Journal for the Education of Gifted Young Scientists, 11(1), 33-43, March 2023
e-ISSN: 2149- 360X
jegys.org
dergipark.org.tr/jegys

Young Wise Publishing
youngwisepub.com
gencbilgeyayincilik.com

Research Article

Exploring the teacher-learner ratio and its effect on invitational teaching and learning: A South African study

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Article Info

Received: 17 December 2022
Accepted: 23 January 2023
Available online: 15 March 2023

Keywords
Class size
Overcrowding
Teacher-learner ratio
Invitational teaching and learning

Abstract

There has been a rapid growth in learner enrolment in all South African public schools. The increased number of learners per teacher has created many challenges in the quality of teaching and learning. Various authors and educationist have argued and agreed that the teacher-learner ratio has an impact on invitational teaching and learning. Invitational teaching and learning (education) was coined by Purkey and Novak to ensure a conducive learning environment. They proposed the five powerful Ps, namely, people, places, policy, programmes and procedures which, if applied effectively will ensure classroom success. In this paper a quantitative descriptive study was undertaken to investigate the effect of the teacher-learner ratio on invitational teaching and learning using a survey to 150 participants in primary schools. Data was analysed using frequency tables. The findings of this study revealed that the teacher-learner ratio has a negative impact on the quality of teaching and learning. Teachers found it extremely difficult to offer support to learners who experienced barriers to learning. Furthermore, the large class size and overcrowding had an impact on the provisioning of resources to learners. The study recommended that the post-provisioning norms for South African schools should clearly articulate 1:30 so that school principals adhere to the policy. Finally, it is also recommended that all teachers should be capacitated through a formal programme on classroom management, especially large classes.

To cite this article:

Venketsamy, R. (2023). Exploring the teacher-learner ratio and its effect on invitational teaching and learning: A South African study. *Journal for the Education of Gifted Young Scientists*, *11*(1), 33-43. DOI: http://dx.doi.org/10.17478/jegys.1237615

Introduction

Rapid changes and accompanying problems such as overcrowded classrooms (West & Meier, 2020), inadequate educational facilities, poor discipline among learners and a loss of vision for the future currently impede quality invitational education in South Africa. From all sides, it is being said that something is radically wrong with our education system (Le Roux, 1993: 32). Education can only be effective if it can guide and encourage the learner to strive towards proper adulthood through support from the teacher. This is only possible if both teachers and learners are mutually involved with each other in a specific education. Van De Walle and Lovin (2006) advocate that the atmosphere and environment of the classroom influence learners' performance and educational outcomes. According to the Hun School of Princeton (2019) and Venketsamy (2000), the smaller the teacher-learner ratio, the greater the academic results, the relationships between teachers and learners and the support learners receive from their teachers.

According to Hartshorne (1992: 39, 56), research conducted by the Eiselen Commission found that the average teacher-learner-ratio in most South African schools was 1:43,8. According to Zenda (2019), in the last two decades, most

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South African schools have rapidly grown learner enrolment. There has been a steady increase in the number of learners per teacher, and this number began to peak at 1:59. This increased teacher-learner-ratio according to the Eiselen Commission, will lead to the deterioration of learning and greater indiscipline in schools, thus causing a breakdown in the teacher-learner relationship of trust, understanding and authority.

There are many demands made on the teachers in our schools. The schools, and particularly the teacher, have assumed the responsibility of being parent substitutes – in *loco-parentis.* For successful invitational learning, the teacher and the learner must have an educational relationship. It is through the relationship of trust and knowing that authority can be maintained. The mutual relationship of trust, knowing and authority is fundamental to preserving and promoting a conducive learning environment for improved learning outcomes. This paper aims to explore the teacher-learner ratio and its effect on invitational teaching and learning. The focus is on the relationship of knowing, trust and authority and how these three principles impact teaching and learning.

