

Art. #1719, 9 pages, <https://doi.org/10.15700/saje.v40n1a1719>

Contribution of teaching assistants to quality education in Grade 1 classrooms

learners' academic careers. Awareness of the potential advantages of employing TAs could positively contribute to the standard of teaching in Grade 1 and could inform future educational policies. We now look at the positive and negative impacts that the presence of TAs might have and how they could or could not help with the current problems faced by Grade 1 teachers in South Africa.

Importance of Early Childhood Education with a Focus on Grade 1

Grade 1 learners are in a developmental phase – characterised by dependence on adult support – and can easily be influenced. As the learners develop on their own, they gradually become adapted to a level of individuality (Costley, 2010), although they still need guidance from elders.

The importance of ECE is encapsulated in the fact that it is the phase where learners develop self-concepts and thinking skills, and they start to participate in active learning (Rivera, 2008:61). The early years of a child's development provides a good opportunity to nurture their foundational skills in order to achieve academic success, health, and general well-being (Anderson, Shinn, Fullilove, Scrimshaw, Fielding, Normand & Carande-Kulis, 2003). Anderson et al. (2003) make it apparent that this is the most crucial phase in a learner's life, and if teachers do not manage learners to the best of their ability, this may affect learners' academic development. Therefore, one can argue that what children experience in their first years of their life has a great impact on their development, which in turn, has an impact on society (Van Leer, 2004).

Grade 1 learners are transitioning from informal pre-schooling methods to formal classroom settings, which is a crucial period in learners' lives. Although the early years is the best opportunity for learners to grow and develop, many learners are vulnerable at this stage of their lives. The young child is dependent on adult assistance to provide a strong foundation for academic development.

Children in this phase of learning are highly impressionable (Bwayo, 2014; Riley, 1991). Even if their family and social backgrounds are very harsh, when surrounded by loving, caring, and knowledgeable adults in their educational environment, they can still obtain remarkable personal development. A large amount of learning by a child originates from social interaction with a more knowledgeable tutor, which may be a parent, teacher, or tutor (Vygotsky, 1978).

Support in Early Childhood Education Classrooms

Teachers in South African classrooms are at a disadvantage because they need to manage and maintain difficult environments (Isingoma, 2014). These teachers endure ill-disciplined learners who do not listen to instruction and are rowdy during lessons. Sadler (2007:3) states that these problems arise

when children feel inadequate and unable to adapt to learning tasks. Maintaining classroom discipline consumes a substantial amount of time, which leaves the teacher with little time to thoroughly present and discuss subject material. Marais and Meier (2010) reveal that teachers are becoming increasingly distressed about disciplinary problems in schools. The impression is now that the number of learners in a classroom can affect the social and academic engagement of the learners involved (Isingoma, 2014).

Teachers find it challenging to provide quality learning because they are confronted with over-crowded classrooms and high learner-teacher ratios (Isingoma, 2014), diversity, and different language barriers. Because of such barriers, teachers need support in the classroom. Teaching assistants are required especially in the ECE sector, as early childhood learning forms the basis of all institutional learning, and Grade 1 marks the beginning of learners' formal education. In the next section we discuss Vygotsky's (1978) research on the Zone of Proximal Development (ZPD).

Learners' Engagement with Knowledge

Vygotsky's (1978) ZPD is relevant to this topic as it highlights the ways that learners engage with others in order to attain knowledge (Kirch, 2014).

Additional support in class could help both the teacher and the learner. When the teacher cannot provide individual support, this additional support person (an adult) can act as the knowledgeable substitute. The learners could progress even further when the knowledgeable adult, such as a TA, assists while the teacher is engaged with other duties.

ZPD is a concept that investigates the social interaction between adults and learners and illustrates how adults have a positive influence on the learners' learning abilities. ZPD indicates that learners with gaps in their knowledge/skills can achieve more with the help of a more knowledgeable person. McLeod (2007) summarises the theory by stating that the success of a young child's learning depends on proper assistance by a knowledgeable adult person. A teacher can serve as such a person. However, as stated before, a teacher in a South African Grade 1 classroom has too many additional challenges to be able to serve as this person all the time.

