

Takalani Sesame WhatsApp Chatbot Needs Assessment Research Final Report

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Introduction

Sesame Workshop International, South Africa (Takalani Sesame) requested a needs assessment research to inform content development, curation, and a delivery strategy for a WhatsApp Chatbot to be implemented in South Africa. Three partners are involved in the Chatbot project: Takalani Sesame, the LEGO Foundation and DBE-E³. Takalani Sesame and the LEGO Foundation focus on promoting and building capacity in learning through play (LTP) and the mandate of the DBE-E³ programme is to research, pilot, and train teachers in a teaching-for-learning approach that will prepare learners with the skills they need for a changing world, resulting in young people engaging meaningfully in society and the economy either through Education, Employment, or Entrepreneurship. The Play to Learn Programme being implemented by Takalani Sesame and funded the LEGO Foundation focuses on the ECD level, while DBE- E³ focuses on schools up to Grade 7. The programmes are developing and implementing a WhatsApp Chatbot that will support caregivers of children from ECD to Grade 7 in accessing supportive learning services through social media.

While Chatbot technology provides a host of new opportunities for content delivery and interaction with caregivers to support learning, the value-add of this technology depends on the relevance of the content shared to the needs of the target users as well as being responsive to contextual realities that influence social media access and use. Thus, a needs assessment was conducted with caregivers of children across three provinces in South Africa to inform the development of a content creation, curation and delivery strategy.

The goals of the need assessment were:

- Understanding caregivers' perceptions of the value and importance of their involvement in their children's schooling and challenges to this involvement
- Understanding platforms caregivers currently use to search for educational content
- Understanding the challenges caregivers and children face in accessing early learning services, including virtual learning opportunities
- Understanding the challenges caregivers and learners face in accessing psycho-social, learner development and academic support in primary and senior phases, including virtual learning opportunities
- Understanding caregivers' perceptions of social media platforms and their potential to serve early learning needs, and learning needs in school
- Identifying what support mechanisms need to be put in place for parents to participate in online learning platforms such as WhatsApp
- Understanding caregivers' experiences with other chatbots
- Determining whether content need to be tailored to the gender of the caregiver and how should this be done
- Understanding which incentives are most likely to encourage parents and children to continue using online platforms such as WhatsApp
- Understanding the best time of the day to deliver content

Methodology



The research design sought to include a diverse cross-sample of South African communities, including marginalised communities. Data was collected from three sites across three provinces – Free State, Limpopo and Gauteng. The three sites included one rural location, one township location and one urban location, and the specific sites were finalised in consultation with Takalani Sesame and DBE- E³.

In each location, in conjunction with DBE E³ Provincial Support Officers and Takalani Sesame district advisors, a school/ECD Centre/Community centre was identified and used as the base for the research. Caregiver recruitment was done through the ECD centre, and/or community centre and/or DBE E³ identified schools, and interviews were conducted at the relevant centre. Fieldworkers were recruited, and a one-day training was conducted prior to collecting the data. The aim was to interview 20 parents/caregivers in each area (60 adult participants). In addition, data from children was gathered via focus groups of 6-10 children each. The aim was to conduct three child focus groups per site, one for children 4-6 years (ECD), one for children 7-9 years and one for children 10-12 years (60 children).

Research instruments were prepared and translated into four languages: Sesotho, Sepedi, Tswana, and IsiZulu. The fieldwork team spent three days (Thursday to Saturday) in each area. On the two weekdays the interviews with caregivers were conducted. Caregivers who participated in interviews were asked to bring their child(ren) to the identified centre on the Saturday to participate in the focus groups. Informed consent was sought from adult participants, and assent was sought from the children. Fieldworkers recorded interview responses on hard copies of the instruments and these were captured using an online form after



the interviews. In recognition of their time and contribution to the research, each family (caregiver and child(ren)) received a R150 grocery voucher and R100 cash to cover travel costs to the research venue.



In total, 65 interviews with caregivers were conducted, and 101 children participated in 19 focus group discussions. The following data was collected:



Table 1 *Data collected*

Province	Location	Interviews conducted
Limpopo	Rural	<ul style="list-style-type: none"> ● 20 parent/caregiver interviews ● 7 children focus groups <ul style="list-style-type: none"> ○ 1x 13-14 years (4 children) ○ 2x 11-12 years (13 children) ○ 2x 9-10 years (9 children) ○ 1x 7-8 years (7 children) ○ 1x 4-6 years (6 children)
Gauteng	Township	<ul style="list-style-type: none"> ● 23 parent/caregiver interviews ● 6 children focus groups <ul style="list-style-type: none"> ○ 2x 11-13 years (11 children) ○ 1x 9-10 years (7 children) ○ 1x 7-8 years (5 children) ○ 2x 4-6 years (10 children)
Free State	Urban	<ul style="list-style-type: none"> ● 22 parent/caregiver interviews ● 6 children focus groups <ul style="list-style-type: none"> ○ 1x 11-13 years (6 children) ○ 1x 9-10 years (4 children) ○ 1x 7-8 years (5 children) ○ 3x 4-6 years (15 children)



Findings

Demographic Information

The following tables provide a snapshot of caregiver and children demographic data.

Table 1 Caregiver profile

	Limpopo	Gauteng	Free State	Total sample
Number of interviews	20	23	22	65
Age ranges	21-69 years	16-53 years	22-47 years	16-69 years
Average age	42 years	36 years	33 years	37 years
Gender	95% female 5% male	91% female 9% male	95% female 5% male	94% female 6% male
Average number of children they take care of	3	2	2	2
Range of number of children they take care of	1-5	1-5	1-6	1-6
Gender of children they take care of	59% male 41% female	41% male 59% female	50% male 50% female	50% male 50% female
Age range of children they take care of	1-28 years	2-23 years	8 months–23 years	8 months-28 years
% primary caregivers	80%	91%	100%	91%
% working	30%	26%	18%	25%



Table 2 *Children profile (4-8 years)*

	Limpopo	Gauteng	Free State	Total sample
Number of focus group discussions	2	3	4	9
Number of children participating in focus group	13	15	20	48
Age ranges	4-8 years	4-8 years	4-8 years	4-8 years
Average age	6 years	6 years	5 years	6 years
Gender	46% female 54% male	53% female 47% male	45% female 55% male	48% female 52% male
Grades	RR- 3	ECD- 3	ECD-3	ECD- 3

Table 3 *Children profile (9-14 years)*

	Limpopo	Gauteng	Free State	Total sample
Number of focus group discussions	5	3	2	10
Number of children participating in focus group	26	18	10	54
Age ranges	9-14 years	9-13 years	9-13 years	9-14 years
Average age	11 years	11 years	11 years	11 years
Gender	42% female 58% male	78% female 22% male	90% female 10% male	63% female 37% male
Grades	3-7	4-7	4-7	3-7

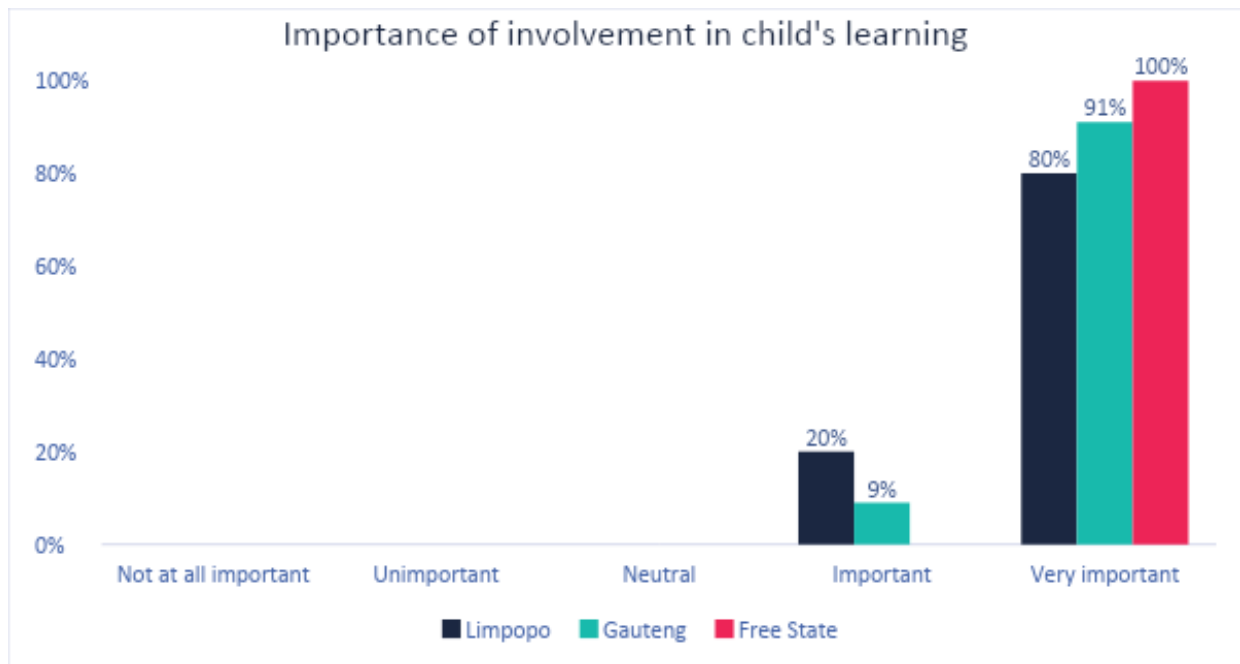
For children focus groups, two research instruments were prepared – one for children 4-8 years and one for children 9-12 years – but the children were sub-divided according to age during the focus groups discussions, and children older than 12 were also accommodated. Thus, in presenting the findings from children, the findings are presented for children 4-8 years and for 9-14 years.



Caregiver perceptions of the value and importance of their involvement in their children's schooling and challenges to this involvement

Caregivers were asked to rate how important it is for them to be involved in their child's learning, and across all provinces caregivers rated that it is important to be involved in their child's learning as displayed in the graph below.

Figure 1 Caregiver ratings of the importance of their involvement in their child's learning



In their qualitative responses, caregivers noted the following reasons for their ratings:

- To improve their child's futures and education so that they are more successful than previous generations in their family;
- To improve the child's learning at school; and
- So that they can support and guide their child in their learning.

Examples of responses were:

Being actively involved helps me as the parent to be able to offer guidance and assistance in my child's learning. I am able to know what are the things that my child needs help with and how to help him. (Caregiver, Free State)

The child need support because they are so playful and very slow in their completing their school work. If we are not involved in their school work and support them in their learning their performance will never improve and we will not get the expected results. (Caregiver, Limpopo)

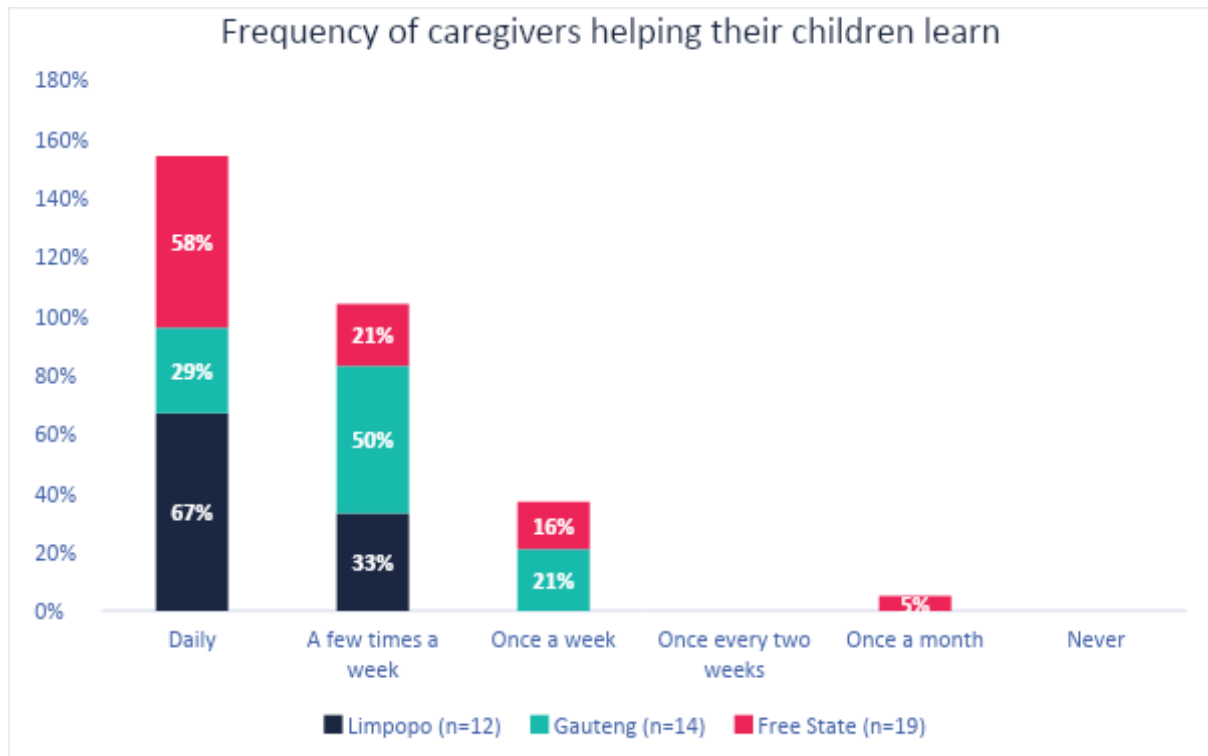
It is important because it helps me keep track of what he is learning at school and makes it easier for me to identify areas that he is struggling with so that I can help where I can. (Caregiver, Free State)

It is important because I want my child to be successful and reach higher levels of success that the family or previous scholars in the family never reached. (Caregiver, Free State)

Caregivers were asked to indicate how often they help their child learn (do work from school or other activities).

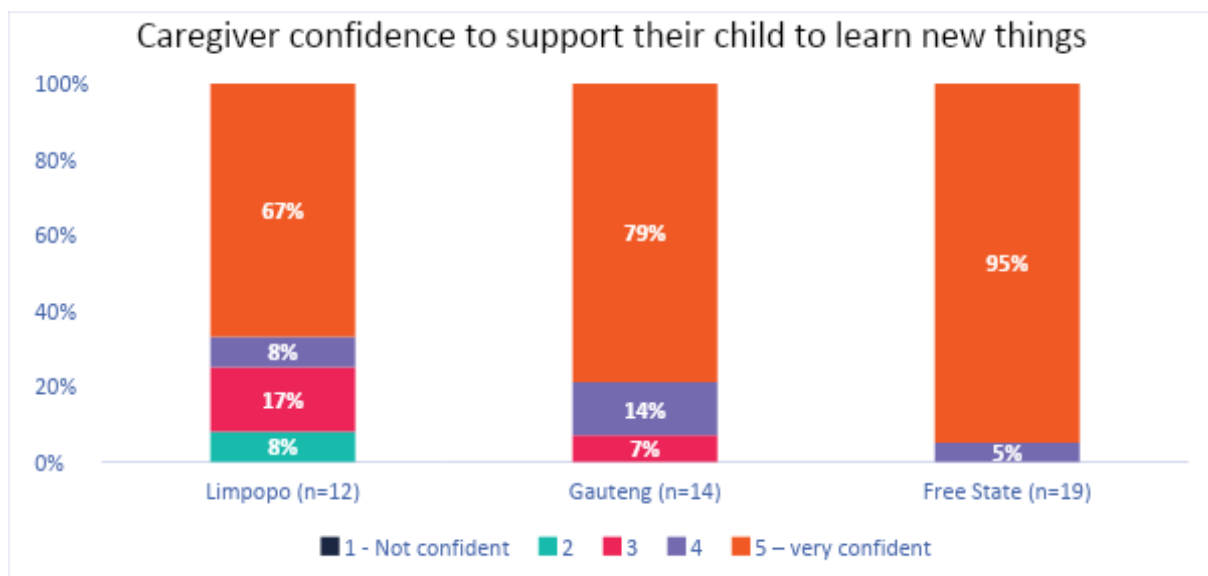


Figure 2 Frequency of caregivers helping their child learn



The responses reveal that overall caregivers, particularly those in Limpopo, help their children learn frequently: daily or a few times a week. Questions were also asked about caregiver confidence to support their child to learn new things, reading, and numeracy. Given the possibility of self-report bias/ social desirability bias, results related to confidence self-ratings should be treated with caution.

Figure 3 Caregiver confidence to support their child to learn new things





Some explanations provided for their ratings were:

I am very confident because in the process of supporting my children to learn, I also learn new things that empower and encourage me to help my children more. (Caregiver, Free State)

The level my child is at is quite easy to work with. The content of that level is manageable. The vocabulary is less demanding. (Caregiver, Gauteng)

I have knowledge and understanding of the importance of exploring new things. For example nowadays everybody has to know technology therefore one needs to read and explore every day. (Caregiver, Limpopo)

Those who did not feel confident provided the following reasons:

Because some of their learning concepts are not familiar to me. (Caregiver, Limpopo)

I am not too much learned, I am old, about 63 years old, some of the new learning ideas confuse me. (Caregiver, Limpopo)

Caregivers were asked what motivates them to help their child learn new things:

- Most caregivers want a better life for their child;
- Their child is curious and willing to learn (noted in Gauteng and Free State); and
- To improve the child's abilities and learning so that they can achieve the best that they can.