Explanation of Teacher-learner Ratio

Matthews and Ellis (2019) explain "ratio" as a quantitative relationship between two similar magnitudes determined by the number of times one contains the other integrally or fractionally. Teacher-learner-ratio refers to the number of learners grouped in a particular class. The Hun School of Princeton (2019) states that this number is about more than just the number of learners in a class (class size), but how this number affects the teaching-learning relationship between the teacher and learners (Venketsamy 2000). The teacher-learner ratio impacts the teacher's workload and how they can offer quality teaching and learning to their learners. Koc and Celik (2015) argue that the teacher-learner ratio also influences the services and support the teacher can show the learners in the class. According to the Hun School of Princeton (2019), they found that the lower or smaller the number of learners in a class, the greater the quality of teaching and learning.

Research has found that the teacher-learner ratio is one of the most vital indicators of learner success and engagement. Wright, Bergom, and Bartholomew (2017) state that the smaller the class size, the greater the opportunity for the teacher to work with individual learners. Singh and Mahomed (2013) found that teachers and learners could develop healthy one-on-one mentoring relationships. Venketsamy (2000) found that the lower the teacher-learner ratio, there was greater opportunity to lighten the workload of the teacher, thus enabling them to focus on the quality rather than the quantity of their teaching, learning and assessment. He also found that the smaller the class size, teachers and learners could develop a mutual relationship of knowing, trust and authority.

In their studies, Wright et al. (2017) and Venketsamy (2000) found that smaller class sizes provided learners with an opportunity to excel and harness their full potential and forge a positive mutual relationship with their teachers (Hun School of Princeton, 2019). Wright et al. (2017) agree that within smaller classes, teachers can address challenges experienced by learners and immediately offer assistance to individuals. In their studies, the Hun School of Princeton (2019) found that the lower teacher-learner ratio yielded better test scores, fewer dropout of learners and a higher graduation rate in their schools.

Invitational Theory and Education

Invitational learning (education) is based on the Invitational Learning Theory, contending that learning is enhanced when learners are invited into the learning environment using improved approaches (Haigh, 2011). Founded by Purkey (1991), Invitational Education (IE) aims to persuade learners into meaningful knowledge construction by removing barriers and obstacles to learning, causing learners to be disengaged and unreceptive (Haigh, 2011). The Invitational Learning Theory defines five domains, people, places, policies, programmes and processes (Purkey & Novak, 2015)

Invitational learning aims to make these domains intentionally inviting by cordially encouraging each learner to develop physically, intellectually and emotionally. The invitation is measured through four levels: Intentionally Disinviting, Unintentionally Disinviting, Unintentionally Inviting and Intentionally Inviting.

IE aims to create an entire school environment that intentionally invites everyone in the school to be successful (Egley, 2003). “Invitational Education is a theory of practice that aims to create and maintain a human school environment that intentionally and cordially invites individuals to realise their boundless potential in all areas of

worthwhile human endeavour" (Friedland, 1999:15). The purpose of IE is to create a more exciting and enriching experience for all role players in the education process (Purkey & Aspy, 2003) with the intent to grow human potential (Friedland, 1999). The IE learning theory developed into a model of practice after research into the factors and principles that contribute to human success or failure (Purkey & Novak, 2015). "It is a learner-centred approach to the teaching-learning process" (Smith & Hunter, 2007, p. 8).

IE acquires its foundations from The Democratic Ethos, The Perceptual Tradition and the Self-Concept Theory (Purkey, 1992). The Democratic Ethos is based on the belief that all individuals matter and can find growth in self-governance; this is established in IE in deliberate conversation, collaboration and respect (Purkey & Novak, 2015). The Perceptual Tradition considers behaviour as a response to the perception and understanding of surroundings and events (Purkey & Novak, 2015). The Self-Concept Theory, developed by Purkey (1991), states that behaviors are influenced by 'the view one has of oneself' (Purkey & Novak, 2015).

The Invitational Learning Theory outlines five domains in almost every environment that contribute to the success or failure of human endeavour. These domains are called "The five powerful P's" and consist of people, places, policies, programs and processes. The Powerful P's created an ecosystem in which the individual exists (Purkey, 1991). The table below gives an outline of each domain.

Table 1. Outline of Powerful P's

People	**Places**	**Policies**	**Programmes**	**Process**
Teachers and staff (both teaching and non-teaching)	Physical attributes of the classroom and school.	Written and unwritten rules regarding procedures. This includes policies on grading and discipline.	Curriculum and content for learners. This includes programmes of wellness and parent participation.	Examines how the other four P's are conducted.