The purpose of this discussion is to indicate that even though learners in this age group are moving towards the attainment of independence, they still need adult guidance in the classroom environment to help them understand how society perceives what is right and wrong. Adult assistance is needed to help them accomplish tasks that are a little too advanced for their capabilities. Their social well-being can also benefit from adult support and encouragement in the classroom (Berry, Dawes & Biersteker, 2013). The teaching assistant's role is such that their presence in a classroom can allow the teacher to be-

come the functioning adult support that learners desperately need, they could also assist in managing the class so that the teacher does not experience ill-mannered learners while teaching. As mentioned earlier in our discussion we see that learners still need teachers' guidance but unfortunately teachers have too many responsibilities to fulfil this role.

Overburdened Teachers' Responsibilities

A teacher's influence is critical and impacts the cognitive, social, emotional, and moral domains of young learners. According to Shipley (2012) teachers have a great responsibility to build lasting relationships with each child as well as shaping and mentoring young learners.

A teacher assumes the role of learning mediator. Being an effective teacher includes asking questions frequently and allowing learners to engage in higher-level thinking. An effective teacher should also challenge learners and focus on enhancing their cognitive functioning; teachers must use the feedback they get from the learners and encourage them to ask questions. Teachers must also evaluate the learners' progress to determine what their strengths and weaknesses are, and accommodate learners' different learning styles (De Witt, 2009).

The role of a teacher in the Foundation Phase is, therefore, challenging and demanding. One teacher cannot be expected to meet the various needs of all the learners. Dowling (2000:26) indicates that teachers are open to the idea of having a TA, sharing the work, catering for small groups, creating an environment where learners have access to a known adult with whom they can share their thoughts and experiences.

South African teachers have even more to contend with, given the specific challenges presented in their classrooms. Lewit and Baker (2007:118) indicate that teachers in large South African classrooms find it difficult to maintain order and provide adequate individualised attention to learners. Teachers also find it challenging to implement the curriculum effectively, which results in poor quality of teaching and learning. From a teachers' perspective, this is an understandable problem, as teachers would naturally struggle to manage all aspects of classrooms and presentations and have sufficient time to get to know all the learners well enough to meet their individual needs. An additional problem in large classes is related to teachers' ability to maintain discipline.

Berry et al. (2013:25) urge teachers to realise that if social skills and academic problems are not detected and dealt with during the Foundation Phase, it could negatively influence learners' personal growth and self-esteem. As fundamental basics start in the earliest stage of any endeavour, it is imperative that ECE education should be of the highest quality. The following section explains how TAs can contribute to creating quality education in the classroom.

Teaching Assistants as Assets

Teaching assistants have become very popular in certain parts of the world, such as the United Kingdom (UK) and Australia (Bignold & Barbera, 2012). A study by Dunne, Goddard and Woolhouse (2008) revealed a drastic increase in the number of TAs employed – from 60,000 in 1997 to 130,000 in 2006. A number of reasons are cited for this increase.

The rise of teaching assistants

Research on TAs in South Africa is lacking, as no specific research could be identified on TAs and their responsibilities in South African classrooms. However, research in England indicates that TAs have become popular in this country over the previous few years and are in high demand (Bignold & Barbera, 2012). De Witt (2009) states that by using TAs' services, learners, teachers, and schools are supported, which has resulted in improved academic quality. Teaching assistants in Australia are highly valued and respected, and a substantial number of TAs are employed (Dunne et al., 2008). Webster (2014) describes the role of TAs as having a direct instructional role to support and interact with learners, especially learners that are slower and struggle more. The following section looks closely at the purpose of a TA.

Functions and advantages of teaching assistants

The primary role of teaching assistants is to support learners with learning by working with them and focusing on particular individual needs. This is done either on a one-on-one basis or in small groups (McVittie, 2005).

Furthermore, TAs must be able to manage a classroom and to arrange the classroom in preparation for lessons. They may also help with reading activities, or by supporting those who need extra help to complete tasks. The TAs can also become involved in playing educational games with learners, encouraging them to learn through play in the process (McVittie, 2005).