Examples of responses were:

I want my children to see and learn new things and get the best education for themselves in order to gain the knowledge they need. This is mainly because I as a parent did not have an easy access to education back then, so I want my children to go to school and become independent and educated people. (Caregiver, Free State)

What motivates me is that when X comes home from school she will be telling me what they did for the day, explaining how and what they did with the teacher with excitement and seeing that drives me to also help her. (Caregiver, Free State)

In case of my absence my child will be able to be independent and apply knowledge. (Caregiver, Gauteng)

The most commonly noted barriers that make it difficult to help their child learn new things were:

- Funds and resources (including electricity);
- Language barriers; and
- Understanding the schoolwork.

Examples of responses were:

Lack of money and jobs. I indicated that I do have N6 in Management Assistant but I was never called for learnership. I do not have a job and I end up as a helper so that my children get food. Sometimes I do not even have money to buy data so that I can help the children with their school work even if I know I can get to Google and get some information on things I do not know. Unemployment and poverty plays the biggest role as barriers to us and our children to learn new things. (Caregiver, Limpopo)

Language can be a barrier, more especially English. Due to not being good with the language and having to teach my child new things can be very challenging. (Caregiver-Gauteng)

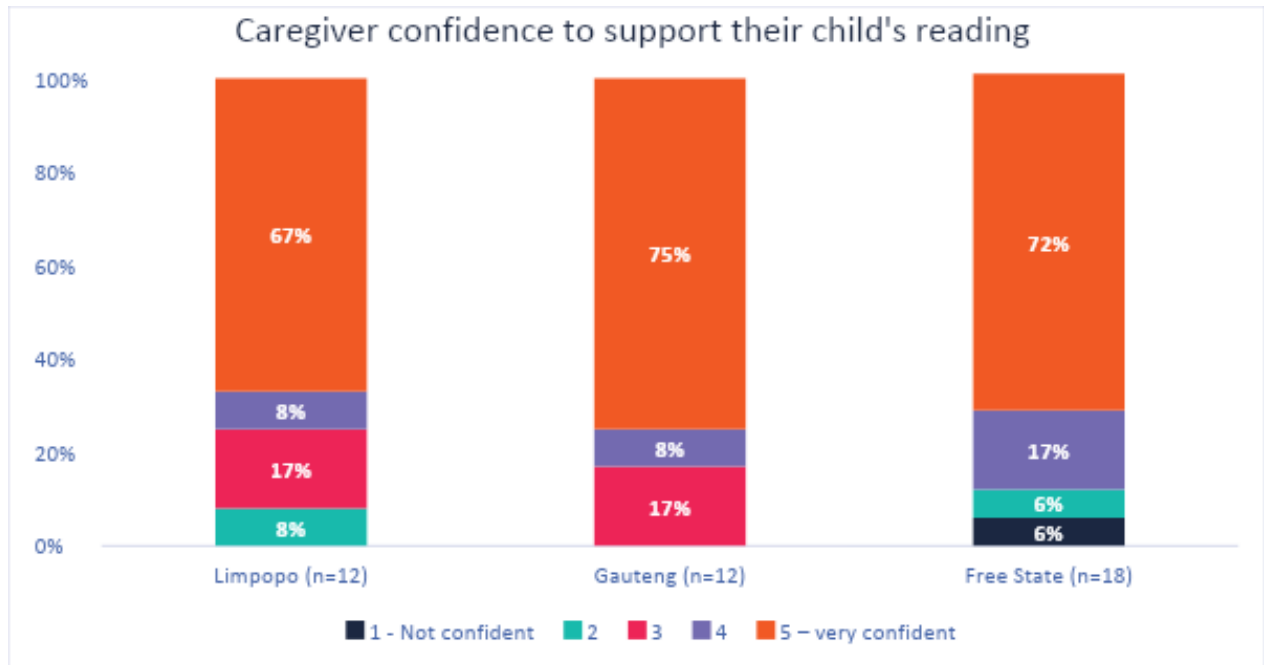
There are certain things I do not understand: the questions and level of comprehension. At school (ECD) they often have homework that requires them to use magazines to cut out pictures. Sometimes we do not have any magazines to cut out from. (Caregiver, Gauteng)



Lack of understanding /knowledge of what is expected of the children. I do not know the content of what is taught at school. (Caregiver, Limpopo)

Caregivers were asked to rate how confident they are in supporting their child in reading:

Figure 4 Caregiver confidence to support their child's reading



Most caregivers feel confident to support their child in reading, but self-rated confidence levels were the lowest in Limpopo. In explaining their rating, most responses iterated the importance of reading. Examples of responses were:

It is important to engage kids daily for me. I help them to read, then we close the book and I ask them to tell me what they learned so that I can be sure that they understand the content. (Caregiver, Limpopo)

It is because I read with him every day. I ensure that I teach him how to read on a daily basis. (Caregiver, Free State)

It is imperative that she learns how to read. If she does not know how to read, she won't know much. That's a limitation. I sit with her and we read together. Where she does not understand, I explain further and help her. I use pictures a lot to stimulate her senses. (Caregiver, Gauteng)

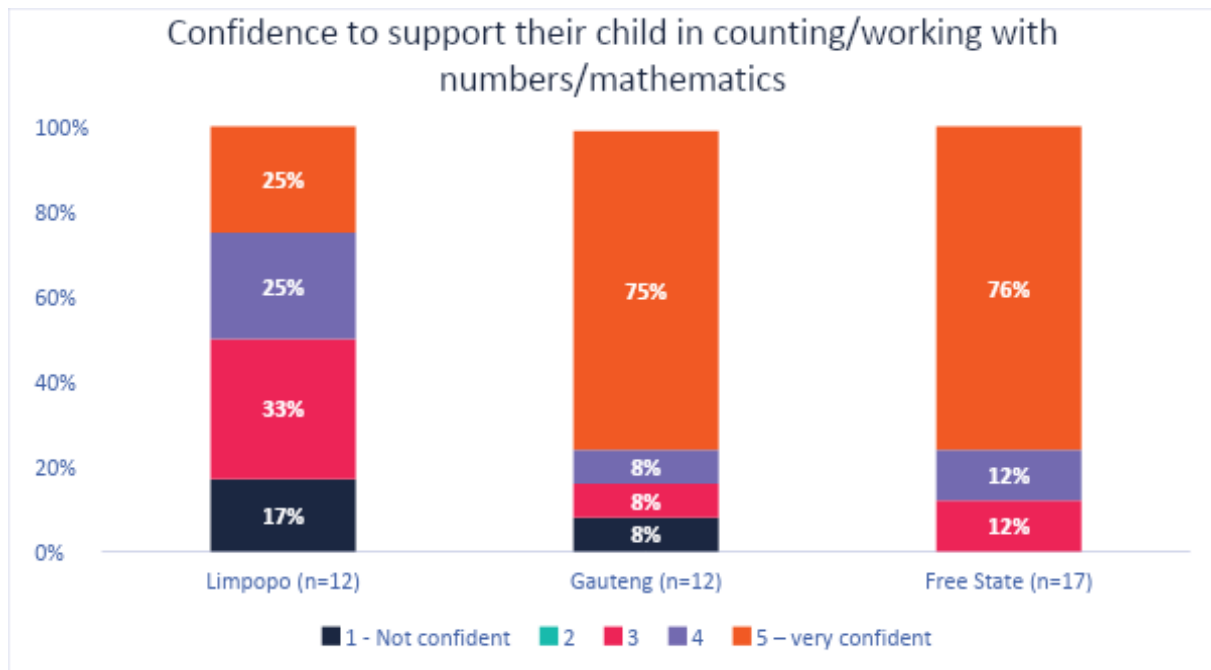
Those who rated their confidence lower (neutral-low) noted the following:

- Personal stress affects their ability to support their child's reading;
- They cannot read;
- They are tired from work; and
- The child does not have an interest in reading and has a short concentration span.

However, when it came to counting/working with numbers, while 60% of Limpopo caregivers felt confident to do so, this was much higher for Gauteng caregivers (91%) and for Free State caregivers (88%) as displayed in the graph below:



Figure 5 Caregiver confidence to support their child in counting/working with numbers/mathematics



When asked to explain their ratings, those who had high confidence levels noted that:

- They count with their child; and
- They use resources to help their child.

Examples of responses were:

Because there is an improvement in the counting abilities after I bought counting blocks and helped him learn how to use it. (Caregiver, Free State)

We sell ice cubes at home (flavoured frozen ice). He likes being the one selling when I ask him how much was given to him he is able to explain how much he was given the amount of money for the ice and how much change should the buyer get back if there is change for them. So him showing interest and effort makes it easier for me to be able to help him without hesitation because he is willing to learn. (Caregiver, Free State)

I make use of different materials to ensure that my child knows how to count. I make counting an everyday activity. (Caregiver, Gauteng)

Those who were less confident mainly noted that they find it difficult to understand. For example:

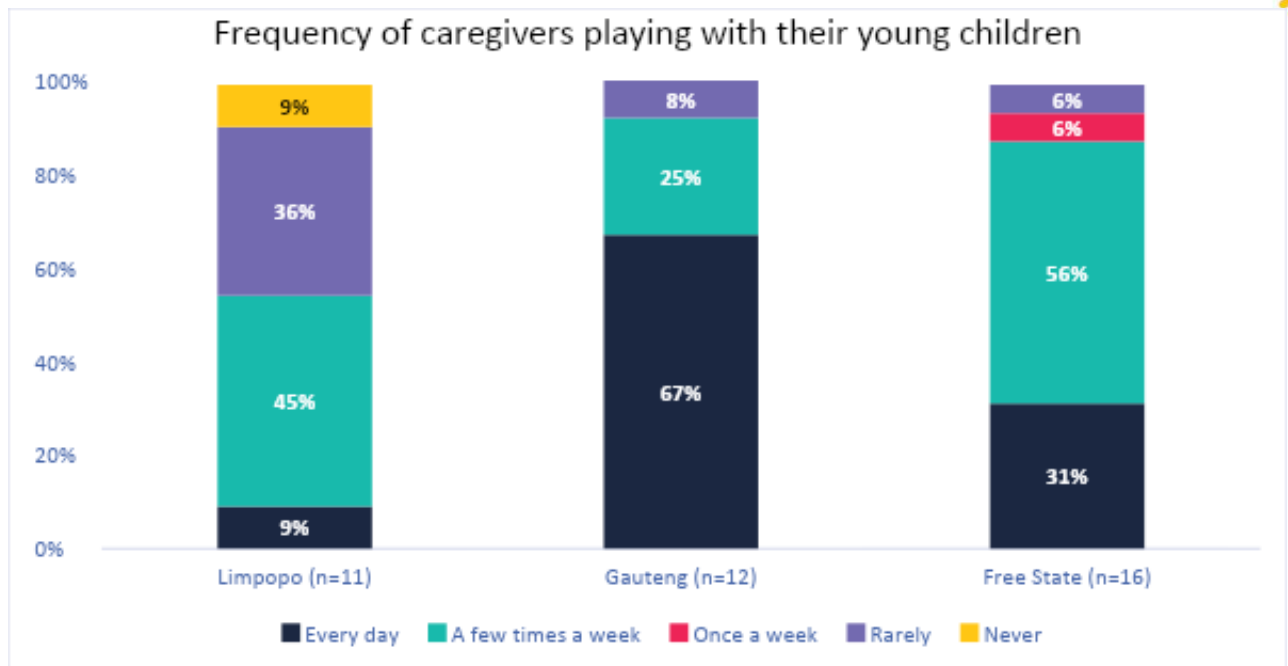
Math is complicated these days unlike in the old days when I was in school. (Caregiver, Limpopo)

Mathematics has never been my strong point. Maybe a calculator can be used to help. (Caregiver, Limpopo)

Caregivers were asked how often they play with their young children, and their responses are displayed below:



Figure 6 Caregiver frequency of playing with their young children



Results were varied with respondents in Gauteng playing with their children more frequently, and those in Limpopo less frequently. Caregivers provided several examples of play activities such as soccer, running, pretend play, using building blocks, playing with skipping rope, riding bicycles, playing games on a phone, watching television, counting with bottle caps, and completing puzzles. Similar examples were noted across all three provinces.

Children (4-8 years) were asked what kinds of things they do together with their parents. The responses were diverse and included playing ball games, singing and dancing, reading and counting, and watching television and videos. What was interesting is that children from Limpopo mainly listed what could be considered daily chores like washing clothes and dishes, opening the gate, cleaning the yard, and helping with cooking, while those in Gauteng mainly listed counting, singing songs and watching videos and television. Children from the Free State mainly noted activities like colouring and painting, singing songs, playing games, and playing with toys. One child from the Free State felt that adults should not play with children.

Children were asked how often they play with their parents/caregivers. The responses from children in Limpopo revealed that this was occasional (not a daily activity, and where it was frequent, it was with siblings, friends or their teacher), and this data corroborates with self-reports from caregivers. Children from Gauteng reported that they play every day after school. Children from the Free State also reported that they play often with their parents/caregivers. For example:

N: I play skipping and tennis with my mother.

K: I play Ludo, balloons and puzzles.

X: I also play Ludo, balloons and puzzles.

T: I play tennis and with toys. (Focus group 4-8 years, Free State)

The children were then asked how often their parents / siblings / caregivers read stories to them, and whether they read books together. In Limpopo, few children reported that they read with their caregivers. For example:

T: No stories are read for me, but my mother reads the bible.

F - No story.



M: My mother reads letters.

M – We only talk about stories when we are doing homework. (Focus Group 4-8 years, Limpopo)

K: My mother told me a story about a child that was murdered (she narrated the story and then she told a story about Jesus that she heard at Sunday School, and she said that it was from her Sunday School teacher).

M: I take the old magazine and read the story, and after reading the story, I tell my mother and we go through it together.

L: There is no electricity so I can't read at night. During the day I go to fetch wood. (The child was almost in tears). I help my mother to cook so there is no time to read.

All the children remember hearing stories from the bible, that they had heard at Sunday School. They are also able to relate the stories. (Focus Group 4-8 years, Limpopo)

In Gauteng and the Free State, there was a mix of responses, with some children indicating that they read with their parents, while others indicated that they do not read together.

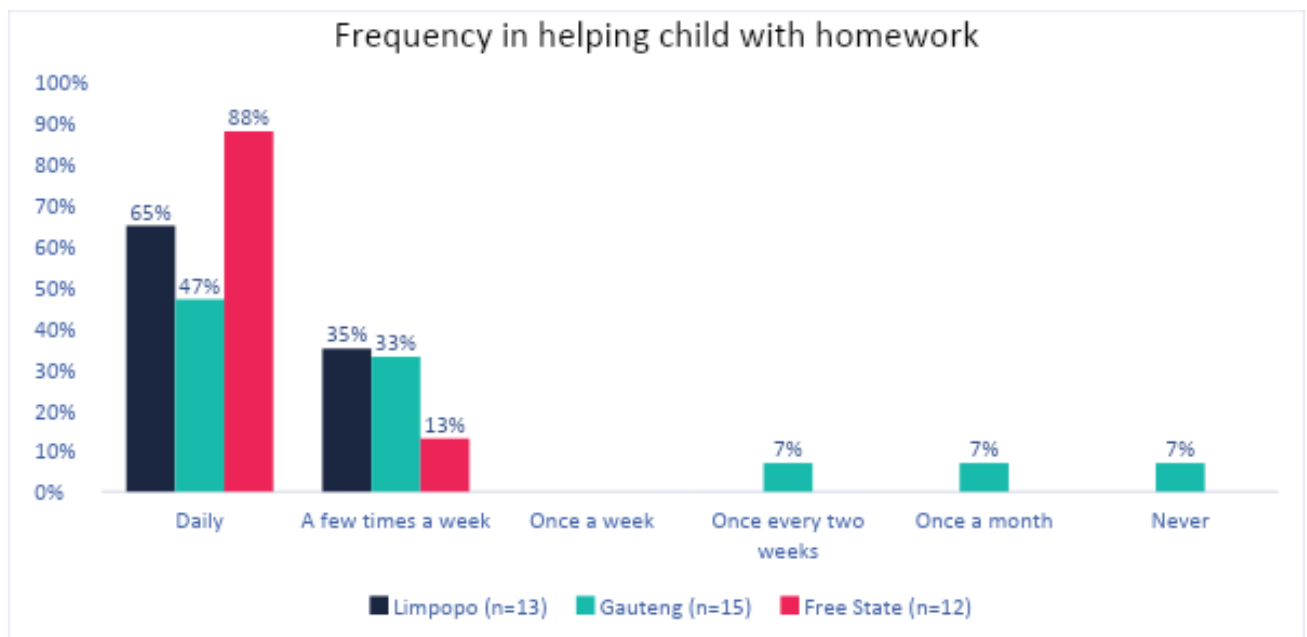
O : I read stories to my mom and also read at school with my teachers.

T: My parents read to me.

A: They don't read for me but I read for myself. (Focus Group 4-8 years, Gauteng)

Caregivers were asked how often they/another adult/sibling helps their child with their homework and the results displayed in the graph below illustrate that caregivers in the Free State report helping their children with homework more frequently than caregivers in Gauteng and Limpopo.