Invitational Education is based on five basic assumptions or elements: trust, respect, optimism, intentionality and care. These five assumptions create purpose and directionality in theory (Purkey, 1991).

Trust

"Education is a cooperative, collaborative activity where the process is as important as product" (Purkey, 1991:2). A pivotal aspect of IE is understanding that human existence is a collaborative activity and all humans are interdependent (Purkey & Novak, 2015). To create inviting relationships, both time and effort to create a trustworthy pattern of interactions between teacher and learner.

Respect

"People are able, valuable and responsible and should be treated accordingly" (Purkey, 1991:2). Mutual respect by all role-players determines school success. Respect should be manifested in all aspects of places, policies, programmes and processes within the school.

Optimism

"People possess untapped potential in all areas of human endeavour" (Purkey, 1991: 2). It is not enough to be inviting; it is essential to be optimistic about the process. Human potential has no clear limits and should be considered boundless; in doing so, curricula can be devised, policies can be created, programmes can be supported, processes can be encouraged, physical environments can be established, and relationships maintained (Purkey, 1991).

Intentionality

Human potential can be optimally applied by places, policies and programmes tailored to address invitation as a prerequisite to development. Moreover, it can be used by those who focus on inviting both others and themselves, personally and professionally (Purkey, 1991:2). Intentionality gives experiences purpose and allows teachers to create

environments that have directionality and are goal driven. Intentionality is essential to consistently and dependably invite people to realise their human potential (Purkey, 1991).

Care

Caring involves warmth, empathy, and positive regard for others; it provides others with benevolence which filters through into one's personal life as well as the lives of one's fellow humans (Purkey & Novak, 2015: 2). The element of care is considered as one of the essential elements of Invitational Education.

Aim and Problem of Study

This paper aimed to explore the teacher-learner ratio and its effect on invitational teaching and learning. The focus was mainly on primary school teachers in the lower south coast of the Durban area. The DBE mandated that schools accommodate and give all learners access to schooling. As a result of this mandate, there has been an influx of learners from rural schools into urban and semi-urban areas. Class- sizes increased exponentially, thus creating a crisis in terms of providing quality education, supporting the individual needs of learners, lack of appropriate infrastructure and resources and classroom management. The teacher-learner ratio from 1:25 in primary schools increased to 1:40 and is still growing. In some schools, the teacher-learner ratio is 1:70; therefore, this study investigated teachers' views regarding the increased class size and its effect on invitational teaching and learning.

Method

Research Design

The research followed a quantitative approach (Maree, 2020) using a descriptive and a causal non-experimental survey research design. The rationale behind choosing this design was that it was the most appropriate and suitable; since the research aimed to describe the present situation as it exists (Creswell, 2014). This research used a descriptive and causal non-experimental design to determine the teacher-learner ratio and its effect on invitational teaching and learning.

Participants

To administer the questionnaire, the researcher agreed on 150 participants. These were teachers who were teaching in primary schools in the Durban South and Port Shepstone regions responded. Three (3) teachers were randomly selected from 50 schools in the Durban South and Port Shepstone regions to complete the questionnaire. The inclusion criteria were that the teacher had to teach a class with more than 40 learners, the class had to consist of learners from different racial and cultural backgrounds and the teacher had to have a minimum of five years of teaching experience. Among the participating teachers, 102 (68 %) were females and 48 (32%) were males. On average, the participants had more than five years of teaching experience.

Data Collection & Interview Form

The researcher collected the data using a questionnaire (Appendix A) with two sections: biographical data (Section 1) and statements pertaining to factors that affect invitational teaching and learning. The questions in section 2 consisted of a 3-point Likert scale regarding the factors that affect invitational teaching and learning (1- agree; 2 – disagree; 3 – uncertain). The questionnaire included 44 closed-type questions. The researcher, together with his supervisor, developed the questionnaire. The questionnaire included 44 closed questions using the Likert Scale, three levels participants had to choose from 'agree, disagree and uncertain.' The questionnaire was subdivided into two sections. Section one dealt with the biographical information of the respondents and consisted of questions 1 to 10. Section two focused on the factors concerning the learners, teachers and the school environment, composed of 44 closed questions. In this section, respondents were asked to indicate their perceptions of the teacher-learner ratio and invitational learning in three ways: agree, disagree and uncertain.