The main idea of having a TA in the class is for another dedicated person to provide additional support, and to impart knowledge to learners. TAs are, therefore, described as another pair of eyes in the classroom, aiding differentiation among learners, thus making it easier for the teacher to manage large groups (Tucker, 2009).

It is strongly believed that TAs have a positive effect on learners' educational progress (Rubie-Davies, Blatchford, Webster, Koutsoubou & Bassett, 2010) and that learners in schools with teaching assistants receive better assistance than those without teaching assistants (Bignold & Barbera, 2012). Prior investigations regarding support for teachers indicate that TAs can help to minimise workload and stress levels by helping with organisation, maintaining classroom discipline, and providing, not only

learning opportunities, but also emotional and physical support (Richter, 2016; Webster, 2014).

The Disadvantages of Teaching Assistants in Classrooms

One disadvantage of employing TAs may be that the teacher's and the TA's teaching styles may differ. This could cause a clash between the teacher and the TA in the classroom. TAs need to understand that they should respect the teacher's authority and follow their instruction (Butt & Lowe, 2012).

A related area of concern centres on the respective training programmes of teachers and TAs. For instance, a teacher would know how to guide the learner to progress towards a solution whereas an inexperienced assistant may simply give an answer. An inexperienced TA could, therefore, have a negative effect on the children's learning by spoon-feeding the learners instead of teaching them how to gain new knowledge (Blatchford, Bassett, Brown, Martin, Russell & Webster, 2011).

Financial constraints can also be a limitation to schools. A reason why TAs are not used in South African schools could be that many schools cannot afford the additional expenses (Cassim, 2016). TAs in Grade 1 classrooms in SA are rare, most notably in government schools. TAs in crèches and preschools usually earn between R76,656 to R271,026 a year, which is almost equal to a qualified teacher's salary. This is comparable to paying for two teachers for many classes, adding severe strains on limited school budgets (PayScale, Inc., 2019).

Table 1 Interview questions for each case

Case	Interview questions for each case
1. Teachers with TAs	<ol style="list-style-type: none"> 1. Why do you think there is a need for TAs in Grade 1? 2. How do you experience TAs? 3. What roles do TAs play in the classroom? 4. Does the TA help with the quality of teaching and learning? If so, how?
2. Teachers without TAs	<ol style="list-style-type: none"> 1. How do you cope with your daily teaching/learning and duties in your class? 2. If you had a TA, how would you use her efficiently? 3. How would a TA contribute to the quality of teaching and learning?

Population

Six different schools were involved in the study. Three schools employed teaching assistants, while the other three schools did not. In four schools English was used as medium of instruction, while the other two were double medium schools (English/Afrikaans). Participant teachers were required to have had more than three years' teaching experience.

Selection of Participants

This study employed purposeful sampling, as its

While keeping the potential problems in mind, we postulate that a TA is still a valuable asset to a Foundation Phase classroom, due to the various advantages described in the previous section.

Very little research about the employment of teaching assistants in South Africa exists. In view of the need to add to this body of knowledge, the aim of the study was to gain a deeper and clear understanding of the role that TAs play in the Foundation Phase classroom. The knowledge gained could be used as guidelines for future appointment of TAs.

Methodology

Paradigm and Research Design

This study used a qualitative methodology within an interpretive paradigm that is context dependent. The study was geared to acquire an understanding of the value of teaching assistants in a Grade 1 classroom. A qualitative approach was used to gain an in-depth understanding of participants' experiences (Snape & Spencer, 2003).

Data Collection

Data was collected through semi-structured interviews with participants. The number of questions varied as teachers with TAs had more information to share than the teachers without assistants. Between four and seven questions were asked. In some cases the interviewer posed additional questions to gain a better understanding of the participant's answers to previous questions (see Table 1).

purpose was to determine how Grade 1 teachers with teaching assistants experienced the use of their TAs in their classrooms, and whether teachers without TAs believed that there was a need for such assistance. Participants were Grade 1 teachers in the Foundation Phase. The teachers were selected from private and public schools. The anonymity of schools was maintained however, a table was prepared to match the schools and participants using codes (see Table 2).