Figure 7 Caregiver frequency in helping children with homework



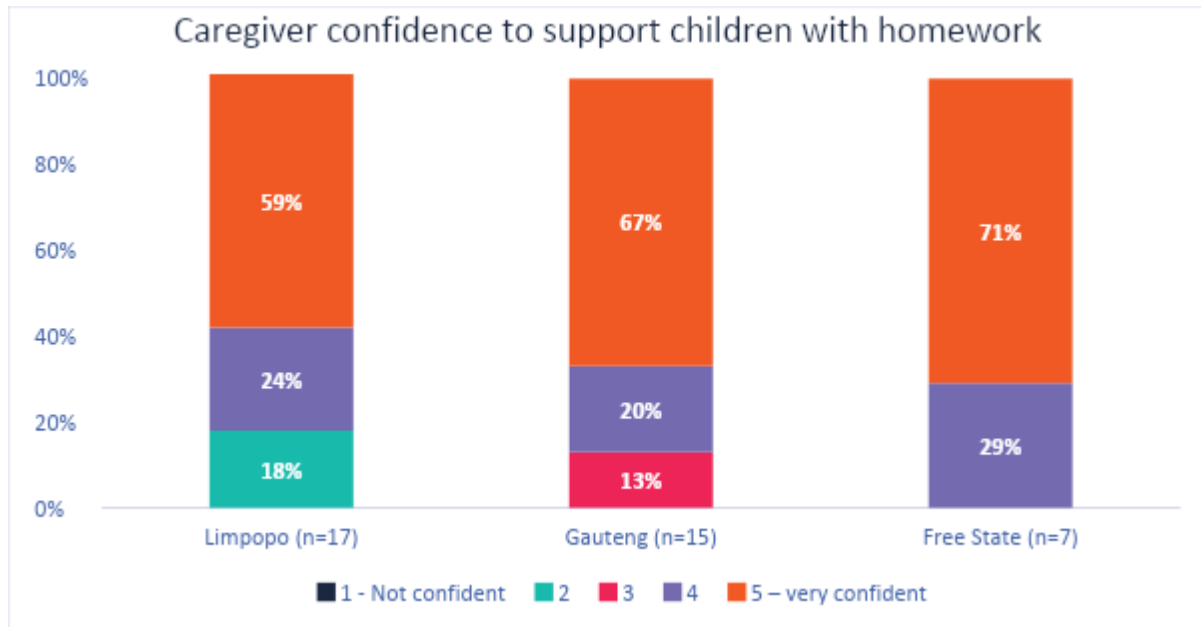
Children aged 9-14 were asked how often parent/caregivers help them with their schoolwork/homework. All the children, aside from two, indicated that they seek help with their homework and this is across several subjects. Subjects mentioned were: Mathematics, English, History, and Life Skills, Social Sciences, Life Orientation, Technology, Sepedi, and Economic and Management Sciences. Assistance is required every day to several times a week. In addition, two children in Gauteng noted that their parents are unable to assist them with Mathematics school work. For example:

Help is minimal when I have challenges in maths. My parents don't understand the subject as well. (Focus group, children 12-13 years, Gauteng)



Caregivers were also asked to rate their confidence in supporting their child with their homework, and as displayed in the graph below, overall, caregivers rated that they are confident to support their children with homework, with caregivers from Limpopo rating their confidence lower than caregivers from Gauteng and the Free State.

Figure 8 Caregiver ratings of their confidence to support their child with homework



The most commonly cited motivation to help children with homework were:

- To improve their child's school results and performance;
- To improve their child's future; and
- Because they care for their child.

Examples of responses:

So that my child can get the opportunity that I missed and in addition become an independent thinker. When I assist my child with homework, it also signals to them that I care about their learning. (Caregiver, Gauteng)

Most of the homework are very challenging but I always strive and want him not to lack behind with his school work. I want him to do better. (Caregiver, Limpopo)

What motivates me as a parent is that my hard work of helping my children pays off very well. This is because they are always top achievers at school. This shows my help as a parent helps them commit to their school work. (Caregiver, Free State)

I want them to be successful. I don't want them to be like me. I extremely want them to succeed. (Caregiver, Limpopo)

Caregivers were asked, in an open-ended question, to identify barriers/what makes it difficult to help with their children's homework. Similar themes emerging from responses to previous questions were noted. The main barrier noted by caregivers was difficulty understanding the content (noted by most caregivers in Limpopo and Gauteng).

The challenge I have is of the new learning areas although I sometimes have to read from their text books for understanding. (Caregiver, Limpopo)



Some of the things from school I do not understand, though I use Google but yes I do not know some of the things. (Caregiver, Gauteng)

Two caregivers noted that the lack of understanding is also related to language barriers:

My level of education, as some work is done in English, and English is a language barrier. (Caregiver, Limpopo)

Language barrier is an issue (English). I am less knowledgeable in the language so at times I find it hard to comprehend some terminologies. (Caregiver, Gauteng)

A further three caregivers pointed to a lack of funds to access support to assist with understanding:

The problem comes where maybe I could call the educators just to find out on things that I do not understand. There is no money for airtime and sometimes we do not even know where to get the information. (Caregiver, Limpopo)

Another commonly noted barrier across provinces was other commitments, including household chores:

When I am busy with house chores and my aunt is taking care of my grandmother, the children will not have anyone to help them. By the time I have finished whatever I have been doing and going back to assist them they will be tired because they played while I was busy. They will be very tired and want to sleep. (Caregiver, Limpopo)

I go out to sell for income. I am often busy and I may not be home early to help with my child's homework. We are in an area without electricity and it is difficult to do work in dusk. (Caregiver, Gauteng)

I have an eight-month-old baby who needs attention every now and then so it tends to delay me helping X with homework. (Caregiver, Free State)

In Gauteng, two caregivers noted that the child does not listen to them when they try to assist with homework:

X makes it difficult to be assisted with homework. He runs away when he is supposed to do homework. (Caregiver, Gauteng)

He does not listen when I try to help him he only needs to do what he thinks it's right or what he has in his mind even if it's wrong. (Caregiver, Gauteng)

Other barriers mentioned were:

- Personal stress;
- Loadshedding or lack of electricity at home (as it is difficult to help children with homework in the evenings when parents get back from work); and
- Home environment (if there are conflicts or the home is small).

Children aged 4-8 were asked whether they ever needed help with their learning/schoolwork. Most (particularly) older children reported that they do receive assistance from parents, grandparents, or siblings (none of the support was virtual), and that this support was very useful. When asked what they did not like about the support they receive, six children noted that they did not like being shouted at or hit when they did not understand.

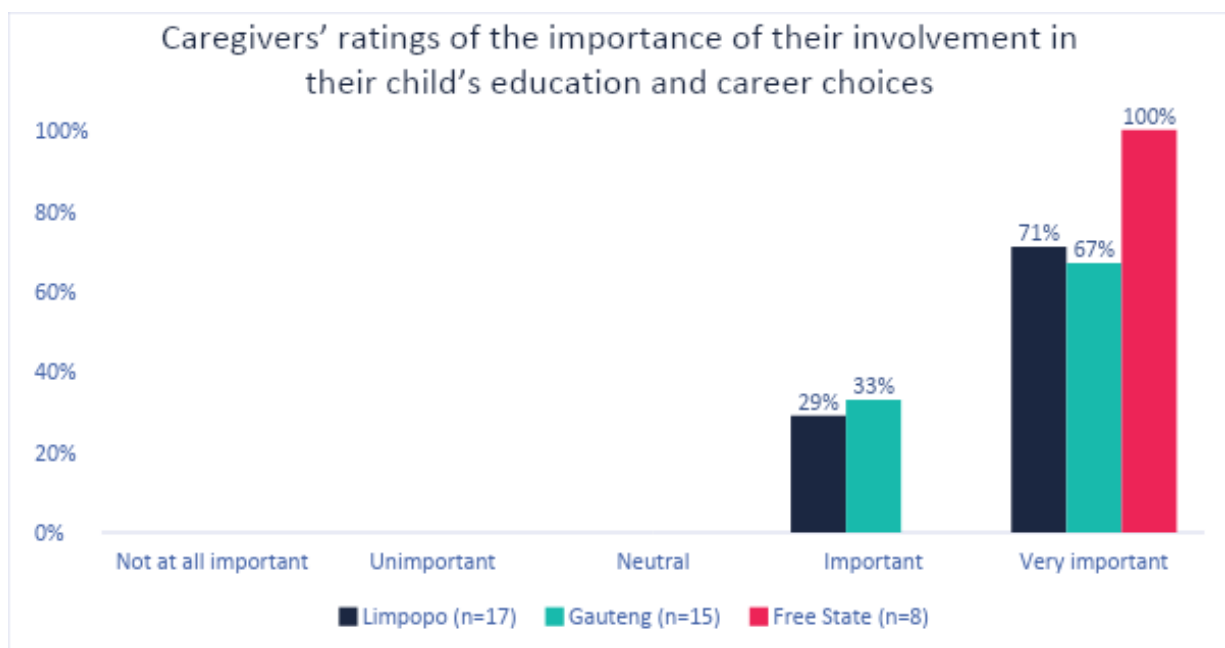
Children 9-14 were also asked whether they ever needed help with their learning/schoolwork. All children indicated the affirmative, with almost all noting that they are helped by family members (parents, grandparents, siblings, uncles and aunts). One child in Limpopo receives help from his neighbours, three children in one focus group in Gauteng noted that they ask the librarian for help, and one child in the Free State reported receiving help from a family friend. Most of this support was in person (face-to-face), but in some instances where siblings support them with homework, this is via the phone (calls and WhatsApp) as



their siblings do not live with them. Children find this useful as it improves their academic performance, they feel supported and helped, they can use what they learn to help other children, their parents are able to explain the work in 'simpler terms' and one child noted that she feels confident about what she knows. When asked what they did not like about the support, three children from Limpopo noted that the people they consult usually complain about them interrupting with their daily work/ activities. One child from Limpopo and all the children in one focus group in the Free State, and one in another Free State focus group reported that they did not like being shouted at when they did not understand. Another child in Free State did not like being given the 'wrong answers'.

Caregivers were asked to rate how important it is to be involved in their child's education and career choices, and this was also rated very positively, as displayed in the following graph:

Figure 9 Caregiver ratings of the importance of their involvement in their child's education and career choices.



In explaining their positive ratings, the most commonly noted themes emerging from their explanations were to:

- Provide support and guidance;
- Help their child make good choices;
- Help their child achieve better success; and
- Be a source of encouragement.

Examples of responses were:

As a parent, I need to assist my child in taking the right career path and help them think of the subjects they are going to do when they get to high school. I also need to teach them about that advantages and disadvantages of certain careers. (Caregiver, Gauteng)

To help the child become aware of the importance when choosing a career and to stay motivated. I need to be consistent with encouraging my child to push through. (Caregiver, Free State)

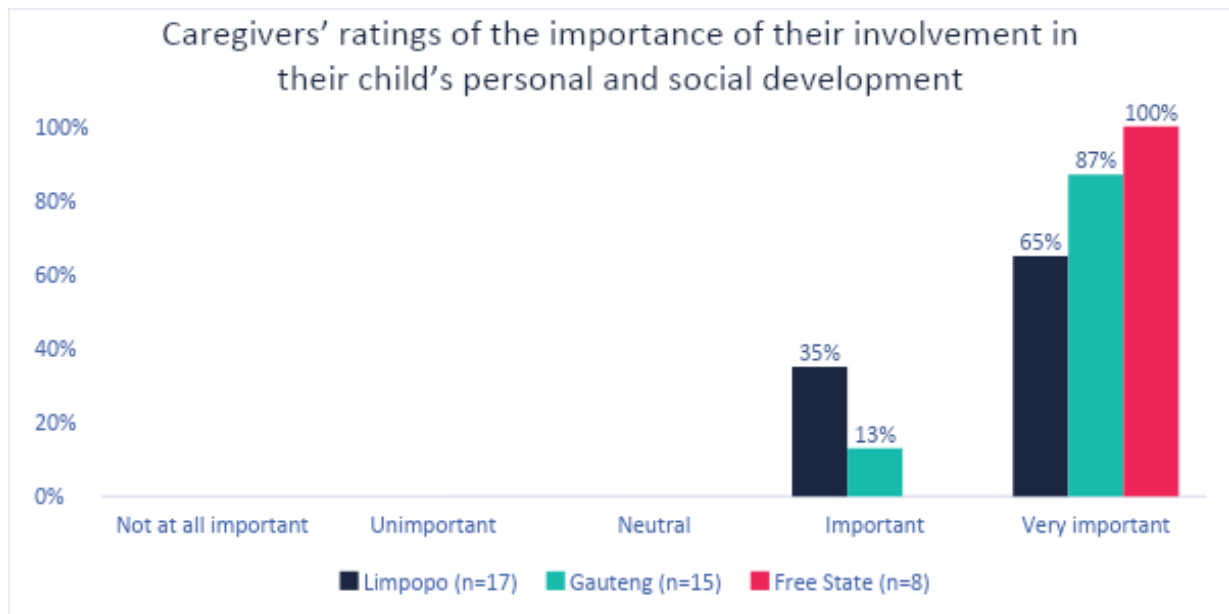
So that she can see her strengths in certain subjects to get an idea of where she can be. (My involvement stems from wanting her to make the correct decisions that are aligned with her interests strengths in terms of career choice. (Caregiver, Gauteng)



I want them to achieve more in life. They need to know from the young age that education is very important and they need to work towards achieving what our parents did not achieve. (Caregiver, Limpopo)

Caregivers were then asked to rate how important it is to be involved in their child's personal and social development, and this was also rated very positively, as displayed in the following graph:

Figure 10 Caregiver ratings of the importance of their involvement in their child's personal and social development



In explaining their ratings, the main themes emerging were:

- Ensuring that their child has good friends and keeps good company;
- Providing support and guidance to their child; and
- Ensuring that their child does not engage in negative social activities like drugs, smoking and unprotected sex.

Examples of responses were:

I want him to get a better future and not to mix with bad crowd and be influenced in doing bad things. I always want to know with whom he is going to play with to guide him on the kind of friends to associate with. (Caregiver, Limpopo)

I want to know what kind of friends she has. I even invite them over so that I eavesdrop on their conversations to gauge what influence they may have on her. (Caregiver, Gauteng)

A parent acts as a compass of direction that sheds light for the child. So it is important for the parent to be actively involved and be able to guide the child so the child doesn't find herself exposed to wrong individuals. (Caregiver, Free State)

For the child to be able to grow and develop well they need to stay mindful of their surroundings and be aware of the friends that they choose to play with. I will ensure that my child stays away from bad people and drugs that are exposed to them in the community by keeping her in the yard where I can monitor her. (Caregiver, Free State)



Other explanations of their ratings of their involvement in their child’s personal and social development were:

- Developing their child’s social skills, manners and etiquette;
- Ensuring that their child can have a better future; and
- Ensuring that their child is able to withstand challenges and peer pressure.

Children aged 9-14 were asked how often they ask their parents for help on things that may be bothering them at school, and what kind of help they ask them for. Three children in Limpopo and three in Gauteng mentioned that they have had challenges with bullying and they spoke to their parents and teachers about it. Another challenge mentioned by children in one Gauteng focus group was with regard to the feeding scheme and teachers giving children very small portions and taking the best food home, and giving the best food to their children as opposed to the children at school. These children noted that they have asked their parents to address this issue with the school. One girl in the Free State noted that she feels uncomfortable around some boys but she does not feel comfortable raising this with her parents. Another mentioned that others called her a bully for standing up for herself and her mother did not believe her, while another noted that she does not tell her parents anything.

I feel like there is no use in talking to my mother as she will believe the other party anyway. (Focus group with children 11-13 years, Free State)

Other issues mentioned (across all provinces) related to schoolwork and not social challenges. Several children reported that they did not experience any challenges, and two children in the Free State noted that they do not experience social challenges due to their positive social circles, for example:

I enjoy school so much that nothing is bothering me at school. I have an amazing group of friends and I make sure that I always associate myself with the right crowd. (Focus group with children 11-13 years, Free State)

When asked whether their parents are able to help them with difficulties they experience, children in Limpopo noted that they receive help from their parents, teachers or school principal. In Gauteng, children noted that their parents and siblings are able to assist them with difficulties they experience. One child mentioned that their parent also uses Google to help them. In the Free State, one child noted that she attends therapy sessions to help her deal with things that bother her that she cannot discuss with her parents. Others noted that they seek support from family members (aunt), teachers and the school management team, and in one instance police were involved in a bullying incident. One child noted that she does not ‘disclose experiences’ to her parents.