Pilot Study

To ensure the validity and reliability of the instrument, the researcher conducted a pilot study. A pilot study is an abbreviated version of a research project in which the researcher practices or tests the procedures to be used in the subsequent full-scale project. For this study, the researcher conducted a pilot run of ten teachers with children in primary

schools. The pilot study allowed the researcher to rephrase some of the questions to ensure clarity and avoid misinterpretation. The pilot also indicated to the researcher the time required to complete the questionnaire. Once all the factors were considered, the research supervisor finalized the questionnaire and approved it for distribution to each of the 50 schools.

Data Analysis

Once data was collected, it was captured in a format that would permit analysis and interpretation. This involved carefully coding the 150 questionnaires completed by the teachers at primary schools. The coded data were transferred onto a computer spreadsheet using the Quattro Pro 4.0 database statistics computer programme. The coded data was submitted to the Department of Statistics at a South African university and computer analysed using the SAS programme to interpret the results through descriptive statistics.

For this study, the researcher opted for descriptive. For the descriptive statistics, frequency tables were used to interpret the data.

Ethics

The University of Zululand granted ethics approval to conduct this study as part of doctoral research. For ethical purposes, the researcher reached out to each participant with a formal letter of invitation outlining the project and requesting their participation. To administer the questionnaire to teachers of schools in the Durban South and Port Shepstone area, the researcher contacted the relevant circuit inspectors by telephone and received verbal permission from them to conduct the proposed research. The *proviso* was, however, that permission should be obtained firstly from the school's principal before approaching the members of their teachers. Participants who agreed to participate in the study signed the consent form agreeing to participate. They were also informed of voluntary participation and were not obligated to complete the questionnaire. All participants were ensured anonymity and confidentiality of their participation in the study. They were told that during the reporting phase, pseudonyms would be used.

Procedure

Since this paper emanated from the author's Doctoral studies, collecting data was via postal services and telephonic conversation. Five interview forms were posted to each school in the Lower South Coast of Durban. The researcher communicated telephonically with each school principal, who agreed to hand the interview form to their teachers in the Foundation Phase. Once the form was completed, the school principal sent the documents via postal services to the researcher. Although the researcher sent five forms to each school, most schools in the lower south coast of Port Shepstone have only three grades in the Foundation Phase, grades 1, 2 and 3. Therefore the researcher received three forms from the 50 participating schools, thus totaling 150.

Results

Descriptive statistics

The purpose of the research was to gain insight into a situation, phenomenon, community or person. Descriptive analysis is one of the methods of analysis used to study a person or persons scientifically in an educational problem. It attempts to describe the situation as it is; thus, there is no intervention on the part of the researcher and, therefore, no control. Maree (2020) says descriptive studies do not set out to test hypotheses about relationships but want to find the variables' distribution. In this study, nomothetic descriptive research was employed to describe the teacher-learner ratio and its effect on invitational learning. The researcher was primarily concerned with the nature and degree of existing school situations.

Gender

Table 1. Frequency distribution according to the gender, age and teaching year completed by respondents

Gender			**Age**			**Teaching Years Completed**		
	Frequency	%	Years	Frequency	%	Range	Frequency	%
Male	48	32	20-30	32	21	1-15	116	78
Female	102	68	31-40	88	59	16-30	34	22
			41-50	40	20			
	150	100		150	100		150	100

Table 1, regarding the gender of the participants, it shows that 36% more females than males completed the questionnaire. The researcher believes that females see teaching as an occupation where they can be accessible in the afternoon to attend to their usual chores. Furthermore, according to Africa Check (2018), almost 68% of the teacher cadre in South Africa is made up of female teachers. A similar finding exists in Australia, where women are over-represented in the teaching profession; an average of 96 percent of females are teaching in either pre-primary or primary schools (Tani, 2019)

According to Thakur (2021), the salaries offered in the private sector are more lucrative than teaching; therefore, many males opt to find employment in the private sector rather than in the teaching profession. Teaching is no longer the most lucrative career in Asia, although Asians strongly emphasize education and hold teachers in high regard.

