Chapter 4

Analysis of the responses in the questionnaires: Learning areas, learning activities and outdoor facilities available at early learning centres

4.1 INTRODUCTION

In Chapter 3, I described and explained the research design and chosen methodology for this study. I justified the research design and choice of methods in terms of my research questions and the purpose of my study. In this chapter, I report on the results of the study by explaining the themes that emerged from analysis of the raw data obtained from questionnaires. This report includes figures and photos to enhance the discussion of the themes, sub-themes and categories. I present quantitative and visual data results focused on facilities and learning activities available in early learning centres. In this regard, I look into the availability of learning areas, learning activities and outdoor facilities.

4.2 PRESENTING THE RESULTS OF THIS STUDY BY PROCESSING THE QUESTIONNAIRE DATA

Completed questionnaires from 213 students served as the quantitative data source to investigate available facilities and types of learning activities that were offered at the different early learning centres in the case study. After completion of the questionnaires, a research assistant numbered each questionnaire for analysis and anonymity purposes (see Appendix F). To convert the responses in a meaningful numerical format, she manually indicated on paper all the information that was captured on the questionnaires. The research assistant then created columns in order to categorise the pre-coded answers (see Appendix F). As I discussed in Chapter 3, when constructing the questionnaire, I chose to group similar items that address the same issues into clusters and I developed total scores across item clusters (Gay et al., 2009: 185). The answer categories were thus known in advance and therefore a coding frame was printed onto the questionnaire (Cohen et al., 2001: 265). The scores for all the items of each scale of the questionnaire were added
together to give a combined score for the total questionnaire (Terre Blanche & Durrheim, 1999: 98) (refer to Appendix M). After completion of this manual process on paper, the research assistant captured the data electronically.

I used the raw electronic data to make summaries of responses to the questions in columns in Excel (see Appendix G). With the help of an information specialist, I captured the relevant data in pie charts. This visual presentation facilitated the analysis and interpretation process.

Figures in section 4.2.1 are based on the results of the questionnaires and illustrate the presence or absence of facilities and apparatus or learning areas (also called learning centres) that are part of early learning centres’ indoor and outdoor play environments. In addition, these figures also indicate whether centres present or neglect to offer specific learning activities.

4.2.1 Questionnaire results

(a) Learning areas (learning centres)

Early childhood environments are organised into separate learning areas. These defined areas of the playroom have a particular purpose and contain relevant furnishings and resources. Learning areas enable children to focus their attention, small-group interaction is promoted, and the areas require children to make choices and experience the consequences of those choices (Bredekamp, 2011: 240). Graph 4.1 provides a visual summary of the number of indoor learning areas found in the early learning centres ranging from the most to the least.

In summary, Graph 4.1 indicates that in nearly all the early learning centres, book corners and display tables for theme discussions, as well as areas for art and cognitive activities were present. Most of the early learning centres had fantasy and block play areas. However, discovery and mathematics corners were visible in less than half of the early learning centres. In most cases (more than 70%) sensopathic, music or technology areas were not available.

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6 Marietjie Schutte, Information Science, University of Pretoria
Table 4.1 provides a layout of the availability of the different kinds of indoor learning areas in the early learning centres.

**Table 4.1: The frequency of availability in terms of the indoor learning areas**

<table>
<thead>
<tr>
<th>Frequency of availability</th>
<th>Learning area</th>
</tr>
</thead>
<tbody>
<tr>
<td>All (92%)</td>
<td>Book corner</td>
</tr>
<tr>
<td></td>
<td>Display table</td>
</tr>
<tr>
<td></td>
<td>Art area</td>
</tr>
<tr>
<td></td>
<td>Cognitive area</td>
</tr>
<tr>
<td>Most (86%)</td>
<td>Fantasy play area</td>
</tr>
<tr>
<td></td>
<td>Block play area</td>
</tr>
<tr>
<td>Few (35%)</td>
<td>Discovery corner</td>
</tr>
<tr>
<td></td>
<td>Mathematic corner</td>
</tr>
<tr>
<td>Absent (&lt; 22%)</td>
<td>Sensopathic area</td>
</tr>
<tr>
<td></td>
<td>Music corner</td>
</tr>
<tr>
<td></td>
<td>Technology corner</td>
</tr>
</tbody>
</table>

Graph 4.1: A summary of the indoor learning areas ranging from the most to the least

Each questionnaire item required participants to indicate whether a specific indoor learning area was present in the early learning centre or not. Analysis of the questionnaires includes pie charts that visually depict responses. For every area and
activity addressed in the questionnaire, I also present a photograph documented by the student researchers at early centres as additional visual evidence of the areas or activities in question. Each photograph also cites which early learning centre (ELC) is featured.

As I explained in Chapter 3, the open ended items included in the questionnaires created space for student-participants to share reflective experiences in terms of the facilities and activities they encountered at the early learning centres. The open-ended items in the questionnaire, allowed for rich descriptions. After analysing each question, I present some of the answers or comments given by the student-participants in the open-ended section of the questions. These quotes present a perspective on the variation of facilities encountered by student-participants at the different early learning centres.
Question 1: Art area

Figure 4.1: Art area Photograph 4.1: Children painting in the art area, ELC 13

Photograph 4.1 depicts children engaged in a painting activity in an art area. Figure 4.1 shows that the majority of the centres, namely 91% had an art area indoors where children can engage in art activities.

An art area enables children to investigate and create while using a rich variety of materials that invite creative expression, exploration, experimentation, problem solving, and connections to real life (Isenberg & Jalongo, 2010: 248-249). In an art area there is a wide range of two- and three-dimensional materials that can be used by the children as part of the daily programme to paint, paste, construct, cut, thread, model and draw (Schirrmacher, 2006: 303; Solomon, 2005: 142).