Table 2 Participants and their schools

Case number	Code	Explanation
1. Teachers with TA	1a	Public school 1
	1b	Public school 2
	1c	Private school 1
2. Teachers without TA	2a	Private school 2
	2b	Private school 3
	2c	Rural school
3. Teaching assistants	3a	Teaching assistant 1
	3b	Teaching assistant 2
	3c	Teaching assistant 3

Permission to conduct and record interviews with participating teachers was gained from the school principals and the teachers. Participants were selected according to certain criteria, which included years of working experience, employment of a TA or not, and type of school (urban, rural, private, or public) where the teachers and TAs were employed. Schools were also selected based on the above criteria.

Research Site

The interviews were conducted after regular school hours in an office or an empty classroom – a quiet environment to eliminate disturbances in the recording. The researcher conducted the interviews that lasted between 3 and 8 minutes each.

Data Analysis

According to Creswell (2014), analysing data in qualitative research includes preparing and organising data, organising data into themes by using a coding system and presenting the coded data in discussions. In this study, data was organised and prepared for analysis by categorising the interviews into themes and categories. As the interviews were recorded and stored, the data collected was organised into themes and categories according to individual cases. In Table 3 the themes and categories are outlined.

Table 3 Themes and categories

Theme	Category
Challenges	• Large classes
	• Learner diversity
Roles	• Roles of the teacher
	• Roles of the TA
Support	• Supporting the teacher
	• Supporting the learner

In qualitative research the quality of the research, which includes quality in design, analysis, and judgements of the study (Thomas, 2010), is most important. The article can be adapted by anyone in FP research who wants to do research with assistants, or who wants to explore the roles of teachers. The participants were afforded the opportunity to review the transcribed data to confirm that their views and opinions were being portrayed accurately. A voice recorder was used to ensure that the complete

interviews were recorded accurately and that no responses would be portrayed out of context.

Discussion and Results

Data collected from teachers with teaching assistants is discussed first, followed by a discussion of the data collected from teachers without teaching assistants.

Teachers with teaching assistants in their classes were unanimous in their praise of the support afforded to them. They agreed that they could not imagine teaching without such assistance. These teachers believed that their TAs were assets that raised the standard of education in their classes, either by supporting the teacher or the learners, or by providing an extra pair of hands in the class. The Physics and Mathematics teacher (PMT) said “... yes, *I am for a teaching assistant they do really help*” [sic].

The main roles of TAs were to stand in whenever a teacher was not available, and to assist with administrative duties. No specific job descriptions for TAs exist, therefore teachers assign TAs’ tasks based on their respective needs and preferences. These tasks include helping with administrative tasks, marking and reviewing, preparing lessons, sorting out worksheets, copying, pasting, laminating, assisting with stronger learners (to allow teachers to assist weaker learners), watching over outdoor play, and accompanying learners from one class to the next.

Teachers mentioned that they regarded TAs’ commitment and personality to be more important than qualifications. This emphasises the importance of teachers and TAs having healthy working relationships. Having a TA in class allows teachers more time to assist learners on a one-on-one basis. Teachers are freed to assist weaker learners while TAs tend to the stronger learners.

It was apparent that interviewed teachers preferred their TAs not to be involved in the formal learning programmes. The recorded interviews indicate that the TAs’ actual responsibilities depended on what their teachers preferred them to manage, and that each teacher had different tasks in mind. The pattern that emerged was that all teachers wanted their TAs to adopt their way of teaching, and that their abilities to do so were what distinguished them as being useful assistants.

Teachers without assistants all argued that there was a real need for a TA in a class, as they battled to fulfil all the duties on their own. Their main concern was that they did not teach effectively as they seemed to be spending more time executing administrative tasks and sorting out problems in class than actually teaching. Those teachers felt that, if they had had TAs in their classes, they would have had more time to present lessons while the TAs could have tended to various problems, read to the learners, done printing and photocopying, collected money, completed the register, or accompanied learners from class to class. Those are largely mundane tasks that are also time-consuming, which should ideally be taken care of by another adult who is aware of events and requirements in the presentation of lessons.