Regarding the age of the participants most respondents (80%) were 41 years or younger (Table 2). This may be attributed to the fact that older teachers (with several years of pension contribution service) have opted for the Voluntary Severance Package (VSP), which was recently offered to teachers by the various Departments of Education. According to Phitidis (2022), young people opt to get into education because funding to study for a teaching degree is more readily available. The DBE offers the Fundsa Lushaka Bursary in South Africa for potential teachers in critical subjects. Students who often get rejected or unplaced in their first choice at a university often choose teaching as a career path.

With reference to the number of teaching years completed by the participants More than 78% of the teachers completed between 1 – 15 years of service in teaching. This finding coincides with Table 1, where 68% of the respondents were females. According to the researcher, a possible reason for this finding is that most females are satisfied in their job situation and therefore do not often seek alternative employment. Dhal (2021) concurs that female teachers remain longer in their profession due to the security and benefits provided by the education sector.

Number of Learners in the Largest Class the Respondents Teach

Table 2. Frequency distribution according to the number of learners in the largest class in which the respondents teach

	Number of learners	**Frequency**	**%**
1	10 – 20	3	2,0
2	21 – 30	21	14,0
3	31 – 40	34	23,0
4	41 –50	71	47,0
5	51 – 60	9	6,0
6	61 – 70	7	5,0
7	71 – 80	3	2,0
8	More than 80	2	1,0
	Total	150	100

Most teachers who completed the questionnaire teach classes with more than 40 learners (Table 2). The ideal teacher-learner ratio is 25, according to Smart (2019), who believes that quality invitational teaching and learning is only possible when the teacher-learner ratio is manageable.

Table 3. Frequency distribution according to the respondent's perception of a favourable teacher-learner ratio

	Teacher-learner ratio	**Frequency**	**%**
1	10 – 15	3	2,0
2	16 – 20	16	11,0
3	21 – 25	74	49,0
4	26 – 30	32	21,0
5	31 – 35	20	13,0
6	36 – 40	5	4,0
	Total	150	100

Table 3 shows that most teachers (62%) prefer classes with 25 or fewer learners. Many indicated that with a small number of learners, quality invitational learning would be actualised, which would also avoid disciplinary problems in class. This finding concurs with Wright et al. (2018), who also agreed that the decreased number of learners in a class provides more significant opportunities for teachers to provide necessary educational support. According to Meador (2019), larger classes make it difficult, frustrating and cumbersome for teachers to maintain discipline and provide help.

Table 4. Item analysis in respect of class size

Question Number		**Agree**	**Disagree**	**Uncertain**	**Total**
2.1 Effective discipline in the class	f	126	24	0	150
	%	84	16	0	100
2.7 The teachers' understanding of individual learner's problems	f	121	27	2	150
	%	81	18	1	100
2.10 The creation of a warm atmosphere in class	f	56	66	28	150
	%	37	44	19	100
2.11 Individual assistance to learners	f	98	42	10	150
	%	65	28	7	100
3.7 The challenging nature of lessons	f	78	62	10	150
	%	52	41	7	100
4.2 The availability of teaching resources	f	100	46	4	150
	%	66,5	30,5	3	100
4.3 Adequate physical provision such as furniture, classroom space, etc.	f	116	33	1	150
	%	77	22	1	100
4.5 The recognition by management for the teachers' efforts	f	63	68	19	150
	%	42	45	13	100
4.8 The teachers' understanding of different cultural issues	f	107	35	8	150
	%	71	23	6	100
4.9 Understanding of learners' cultural backgrounds	f	115	28	7	150

For this paper, the following items were selected from the questionnaire for analysis since these items aligned directly with the *teacher-learner ratio and its effect on invitational teaching and learning*.

Effective discipline in the class

According to Ecole Admin (2021), discipline is essential in life. It is a character trait that is crucial for expressing many other attributes in life. It refers to orderliness in life, which is necessary for success in one's life. Additionally, it demonstrates respect for physical and moral laws in society.

In the table above, a very high percentage, 84%, agreed that an unfavourable teacher-learner ratio would affect discipline in class. Without proper discipline and authority, chaos may rule in class and thus affect invitational learning.