From the following quotes by student-participants in open-ended items, it is evident that although art activities are offered at most of the centres, variation exists in terms of creativity and the variety of art apparatus that are available to the children.

Q6: “There is a wide spectrum of art and handwork”.
Q48: “Not very creative, everybody had to do the same thing”.
Q73: “There is an art and handwork area in each class with a wide variety of objects”.
Q98: “Well equipped and learner friendly”.
Q104: “Very neat and well managed with a variation of resources for example paint, crayons etc.”
Q204: “Brilliant, children had endless amounts of open ended materials, paint and crayons etc.”
Question 2: Discussion/display table

Photograph 4.2 documents a representative discussion/display table. A synonym for this area is an interest table because it is a visual resource used to teach children about themes that are appropriate and of interest to them developmentally (Davin & Van Staden, 2005: 250; Crowther & Wellhousen, 2004: 24). Pictures, word cards, books, real objects and models are usually part of a typical discussion table. Photograph 4.2 illustrates a display on the theme insects.

As is the case with art areas, Figure 4.2 illustrates that most of the centres (92%) had some kind of discussion table where materials and resources about the weekly theme are displayed.

From the student-participant responses in the open-ended item section, it seems that space, or the lack of space, often determines the size and quality of discussion tables. To address this, some centres provided a combined discussion table for all the age groups.

Q7: “There is one for each of the playrooms. They put in a lot of effort”.
Q14: “It is not very big. The playrooms are very small”.
Q15: “There is only a board”.
Q33: “A bit too small”.
Q59: “There was a very small table in each class”.

Q9: “They had a nice table”.
Q21: “A table with little pictures”.
Q30: “A really good one”.
Q41: “A display table”.
Q46: “It was a display table with insects”.
Q56: “There was a small table”.
Q58: “There was a big table”.
Q61: “There was a very small table. A display on insects.”
Q61: “It is there, but there is not much information on display”.
Q72: “It is next to the discovery area, with the same theme”.
Q73: “The display table is set up in such a way that the children can see it every day”.
Q74: “There is one for the whole school”.
Q109: “In the entrance hall, being changed every week”.
Q142: “There was a table but nothing was on it. Maybe it was just while I was there?”
Q153: “The Grade 00’s discussion table is a do not touch table. In the Grade 0’s it is a touching table and is phonic based. There is another table which is theme based”.

**Question 3: Discovery area**

![Figure 4.3: Discovery area](image)

**Figure 4.3: Discovery area**

In Photograph 4.3 a young girl explores different herbs through the sense of smell in a discovery area. Figure 4.3 reveals that only 39% of the centres had a discovery area where children can practise their discovery skills in an informal way.

A discovery area invites children to explore and investigate if it is stocked with interesting materials and objects, including objects from the natural world. Open-ended materials that can be used in a variety of ways are usually the best choice for a discovery area (Dodge *et al.*, 2003: 384). Young children learn through their senses and in informal ways. A discovery area where children can both look at objects and which invites interaction, provides many learning opportunities. “Please touch! is the implied invitation of an interesting, ever-changing discovery area” (Mayesky, 2009: 428). The theme at a discovery area is often related to science and provides opportunities for children to engage with new knowledge in an informal, hands-on way.
The open-ended responses provided by the student-participants revealed that in schools that had discovery areas the available items and children’s access to these items varied, including whether a hands-on or hands-off approach was followed.

Q33: No discovery area, it is part of the discussion table”.
Q73: “The discovery area is next to the discussion table, therefore the children can play there freely.”
Q75: “Not too great. Not a lot of effort put into”.
Q95: “The children get the opportunity to experiment”.
Q104: “A big variety and learners were encouraged to bring things from home”.
Q137: “There is a corner with chickens and dead bugs and containers to smell”.
Q139: “Many things that they can play with and discover”.
Q142: “There was one but it was not hands-on”.
Q204: “Real life section with magnets and other discovery apparatus”.

**Question 4: The technology area**

![Figure 4.4: Technology corner](image1)

![Photograph 4.4: Disassembling appliances in the technology corner, ELC 130](image2)

In Photograph 4.4 a girl and a boy can be seen exploring and investigating in a technology area. With the use of pliers they disassemble the insides of old discarded computers and other household appliances. In the process they learn what is inside the apparatus and that tools are required to extract parts. Figure 4.4 informs us that only 17% of centres had technology areas.

Dodge, Colker & Heroman (2003: 513) suggest that children’s awareness of technology can be increased by talking about and exposing them to different tools
and machines that we see and use in everyday life for example, pulleys, pipes and elbows, magnifying glasses and magnets. A technology area provides many opportunities for children to do informal investigation in their own time and to solve problems through exploration and discovery (Charlesworth & Lind, 2003: 529).

Student-participants’ open-ended item responses indicate that only a few centres had technology corners, and that such areas usually contained appropriate apparatus.

Q24: “There is not enough space in the playrooms for everything”.
Q44: “There were only construction builder toys (plastic)”.
Q104: “A variety of activities where the children may participate daily. Also computers”.
Q137: “There were kettles, hair driers, toasters that the learners could dismantle and build with”.
Q151: “Computers, telephones, type writers for use by the children”.
Q200: “Never saw it, but saw the planning for it”.

**Question 5: The mathematics corner**

![Pie chart showing 68% Yes and 32% No](image1)

![Photograph 4.5: Informal weighing in the mathematics corner, ELC 148](image2)

In Photograph 4.5 a child is seen experimenting with a scale and learning about objects, weight and balance. About a third of the centres had specific mathematics corners for the stimulation of numeracy in their classes as is shown in Figure 4.5.