The interviewed teachers wanted extra pairs of hands and eyes in the classrooms to assist when and wherever needed, especially in relation to the needs of weaker learners. One teacher responded as follows: *“Yes, it is crucial [to have an] extra pair of eyes around the class as well as someone to assist with preparing the lessons. They are a big help when it comes to one-on-one learning. Without a TA it’s madness and it is unbelievable how people manage without a TA.”* Those teachers stated that, if they had had TAs in their classes, they could have spent more time planning their lessons and designing them to be more fun and creative. They were not able to do that, strained by the various other responsibilities they needed to fulfil. Assistants could possibly also have helped with language barriers in rural school where most of the learners’ first language was not English.

One key aspect was highlighted by all the interviewed teachers. They strongly believed that a teacher and a TA could only work together well in a classroom if they succeed in developing a healthy relationship on a personal as well as a professional level. However, teaching assistants need to know their boundaries and recognise the limits of their designated responsibilities. They need to know that they are not the heads of classes, but assistants to the actual heads of classes. It is advisable for the TAs to support teachers in ways that will allow the latter to focus solely on their lessons, the learners, and their progress. The teachers believed that a higher quality of education would be delivered as a result of teaching assistants’ involvement.

The data reveals that teachers without TAs felt that, although they maintained control of their classes, they survived rather than thrived in their environments, getting by with the bare minimum of assistance from the school. They felt as if they were “short-changing” the learners and were not able to go the proverbial extra mile. They could not give each learner the individual attention they deserved, especially in the Foundation Phase. This lack of attention was perceived by them to result from being

overburdened by non-teaching tasks such as administrative chores, the maintenance of discipline over large groups, and the management of learner diversity.

From the research findings it is clear that TAs are assets in classrooms. Based on the findings, it can reasonably be argued that TAs need to be deployed in every Grade 1 classroom if South African schools wanted to improve the quality of education – especially in Early Childhood Education. This solution is even more essential in public schools where class sizes often exceed 40 learners. Teachers need to be relieved of taxing responsibilities and extra tasks to be able to focus more on their learners’ educational needs. If the foundation for the effective teaching of young learners is firmly laid, then the quality of education will improve and learners’ academic results will progressively improve as well (Riley, 1991).

Teachers with TAs in their class stated that the assistants were blessings and that they could not imagine life without them in the classrooms. Teachers that did not have TAs explained that they were barely coping with their classes and struggled to give their learners the attention and quality of education they deserved. They felt that their teaching might not have been effective enough because of the numerous other responsibilities they had to tend to.

Therefore, a teaching assistant can be regarded as having the potential to not only assist a teacher, but to improve the performances of learners and the class as a whole. Teachers can attain a more productive level of teaching if they are able to delegate lower-level tasks to TAs. It is imperative that learners perform well from the outset of their school careers, since the Foundation Phase is widely regarded by mentioned researchers as the most important phase of a child’s schooling. Quality education will improve a school’s overall performance as the correct basis will have been laid in the Foundation Phase. It can hence be argued that TAs add quality to learning in classrooms as they support teachers in important and effective ways.

Conclusion

We support the perception that teachers are important role models for young children and that they have many responsibilities to uphold in educating learners. Teachers need to present stimulating lessons, deal with varying levels of stronger and weaker learners and be able to give individualised attention to those learners that need it. Simultaneously, teachers have to attend to administrative chores such as keeping attendance registers, copying and printing worksheets, and collecting funds. In addition to these general tasks and responsibilities, South African teachers manage overcrowded classes, must overcome language barriers and issues of diversity. As Grade 1 learners transition from infor-

mal to formal learning, they depend on a trusted and supportive role model to create an empowering learning environment for them. To be successful, teachers need advanced social and emotional skills, enabling them to assist learners on cognitive, emotional, and social levels. The multitude of responsibilities and functions of the Grade 1 teacher can be overwhelming; assistance in the classroom may reasonably be regarded as a vital contributor to a higher quality of education.