Caregivers were asked whether they reach out to the school or other organizations to seek support to help their child make the right decisions in terms of subjects and life choices. The results were analysed and are tabulated below:

Table 4 Caregivers reaching out to seek support for child’s decisions in terms of subjects and life choices

	Limpopo (n=17)	Gauteng (n=14)	Free State (n=8)	Total sample (n=39)
Yes	71%	57%	38%	59%
No	29%	43%	63%	41%

Considering the total sample, a higher percentage of caregivers do reach out for support (although this was not the case for the Free State which had a small number of respondents). Caregivers primarily reach out to the school, family members or members of the community. Examples of positive responses were:

I came to school with T to ask for advice from his teachers regarding his career choice because my son wants to be a pilot so going to the teacher and getting advice was very helpful. (Caregiver, Free State)



Yes I believe a village raises a child. The school offers extra support. We communicate. I gain another perspective/views of how I can help her. It helps her to improve where she lacks and know what her weaknesses are. (Caregiver, Gauteng)

Yes I have good relationships with my neighbour so I would go to them for advice. I took my children to church and they participate in church activities. The pastor who is also female helps in talking with them. (Caregiver, Gauteng)

Yes I do reach out to the school though there are no organizations that I know of. Sometimes when we collect reports at schools we get time to talk one on one with the educators. This is the time where they are able to assist us on the right decisions in terms of the subjects and life choices. This helps parents to know more about our children. (Caregiver, Limpopo)

Those who indicated that they do not reach out for support noted that they usually communicate with the school when there are challenges, and that the children are still young to be making subject choices, for example:

I do not reach out for assistance. It is because she is not yet at the level/age where she have to choose subjects for the careers she want to pursue. I will however reach out when she get to the level deemed necessary to decide on subjects and life choices. (Caregiver, Gauteng)

Some also noted that they, as parents, are able to assist their child, for example:

We don't really go to organizations or school, we search on the internet and explore the various options that come up ensuring that we guide X to choose wisely. In terms of life choices, as her sister I talk to her and make sure that I create a safe space for her to open up. (Caregiver, Free State)

Two caregivers noted that they had not considered this:

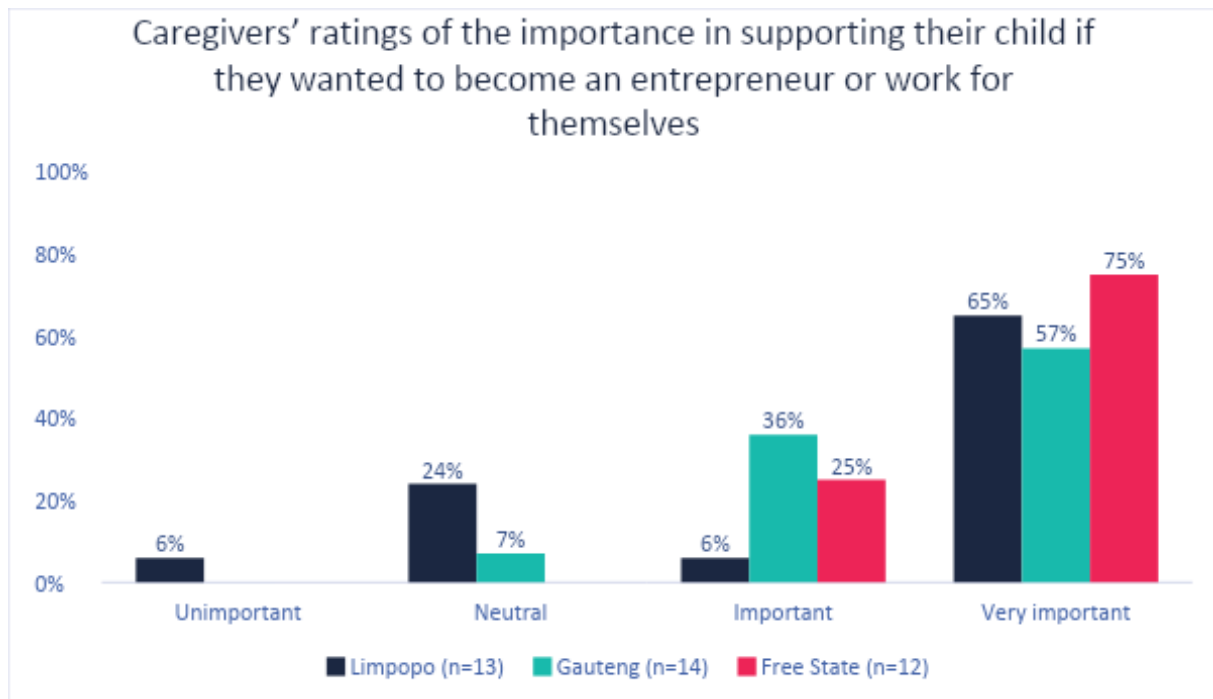
No, I did not assume that was an important thing to do, also, I have no knowledge of other organizations in my area that I could approach regarding the matter in question. (Caregiver, Gauteng)

No. I was not aware of such organizations which I can consult to make my child make informed and right decisions. I only get to the school when requested but never reached out even when my son is having difficulties and reluctant to be assisted. I was not aware that I can reach out to others for help. (Caregiver, Limpopo)

Caregivers were asked to rate the importance of supporting their child if they wanted to become an entrepreneur or work for themselves.



Figure 11 Caregiver ratings of the importance in supporting their child if they wanted to become an entrepreneur or work for themselves



Most caregivers rated this as important, but almost a quarter of the caregivers in Limpopo were neutral and 6% regarded it as unimportant. In explaining their ratings, caregivers noted the following reasons for supporting their child in entrepreneurial endeavours:

- They want their child to be successful and work for themselves;
- Their child will contribute to their family and community; and
- They will encourage their child to pursue whatever they wish.

Examples of responses were:

Jobs are scarce so it will be beneficial to him to help him with combatting poverty. (Caregiver, Free State)

I would be very much supportive to my child if he/she want to explore into entrepreneur because the high rate of unemployment needs people who can think beyond the box. In this case the child can make money and be able to buy her/his own needs. Sometimes we can also be able to buy data so that it helps them in their school work because presently we have money problems and anything that can bring a little is welcome. (Caregiver, Limpopo)

Entrepreneurs are helpers of the community, so I will be proud of my son to be one. As an entrepreneur, he will be a role model in the society so it is important that I support him in that department. (Caregiver, Gauteng)

I would encourage her because as an entrepreneur you can create jobs and economic stability. it is no longer easy to get a job. I am business minded so it would be easy to help her. (Caregiver, Gauteng)

I believe that it is crucial to support my child as it will give my child an opportunity to be independent and know exactly what she wants for her life. (Caregiver, Free State)

Those who provided neutral ratings were mostly from Limpopo and noted the following:

- It will distract them from their schoolwork;



- The parent is unsure about this path;
- Their child does not have the requisite money skills; and
- It is difficult to be an entrepreneur without support and backing.

Examples of responses were:

I am very reluctant to help him because I am afraid he will concentrate more on the money he might be making and loose interest in his school work. He might no longer do his school work and fail his grades because he shifted his concentration to making money. (Caregiver, Limpopo)

I will not encourage them because this will disturb and disrupt them with their school work. They will concentrate more on making money than doing their school work. I do not want them to ignore their studies. (Caregiver, Limpopo)

The child has interest in entrepreneurship but I am not sure that I will proceed with it as time goes on (Caregiver, Limpopo)

I realise that he is not good in handling money, that he cannot take care of it. (Caregiver, Limpopo)

It's hard to succeed as a black business owner as there is no support from government- the National Youth Development Agency. I think it's best if someone comes from a privileged background with capital injection to start and sustain the business. (Caregiver, Gauteng)

The one respondent who rated this as unimportant noted:

It will waste time for his learning progress (Caregiver, Limpopo)

Data from the children's focus group did not reveal meaningful information regarding parental support in trying new things. Children across all provinces mentioned that they usually request material items from their parents (for example, clothing, toys, tablet, or bicycle). However, their parents usually do not have funds to purchase these. In two focus groups in Gauteng, children mentioned extra tuition /extra classes for school on Saturday and one child mentioned needing data to use her father's laptop. Other things they ask their parents help for were:

- School projects;
- Assistance with functions at school (for example farewell parties), but this was also to request funds;
- Money to start a garden (but this was not possible due to lack of funds);
- How to ride a bicycle;
- How to make a video call;
- Learning new words and meanings, or information about specific school subjects; and
- Cooking and baking (under parent/ sibling supervision).

Children were then asked where they turn to learn new things (aside from school). In two focus group discussions in Limpopo, children only mentioned teachers and the school (possibly indicating that they do not turn elsewhere to learn new things). Other examples listed were Google, YouTube, and a dictionary app. Children in Gauteng mentioned the community library for homework, reading and doing research, and they are also able to access the Internet (and use Google) at the library for free. Children in the Free State mentioned Google, the library and TikTok to learn new things. One child noted that she asks her sister when she wants to learn new things.

Given that there were a few examples of where children turn to learn new things, particularly children from rural areas, points to a need for such support and resources.



Platforms parents currently use to search for educational content

Caregivers were asked where they have looked for resources to support their child with his/her learning and homework. The most common responses were:

- They purchase books and other resources;
- They watch educational programmes;
- They use resources they have at home, school, the library, or borrow from neighbours; and
- They search the Internet (Google).

Examples of responses were:

Google. I purchased blocks and extra story books. School mathematic training helped. Nal'ibali programme (Caregiver, Limpopo)

I bought counters and a cut and paste book. (Caregiver, Free State)

Television, colouring books, watching TV programs like Zim-zim or Takalani sesame, fruit and numbers poster. (Caregiver, Gauteng)

I used bottle lids to help B to count, I also bought counting blocks from Bargain Basket to also assist him in Maths. (Caregiver, Free State)

I get resources from shops, like boxes, egg boxes etc. to build houses or as per the teacher's instructions. (Caregiver, Limpopo)

I buy board games, number games, books for reading that will be helpful. I also use phone games, the colour ones to help her distinguish colours. (Caregiver, Gauteng)

I got books from the library to help my child with his learning. (Caregiver, Free State)

Significantly, 44% of Limpopo caregivers and 29% of Free State caregivers indicated that they do not look for resources.

Caregivers were asked whether they or their children ever used virtual/online learning. Most responses referred to them using television, radio and the Internet (Google and YouTube), with two respondents noting that they have accessed educational games and learning apps.

Examples of responses were:

Television is mostly used by young ones to see Popeyes. There are sometimes lessons from the radio station of Thobela FM and the older once do sometimes listen to them. (Caregiver, Limpopo)

I used the TV and YouTube and internet where we download educational games. (Caregiver, Free State)

Nal'ibali on radio and newspaper, Cocomelon on YouTube, and Song & Numbers on Google. (Caregiver, Limpopo)

We use Google Chrome most of the time. I usually give directions and give them my phone to search. (Caregiver, Limpopo)

Download apps from Appstore, YoTV and Mam'Sakhile's house on TV, there is also a number match app. (Caregiver, Gauteng)

He watches TV Shows (Takalani Sesame and Masha The Bear). (Caregiver, Gauteng)



On TV, he watches Cool Catz and mimics what they were doing and also Takalani Sesame he likes singing the songs. (Caregiver, Free State)

Television- Takalani and Nal'ibali. Radio- Lesedi FM programme for kids called Fundani Nathi which means study/learn with us. (Caregiver, Free State)

Those who have not used virtual/online learning noted that they did not have a phone or television or electricity.

All the resources mentioned were rated highly as being very helpful for children's learning. Frequency of use varied widely from 30min to hours daily. Some responses around the best part about using these resources were:

- They were interesting and captivating for children;
- They keep children at home; and
- They improve language and communication skills.

Example of responses were:

The young ones learn English which is the first additional language at school. To tell the honest fact this helps them a lot in understanding the language as from grade 4 it also becomes the language of teaching and learning. They also learn different songs and dancing moves. The older ones listen to soapies and the listening skills is also improved. (Caregiver, Limpopo)

It improves her listening skills which triggers her oral skills and also becomes creative because she imagines what she hears. (Caregiver, Limpopo)

The child gets to learn how to communicate with people and also master the English language. (Caregiver, Gauteng)

The child can focus and remember the things said on the radio. (Caregiver, Free State)

Almost all resources listed were regarded as easy to use. Difficulties were noted in relation to loadshedding and children needing to learn how to use the platforms (particularly the Internet).

Platforms children use for educational content

Children 4-8 years were presented with pictures of various television and YouTube educational characters to gain a sense of whether they are familiar with those educational programmes. The following characters were presented:

- Moshe
- Zuzu
- Elmo
- Curious George
- Cocomelon
- Neo
- Mbele
- Masha
- Ryan

In Limpopo, very few children were familiar with any of the characters, and the most commonly known character was Curious George, followed by Masha. In Gauteng, most children recognised Moshe from Takalani Sesame (but did not know his name), and Masha. In the Free State, most children recognised Masha, and Moshe from Takalani Sesame. The frequency of viewing varied greatly between children –



some watching programmes every day, with others watching a few times a week or on weekends. There were no noticeable differences between ages with regards to familiarity with programmes.

Following this, a jingle from the show these characters are in, was presented to assess whether children could identify the programme. The following jingles were played:

- Takalani Sesame
- Curious George
- Cocomelon
- Nal'ibali
- Masha and the Bear
- Ryan Games

While children in Limpopo may not have been familiar with Takalani Sesame characters, most were familiar with the jingle and danced to it. Other familiar jingles were Masha and the Bear and Nal'ibali. In terms of linking the jingle to content, children were best able to directly relate the content of Masha and the Bear with the jingle. In Gauteng, most children were familiar with the Masha and the Bear jingle and were able to describe what they liked about the programme. They were also familiar with Takalani Sesame and Cocomelon, and some were able to describe the programme and what they linked about the song. Children from the Free State appeared to be familiar with most of the programmes. Almost all the children were familiar with the Takalani Sesame song, and most were familiar with Nal'ibali, Masha and the Bear and Cocomelon. They were also familiar with the content of the shows.

Other shows that children watch were: Mr Bean, Team Titus, Popeye, Mickey Mouse, Teletubbies, Spider Man, Batman, Pokémon, Bluey, Ghost Rider, Peppa Pig, Barbie, PJ Masks, Power Rangers, Teen Titans, Sophia the First, Tom and Jerry, Bananas in Pyjamas, Frozen, Super George, Diana and Roma, and Vlad and Niki. Almost all of the above were watched on television, with only one child mentioning that she watches a programme on a laptop.

Children were asked what games they play on a phone. Four children reported that they do not play games on phones (one Limpopo, two Gauteng, one Free State). Children in all provinces provided examples of games, although some appeared to be shows that they watch or videos on Tiktok. Games listed were: car games, video kids, Surfers, Scooter, Granny, Bicycle game, Monkey game, Temple run, Alphabet games, Mickey Mouse, Spiderman and Batman, Mr Bean, Superman, Tom and Jerry, Football, Talking Tom, Talking Angela, Peppa Pig games, Shooting games, and Super George. The only games mentioned by more than two children was football (three children) and car games (six children).

Children were asked whether their caregivers help them find shows to watch, and the findings from the focus group revealed that this is the case for all children aside from one in the Free State. Children were also asked whether their caregivers help them find games to play. Here the results were mixed, with some indicating that parents and caregivers assist them and others indicating that they do not. Seven children in the Free State noted that they download games themselves and one noted that that his mother does not have games on her phone. When asked about frequency of playing games on a cell phone, many of the responses were not related to online games and for the ones that were, frequency varied from seldom to daily.

In addition, children aged 4-8 years were asked whether they have ever had a lesson online. A few children (6) across all provinces mentioned that they had use a tablet or computer to access educational content (videos and apps). When asked what they liked about the online class, one noted that she loved the teacher, another mentioned that she enjoyed colouring, and another noted that he enjoyed counting on his tablet. No reasons were provided when asked what they did not like about the online class. There thus does not appear to be widespread use of technological platforms for learning.



Resources to support older children

Caregivers of older children were asked where they look for resources to support their child with their learning and homework. The most common responses were: textbooks, television, the Internet (Google), and their community (neighbours, school, church, tuckshops). The quality of all resources listed were rated as good and helpful. When asked about the best part of using each of the resources listed, of note is that those who mentioned the Internet highlighted the variety of information, unlimited information, and that information was readily accessible and available (convenient).

Caregivers of older children were also asked where they look for resources to support their child with their psychosocial needs. Commonly noted responses were social workers, with few mentioning family members, teachers, church members, and nurses/doctor. The quality of the resources were generally rated as good and helpful.

In addition, caregivers of older children were asked where they look for resources to support their child with their education and career choices. Responses referred to community members (teachers and neighbours), resources within the community (library, hospital), and career exhibitions .

Children aged 9-14 years were asked what virtual/online learning services they have ever used. In Limpopo, children 12 and under mentioned cartoons and television shows, and three noted that they listen to the radio (no examples of virtual online learning services were mentioned). Children 13-14 in Limpopo made mention of technology use within the classroom (for example a projector). Examples provided were:

- YouTube to watch videos for English, Sepedi and Mathematics and this helps them to understand better. They find it easy to use as they are with their teacher (they use it at school) but sometimes the network is poor.
- Online games like Kahoots which they use at school. This is easy to use.
- Television – cartoons, soapiers and movies to improve English and pronunciation, and this is easy to use.
- Channel 137 for school-related learning.
- Phone to play games and watch videos.
- Radio to listen to the news and children’s programmes ‘such as Lesang Bana which teaches them ‘how to look after one and another so that they are always kept safe from strangers.’

One child noted that she uses Facebook for research and her homework (she indicates that she has a smartphone), and another noted that he uses WhatsApp but no explanation was provided as to what he learns from it. Thus some children may have been providing answers that they think the researcher wants to hear, or to appear more tech savvy to their peers.

Children in Gauteng referenced the following online learning services which they like using:

- Google to research information when they have projects and to get answers they need for specific questions. One child noted that he needed help to use Google while others felt that it was very easy.
- Radio Ukhozi FM and Na’ibali to learn about things like listening to parents, ‘which things are wrong and which are right’, dealing with peer pressure and jealousy. It is easy to use as no data is required, they are able to listen even when there is no electricity, and they are able to listen to it on a phone.
- Mam’Sakhile where they learn ‘how to read and understand stories’, learn songs with lyrics that are educational, and learn good manners. It is easy to use.
- TV Channel 319 and 317 where they learn English and Mathematics, and it is explained better. It is easy to use as it does not require internet and you are able to record the programmes.
- Television programmes such as Casagrande and YoTV where they learn about animals and critical thinking. It is easy to use.
- Learning Channel has different topics for different grades and allows them to learn new topics ahead of time. It is easy to use.
- The Internet and YouTube to learn about various topics. It is easy to use as long as they have data and it is possible to use it when there is no electricity.