According to Charlesworth and Lind (2003: 529), the mathematics corner can be set up for many mathematical skills and concepts and should be available to every child, every day. Materials in this area must be displayed in containers on low shelves that are readily available to the children.
The descriptions of the mathematics corners in the student-participants’ open-ended item responses, indicate that those centres which had them, provided a variety of apparatus and the children eagerly play there.

Q44: “There were Uni-fix cubes, shapes and peg boards”.
Q73: “The maths corner has a wide variety of apparatus that the children can play with”.
Q91: “No maths corner. Maths were done at tables”.
Q98: “No specific area, but activities are done”.
Q104: “Learners may participate daily. Good exposure”.
Q137: “There is a measurement table where they could measure their bodies and posters with numbers on”.
Q186: “It is well organised with mathematical apparatus. The children enjoy it a lot”.

**Question 6: Fantasy corner**

![Figure 4.6: Fantasy corner](Image)

Photograph 4.6 is an illustration of four girls who are engaged in fantasy play in a pretend grocery shop. Figure 4.6 shows that an indoor fantasy corner was present in the majority of the centres, namely 87%.

The fantasy corner (Moyles, 2008) is also known as an area for make-believe play (Hereford & Schall, 1991: 8; Van der Merwe, 1990a), pretend play (Papalia, Olds & Feldman, 2008), role play (Davy & Gallager, 2006), dramatic play (Feeney, Christensen & Moravcik, 2006; Mayesky, 2009) representational play (Schirrmacher, 2006), imaginary play (Papalia et al., 2008) and imaginative play (Davy & Gallager, 2006). Dramatic play happens when a child takes on a pretend role alone. When the child interacts and communicates with another person who is also in a pretend role...
the activity becomes socio-dramatic play (Robson, 2006: 121). The children establish the rules of play and their play is a reflection of children’s understanding of how different people act (Hereford & Schall, 1991: 8).

It seems from the open-ended responses that the fantasy areas that are available at the centres, usually cater for boys and girls and that variety is visible.

Q17: “Very nice, appropriate for boys and girls”.
Q31: “Two fantasy areas, a hospital area for girls and a gym for boys”.
Q37: “There is one, but it can be improved”.
Q62: “There are fantasy clothes in a box, but the learners did not play with it”.
Q79: “Was an all boys school but there was a baby and pram available”.
Q98: “One fantasy area that is changed often to suite both boys and girls”.

Question 7: Book corner

![Figure 4.7: Book corner](image)

![Photograph 4.7: A display of books in the corner, ELC 34](image)

In Photograph 4.7 a book corner with different kinds of children’s books is visible. The books are displayed at the children’s eye level and are easily accessible to them. As can be seen in Figure 4.7, almost all of the centres, namely 94%, had book corners for the stimulation of early literacy in learners. A book corner (Van der Merwe, 1990b) also known as a reading corner (Edwards, 2010) or literacy centre (Isenberg & Jalonga, 2010) must be a comfortable, attractive and enticing place where children can browse through books. This area should be located away from the more active areas. In book corners a selection of books should be available to children including books with stories, books with pictures, fiction and non-fiction books (Edwards, 2010: 269-270).
It is evident from the open-ended responses that although most of the centres had book corners, they varied a lot in terms of the number and quality of books that were available to the children.

Q10: “There are many books, but the majority are old”.
Q27: “There is a book shelf with a variety of age appropriate books, yet no quite area to sit”.
Q40: “There are Afrikaans, English, educational and fantasy books. They are in a good condition”.
Q50: “Variety, good and bad condition”.
Q53: “Each week the books would match the theme”.
Q59: “They had old magazines that fell apart”.
Q62: “No books that they could page through”.
Q64: “Loads of books. Good condition. Age appropriate”.
Q84: “Wide variety and in ‘okay’ condition”.
Q86: “Parents bring a book for each child and it stays there for the whole year”.
Q90: “Wide variety of books. Well looked after. Well stocked library”.
Q125: “Children can’ work with books yet – damage them. Get magazines after lunch to page through”.
Q142: “No books. Posters on the wall of the letters they learnt that week, Aa; Bb”.
Q159: “There were too few books, but the atmosphere was peaceful”.
Q189: “There was a variety of books, but some were placed on the windowsill and the children could not reach them”.
Q204: “Ranging from feel books to big books. Suited all age groups. Good condition”.

Question 8: Music corner

Photograph 4.8 illustrates different musical instruments used by learners in a music corner. The centres that possessed music corners are by far in the minority. Figure 4.8 shows that in only 21% of the centres music corners were available.

Edwards, Bayless and Ramsey, (2009: 153) explain that a listening-to-music corner/area that is carefully prepared and regulated for children, is a definite asset for any playroom. They declare that a well-organised music corner creates an environment where children are free to make choices and where they are in charge of their own learning as they explore independently and make their own decisions about the activities in which they engage. A music corner should give children the freedom to explore rhythm, melody, form and expressive music qualities (Edwards et al., 2009: 153).

The data from the questionnaires conveyed that music corners are not often part of early learning centres. The open-ended responses furthermore confirms that in instances where musical instruments are available, instruments usually are kept in a cupboard or container.

Q9: “No music corner, but they have enough instruments and often do music activities”.
Q59: “There isn’t time for music”.
Q124: “No separate corner, but they do music activities”.
Q125: “No music corner, but they do music activities each day for 15 minutes”.
Q137: “There were always a cd player and bongo drum”.
Q141: “The garage is adapted into a movement and music area”.
Q145: “There is a radio and they often listen to music”.
Q147: “The instruments are in drawers in the store room”.
Q204: “They have a music corner with posters of all the different instruments”.
Q211: “There is a music classroom with a piano and wall with mirrors and cd player”.
Q213: “They have a music corner where they sing and dance”.