The primary purpose of a teaching assistant is to provide support benefitting both teachers and learners. When a TA assumes the duty of completing time-consuming administrative tasks, for instance, the teacher is free to concentrate on the cognitive development of learners, taking the necessary time to adequately explain new concepts or to present the class with opportunities to ask questions and discuss any uncertainties. This support is imperative because teachers can then devote more time to learners, assess learners individually and moreover, determine which learners are not performing well in relation to their prior performance in order to see any improvement or lack thereof. Teachers can hence devote their energy to assist struggling learners while TAs can manage the rest of the learners in class with tasks assigned by their teachers. The main benefit of teachers having TAs is to share the workload.

When comparing positive and negative aspects of having TAs in classrooms, the advantages seem to outweigh the disadvantages. South African classrooms present localised challenges to teachers, e.g. language barriers, and overcrowding. Each of these challenges underlines the need of employing extra assistance in a classroom. In a more universal sense, Vygotsky's theory of the Zone of Proximal Development supports the argument of having adults available to assist learners in bridging the gaps between their current knowledge and their potential knowledge. Because teachers are often too busy tending to their wide range of responsibilities, they struggle to maintain their primary function as experts that focus on the educational needs of all learners, individually and collectively, in their classrooms.

Empirical findings (Blatchford et al., 2011) show that TAs have become popular in recent decades, and more positive than negative arguments for their employment can be listed. TAs have undoubtedly proven to be assets in classrooms if their support was utilised correctly by teachers and schools.

A notable finding of this study was that Grade 1 teachers at the different schools who took part in the study believed that there was a substantial need for TAs in Grade 1 classrooms. However, few Grade 1 teachers have TAs in their classes even though such a prominent need exists. The research findings and recommendations from this study could contribute to improving the quality of education by

promoting the increased deployment of TAs in Early Childhood Education. Furthermore, this study could also inform policy. Further research can be conducted on the specific roles of TAs at schools. The Department of Education needs to pay heed to the voices of teachers expressing their need for assistance required to improve the overall standards of education in South Africa.

In this article we confirm the perception that the employment of TAs has become indispensable as they help to free teachers of time-consuming tasks, thereby improving the quality of educational endeavours in schools. Action needs to be taken to ensure that teaching assistants are rightfully employed in all Grade 1 classes, countrywide.

Recommendations

To produce effective learning with both a teacher and TA in a class, some form of uniformity in teaching approach needs to exist. Teachers need to clarify the roles of the teaching assistants (and associated expectations) in their own classrooms, since such stipulations will vary among teaching staff. Administrative tasks expected from teachers should be reconsidered. Teachers should be allowed to focus primarily on their teaching roles, and the Department of Education should support teachers by decreasing their administrative responsibilities. Heads of Departments should oversee the relationships between teachers and teaching assistants. They should ensure that their personalities match and that they work well together, as it is imperative that they get along, work together well, and communicate effectively.

Acknowledgement

I would like to acknowledge everyone who continuously supports me – especially my parents and my husband.

Authors' Contributions

Nabeelah Cassim wrote the manuscript, provided data for Tables 1, 2 and 3, and also conducted the interviews. All authors reviewed the final manuscript.

Notes

- i. This article is based on the masters' thesis of Nabeelah Cassim.
- ii. Published under a Creative Commons Attribution Licence.
- iii. DATES: Received: 18 June 2018; Revised: 26 April 2019; Accepted: 21 June 2019; Published: 29 February 2020.

References

Anderson LM, Shinn C, Fullilove MT, Scrimshaw SC, Fielding JE, Normand J & Carande-Kulis V 2003. The effectiveness of early childhood development programs: A systematic review. *American Journal of Preventive Medicine*, 24(3):32–46. [https://doi.org/10.1016/S0749-3797\(02\)00655-4](https://doi.org/10.1016/S0749-3797(02)00655-4)

Berry L, Dawes A & Biersteker L 2013. Getting the basics right: An essential package of services and

support for ECD. In L Berry, L Biersteker, A Dawes, L Lake & C Smith (eds). *South African Child Gauge 2013*. Cape Town, South Africa: Children's Institute, University of Cape Town. Available at http://www.ci.uct.ac.za/sites/default/files/image_to_pdf/images/367/Child_Gauge/South_African_Child_Gauge_2013/SouthAfricanChildGauge2013.pdf. Accessed 28 December 2019.