Through discipline, the learner realises the necessity for order in the world around him and that some behaviours are abhorred while others are praised.

The teachers' understanding of individual learner's problems

A high percentage of the respondents (81%) agreed that a large class would be affected by the teacher's understanding of individual learners' problems. Problems within the learning situation come to the fore in all classrooms, although they vary in importance, urgency and intensity. Within an educational context, teachers should be able to assist learners in identifying problems, their causes and possible consequences as quickly as possible (Koc et al., 2015). They should further help each learner employ or arrange counter measures for a problem (Johnson, 2014).

The creation of a warm atmosphere in class

Although less than half, most of the respondents (44%) still disagreed that a large number of learners would affect the teacher's self-concept. Loeng (2020) maintains that teachers already have a well-established self-concept that external actors cannot easily affect. Ismail and Tekke (2015) agree that the teacher's self-concept lies at the core of his personality, and a teacher with a positive self-concept can expose himself to criticism without feeling threatened.

Individual assistance to learners

A warm, inviting classroom is one of the prerequisites for invitational learning (Purkey & Novak, 2015). Most respondents (65%) indicated that being responsible for many learners makes it difficult to create a warm, inviting atmosphere in the class. Ballantine (1983: 165) says only with absolute dedication can a teacher create an atmosphere in which the learner feels essential, accepted and valued. The researcher believes that the class size often makes it impossible for the teacher to rearrange or reorganise the classroom.

The challenging nature of lessons

Only slightly more than fifty percent of the respondents (52%) agreed that large classes affect the challenging nature of lessons. A challenge can incite learners to better performance if the teacher explains until the chances of success are high (Johnson, 2014). To be challenging and thought-provoking, a lesson should not be a mere presentation by the teacher but should also consider learners' work habits. According to Wokoma (2020), the way learners tackle unexpected problems and their ability to work with others. Any challenge should be realistic and issued only when there is a reasonable chance of success.

The availability of teaching resources and Adequate physical provision such as furniture, classroom space, etc.

A relatively high percentage, 66,5% and 77% of the respondents, agreed that the availability of resources and inadequate physical provisions affect invitational teaching. An unfavourable teacher-learner ratio and a shortage of educational resources make it difficult for teachers to ensure effective learning. According to du Plessis and Mestry (2019), many schools need more furniture, stationery, textbooks, etc. Invaluable teaching and learning resources are necessary for the classroom for invitational learning. Successful invitational learning can only be realized fruitfully with adequate furniture and classroom spaces. Fifty percent of the respondents agreed that adequate physical provisions are necessary for successful invitational teaching and learning.

The teachers' understanding of different cultural issues and Understanding of learners' cultural backgrounds

Most respondents (71%) agreed that a teacher's understanding of different cultural issues is affected by large classes. In contrast (77%) conceded that understanding a learner's cultural background is affected by an unfavourable teacher-learner ratio. In teaching learners from culturally different backgrounds, a teacher must watch for signs of incongruity, which is only sometimes possible due to the large class size. Apart from understanding learners' diverse cultural backgrounds, large class sizes make it impossible for teachers to get to know all learners (Meador, 2019).

Discussion

Initially coined by Purkey and Novak, invitational teaching and learning (education) aimed to improve classroom practice. The classroom environment is the critical determiner for creating an invitational teaching and learning

environment (Venketsamy, Sing & Smart, 2020). Various factors influence and determine the quality of invitational teaching and learning. In this paper, the teacher-learner ratio (class size) was the determining factor in the effectiveness of promoting invitational education. Large class size has negatively impacted teacher and learners' attitudes toward schooling. Despite the Minister of Education indicating that there is a campaign to achieve a 1:30 teacher-learner ratio in public schools in South Africa, this is a far cry. According to West and Meier (2020), there are classes in South Africa's public schools with more than 50 learners to one teacher. The finding in this study revealed that the class size impacted how teachers manage discipline. It was found that most teachers spent their time trying to discipline the learners instead of teaching. Wright et al. (2017) agree that for effective teaching and learning to occur, there must be a decrease in the number of learners in a teacher's class. This view is supported by the Hun School of Princeton (2019), which believes that smaller classes yield better results and tremendous success among learners. The findings also revealed that teachers could not identify learners learning problems and psycho-socio-emotional challenges. They felt they had too many learners to contend with and needed help identifying challenges among them.