**Question 9: Block corner**

![Pie chart showing the percentage of centres with block corners.](image)

**Figure 4.9: Block play area**

Photograph 4.9 illustrates a complex structure built by learners with unit blocks in a block corner. As apparent from the photograph, learners used all the available blocks to erect the structure. Figure 4.9 reveals that more than 80% of the centres had block corners for block play in their playrooms.

Dodge, Colker and Heroman (2003: 255) indicate that children go through a series of predictable stages and progress through these stages at different rates when they are playing with blocks. A block area should be well equipped with enough good quality blocks and plenty of accessories to encourage the children to participate in block play. Charlesworth and Lind (2003: 540) are of the opinion that young children’s block play performance during preschool is a predictor of their future mathematics achievement in primary and secondary school.

It seems from the open-ended descriptions that the number and quality of available blocks vary and that there is also much variation regarding the availability of accessories to add to blocks.
Q25: “A big variety of sizes and colours, as well as plastic toys”.
Q27: “There is no specific block play area, children play on the carpet”.
Q29: “There were more that 50 blocks. There were also cars”.
Q40: “It is different every week”.
Q48: “A big variety. A popular area”.
Q50: “Lots!!!”
Q90: “Fully stocked block corner. Wide variety of blocks and accessories”.
Q113: “Blocks are being taken from the store room when used”.
Q142: “No accessories. Enough blocks to go around. Blocks were very old”.
Q149: “The block area is very popular, specifically with the four to five year olds”.

Question 10: Cognitive area

The girl in Photograph 4.10 is building a puzzle and practising her critical thinking skills in the cognitive area. It seems that cognitive stimulation is definitely a priority in most of the centres as Figure 4.10 indicates that only 10% of the centres did not have cognitive play areas.

A cognitive area provides children with the opportunity to learn basic concepts and to develop their thinking and fine motor skills (Isenberg & Jalongo, 2010: 281).

Apparatus in this area offers important development opportunities for literacy and numeracy and provides concrete experiences for problem solving, creating and cooperation. Manipulative materials, construction and educational toys and jigsaw puzzles can be found in a cognitive area (Feeney et al., 2006: 240).
Student-participants’ open-ended item responses indicate that the cognitive areas seems to be mostly well stocked and was a popular choice amongst the children.

Q24: “There is not a cognitive area, but a cupboard with cognitive games”.
Q29: “It was well controlled and children could choose what they wanted to do”.
Q61: “Has been used a lot, sometimes the whole day. The teacher assists the children a lot”.
Q76: “Very well equipped in this area. Frequently changed. Puzzles”.
Q79: “Puzzles were changed regularly and pieces increased. Lots of fine motor toys: i.e. Opening locks, plastic ants etc.”
Q94: “Many of everything and in excellent condition”.
Q103: “It is the most used area and the learners were enjoying the area”.

Question 11: Sensopathic table

In Photograph 4.11 children are exploring dry woodshavings with their hands and different kinds of scoops and small containers at the sensopathic table. From the responses in the questionnaires (Figure 4.11), it is evident that not many centres have sensopathic tables indoors. Sensopathic tables were only present in 24% of the centres.

Human beings receive information from the outside world for mental/neurological processing and storage through the five senses and through movement. Before young children are able to identify, discriminate, understand, remember and label sensory experiences, they need many sensory experiences (Entz, 2009: 149; Essa, 2011: 316). A sensopathic or sensory area is a place where children particularly use their senses of touch and sight. Experiences in this area contribute towards childrens’
observation skills and are also emotionally satisfying experiences. A sensopathic table usually is a container that is filled with sand, birdseed, rice, seeds, etc. and sometimes there are other items that are hidden in the fill (Good, 2009: 133).

According to student-participants’ open-ended item responses, the sensopathic area seems to be absent in most of the early learning centres. Only a few schools had indoor sensopathic areas and there were just a few remarks about them.

Q64: “Wonderful toys and sensopathic material to fill up three trays per grade”.
Q95: “A bowl with wood shavings and animals and toy soldiers that were inside the wood shavings”.

(b) Structured learning activities

The purpose of the next part of the questionnaire was to determine types of structured learning activities in the daily early learning centre programmes. Teacher-directed/guided/structured learning activities indicate planned experiences that are directed by the teacher to help children learn and to develop particular skills (Feeney et al., 2006: 299; Mayesky, 2006: 390; Coates & Thomson, 2010: 71). Graph 4.2 provides an overview of the frequency of structured learning activities presented indoors in the early learning centres.

In summary, Graph 4.2 informs us that almost all (95%) of the early learning centres presented stories, rhymes, art, music, theme discussions and numeracy activities as part of the structured learning activities of their daily programmes. Most early learning centres (90%) offered movement activities, religious stories, perception and baking activities. About two thirds of the early learning centres had puppet shows. Science, technology and additional language activities were only offered in 30% or fewer of the early learning centres.

