77
5	8	5.03
8	7	4.40
7	8	5.03
1	36	22.64

Table 8 (above) compares the expected ranking of the statements in order of importance, with the actual ranking by the educators, indicating the number of educators and the percentage who felt that a particular statement complies with the expected rating of the researchers.

It is disconcerting to note from the responses that some of the most important aspects in dealing with the pedagogical needs of learners, namely *protecting the best interest of the child, safeguarding the interests of the learner and upholding the fundamental rights of the learner*, are not ranked as important. This outcome is supported by the fact that the choice of teaching methods and assessment strategies clearly favours the needs and interests of a particular group of learners only.

Learner questionnaire

As indicated above, only the section pertaining to the preferred learning style/styles of the learner will be utilized for the purpose of the article. Learners were requested to indicate their preferred learning style/styles. The following responses were received.

Table 9: Preferred learning styles

Learning style	N	%
Sensors and feelers (Convergers); learning by seeing hearing and feeling.	214	42.13
Watchers (Divergers); learning by watching and observing. Prefer lectures and demonstrations	142	27.95
Thinkers (Assimilators); learning by analyzing things and creating understanding for yourself. Prefer reading theory and studying on your own.	245	48.23
Doers (Accommodators); learning by preferring practice to theory. Prefer completing projects.	147	29.94

It is indicated that learners have exclusive preferences for a particular learning style. Although all the learning styles are indicated as being preferred, the responses to this section also indicate a strong preference for a combination of styles. The responses to these questions contrast strongly with the responses of the educators where a strong focus on learning through sensing and watching is indicated. From the responses, it is evident that a large number of learners favour learning through thinking. Learners clearly do not have the same preferences regarding the way in which they learn, and educators have to take cognizance of this.

Conclusions and recommendations

Although exploratory in nature, this research indicates a number of important conclusions regarding classroom teaching and learning. The first aim of this study was to determine the compatibility of teaching practices with the pedagogic needs and fundamental rights of learners. This study indicates that philosophies of teaching and learning are not yet compatible with the pedagogic needs and fundamental rights of learners. A strong focus on the realist world view, where the focus is on transmission and reception, implies that only the needs of a certain group of learners will be addressed. In the context of the research, it is the pedagogical needs of the converger/sensor and the diverger/watcher in particular that are accommodated. The danger of teaching according

to one philosophy could result in a classroom situation where some learners will enjoy lessons and do well, while others struggle and feel uncomfortable. In time, some learners could be seen as good, dedicated and talented, while others could be labeled 'slow', 'bored' or 'difficult'. This does not augur well for addressing the pedagogical needs of learners. By understanding how to cope with learning styles, educators may be able to avoid the aforementioned problems, promote learner performance and competency, and enhance the pedagogical needs of learners.

The second aim of the study was to determine whether learners have a preference for a certain learning style. This study indicates that it is indeed so. Learners have unique preferences when coming to ways in which they learn best. However, educators should accommodate all the different learning styles during their teaching, as this is not only necessary for the successful achievement of learning outcomes, but, as indicated by the responses of the learners, some favour a combination of styles. It is therefore important to expose learners to a variety of learning styles.

The third aim of the study was to determine whether educators are empowered to meet the pedagogical needs and fundamental rights of the learners in their classrooms. This study indicates that educators are not empowered to do so. The strong focus on maintaining the workload efficiently, enforcing school rules, managing stress levels and adhering to practices that have been proven – as well as a strong tendency to accommodate learners who favour learning through sensing and watching – imply that the fundamental rights and pedagogical needs of learners are neglected in practice. The responses of learners indicating their preferred learning style also confirm this. According to the data, the pacing of learning according to learners' different needs and using different approaches to teaching and learning appropriately are ranked lower than expected. These results sound a warning in that inclusive education might become an unrealized dream in time. By being trained concerning the importance of meeting the pedagogical needs and fundamental rights of all the learners, and by practicing this skill, educators may be able to face this challenge successfully.

The fourth aim of the study was to make recommendations to assist educators in meeting the pedagogical needs and fundamental rights of the learners in their classrooms. This implies that educators need to develop an own understanding of their philosophy of teaching and learning, to compare it with other philosophies, to discard those aspects that are unhelpful and to acquire new ones. Educators need to understand philosophies of teaching and learning and their relation to classroom practice in greater detail. Secondly, the professional development of in-service educators needs to deepen their understanding of the processes of teaching and learning and of the learners they teach. Thirdly, educator preset-training and in-service training need to focus on the importance of recognizing and enhancing the pedagogical needs and the fundamental rights of all the learners.

This research indicates a link between educators' philosophies of teaching and learning and what happens in practice. It appears that educators are unaware of how their beliefs affect their teaching practice. Educators perceive their practice to involve both teacher-centred and learner-centred approaches, whereas this is contradicted by the choice of teaching methods and assessment strategies.

Educators are faced with the challenge of balancing the different philosophies of teaching and learning during instruction, in order to accommodate diverse learning styles, and in turn avoid pedagogical barriers to learning. This could ensure that the pedagogical needs of learners are enhanced and the fundamental right of learners to learn according to their own style is met.

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