Children in the Free State referenced the following online learning services which they like using:

- The Internet and Google to learn more about mathematics concepts and solving problems, and to use as a dictionary (search meaning of words); and they find this user friendly and very easy to use.
- Television to improve reading and speaking fluency (DSTV 319), and to multiply and add numbers (Geleza Nathi – a mathematics program on channel 191). This is very easy to use, and the service is free and accessible.
- TikTok (following a Tiktoker to improve vocabulary) as it doesn't require a lot of data and it very easy to use.
- Nal'ibali on the radio to gain listening skills and develop reading fluency and thus is very easy to use.

Children aged 9-14 were asked whether their teachers encourage them to use online platforms to support their learning, and to indicate the platforms and information they source. In Limpopo, the children in the older focus group (13-14 years) noted that their teachers use Kahoot games and YouTube in their classes for English, Sepedi, Natural Sciences, and Mathematics. The children aged 10-12 noted that their teachers have encouraged them to search on Google for 'the meaning of a novel' and 'to look for the history of Nelson Mandela'. The children in focus groups for those 9-10 said that they were not encouraged to use online platforms to support their learning. All the children in Gauteng noted that teachers encourage them to use online platforms to support their learning. They are encouraged to use Google and YouTube to research about people like Mandela, and check time zones in other countries. They are also encouraged to watch the Learning Channel and to use Wikipedia. In the Free State, children noted that their teachers encourage them to watch mathematics and reading programmes on television, to listen to a reading programme on radio and to use Google and YouTube.

Children were asked whether they had ever had a lesson online, and to provide explanations about their experience. Only one child in the Free State said that she had a lesson online. From the follow up questions it appears that she may have watched a television show or an online video. She noted that the programme taught her 'how to read, write and speak and solve problems' but she prefers face-to-face teaching because it allows her to ask more questions and interact with the teacher.

In Limpopo, the older children (11-14) indicated that they would like to learn online. In Gauteng, all the children (aside from one) indicated that they would like more opportunities to learn online and would like to learn about the following subjects: History, Science, Law, Medicine (doctor), Current Affairs such as the economy of the country, HIV and TB, Planets, English, and Maths. In the Free State, none of the children indicated that they would like more opportunities to learn online. They noted that they don't know enough about online learning and they have doubts about it, and were concerned that they won't get enough information in case they need help or miss information.

Thus, educational content is primarily accessed via television, followed by radio and the internet (specifically Google and YouTube).



Challenges caregivers and children face in accessing early learning services, including virtual learning opportunities

Caregivers were asked what challenges they face in accessing early learning services and virtual/online learning. The main challenges noted were:

- Loadshedding;
- Insufficient funds (data and electricity);
- Lack of device; and
- Difficulty understanding content or using devices.

Examples of responses were:

The difficulty now is loadshedding. Children are not able to watch their programmes as it was before. Sometimes I do not have enough money for electricity or data hence it becomes a problem to access the services. (Caregiver, Limpopo)

Lack of electricity due to funds that are not enough to purchase coupons. (Caregiver, Free State)

Typing on the device can be very challenging and time consuming. (Caregiver, Gauteng)

Being less knowledgeable on which buttons to press when accessing these platforms. In addition all these platforms are in English which can be hard to understand at times. So we tend to rely on subtitles. (Caregiver, Gauteng)

The television is currently broken. (Caregiver, Free State)

Yes I did experience difficulties, the challenge was network connection because during loadshedding network goes off and it will be running smoothly when the electricity is back. (Caregiver, Free State)

These challenges are a recurring theme impacting on caregivers supporting their children in learning.

Challenges caregivers and learners face in accessing psycho-social, learner development and academic support in primary and senior phases, including virtual learning opportunities

Caregivers were asked what challenges they face in accessing psycho-social, learner development and academic support in primary and senior phases, including virtual learning opportunities. Respondents noted the following challenges:

- Lack of funds (in the case of physical resources this included lack of resources to travel to access help);
- Lack of information and support;
- Online content not being necessarily educational; and
- Outdated resources (at the library), and difficulty accessing resources.

In addition, similar challenges as those raised regarding early learning services above were noted, viz:

- Lack of device;
- Lack of electricity (loadshedding); and
- Limited data.

Examples of responses were:

It was very difficult to access the organizations due to lack of funds for travelling. (Caregiver, Limpopo)



I needed an intervention for my grandchild as he has learning difficulties. I asked them to help me place him in a special school that can teach him skills development. They loosely dismissed me by saying that I should have approached them when the boy was 10 years and at that time he was only 11 years or 12 years. (Caregiver, Limpopo)

The ENT classified the hearing problem as a disability. They did not give a referral for disability grant which was going to be useful in making her life easy and manageable. They take time to give the necessary aids. I feel they should prioritise school kids. (Caregiver, Gauteng)

Tik Tok, I think it is not helpful, they are not educational to her at all. (Caregiver, Gauteng)

The book selection at the library is outdated It is not resourceful, there are less textbooks and no computers. (Caregiver, Gauteng)

Being unemployed, it is not easy to buy books and magazines They are not easy to find. (Caregiver, Gauteng)

The library is a bit far from home and not safe for the child to walk alone. She cannot go regularly because of the distance. (Caregiver, Free State)

Caregivers who reported that they and children in their care had not used any virtual/online training were asked to provide an explanation of why they do not use virtual/online learning. Reasons provided were:

- No electricity or internet access;
- Lack of devices;
- Lack of awareness of virtual/online training;
- Lack of funds for data;
- Difficulty ascertaining whether content is educational;
- Content was not relevant; and
- Lack of interest in online learning.

Examples of responses were:

No gadget to access virtual learning / online learning and internet - only the sister's phone which is only available when she knocks off from work. The sister is coming two times a week. If they can afford a phone it will be appreciated. (Caregiver, Limpopo)

We have not used the internet for learning. There is no smartphone (for the child) and data is also an issue. (Caregiver, Free State)

I have never thought of using online learning. (Caregiver, Gauteng)

The older child was not interested in any online learning. (Caregiver, Gauteng)

I do not afford data. (Caregiver, Limpopo)

They only watch TV. I don't know if what they watch is educational or not. (Caregiver, Limpopo)

I once used Vodacom e-learning but it did not work for us as the answers it provided were not useful. (Caregiver, Gauteng)

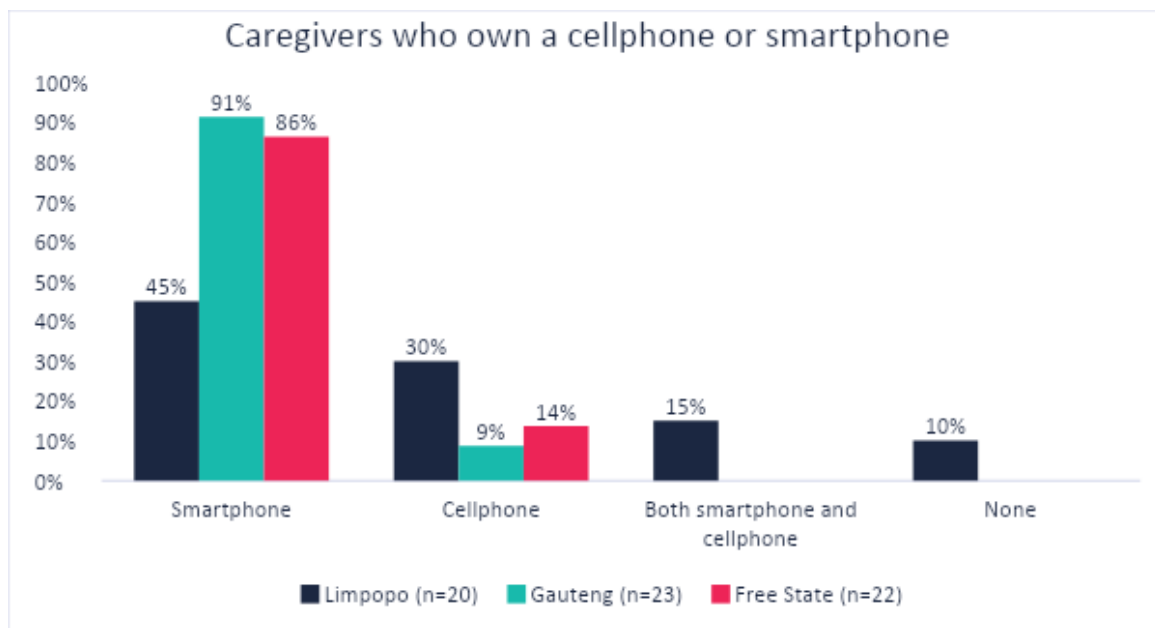
I prefer one on one sessions and not online learning, since it is easier for a child to learn from a person that they can use. (Caregiver, Free State)



Caregivers' perception of social media platforms and the potential to serve learning needs

Prior to ascertaining caregiver perceptions of social media, the study sought to understand general use of smartphones. Therefore, caregivers were asked whether they own a cell phone or smartphone, or both. The results are displayed below:

Figure 12 Caregivers who own a cell phone or smartphone



The results point to more caregivers in Gauteng and the Free State (more developed areas) owning a smartphone compared to Limpopo (rural area). One respondent noted that she uses the youngest sister's cell phone for communication, and another noted that she borrows the neighbours phone if they wished to make a call (both were from Limpopo).

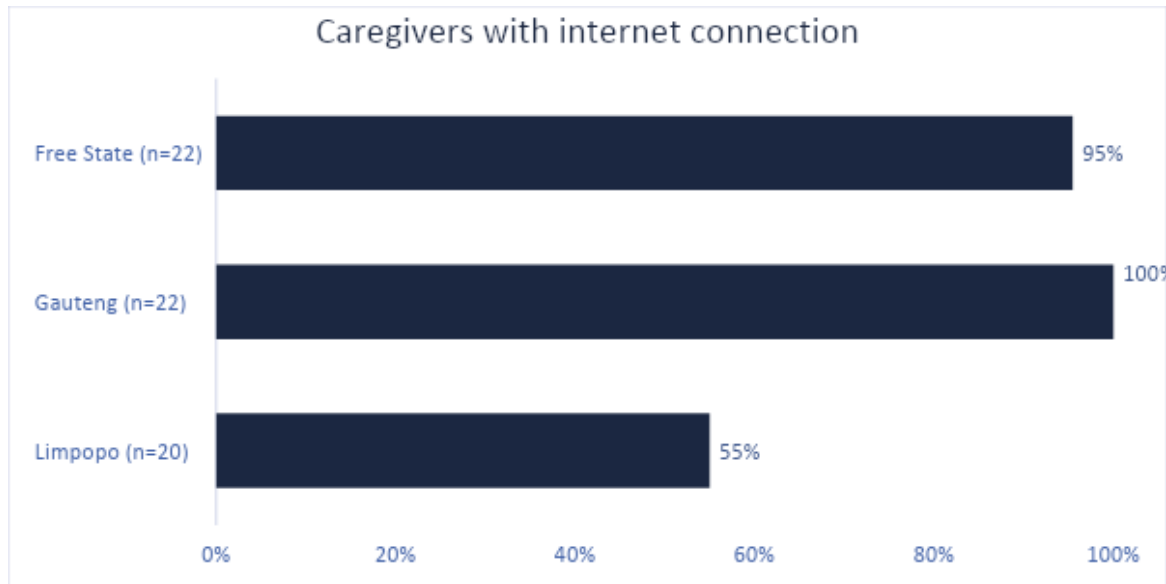
Children aged 4-8 were asked whether they have a phone/tablet, and 12 children (25%) indicated that they had either a phone or tablet. None were from Limpopo, seven were from the Free State (35%) and five from Gauteng (33%). Children were asked whether they are able to use their parents' phone if they need to find information for their learning or schoolwork. Almost all indicated that this was possible. One parent (Limpopo) does not have a cell phone, another from Gauteng indicated that he uses his mum's phone when she is sleeping. In a focus group with very young children in the Free State, all indicated that their parent refused to let them use their phone. When asked what time of the day they are able to use their caregivers' phone, the most common response was in the afternoon, after school.

Children aged 9-14 were asked whether they have a phone/tablet and in total, four children in Limpopo (15%), five in Gauteng (28%), and seven in the Free State (70%) indicated that they had their own phone/tablet. Thus a higher percentage of children in the urban setting had a phone/tablet compared to those in the rural setting and township. Children aged 9-14 were then asked whether they are able to use their parents' phone if they need to find information for their learning or schoolwork. In Limpopo, most of the children whose caregivers had phones were allowed to use them, with three noting that they were not allowed to do so. All children in Gauteng and the Free State noted that they are allowed to use their parents' phone, with some providing explanations that this helps them perform better at school. They usually use their/their parents' phones in the afternoon after school or on weekends.



Caregivers were asked where they connect to the internet and whether their internet connection was sufficient to download messages and videos.

Figure 13 Caregivers with internet connection



Caregivers primarily use mobile data to connect to the internet. However, five respondents (all in Gauteng) noted that they use Wi-Fi at home, two noted that they use the local school Wi-Fi and one noted that she uses the free Wi-Fi at the mall when she does her shopping.

Most noted that their internet connection was sufficient to download messages and videos, but some challenges noted were:

- Loadshedding affecting networks (most common challenge);
- Running out of data; and
- Poor connectivity where they live.

Caregivers were asked what social media platforms they use regularly. Most common were Facebook, WhatsApp, Tik-Tok, and YouTube. Less common, but also mentioned were Instagram and Telegram.

Facebook and WhatsApp are used most frequently (everyday). These platforms are primarily used for communication and socializing, information, chatting, and entertainment. One respondent noted that she uses WhatsApp to communicate with the ECD centre, and two noted that they use YouTube for educational videos. All noted that these social media platforms are easy to use.

Respondents noted the same challenges in accessing social media platforms as for online learning; viz:

- Lack of data and funds to purchase data;
- Network challenges;
- Loadshedding; and
- Lack of/Inadequate device.

Example of responses:

Accessibility is a challenge, poverty is a challenge, my family relies on the social grant and the foster care grant. I am not working and I am a SASSA pensioner. (Caregiver, Limpopo)



Access to data can be an issue at times due to financial constraints. Also, the kind of smartphone I possess is not conducive enough as the screen is broken. (Caregiver, Gauteng)

Data. The phone that I am using does not have enough space. (Caregiver, Gauteng)

Loadshedding, depleted data, (and) network issues (Caregiver, Gauteng)

Data depletion and sometimes during loadshedding the coverage can become bad. (Caregiver, Free State)

Data is usually expensive and it does not help that these platforms consume a lot of data. (Caregiver, Free State)

One respondent noted the lack of time to access social media platforms.

Caregivers were asked whether they trust information from social media platforms. Most appeared to trust the information, for example:

Yes, I trust the platforms because they help us with finding the answers we need and more information for my child's homework and projects. (Caregiver, Limpopo)

I trust the information. I also ensure to check the validity of the information. (Caregiver, Gauteng)

Yes, I trust the information because they don't require my personal information, like my ID number and stuff. (Caregiver, Free State)

Others' had mixed views about what information they trust with some indicating that they need to verify information (responses revealed that Facebook was regarded as less trustworthy than WhatsApp, particularly due to scams):

Neutral because it depends. Some information you can tell that they are valid and some are not. So not everything can be trusted. (Caregiver, Gauteng)

I trust the platform but I am careful with the information I get so I vet information I get from social media I research and ensure the information authenticity first. (Caregiver, Limpopo)

I really trust WhatsApp communication and updates. As for as for Facebook I don't trust anything from that platform since they are lot of scams fake account and fraudulent information. (Caregiver, Free State)

WhatsApp is trustworthy. Most of Facebook information is for scamming people. (Caregiver, Limpopo)

In-between. Not everything that you see on social media is true. (Caregiver, Gauteng)

Others noted that WhatsApp was more trusted as they know the source:

Facebook is not trustworthy; information is fake sometimes and you are communicating with people you don't know. With WhatsApp, I know all my contacts. (Caregiver, Gauteng)

Caregivers were asked whether they think these platforms are useful to support them and their child and help their child learn. Almost all respondents agreed that these platforms are useful for accessing information, and receiving communication around school work. Examples of responses were:

Yes they are useful. I am in a school WhatsApp group and they send information about homework. I use YouTube to assist with her school projects and I get more information from there. I use WhatsApp for family and friends communication and work related adverts. (Caregiver, Limpopo)



Yes. It can be useful because there might be some information that I may have no knowledge of and these platforms can be helpful. (Caregiver, Gauteng)

Yes, because they learn a lot from these platforms. For example, T loves baking so she usually gets a lot of informative videos from TikTok and YouTube about baking. (Caregiver, Free State)

It is useful because it makes communication between me and the school teachers easy as the educators can send me school work on WhatsApp for the child to complete. (Caregiver, Free State)

Two respondents in Gauteng highlighted that it depends on the content:

Neutral, also, it depends on the kind of content we engage ourselves with. For instance, the platforms, particularly Facebook that I use for novels, helps with improving our English for the better. (Caregiver, Gauteng)

They are useful because they are quick and easy to use. However the disadvantage is children can access wrong information. (Caregiver, Gauteng)

Three caregivers who did not find it useful noted:

Sometimes information is false. (Caregiver, Gauteng)

YouTube is useful, but WhatsApp and Facebook are not that reliable for learning tools, in my perspective. (Caregiver, Free State)

No I want my children to use their own brains instead of relying on the platform. (Caregiver, Free State)

Caregivers were asked whether they have access to WhatsApp throughout the month.