Table 4.2 visually summarizes the level of availability of the different structured learning activities being offered in the early learning centres.
Table 4.2: The frequency of availability in terms of the presentation of structured learning activities

<table>
<thead>
<tr>
<th>Frequency of availability</th>
<th>Structured learning activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>± 95%</td>
<td>Story, Rhyme, Art, Music, Theme discussion, Numeracy</td>
</tr>
<tr>
<td>± 90%</td>
<td>Movement, Religious story, Perception, Baking activity</td>
</tr>
<tr>
<td>66%</td>
<td>Puppet show</td>
</tr>
<tr>
<td>&lt; 33%</td>
<td>Science, Technology, Additional language</td>
</tr>
</tbody>
</table>
Graph 4.2: An overview of structured learning activities

Question 1: Art and handwork

Figure 4.12: Art and handwork

Photograph 4.12: Making pictures with glue and sand, ELC 10
Photograph 4.12 presents children actively involved in a pasting activity in the art and handwork area. The children practise their fine motor skills and hand-eye coordination while they are “painting” a picture with glue and sprinkling sand over it, carefully pouring the excess sand from the paper into a provided container. Figure 4.12 shows that with the exception of 3% of the centres, art and handwork activities are part of almost all of the centres.

Jackman (2005: 211) considers art to be “visual communication through the elements of colour, line, shape and texture”. She notes that sensory awareness, aesthetic appreciation, self-expression and the improvement of visual and motor coordination occurs when children make two- and three-dimensional projects through a variety of media in art activities (Jackman, 2005: 220).

The remarks in student-participants’ open-ended responses about art activities, provide valuable insight regarding the structuring, variety and quality of these important activities. There was much variation in terms of the number of main and side activities offered per week. From the responses it seems that some centres offer activities that are very creative whereas others are teacher-directed and non-creative.

Q27: “Art activities are done approximately three times a week”.
Q44: “Art is done twice a week. The school does not do side activities, the whole class does the same thing”.
Q59: “Art was not done. They said there was not time in the curriculum”.
Q72: “Presented three to four times per week. Anything from collage to paint”.
Q76: “Every day very interesting art activities”.
Q77: “It is sad that they didn’t have it”.
Q79: “Every day an art lesson was presented, mostly a worksheet that they had to complete and the rest played with play dough”.
Q91: “Five times a week. Worked in groups and rotated”.
Q94: “The teacher tells exactly how they must paint. Colouring book type!!”
Q98: “Five times a week. Lots of variation and fresh ideas. Usually work in small groups. Cycle of groups work well”.
Q186: “They always do it in groups with a main and side activities”.
Q205: “Three times a week. Sometimes only colouring pictures. It could have been more challenging”. 
Question 2: Theme discussion

Photograph 4.13 shows children actively participating in a theme discussion about hats. All the learners are wearing different hats and inform the rest of the class about the characteristics of their hats. From Figure 4.13 it is clear that the picture for theme discussion mirrors the art activities’ graph, in that 96% of centres have theme discussion as part of their daily programme.

Content directing learning and play in an early learning centre is usually based on themes appropriate, relevant and of interest to the children (Faber, in Faber & Van Staden, 2005: 23). It is the opinion of Jackman (2005: 57) that the thematic approach enables teachers to tie in the observations, interests and abilities of the children to language and literacy, dramatic play, art, music, movement, numeracy, perception and science with curriculum direction and expansion initiated by the children. The content of the theme is discussed during theme discussion sessions where the learners get the chance to contribute and share their experiences with the rest of the group.

The open-ended remarks revealed a difference in the number and length of discussions offered at the centres.

Q25: “Every day a short discussion”.
Q40: “Once every two weeks”.
Q44: “It is done once a week, at the beginning of the week when the new theme starts”.
Q58: “Done daily because the teacher adds on to the previous knowledge”.
Q61: “It has been done, but not in depth”.
Q101: “Learners talk/work very well together”.

Figure 4.13: Theme discussion

Photograph 4.13: Learning about hats during the theme discussion, ELC 149
Question 3: Story

![Figure 4.14: Story](image)

Photograph 4.14 presents a teacher telling a story to children. In this case two-dimensional pictures are used to enhance the story. Story telling is part of almost every centre’s daily programme. Figure 4.14 shows that only 2% of the respondents indicated that stories were not included at their early learning centres as part of the daily programme.

According to Entz (2009: 59), “story telling is the age old process of relating a tale based on a real-life event, fantasy, or fable”. Telling stories is also a method for teachers to engage children linguistically – embedding concepts, vocabulary and values. Story telling is furthermore a valuable tool through which a teacher can model rich language (Entz, 2009: 59).

It is evident from the open-ended responses that story time seemed to be very common in early learning centres and there was uniformity in terms of the number of stories being told per week. Most centres had a story as part of their everyday daily programme.

Q28: “Specific time for story every day from 12:00 –12:15”.
Q124: “Stories are being told every day. Nice stories”.
Q137: “Four times a week, after lunch, before sleeping time”.
Q141: “Before lunch a story is told”.

![Photograph 4.14: Children listening to a story, ELC 64](image)
Question 4: Puppet show

Almost two thirds of the centres (65%) present puppet shows in their daily programme as apparent in Figure 4.15. In Photograph 4.15 a boy uses puppets to set up his own puppet show.

Mayesky (2006: 129) remarks that an excellent medium for enhancing children’s dramatic play is through the use of puppets, because puppets develop creativity and imagination in young children and a puppet show is also an important medium for language development.

Although puppet shows were amongst children’s favourite activities, it is evident from the open-ended responses that they were not presented often. In many early learning centres puppet show presentations occurred on rare occasions and in some instances outsiders (not teachers) presented puppet shows.

Q28: “At least once a quarter and it is being done by external people”.
Q80: “Was never presented. There was no puppet theatre and other apparatus”.
Q124: “Not while I was there”.
Q125: “Once a week. Very nice! The teachers do it themselves”.
Q204: “Once a month. Some children scared”.
Q211: “They get someone once a year to present it. It is becoming too expensive. They don’t realise that they can do it themselves”.