Bignold W & Barbera J 2012. Teaching assistants and teacher education in England: Meeting their continuing professional development needs. *Professional Development in Education*, 38(3):365–375. <https://doi.org/10.1080/19415257.2011.621967>

Blatchford P, Bassett P, Brown P, Martin C, Russell A & Webster R 2011. The impact of support staff on pupils' positive approaches to learning and their academic progress. *British Educational Research Journal*, 37(3):443–464. <https://doi.org/10.1080/01411921003734645>

Burgess H & Mayes AS 2007. Supporting the professional development of teaching assistants: Classroom teachers' perspectives on their mentoring role. *The Curriculum Journal*, 18(3):389–407. <https://doi.org/10.1080/09585170701590056>

Butt R & Lowe K 2012. Teaching assistants and class teachers: Differing perceptions, role confusion and the benefits of skills-based training. *International Journal of Inclusive Education*, 16(2):207–219. <https://doi.org/10.1080/1360311003739678>

Bwayo JKW 2014. Primary school pupil's life skills development: The case for primary school pupils development in Uganda. PhD dissertation. Limerick, Ireland: University of Limerick. Available at <https://pdfs.semanticscholar.org/c51f/15e0ef487b7f57e028855eb8b11c01bb15c8.pdf>. Accessed 28 December 2019.

Cassim N 2016. Perspectives of Grade 1 teachers on the need for teaching assistants. MEd dissertation. Pretoria, South Africa: University of Pretoria.

Costley KC 2010. *Perspective of young children: How do they really think?* Russellville, AR: Arkansas Tech University. Available at <https://files.eric.ed.gov/fulltext/ED509726.pdf>. Accessed 6 January 2020.

Creswell JW 2014. *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed). Thousand Oaks, CA: Sage.

De Witt MW 2009. *The young child in context: A thematic approach. Perspectives from educational psychology and sociopedagogics*. Pretoria, South Africa: Van Schaik.

Dowling M 2000. *Young children's personal, social and emotional development*. London, England: Sage.

Dunne L, Goddard G & Woolhouse C 2008. Mapping the changes: A critical exploration into the career trajectories of teaching assistants who undertake a foundation degree. *Journal of Vocational Education & Training*, 60(1):49–59. <https://doi.org/10.1080/13636820701828853>

Du Plessis S & Louw B 2008. Challenges to preschool teachers in learner's acquisition of English as Language of Learning and Teaching. *South African Journal of Education*, 28(1):53–75. Available at <http://www.sajournalofeducation.co.za/index.php/saje/article/view/148/96>. Accessed 13 December 2019.

Isingoma P 2014. Overcrowded classrooms and learners' assessment in primary schools in the Kamwenge District, Uganda. MEd dissertation. Pretoria, South Africa: University of South Africa. Available at <http://citeserx.ist.psu.edu/viewdoc/download?doi=10.1.1.839.6178&rep=rep1&type=pdf>. Accessed 13 December 2019.

Kirch SA 2014. Integrating Vygotsky's theory of relational ontology into early childhood science education. *Cultural Studies of Science Education*, 9(1):243–254. <https://doi.org/10.1007/s11422-013-9532-5>

Lewit EM & Baker LS 2007. Class size. *The Future of Children*, 7(3):112–121.

Marais P & Meier C 2010. Disruptive behaviour in Foundation Phase of schooling. *South African Journal of Education*, 30(1):41–57. Available at <http://www.sajournalofeducation.co.za/index.php/saje/article/view/315/188>. Accessed 6 January 2020.