- In Limpopo, three indicated that they have sufficient data for WhatsApp every month, while seven indicated that this was not the case.
- In Gauteng, all 13 caregivers who answered the question indicated that they have sufficient access to WhatsApp throughout the month.
- In the Free State, 14 have sufficient data for WhatsApp every month and are able to access videos, but three do not.

Examples of responses were:

I do not have access to WhatsApp throughout the month because I do not have enough money. I do not have data package. (Caregiver, Limpopo)

I only have data seldomly, not every month. I don't have a data package I don't have access to WhatsApp throughout the month. I can access videos when I have data. (Caregiver, Limpopo)

Yes I have access to daily WhatsApp I purchase daily WhatsApp data which is enough. (Caregiver, Gauteng)

I can access WhatsApp throughout the month. I purchase WhatsApp data packages that allows me to send and receive WhatsApp messages. (Caregiver, Free State)

All caregivers, aside from one in Free State, indicated that receiving ideas to support their child's learning via WhatsApp would be useful and easy to use. One Limpopo caregiver noted that it would be easy if she was taught to use it. Examples of responses were:

If a child watches videos she will learn. WhatsApp will be easy for me to use as I am already using it. (Caregiver, Limpopo)

Yes WhatsApp is easily accessible. Information can be saved and stored on phone and can go back to it any time. (Caregiver, Gauteng)



I do believe that it would be very helpful. Yes it will be easy to use because WhatsApp doesn't need much data and it is easily accessed. (Caregiver, Free State)

When you receive something (video) on WhatsApp we can easily watch it and use it where necessary. (Caregiver, Free State)

Caregivers were asked whether they think children can learn through WhatsApp. Only two felt that this was not the case:

No. I don't want them to because they will be addicted. (Caregiver, Limpopo)

No specifically my child because he is still at a tender age and cannot navigate through WhatsApp. (Caregiver, Free State)

Another was concerned about prolonged use:

Yes, but I don't want her to be on WhatsApp for long periods because it will take her concentrations away from books. Her eyes will be affected if she is on it too long. (Caregiver, Limpopo)

Examples of positive responses were:

Yes, they can learn through WhatsApp because it makes everything easy and convenient and accessible at most times. (Caregiver, Free State)

I think my child will be excited to learn through WhatsApp as it will be a new platform and a new way of learning. (Caregiver, Gauteng)

Our children know much about cell phones therefore it will be easy for the to use WhatsApp to learn. Parents will also know that the children are just not playing but learning at the same time. (Caregiver, Limpopo)

Children can learn through WhatsApp as the school already has a WhatsApp group for homework and other kinds of communications. (Caregiver, Limpopo)

All caregivers who answered the question, indicated that they think Takalani Sesame can create helpful content for the whole family, and not just children. Examples of responses were:

Very much. As parents we shall be able to share the teachings with children. The whole family will enjoy the same thing and have time to share and play together. (Caregiver, Limpopo)

Yes, it caters for all. We enjoy watching it with X. (Caregiver, Gauteng)

Learning is a process and does not go with age. So not only will the children acquire more knowledge, even the elders in the family stand chance to build up on their knowledge. (Caregiver, Gauteng)

Takalani can create helpful content for the whole family, because the family will be able to benefit from the games and songs that will help teach or inform us in bettering our learning. (Caregiver, Free State)

Yes it can enlighten the parents on how to improve their parenting skills and also gives parents ideas on how to make their lessons fun, and gives parents ideas about how to play and what activities to do, and then they get to bond as a family. (Caregiver, Free State)

Caregivers were asked whether they would trust educational content they receive via WhatsApp and to provide an explanation for their answer. All caregivers aside from one in Limpopo and one in the Free State indicated that they would trust educational content received via WhatsApp. The Limpopo caregiver noted



that this was because she was not familiar with WhatsApp, while the Free State caregiver noted that some information is not trustworthy.

Those who would trust educational content received via WhatsApp provided the following explanations for trusting information:

- It relates to school work/ content is educational or beneficial;
- It comes from a reputable source (like Takalani Sesame);
- They can verify the information;
- It is an accessible format;
- Only people who have their number can contact them; and
- The app is convenient and reputable.

Examples of responses were:

Because it is a learning programme for children therefore all the information being shared is for the benefits of the learners to develop and be educated, and not to harm or mislead them. (Caregiver, Free State)

If it is from a reliable source and not scams. They give us information and answers to our questions. (Caregiver, Limpopo)

If it is from an a credible source. It will also depend on who recommended it. (Caregiver, Free State)

With WhatsApp unlike Facebook people who have access to your number are those you know or made arrangements with so there will be no fear in using it. (Caregiver, Limpopo)

WhatsApp is a very convenient App to use whereby the parent will have full access to use. (Caregiver, Free State)

I will trust it. But I will have to verify. (Caregiver, Limpopo)

So long as I have the knowledge that the information is from Takalani Sesame I will trust as I will know that it is for my child's learning. (Caregiver, Gauteng)

I only receive information from people who have my number. I receive full information from WhatsApp. (Caregiver, Gauteng)

Yes because WhatsApp is a reputable app. (Caregiver, Free State)

Support mechanisms for parents to participate in online learning platforms such as WhatsApp

Caregivers were asked whether the learning centre/school communicates with them via email, WhatsApp or other social media platforms. Responses were analysed and revealed the following:

In Limpopo (n=19), 53% said that the school/learning centre did not communicate with them via email, WhatsApp or other social media platforms, and that letters or phone calls were used to communicate. 16% noted that WhatsApp was used, while 21% noted that both WhatsApp and letters were used.

In Gauteng (n=23), 65% of parents/caregivers noted that the school communicates with them via letters and messages in children's notebooks and they call in case of emergency. 22% indicated that both WhatsApp and letters were used, while 13% indicated that WhatsApp was used. WhatsApp is used for Student Governing Body meetings/calls, and to communicate class information via a WhatsApp class group.



In the Free State (n=22), 36% noted they the school/learning centre uses letters to communicate, 23% indicated that WhatsApp is used and 39% indicated that WhatsApp together with letters/face-to-face meetings/SMS is used. Examples of responses were:

The school communicates through the WhatsApp and letters, they don't use other online platforms to communicate. (Caregiver, Limpopo)

The school uses letters to communicate. When there are parent meetings, school trips or other events, we receive letters from the school. (Caregiver, Free State)

Those who indicated that WhatsApp is used (37% in Limpopo, 35% in Gauteng, and 62% in the Free State), were asked to note what type of information is communicated via WhatsApp. The results were thematically analysed and revealed the same types of information across all three provinces. The results are tabulated below (note that respondents provided more than one response):

Table 5 Types of information communicated over WhatsApp

	Limpopo (n=9)	Gauteng (n=9)	Free State (n=14)	Total sample (n=32)
Homework	46%	40%	22%	33%
Parent meetings	23 %	33%	35%	31%
General school and class information such as time tabling and class excursions	31%	27%	43%	35%

Examples of responses were:

WhatsApp is used for homework and messages. Letters are used to invite us to meetings. (Caregiver, Limpopo)

Day care, meal related, food to include in the lunchbox. Functions. (Caregiver, Gauteng)

They update us about school related things like meetings, trips and fund raising. (Caregiver, Free State)

General information about everything that happened or that's going to happen at the school, meaning class activities, parent committees, extra mural, homework and timetables. (Caregiver, Free State)

Those who indicated that WhatsApp is not used to communicate with the school were asked whether WhatsApp was a preferred way to receive information. Most caregivers in Limpopo indicated that it was not (80%), while most in Gauteng (93%) and the Free State (78%) indicated that it was a convenient or preferred way to receive information. Reasons for non-preference in Limpopo mainly related to not having smartphones to access WhatsApp messages. Those who preferred WhatsApp noted that it is a convenient way to receive information, it is accessible and fast, and is a more reliable way of receiving information from school. Examples of responses were:

I would prefer WhatsApp. If I am busy or miss a call perhaps, WhatsApp would serve as an alternative as I would receive these messages. (Caregiver, Gauteng)

Yes, because letters given from school can be easily misplaced by children, so using WhatsApp would make things easier as there will be fast and reliable information and communication. (Caregiver, Free State)

I would prefer WhatsApp since it is a platform I can be always reached on, and it can be very convenient for me. (Caregiver, Gauteng)



Caregivers were asked what can be done to make it easier for them to use WhatsApp to get information to support their child with their learning. Most indicated that they would like data packages. Other suggestions were:

- Wi-Fi at home/community;
- Free access to WhatsApp and learning material;
- Access to a smartphone;
- Support in how to use WhatsApp; and
- Participating in a WhatsApp school group chat.

Examples of responses were:

*I have a cell phone not smartphone. Should I get a smartphone, my grandchild will be able to connected to WhatsApp. I think I should save some money to help them get a smartphone.
(Caregiver, Limpopo)*

*Data packages (free rated access to internet). If I can receive videos that do not need data.
(Caregiver, Gauteng)*

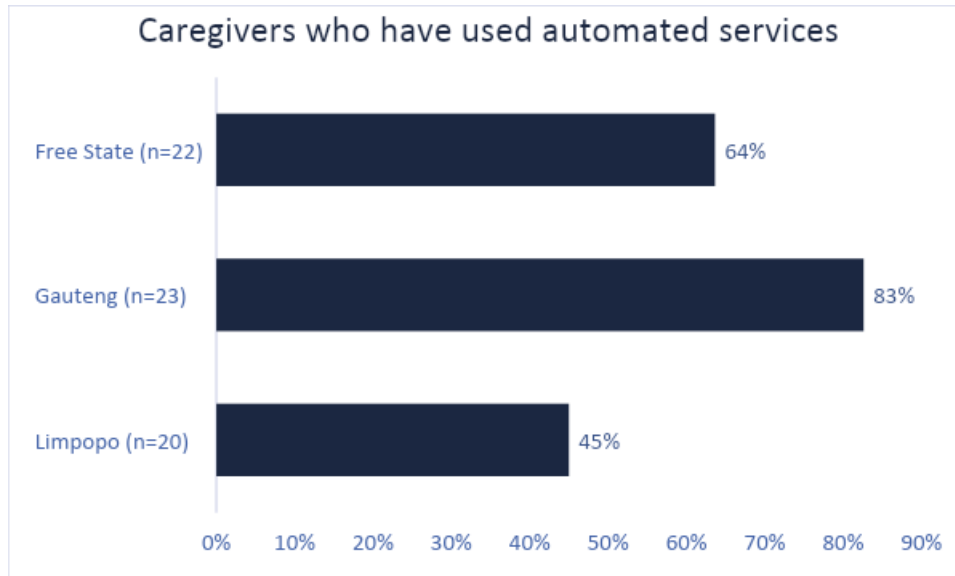
Teachers can open a WhatsApp group for parents to get information on how to help the child with learning. (Caregiver, Free State)



Experiences of caregivers with other chatbots

Caregivers were asked whether they had ever used cell phone services that provide automated responses to their queries. The results are presented below:

Figure 14 Percentage of caregivers who have used automated services



Caregivers in Gauteng appear to have had more experience using automated services compared to those in the Free State and Limpopo, with under half of the caregivers in Limpopo having used such services. Caregivers mentioned using banking apps, cell phone provider apps to load airtime, the DStv App, Social grant applications, and using Covid-19-related health services.

Examples of services used:

Yes, the service like the bank is very helpful, enjoy using it. (Caregiver, Limpopo)

Covid-19 experience to access hospital. (Caregiver, Limpopo)

Yes SASSA SRD application through WhatsApp, loading airtime through USSD, Department of Health Covid WhatsApp line. (Caregiver, Gauteng)

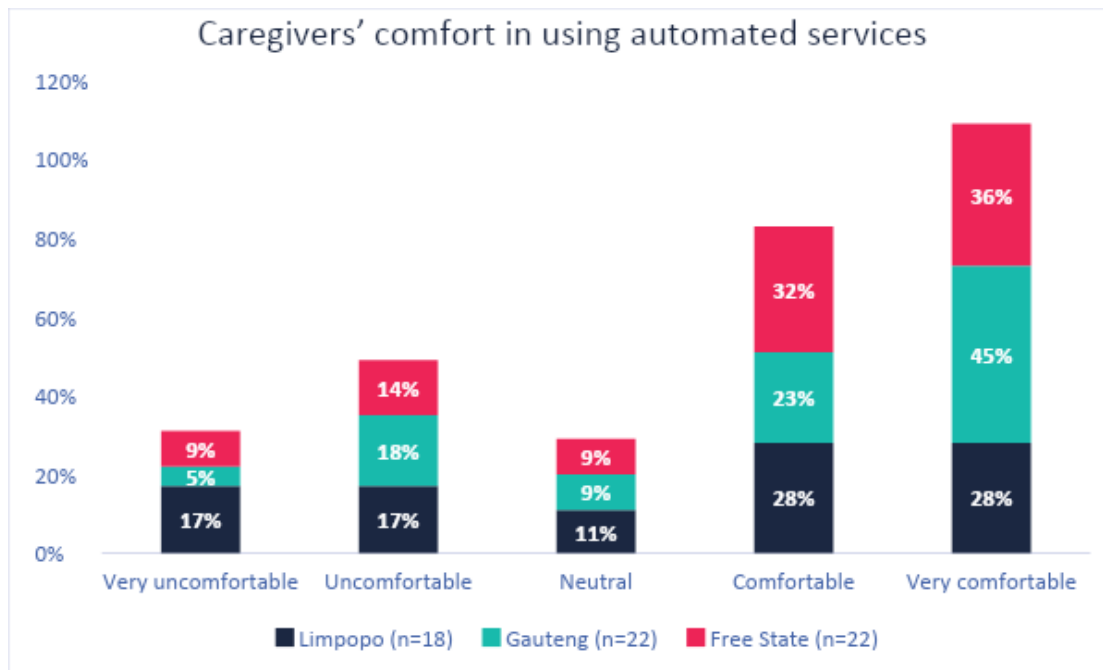
I use automated cell phone service for buying airtime online. (Caregiver, Limpopo)

During my pregnancy the programme called MOM CONNECT. (Caregiver, Free State)

Caregivers were asked to rate how comfortable they feel using automated services, and the overall results point to a larger proportion of caregivers in all provinces being comfortable using automated services, with higher comfort levels among Gauteng and Free State caregivers:



Figure 15 Caregivers' comfort in using automated services



Those who rated that they were comfortable or very comfortable in using automated services provided the following reasons (similar themes were noted across the provinces):

- It is convenient, reliable and accessible;
- It is easy to use and to access information;
- It is cost-effective and saves time and money;
- They are comfortable and familiar with using online platforms; and
- Chatbot services are confidential.

Examples of responses were:

When I use the services I get fast responses so it is convenient. (Caregiver, Free State)

Quick responses, reliable, and accessible any time. (Caregiver, Gauteng)

All the information is currently available you don't wait for long time to receive feedback or answer based on the question you pose. (Caregiver, Free State)

The program is easy because it leads you automatically and it prompts with enough information. (Caregiver, Limpopo)

I am comfortable because I think it will be easy for me to use and they can be helpful. (Caregiver, Free State)

It saves time and money from travelling to and from the shopping centre to access ATM from the bank. (Caregiver, Limpopo)

Those who were neutral in their rating (and provided reasons) noted:

- Lack of device;
- Lack of data;
- Treating online information with caution; and
- Difficulty using the apps.



Examples of responses were:

Having no knowledge of the receiver of your personal information, and not understanding who is behind the automated responses, who gets to access your information and where it gets to be captured can be very uncomfortable. (Caregiver, Gauteng)

Because it is slow and I don't usually get the desired responses. (Caregiver, Free State)

It is because sometimes it becomes tricky for me to use those apps. (Caregiver, Free State)

Those who rated that they were uncomfortable or very uncomfortable in using automated services, provided the following reasons for their rating:

- They had never used an automated service before;
- They do not use a smartphone or WhatsApp;
- They are suspicious of scams;
- They perceive chatbots as unreliable;
- They are uncomfortable with 'instant replies'; and
- It is confusing to use.