Figure 4.15: Puppet show

Photograph 4.15: A boy telling his own puppet show story, ELC 149
Question 5: Rhyme

The children in Photograph 4.16 are learning a new rhyme. The teacher uses masks as a resource to capture the children’s attention. Just as with art activities, theme discussions and stories, rhymes are presented in almost every centre. Figure 4.16 points out that rhymes are part of the curricula of 98% of centres.

Faber (in Grobler, Faber, Orr, Calitz & Van Staden, 1996: 118) remarks that rhymes are not just pleasurable activities for children, but play an important role in their language development because they serve as examples of good language and sentence construction and encourage children to use language creatively.

Although almost all of the centres had rhymes as part of their language activities, there were not many open-ended responses in this regard. The few remarks about the rhymes indicated that they were done on a regular (mostly weekly) basis.

Q8: “Usually once a week and repeated throughout the week”.
Q128: “Every day. Many in the Grade R class”.
Q132: “They know many cute rhymes”.
Question 6: Additional language activities

In Photograph 4.17 an illustration of a language game can be seen where learners can build basic words with letter blocks aided by pictures and word cards in both Afrikaans and English. This game is one way to expose learners to an additional language through incidental reading. Figure 4.17 informs us that only 32% of centres introduce their learners to an additional language.

Davin (in Davin & Van Staden, 2005: 91) points out that songs, rhymes and chants are useful when acquiring an additional language. She also emphasises the importance of visual resources like puppets, pictures and magazines to enhance concrete experiences in an additional language.

Many different open-ended comments were captured about additional language activities. It seems that many centres offering additional language activities, do this in an incidental way.

Q23: “English is the children’s second language and the language of teaching. Additional language activities are done every day”.
Q27: “Very seldom done”.
Q58: “Daily, sometimes it is incidental”.
Q61: “They do the days, months and weeks in English”.
Q72: “Presented by outside people”.
Q91: “It was done three times a week. Done in English, Afrikaans and Tswana”.
Q95: “Presented five times a week. The children talk to their English friends and learn new words in English”.
Q137: “Every morning spelling and words in other languages”.
Q154: “During art and baking activities language is done with shapes etc.”
Question 7: Religious story

Many programmes include a special time for religious stories, music, activities and prayers that help children learn more about religious beliefs. When teachers choose to tell children religious stories, they must keep the social, emotional, intellectual, physical and spiritual needs and development of the children in mind. There should be links with the children’s everyday lives and the effect and emotional impact should be considered when appropriate religious stories are chosen (Theunissen, 1981: iv; Van der Merwe 1990b: 248). Photograph 4.18 is an illustration of a teacher telling a religious story to children as part of a daily programme. In this instance the story of Noah and the great flood is being told. From the answers in the questionnaires (Figure 4.18), it seems that religious stories are told in the majority of centres, namely 93%.

Religious stories are part of the daily programmes of most centres. The open-ended responses indicated that in most instances religious activities occurred every day.

Q28: “Every day in the morning”.
Q50: “Daily, most of the time”.
Q81: “A dramatised Bible story was done on Friday by children”.
Q104: “There is a big variety of religions, therefore Bible stories are avoided”.

Figure 4.18: Religious story

Photograph 4.18: Children listening to the story of Noah, ELC 43
Question 8: Science

Figure 4.19: Science

Photograph 4.19 illustrates a formal planned science activity where the teacher aims to develop particular scientific skills in children. In this instance the activity aims to teach about mixing colours and the colour wheel. Although only 39% of centres indicated the presence of discovery (science) corners (Figure 4.3), Figure 4.19 shows that almost half of the centres, namely 47%, present science activities in their daily programmes.

Mayesky (2006: 167) explains that science activities, where children learn through active investigation, provide children with knowledge about the world around them. She emphasises the fact that the investigating process is more important than the knowledge that the children gain. For Entz (2009: 167), science education is an important tool to encourage children to think, to ask questions and to seek answers to the questions that they have formulated.

According to the open-ended response, science forms part of less than half of the centres' daily programmes. Those centres that do offer science activities, usually have them once a week.

Q44: “Science is done once a week”.
Q52: “There is a science ring every Friday”.
Q98: “Once a week there is a lady who comes in and does science with them”.
Q105: “Once a week. Very interesting science activities”.
Q163: “Does occur, but not that frequently”.
Q199: “Sometimes replaces theme discussion”.

Photograph 4.19: Children learn about the colours in the colour wheel during a science activity, ELC 143
Question 9: Baking activity

Figure 4.20: Baking activity

Photograph 4.20: Children are decorating gingerbread men, ELC 13

The children in Photograph 4.20 are engaged in a baking activity where they are decorating gingerbread men they made. Baking is an activity that is presented in early learning centres in 87% of the cases, as is shown in Figure 4.20.

Food is part of every child’s experience and involves all of the senses. Through baking activities children learn new information and skills and develop concepts such as size, taste, colour, texture and shape. Baking activities are also beneficial for the development of children’s hand-eye coordination and small muscle skills (Mayesky, 2006: 191).

It seems from the open-ended responses, that baking activities are often neglected in early centres, seemingly because of a presumed cost factor, or because of a lack of facilities.

Q10: “There were no baking activities – what a shame!”
Q11: “Baking is done once every three weeks, on a Friday”.
Q80: “There were no facilities for baking activities”.
Q81: “Savoury and sweet baking done twice a week”.
Q137: “Sometimes when they have ingredients”.
Q176: “Because baking is so expensive to present it is not done in the school”.
Question 10: Technology activity

In Photograph 4.21 two boys display an artefact, namely a musical instrument (from recycled materials) they made during a technology activity. Although only 17% of the centres have technology corners (Figure 4.4), technology activities are presented in 41% of the centres, as illustrated in Figure 4.21.