With the large class size, most participants complained about the lack of resources. Learners were forced to share textbooks and other necessary resources. Teachers could not move around the class and give individual attention due to the lack of space. Participants also indicated that there needed to be more furniture in each class. In some subjects, practical work was impossible since there was inadequate equipment to allow students to demonstrate their activities, especially in the science laboratory (Kohler, 2020)

Another factor that hindered invitational teaching and learning is the principles of mutual knowing, trust and authority. The findings revealed that the large class size made it nearly impossible for teachers to get to know their learners and vice-versa. As a result of not knowing the learners, learners found it difficult to develop a relationship of trust with the teacher. Due to the lack of mutual knowledge and confidence between learners and teachers, most participants indicated that they needed more authority in the classroom. 84% of participants said discipline was a significant factor limiting a mutual relationship of knowing (knowledge), trust and authority.

Although Invitational Theory focuses on the powerful 5Ps (people, places, policies, programmes and processes), South African schools' teacher-learner ratio makes this challenging. As much as a teacher try to engage with learners (people) in the classroom environment, the findings highlighted the difficulty experienced by teachers. Invitational education promotes a conducive learning environment (place). Most schools in South Africa are overcrowded; teachers need to arrange the furniture in a work-friendly environment. The DBE has developed several policies and procedures to ensure quality teaching and learning; however, this has become a mammoth task in most public schools. The learner's code of conduct is no longer respected or obeyed. Although teachers spend a lot of time planning for teaching and learning, often these lessons are disrupted by indiscipline; teachers have to quell fights and even try to discuss life skills with these learners.

Conclusion

This paper provided insight into the teacher-learner ratio and its effect on invitational teaching and learning in a South African public school context. Although Purkey and Novak highlight the importance of the powerful 5Ps (people, places, policy, programmes and process) to ensure an invitational learning environment, the teacher-learner ratio in most public schools needs to respond more effectively to the powerful 5Ps. The author argues that for the effective implementation of the powerful 5Ps, the teacher-learner ratio should be at most 1:25 learners. The large number of learners in a class affects the quality of teaching, learning, assessment and support to learners. As a result of the increased teacher-learner ratio, this study found that most teachers do not know their learners, nor do they know the learner's learning problems and socio-economic conditions.

Recommendations

Emanating from the findings of this study, the author recommends the following:

- There should be a reduction in the teacher-learner ratio, which should be the government's central goal. In a presentation to the National Assembly on 12 September 2022, Education Minister – Angie Motshekga stated

that the DBE has a strategic objective to reduce school class size. Since then, there has been a slight improvement in the teacher-learner ratio. However, in some rural provinces, the teacher-learner ratio is still above 1:30 due to the lack of funding

- The current post-provisioning norms implemented in the country do not specify the timeframes for achieving 1:30 learners in a class. Therefore, the post-provisioning norms policy should be revised and implemented accordingly.
- Since the teacher-learner ratio is large in schools, pre-and in-service teachers should be capacitated in managing large classes. Higher education institutions should include a module on classroom management in their teacher-education programmes. This will provide pre-service teachers with the knowledge and skills to manage large classes.
- To minimise poor discipline and behavioural problems, the learner's code of conduct should be accepted and signed by both learners and parents. This will ensure parents and learners become accountable and responsible for their behaviours.

Recommended for Further Research

The study sample focused on primary schools in the lower South Coast of Durban -KwaZulu Natal. The author recommends that further studies be carried out in other provinces and countries worldwide. The author believes South African teachers would benefit significantly from good practices from other countries regarding managing large classes.

Limitations of the Study

The study was limited to only one district in South Africa, KwaZulu-Natal. The participants in this study were only primary school teachers teaching mainly in rural and semi-rural schools. The author proposes that this study should also be done in ex-Model C schools in the province.

Acknowledgment

The author would like to express his sincere thanks to the University of Zululand, where this doctorate study was done. He would also extend his sincere appreciation to his supervisors, Prof M.S. Vos and Prof G. Urbani, both from the University of Zululand.

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