Examples of responses were:

Never used this kind of service, only bank automated service has been used. (Caregiver, Limpopo)

I am not comfortable because I have not used those platforms so I am not at all familiar. (Caregiver, Free State)

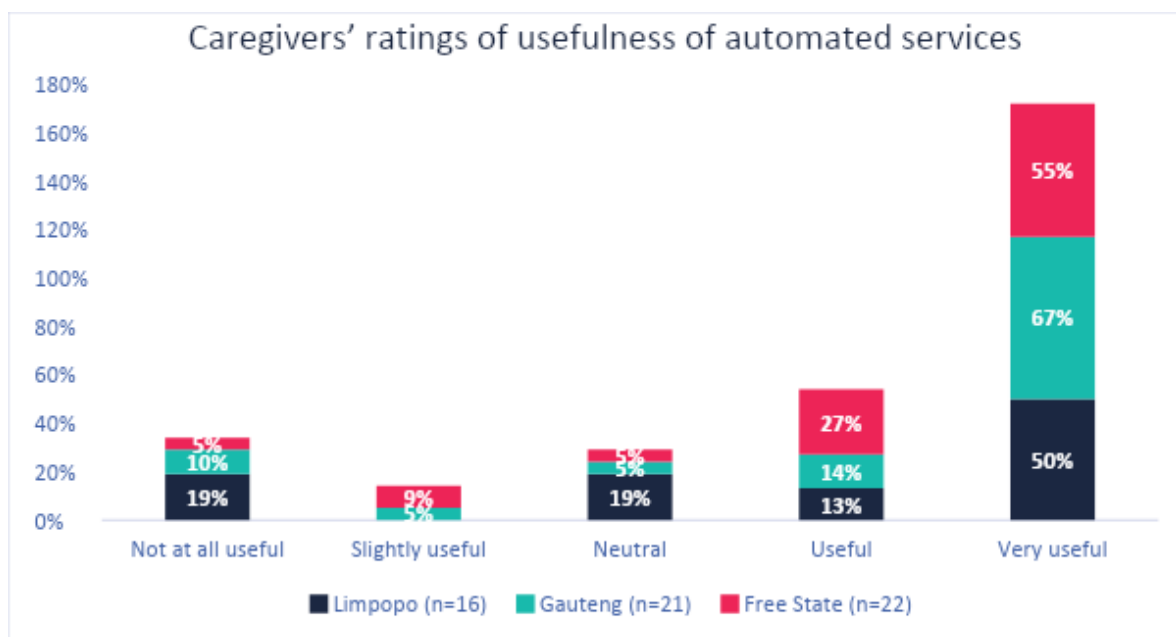
Sometimes it takes longer to respond and provides inaccurate answers. (Caregiver, Gauteng)

Because sometimes I do not get the desired answers to my questions. (Caregiver, Free State)

I am scared of scams. This is because I have to be sure (ensure to verify) of the services that are provided to me if they are safe to use or not. (Caregiver, Gauteng)

Caregivers were then asked to rate the usefulness of automated services:

Figure 16 Caregivers' ratings of usefulness of automated services





In line with comfort levels, a larger proportion of caregivers across all provinces find automated services useful, although a larger percentage of caregivers in the Free State and Gauteng find them useful. In their explanations, similar themes emerged across all provinces, viz:

- It is convenient and saves time and money;
- It provides accessible information and knowledge; and
- It is user-friendly

Examples of responses were:

It makes life easier for me and saves me time. (Caregiver, Limpopo)

It saves time and energy to step out of the house to get a particular needed service. (Caregiver, Gauteng)

It allows me to get all the details and information in the comfort of my home and save time. (Caregiver, Free State)

The information is easily accessible unlike when using a textbook where you need to page through many pages before getting the information you are looking for. (Caregiver, Limpopo)

Every question is easily answered and you can enquire on numerous occasions without being annoying and it's different from dealing with an individual. (Caregiver, Free State)

You get short and clear answers, there is no need to type long paragraphs and the response is always immediate. (Caregiver, Free State)

The five caregivers with neutral ratings provided the following reasons:

- They are unaware of automated services;
- She does not have a phone;
- The service is useful for adults and not children; and
- The information is confusing.

In addition, seven caregivers who rated automated services as not useful provided the following reasons:

- They had not used automated services before;
- Automated services are not trustworthy;
- Automated services are not helpful; and
- They do not have ICT literacy to use WhatsApp and automated services.

Examples of responses were:

I do not trust them and people get easily be scammed. (Caregiver, Free State)

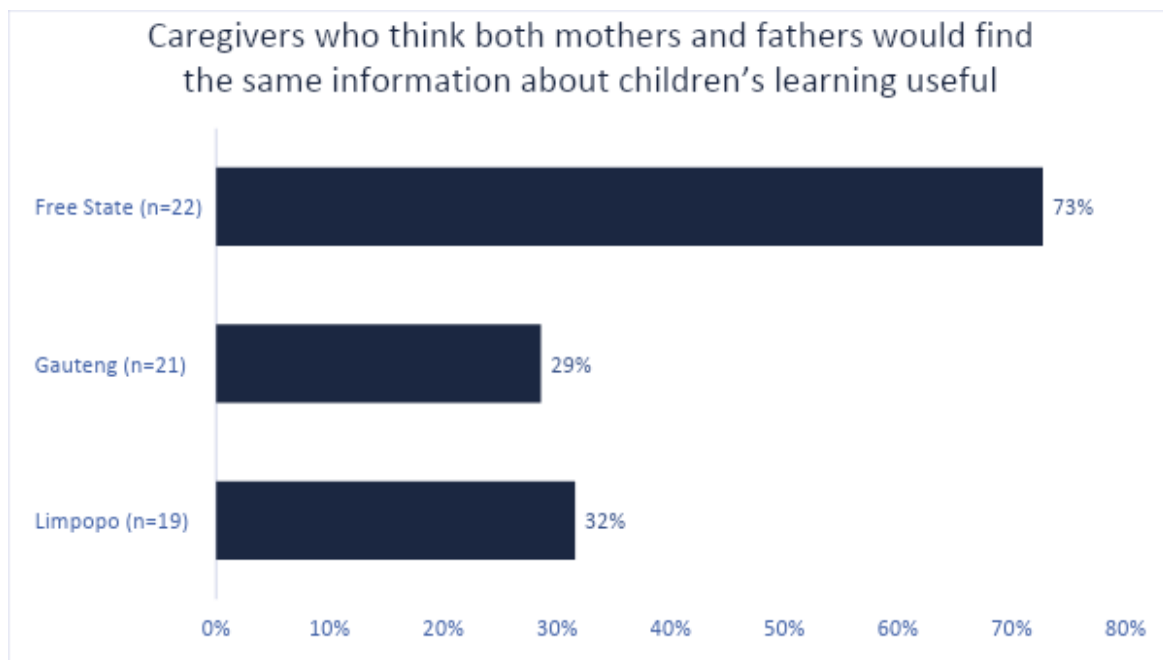
They are slow and the automated responses are not always helpful. (Caregiver, Free State)



Tailoring content to caregivers' gender

Caregivers were asked whether they think mothers and fathers would find the same information about children's learning useful. The results were thematically analysed and are presented as a graph below, highlighting the difference of opinion among respondents.

Figure 17 Caregivers who think that both mothers and fathers would find the same information about children's learning useful



The results above illustrate that only in the Free State more caregivers think that both mothers and fathers would find the same information about children's learning useful. In their explanations, those who felt that both parents would find the same information about children's learning useful pointed to both parents needing to be involved in children's learning. Examples of responses were:

It will help them to work jointly with their children in helping their children to learn. (Caregiver, Limpopo)

Parents should see eye to eye and find the same things for their child. Because both of them have the same love. (Caregiver, Gauteng)

Yes because we are both parents and willing to see our learners or child progress. (Caregiver, Free State)

Yes, because as both parents we know different things about our child and if the father is not present the mother can be able to respond to what is needed for the child. (Caregiver, Free State)

Those who disagreed felt that mothers were the primary caregivers and more patient, and were thus responsible for children's learning. For example:

Mothers are patient to help children while fathers become very irritable to help in school work. (Caregiver, Limpopo)

No, I feel that mothers can do well alone than when with fathers. Mothers are always there for their children. (Caregiver, Limpopo)



No Men cannot be able to look after and take care of children like women do. (Caregiver, Limpopo)

No. I spent most of the time with her, I am exposed to many integral parts of her being therefore there are certain things I would find useful. Her dad is hardly around so that is something that would not enable us to find the same information about her learning useful. (Caregiver, Gauteng)

Caregivers were asked whether there is anything mothers would specifically be interested in. Responses revolved around their child's overall development, and their child's learning and school performance. Examples of responses were:

To see the child performs well academically, behaves well at school and succeeds in life. (Caregiver, Free State)

Mothers are interested in understanding what their children are learning. (Caregiver, Limpopo)

For her to finish school and work, and for her to avoid teenage pregnancy. (Caregiver, Gauteng)

Mothers are more concerned with children's hygiene and their mental development. (Caregiver, Gauteng)

Mothers care more specifically about the development of their children. (Caregiver, Gauteng)

Knowledge on how to assist learners and develop them fully. (Caregiver, Free State)

Mothers are specifically interested in the school work of their child. (Caregiver, Gauteng)

To be educated and attend school regularly to change our status at home: eradicating poverty in our family. (Caregiver, Limpopo)

To see the child performs well academically, behaves well at school and succeeds in life. (Caregiver, Free State)

In line with ratings above as to whether both parents would find information about learning useful, some respondents were unsure as to whether there would be anything fathers would specifically be interested in:

None. They are very impatient. (Caregiver, Limpopo)

No. Most fathers do not have time for their children. (Caregiver, Limpopo)

Men are just men. They do not care much about their children more especially on their school work. (Caregiver, Limpopo)

No interest. They just want results and not to engage in the process to get there. (Caregiver, Limpopo)

Men do not take interest in their children's education except for receiving reports and good results. (Caregiver, Limpopo)

They are only interested in the end results but not on how to attain that. (Caregiver, Gauteng)

Fathers don't like being hands-on in helping the child, so if for example, there was some learning on WhatsApp, the father might just give the child the phone and expect them to do it on their own. (Caregiver, Free State)

However, those who felt that fathers would find information about learning useful, noted that they would be interested in the same areas of development as mothers are interested in. Examples of responses were:

Keen fathers have the same interest as mothers. It helps fathers to understand what their children are being taught. (Caregiver, Limpopo)



Nowadays fathers are more interested to know more about their children growth and learning progress as much as mother do. (Caregiver, Free State)

Make sure that the child gets educated. (Caregiver, Gauteng)

They want to see their children succeed. (Caregiver, Limpopo)

Fathers are specifically interested in the welfare of their child. (Caregiver, Gauteng)

Fathers are more concern edabout the emotional development of their child. (Caregiver, Gauteng)

Yes. Writing and reading with the kids. (Caregiver, Limpopo)

I think fathers might see this as a way to be actively involved in their children's learning. Because they will get to bond and be able to build relationships with their children. (Caregiver, Free State)

Thus, the findings are mixed with regards to whether content needs to be tailored to the gender of the caregiver, with results here suggesting that the same content target both mothers and fathers.



Incentives most likely to encourage parents and children to continue using online platforms such as WhatsApp

Caregivers were asked, in an open-ended question, what will encourage or motivate them to use platforms (such as WhatsApp) to support them and their child. Common themes emerging were:

- Receiving and accessing information related to their children's learning so that they can support their child;
- A subsidized platform or subsidized data (so less costs for parents);
- Access to a device to use online platforms; and
- Platforms that are accessible and easy to use.

Examples of responses were:

Accessing my child's school information so that I can be confident in helping him with his school work. (Caregiver, Limpopo)

It will give me information to help my children and to have knowledge about education. Teach them language. (Caregiver, Limpopo)

The simplicity of usage. It is informative and easily accessible. (Caregiver, Gauteng)

With WhatsApp through a chatbot, homework and learning will be easier as we will be working with platforms that have been proved to be reliable. (Caregiver, Gauteng)

Having a WhatsApp chatbot can motivate me as I will know that I have help in supporting my child. (Caregiver, Gauteng)

Through these platforms, my child gets to learn and develop on the knowledge he has. His English also advances. And again, the easy usage of these platforms also motivates me to support me and my child. (Caregiver, Gauteng)

It is easily accessible, and receives instant and constructive response and it is friendly to be used by anyone. (Caregiver, Free State)

What encourages me is that whenever I have a question or confusion about something I ask and get information quickly without any hassles. (Caregiver, Free State)

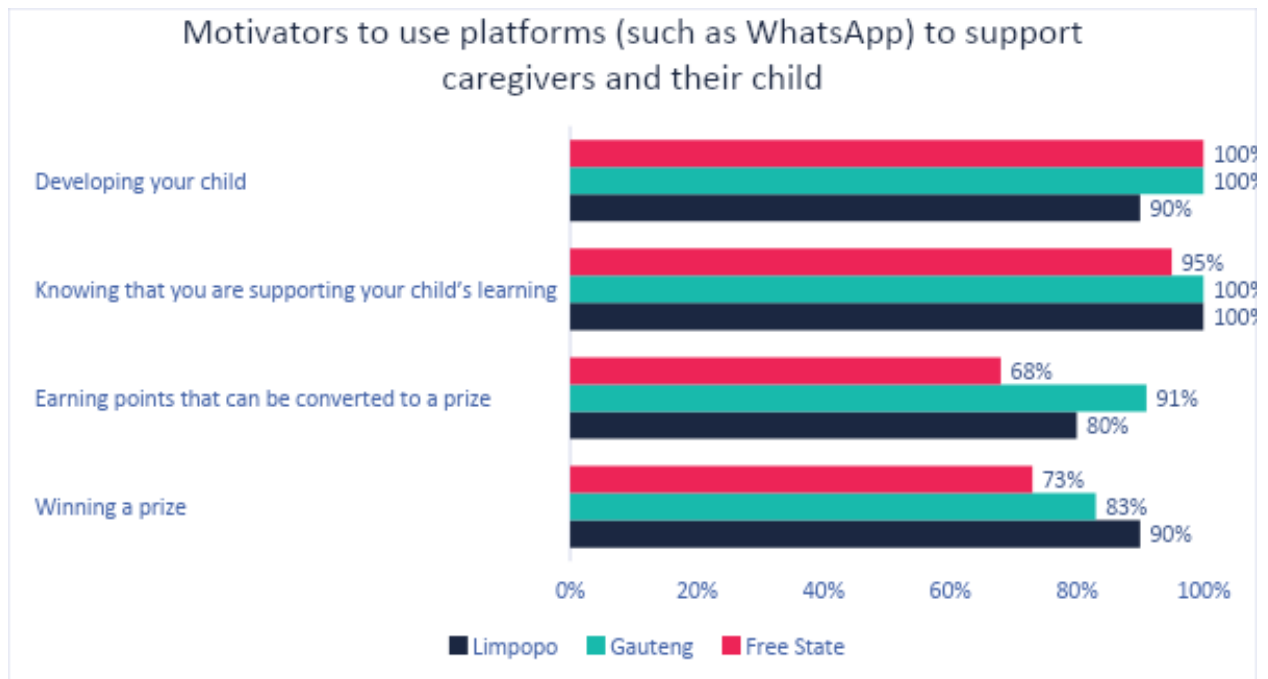
Data packages designed especially for WhatsApp, for example I buy 300MB WhatsApp data that last 7 days for only R10 therefore it is affordable. (Caregiver, Free State)

Data free platforms would motivate me because not only will I be getting useful information for free but I will also be assisting my child with learning. (Caregiver, Free State)

Caregivers were also asked to select from a list of options, what would motivate or encourage them to use platforms such as WhatsApp. The results are presented below and suggest that intrinsic motivators are more popular than extrinsic motivators:



Figure 18 Motivators for caregivers to use platforms to support caregivers and their child



Other motivators noted were:

- Entering a competition;
- Free data;
- Marketing for her business;
- Smartphones/laptops; and
- Gaining personal knowledge.

Children aged 9-14 were asked whether they like to get rewards such as points, badges, prizes or the clapping hands emojis when playing online games. Across all focus group discussions, the responses indicate that all the children feel motivated when they see good progress, winning makes them happy to play and win more. Some children specifically noted they want to win a prize, for example one child wished to receive a football as a prize, and another wished for sweets. A few noted that they enjoy getting the clapping hands emoji, and two noted that like to receive play money, keys and points when they play games like Candy Crush and Subway Surf. Children also liked receiving badges as rewards. An example of children's responses in one of the discussions is:

L - Emojis so that people can see that I worked hard. E- Badges so that everyone can see that I am intelligent. T - when you have a badge others can also see. N- The whole school can see that I have passed. (Focus Group, 11 year olds, Gauteng)

The children were then asked what kind of prizes they like to receive when they play online games. Responses noted were clapping hands, balloons, football and football shoes, car, cash prize, smartphone, trophy, medal, shoes (Vans), badges, online money (virtual money), crown, points, tickets, a trip to Dubai, a bicycle, and stationery.

Children were asked to detail some of the points/badges/prizes they received in the past from online games. None of the children in Limpopo were able to provide examples. Examples provided by children in Gauteng and the Free State were: trophy, handbag, diamonds, skateboard, badges, online money, crown, stars, medals and points to unlock next stages and purchase characters and costumes within a game. An example of rewards mentioned in a focus group:

P - I have received money and a trophy in a running game that is my favourite.



- N - I received money which motivated me to keep on playing.*
- N - I received a trophy to show that my team won the game.*
- N - 3 trophies for a races game win.*
- J - I received money and points after completing a level.*
- T - I received money and tickets to play a game (Focus Group 9-10 years, Gauteng)*

Children were then asked whether getting a prize like this motivated them to carry on playing the game. In Limpopo, responses were mixed, possibly because children there do not play many online games. In Gauteng, all answered yes and stated that winning a prize motivated them to continue playing the game and winning more prizes as that made them happy. In the Free State in one focus group all the children noted that getting prizes ‘avoids boredom’ and ‘keeps them busy’.

Thus for caregivers, intrinsic incentives such as knowing that they are supporting their child’s learning and developing their child are the most important motivators to use online platforms like WhatsApp. In addition, extrinsic incentives that are contextually relevant, such as a free platform/subsidized data are important to consider. Data from the children indicate that online badges, prizes and moving up levels serve to keep them motivated to use online platforms.