The inclusion of technology activities in the daily programme helps to meet the cognitive, psychomotor, social and emotional needs of learners (Harpine, Hickey & Whiting, 2004: 29). Ter-Morshuizen (1994: 3) maintains that technology activities provide a vehicle for problem solving, discovery-type learning, logical thinking, high learner interest, as well as involvement, imagining, planning, making and reviewing.

Only a few open-ended comments were made about the technology activities.

Q98: “Technology is done occasionally”.
Q101: “Technology is being done in class, but there is no technology corner”.

Figure 4.21: Technology activity
Photograph 4.21: Two boys are showing the artefact that they made in technology, ELC 92
Question 11: Numeracy

Figure 4.22: Numeracy

The girl in Photograph 4.22 is using marbles in a numeracy activity involving counting and numbers. Figure 4.22 illustrates that numeracy activities are presented in 95% of the cases.

Entz (2009: 133) indicates that numeracy is more than just numbers, counting and rules. Numeracy occurs from an attempt to solve problems with space, shapes, time, size, patterns, quantities and relationships and is a “way of thinking that enables children to begin to organise and understand their world” (Entz, 2009: 133). Mayesky (2006: 179) uses a synonym for numeracy, namely early maths. She points out that early maths experiences must be hands-on and filled with play and exploration. For her the emphasis needs to be on “active exploration of mathematical concepts as a natural part of the early childhood program”.

From the open-ended responses on numeracy activities, it seems that numeracy is important to early centres and is offered regularly on a daily base. The responses indicate that in some instances numeracy is presented in a formal way in special books, and in other instances it is integrated in other activities.

Q12: “Numeracy is being done every morning”.
Q73: “They have to do numeracy every day with each activity”.
Q95: “Three to four times per week, after the Bible story”.
Q134: “Twice a week. Every morning they count”.
Q141: “Three times a week basic maths and counting is done”.
Q143: “Every day, they have a special book”.
Q157: “Numeracy is constantly intertwined into activities”.

Photograph 4.22: Counting marbles during numeracy, ELC 15
Question 12: Perception/perceptual activity

Figure 4.23: Perception activity

Photograph 4.23 illustrates a perception activity where children learn about spatial orientation in a kinaesthetic way by holding bean bags in various places in relation to their bodies (above, behind and in front of their bodies) and thus experiencing abstract concepts concretely. The majority of respondents, 89%, have perception activities included in their daily programmes as is depicted in Figure 4.23.

Jackman (2005: 210) indicates that perceptual development occurs when children “use their senses to learn about the nature of objects, actions and events”. Dolya, (2010: 31) explains that perception is the foundation for memory, thinking and imagination. She notes that perception starts when young children engage in playful learning like building, drawing or pretend play where they focus on the external properties of objects. With this focus they develop intensively as they embark on the long process of transforming perception through the active acquisition of sensory standards. Perceptual-motor skills are complex interactions between perceptual, motor and cognitive processes. Sensory stimuli need to be integrated with data that has already been processed in order to form specific perceptions (De Witt & Booyse, 1994: 91).

The open-ended responses on perception activities are similar to those on numeracy activities. It seems as if perception activities in many cases occur in a formal way where work books are used.

Q73: “Each day children have perception activities that they have to do, but there is a big variety”.
Q83: “Perception was done on a regular basis”.
Q104: “Learners work in work books every day”.
Q143: “Every day, they have a book”.
Q144: “Three times a week. Flash cards”.
Q152: “The perceptual activities are being presented every day in a formal manner”.
Question 13: Movement activity

Figure 4.24: Movement activity

Photograph 4.24: Children playing with hoola hoops, ELC 143

The children in Photograph 4.24 are exploring their balancing skills with hoola hoops during a movement activity. Figure 4.24 indicates that including movement activities in the daily programme is a high priority for most of the centres. In only 6% of the cases, movement activities are omitted from centres’ daily activities.

Children learn by doing, and a natural avenue for children’s learning is through creative movement activities that involve the whole child (Mayesky, 2006: 137). Children explore their world through movement. Entz (2009: 115) points out that physical competence is achieved when children are able to control and care for their bodies and can perform tasks at the desired level of proficiency through movement activities.

Although the questionnaires indicated that almost all of the centres presented movement activities, the open ended responses revealed that such activities were often delegated to outsiders who offered extramural activities (like Playball or Monkeynastix).

Q12: “Movement activities are being done every Friday (sport development)”.
Q27: “Movement activities are being done four times a week”.
Q29: “Twice a week. The two classes, 4 – 5 year olds, do it together”.
Q44: “Once a week. Playball comes in every Wednesday”.
Q73: “Twice a week. It includes movements as part of rhymes and dances with songs”.
Q106: “Twice a week. The children enjoy it very much”.
Q115: “Once a week. Usually being done outside on the grass with balls, bean bags etc.”
Q136: “They have monkey nastics and ballet”.
Q137: “Every day. Bean bags, ropes and ball activities”.
Q141: “Three times a week. Obstacle courses”.
Q205: “Every second day sport and horse riding”.

Q13: Movement activity
Question 14: Music activity

Figure 4.25: Music activities

Photograph 4.25: Children making music with shakers, ELC 13

Music creates opportunities for varied experiences: singing, responding physically to different rhythms, creative expressions, playing instruments and quiet listening. Music helps children understand other people and their cultures and gives increased opportunities for social and emotional development. Music also provides a means for the aesthetic enrichment and growth of every child (Edwards et al., 2009:xxi).