Margetts K & Phatudi NC 2013. Transition of children from preschool and home contexts to grade 1 in two township primary schools in South Africa. *European Early Childhood Education Research Journal*, 21(1):39–52. <https://doi.org/10.1080/1350293X.2012.760341>

McLeod S 2007. *Simple psychology*. Available at <http://www.simplepsychology.org/vygotsky.html>. Accessed 13 March 2015.

McVittie E 2005. The role of the teaching assistant: An investigative study to discover if teaching assistants are being used effectively to support children with special educational needs in mainstream schools. *Education 3-13: International Journal of Primary, Elementary and Early Years Education*, 33(3):26–31. <https://doi.org/10.1080/03004270585200301>

Meier C & Hartell C 2009. Handling cultural diversity in education in South Africa. *SA-eDUC Journal*, 6(2):180–192. Available at http://www.puk.ac.za/opencms/export/PUK/html/fakulteite/opvoed/educ/artikels/SpecialIssue2009/SpecialEd_SouthAfrica.pdf. Accessed 11 December 2019.

PayScale, Inc. 2019. *Average primary school teacher salary in South Africa*. Available at https://www.payscale.com/research/ZA/Job=Primary_School_Teacher/Salary. Accessed 11 December 2019.

Richter B 2016. Teacher training by means of a school-based model. *South African Journal of Education*, 36(1):Art. # 1108, 8 pages. <https://doi.org/10.15700/saje.v36n1a1108>

Riley MT 1991. *Shapes. A quick study: Child growth and development handbook*. Lubbock, TX: Institute for Child and Family Studies, Texas Tech University. Available at <https://files.eric.ed.gov/fulltext/ED345878.pdf>. Accessed 30 December 2019.

Rivera M 2008. The importance of quality early childhood education. *Educational Digest: Essential Readings Condensed for Quick Review*, 74(3):61–63.

Rubie-Davies CM, Blatchford P, Webster R, Koutsoubou M & Bassett P 2010. Enhancing learning? A comparison of teacher and teaching assistant

interactions with pupils. *School Effectiveness and School Improvement*, 21(4):429–449.
<https://doi.org/10.1080/09243453.2010.512800>

Sadler J 2007. Early childhood education: The promise, the challenges. *Forum on Public Policy*, 2007(2):1–13. Available at <https://files.eric.ed.gov/fulltext/EJ1099084.pdf>. Accessed 10 December 2019.

Shipley T 2012. Giving teachers a voice: An examination of teachers lived experiences in implementing developmentally appropriate practice in early childhood settings. PhD dissertation. Scottsdale, AZ: Northcentral University.

Snape D & Spencer L 2003. The foundations of qualitative research. In J Ritchie & J Lewis (eds). *Qualitative research practice: A guide for social science students and researchers*. London, England: Sage.

Sosinsky LS & Gilliam WS 2011. Assistant teachers in prekindergarten programs: What roles do lead teachers feel assistants play in classroom management and teaching? *Early Education and Development*, 22(4):676–706.
<https://doi.org/10.1080/10409289.2010.497432>

Takala M 2007. The work of classroom assistants in special and mainstream education in Finland.

British Journal of Special Education, 34(1):50–57.
<https://doi.org/10.1111/j.1467-8578.2007.00453.x>

Thomas PY 2010. Towards developing a web-based blended learning environment at the University of Botswana. PhD thesis. Pretoria, South Africa: University of South Africa. Available at <http://uir.unisa.ac.za/handle/10500/4245>. Accessed 30 December 2019.

Tucker S 2009. Perceptions and reflections on the role of the teaching assistant in the classroom environment. *Pastoral Care in Education*, 27(4):291–300.
<https://doi.org/10.1080/02643940903349294>

Van Leer B 2004. *Children are our future*. Available at https://www.crin.org/en/docs/resources/treaties/crc.37/Bernard_van_Leer_Foundation.pdf. Accessed 3 March 2016.

Vygotsky LS 1978. *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Webster R 2014. Education in 2014: The year of the teaching assistant? *The Guardian*, 8 January. Available at <https://www.theguardian.com/teacher-network/teacher-blog/2014/jan/08/education-2014-teaching-assistant-school-support-staff>. Accessed 6 January 2020.