The best time to deliver content

Caregivers were asked that if they were to receive information to help support their child’s learning, whether it is it more convenient to receive this information during the week or over the weekend. The qualitative responses were analysed and revealed that most prefer weekdays:

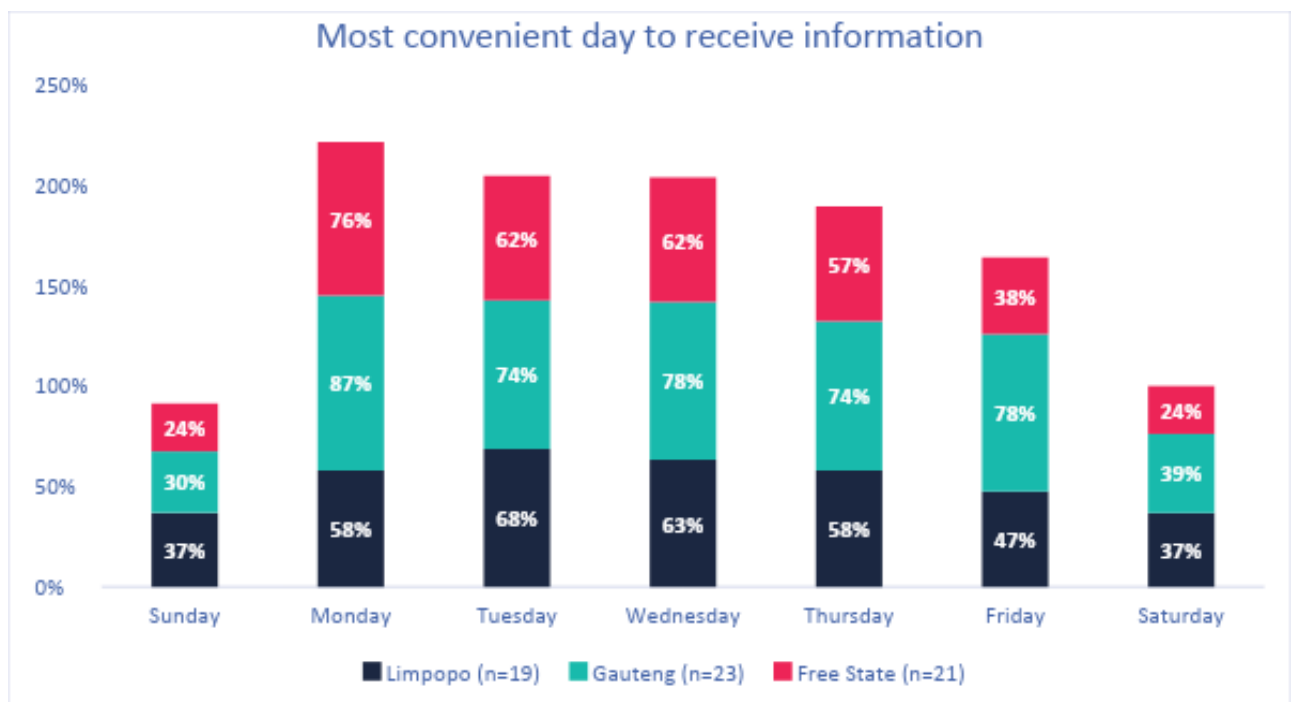
Table 6 Caregivers’ preference on best time to receive information to support their child’s learning

	Limpopo (n=20)	Gauteng (n=23)	Free State (n=22)	Total sample (n=65)
Week	70%	74%	68%	71%
Weekend	20%	13%	9%	14%
Both week and weekend	10%	13%	23%	15%

Those who preferred the week noted that weekends are usually busy with social activities, occasions and events and that weekends are for resting, while school days are for learning and this is when children are focused on their school work. Some caregivers also felt that they have more time to go through content while their children are at school. Those who preferred weekends, felt that they had more time to go through content then. Those who indicated both noted that they have time available of both weekdays and weekends – they are always available.

Caregivers were then asked to indicate which specific day(s) of the week would be most convenient for them to receive information. Overall Monday – Thursday appear to be the most popular days, although caregivers from Gauteng also rated Fridays highly:

Figure 19 Caregivers’ preference on most convenient day of the week to receive information



In their explanations caregivers noted that specific days suited them because they were not working on that day or it was a convenient day for them, for example:



Tuesday is the most comfortable day because I do not have many things to do on the day. (Caregiver, Free State)

Others who selected all the weekdays noted that children are in ‘learning mode’ and that time is thus suited for ‘educational things’; for example:

During the week, we are hands-on with school work and we can be able to help the child with whatever necessary unlike over weekends. (Caregiver, Limpopo)

Monday to Thursday. The child is more focused during these days, compared to the weekend where she gets busy and has no time for school work. (Caregiver Free State)

As noted above, weekends were regarded by some as used mainly for other activities:

Friday is a day to bond with family and go out for drinks. (Caregiver, Gauteng)

Saturday busy with the household duties and Sunday they go to church. (Caregiver, Gauteng)

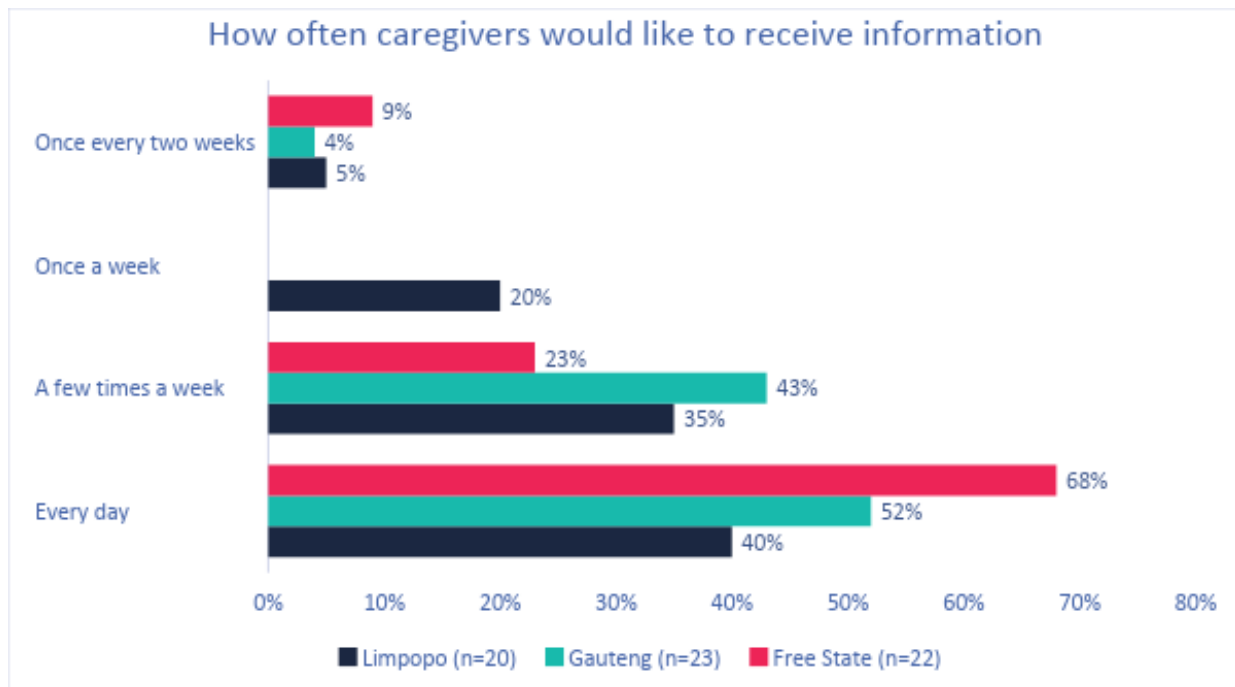
Those who requested weekends indicated that they have time to spend with their children then:

On Saturdays and Sundays I have enough time for my children during weekends. (Caregiver, Limpopo)

Saturday and Sunday because the child is home at this time and it becomes easy to do things with him. (Caregiver, Free State)

Caregivers were also asked how often they would like to receive information and their preference is mostly daily or a few times a week:

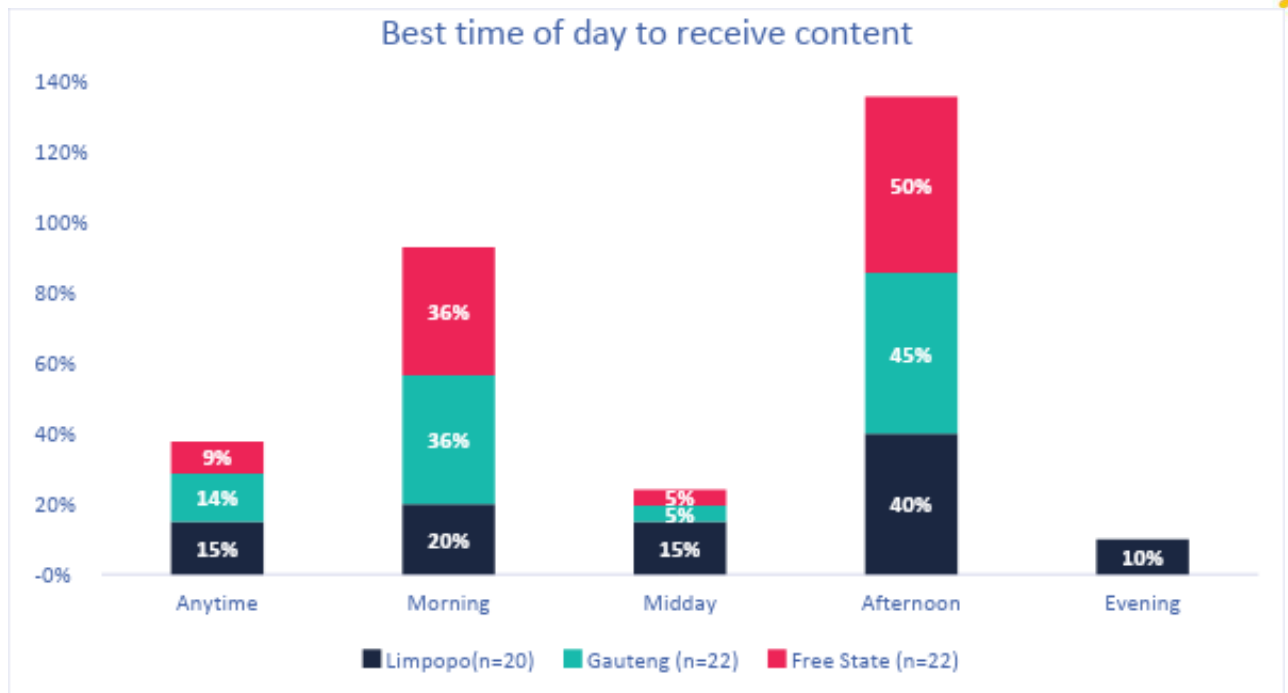
Figure 20 Caregivers’ preference of frequency of receiving information



Caregivers were asked in an open-ended question, what would be the best time of day to receive information. The results were thematically analysed, and indicate that afternoons (after children return home from school) followed by mornings are the best times to receive content.



Figure 21 Caregivers' ratings on best time of day to receive content



Examples of responses were:

From 14H30 because children would be back from school. We shall have time together after they have got their meals and do the dishes. (Caregiver, Limpopo)

Around 15:30 and 17:30 in the afternoon because children will be at home then I will be able to share whatever message they have received. (Caregiver, Limpopo)

Afternoon from 3pm – 5pm. That is the time X is at home and she can access the content. She does her homework during that time I can also be able to help her. (Caregiver, Gauteng)

At 3 o'clock in the afternoon because I am able to focus on the child's learning needs. (Caregiver, Free State)

In the morning when the mind is still fresh by the time the child gets back from school I would have deciphered the necessary information. (Caregiver, Gauteng)

In the morning. I concentrate better at this time of the day and I can look at the information thoroughly at this time as the kids will not be around. (Caregiver, Free State)

In the morning. If I receive the information in the morning I will be able to schedule time during the day to work on them with my children during the course of the day. (Caregiver, Limpopo)

In the morning, because it is quiet, I can be able to focus and process the information easily so that I can be able to share it with the child later. (Caregiver, Free State)

Caregivers were asked what language they would like to receive content in. The results were sorted and are tabulated below:



Table 7 Languages caregivers would like to receive content in

	Free state (n=22)	Gauteng (n=23)	Limpopo (n=20)	total (n=65)
English	45%	22%	20%	29%
English and IsiZulu	0	43%	0	15%
English and Sepedi	0	0	45%	14%
English and Sesotho	32%	9%	0%	14%
English, isiZulu and Sesotho	0	4%	0	2%
isiZulu	0	13%	0	5%
Sepedi	0	0	35%	11%
Sesotho	23%	9%	0	11%

Almost three quarters (74%) of respondents indicated that they would be happy to receive content in English or English and a local language. Just over a quarter requested content in a local language only.



Conclusion

Overall, caregivers highly value their involvement in their children's schooling, and want their children to have a better future and to be successful in school and their lives. Caregivers across all provinces are invested in their child's education, career choices, and their personal and social development: they provide support and guidance, and encourage their children to make good choices and to be successful. Most children noted that they are able to access support for their learning and some are able access psycho-social support. Over half the caregivers reach out for support, primarily to school, family members, and community members, to help their child make decisions on subjects and life choices. Further, most caregivers would support their child if they wanted to be an entrepreneur/work for themselves as they want their child to be successful and contribute to society. Challenges to caregiver involvement in schooling and accessing learning and psychosocial support services relates to lack of funds and resources (including electricity), difficulty understanding the schoolwork, language barriers which makes it difficult to understand schoolwork, personal stress, other competing priorities, lack of devices and sufficient data, lack of information, and lack of interest.

In exploring platforms to access educational content, both caregivers and children primarily noted television programmes, followed by radio and the Internet (Google and YouTube searches). No specific online learning platform to access content was mentioned. Further, among children 4-8 years, there did not appear to be widespread use of technology for learning. There was greater access to devices in more urban areas (Gauteng and Free State) compared to the rural area (Limpopo), and thus these caregivers had more experience in using smartphones and accessing social media.

With regards to social media use, caregivers mainly use Facebook and WhatsApp, with many regarding WhatsApp as more trustworthy. Caregivers find WhatsApp useful for accessing information and receiving communication around schoolwork, but some are sceptical about information not being useful/false. WhatsApp appears to be used for communication in Free State schools. Most caregivers in Gauteng and the Free State have sufficient data for WhatsApp, and prefer it as a mode of communication compared to Limpopo caregivers. Nevertheless, all caregivers are keen overall and willing to use WhatsApp to improve their child's learning, and for Takalani Sesame to create helpful content for the whole family. However, they did request support in having access to devices, guidance in how to use WhatsApp, access to data, and free access to WhatsApp for learning (i.e. no data costs).

Overall there are positive perceptions around using a WhatsApp Chatbot (noting the contextual limitations). While use of automated services such as Chatbots was more common in Gauteng, caregivers in other provinces were also open to using them. However, some concerns were raised around devices and data, how to use automated services, and concerns around reliability and scams. Further, the applicability of a Chatbot in rural areas, where few have regular access to smartphones is questionable, and there is greater applicability in more urban areas which are better resourced.

Most caregivers in Gauteng and Limpopo felt that mothers were responsible for a child's learning as they are more interested in the child's development and school performance. However, most Free State caregivers felt that both mothers and fathers would find the same information about children's learning useful. Thus, the findings are mixed with regards to whether content needs to be tailored to the gender of the caregiver, possibly pointing to the need for the same content to target both mothers and fathers.

In terms of incentives to use online platforms, among caregivers intrinsic motivators of developing their child and knowing that they are supporting their child's learning were most highly rated. Another motivator specifically mentioned was a data cost-free platform. Children feel motivated then they see good progress, and they receive emojis, badges and prizes.



In implementing a WhatsApp chatbot, it might be worth exploring the following:

- Adopting different approaches, or different levels of support for less urban areas. This is important particularly given that there is a great need in rural areas (as evidenced by self-rated confidence levels in supporting children in reading, mathematics, and homework being the lowest in Limpopo; and caregivers in Limpopo also play and read less with their children compared to caregivers in other provinces).
- Zero rating the platform to increase access, given that many caregivers interpret support as financial assistance or data provision.
- In terms of content, self-reported confidence was lower for counting/numeracy/mathematics among Limpopo caregivers and noted in qualitative responses in Gauteng, which suggests that this is an area that content could focus on.
- Given the limited references to online/virtual support, this points to a potential gap that could be filled by a Chatbot or automated service. For example, it could cover areas like psycho-social and academic support, information related to learning and homework (specific subjects) and life and subject choices, as well as entrepreneurial support where children can learn new things.
- It may be useful to target different content to parents and children. Some parents want to access the content and then 'teach' their children, or interpret the content for their children, or work with their children; while some parents might want to give the device to their child and allow them to explore on their own. It also might be useful to 'chunk' content in small bits, and in small time frames, so that the device (especially in families with only one device) does not become a contentious item, dominated by use of the Chatbot.
- In promoting a Chatbot to caregivers, highlight incentives to develop their child. It may also be useful to highlight the ease of use and provide guidance on recommended time to be spent on activities.
- The best time to deliver content is from Monday-Thursday in the afternoon (particularly for mothers as most respondents were mothers).
- It will be useful to provide content in English as well as local languages.