Photograph 4.25 shows children playing in a percussion band with home-made shakers during a music activity. From Figure 4.8 it is evident that only 21% of the centres had music corners. However, music as an activity is presented in 96% of the centres.

Although most of the centres did not have separate music corners, music seems to be an important activity in almost all of the centres. The open-ended remarks however reveal that music in many instances is mostly singing and in many cases it is the responsibility of outsiders to offer extra mural music activities to certain children.

Q29: “The whole school did music together”.
Q44: “The Kindermusik teacher came in three times a week to teach music”.
Q72: “Twice a week for 15 minutes”.
Q79: “Done twice a week. Children loved it especially when playing with instruments”.
Q81: “They did singing once a week and sometimes singing in the class”.
Q114: “Only occasionally. Minimal”.
Q115: “They only play music while they are working, that’s all”.

(c) Outdoor facilities

The purpose of the last part of the questionnaire was to determine the presence of facilities in outdoor learning areas. Graph 4.3 provides a visual summary of outdoor learning areas found in the early learning centres ranging from the most to the least.

Synoptically Graph 4.3 informs that swings, climbing apparatus and slides were usually present in 95% of the early learning centres. An average of 64% of the early learning centres had a sandpit, blocks, fantasy, wheel toys and water play areas available. A dollhouse and outside art activities were present in half of the early learning centres. A sensopathic area, animals, vegetable or herb garden and woodwork were usually absent and only present in 22% of the early learning centres.

Table 4.3 provides a visual summary of the level of availability of the different outdoor facilities at the Early Learning Centres.

<table>
<thead>
<tr>
<th>Frequency of availability</th>
<th>Outdoor facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>± 95%</td>
<td>Swings</td>
</tr>
<tr>
<td></td>
<td>Climbing apparatus</td>
</tr>
<tr>
<td></td>
<td>Slide</td>
</tr>
<tr>
<td>± 66%</td>
<td>Sandpit</td>
</tr>
<tr>
<td></td>
<td>Blocks</td>
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<tr>
<td></td>
<td>Fantasy play</td>
</tr>
<tr>
<td></td>
<td>Wheel toys</td>
</tr>
<tr>
<td></td>
<td>Water play</td>
</tr>
<tr>
<td>± 50%</td>
<td>Dollhouse</td>
</tr>
<tr>
<td></td>
<td>Outside art</td>
</tr>
<tr>
<td>&lt; 22%</td>
<td>Sensopathic area</td>
</tr>
<tr>
<td></td>
<td>Animals</td>
</tr>
<tr>
<td></td>
<td>Woodwork</td>
</tr>
<tr>
<td></td>
<td>Vegetable and/or herb garden</td>
</tr>
</tbody>
</table>
Question 1: Art area outside

Children enjoy the space and freedom of art activities that are offered outdoors (Jackman, 2005: 218). Wellhousen (2002: 83) suggests that an outdoor art centre...
allows more opportunities for children to extend themselves through art. In her view, the outdoors is the perfect place for experimenting with messier art materials like finger painting and natural clay. New challenges and opportunities for problem solving are created through outdoor art and also offer children a natural setting for working with organic materials (Wellhousen, 2002: 84).

Photograph 4.26 illustrates a painting activity presented as part of an outdoor play programme. In this photograph the children are working three dimensionally when they paint patterns on cardboard boxes. According to Figure 4.26, just more than half of the centres, 53%, present art activities as part of free play outside.

The open-ended responses revealed that art activities presented outside were mostly painting or drawing activities.
Q61: “Sometimes they are drawing outside”.
Q73: “There is something to do for each age group”.
Q78: “Play dough and baking were done outside”.
Q79: “Outside so children could mess and paintings could dry”.
Q96: “They write with chalk on chalk boards outside and paint with water on walls”.
Q205: “We painted on the fence”.

Question 2: Woodwork

Just like sand and water, wood is also an example of open-ended material. When children are doing woodwork, they get hands-on experiences with measurement, balance, power and spatial relationships (Charlesworth & Lind, 2003: 545). Schirrmacher (2006: 47) points out that along with the obvious physical challenge,
woodworking fosters children’s verbal and social interaction and also develops their skills in observation, problem solving and hypothesising.

A boy is showing the creation that he made during a woodwork activity in Photograph 4.27. It seems that woodwork is not often presented as part of outdoor activities. Figure 4.27 shows that only 22% of the centres have woodwork as an activity.

The open-ended responses on woodwork revealed that this activity was often neglected. In one instance a reason was given (lack of materials and equipment).

Q26: “Woodwork is presented when the theme is wood or something related to it”.
Q94: “Woodwork was never done”.
Q95: “The children do woodwork by hitting nails in wood. Enough space for the activity”.
Q137: “Built helicopters. Brought own nails and hammers”.
Q152: “There were no planks or any woodwork materials in the school”.
Q200: “While I was there three children brought woodwork materials for one week”.

**Question 3: Climbing apparatus**

![Figure 4.28: Climbing apparatus](image1)

Playscape equipment such as climbing apparatus provides opportunities for children to learn while they are engaged in play (Wellhousen, 2002: 254). A climbing frame (like a jungle gym) allows children to develop their gross motor skills, to challenge themselves by experimenting and taking risks and it should therefore be safe and age- and stage-appropriate for its users (Feeney et al., 2006: 193). According to Berry (2001: 93) climbing equipment, that is flexible and can be changed according
to the children’s needs and interests, is the best option. She suggests that movable boards and ladders can add interest to static equipment like a climbing frame.

In Photograph 4.28 a wooden climbing structure can be seen where children are engaged in a variety of physical activities. According to Figure 4.28 almost all of the centres have climbing apparatus as part of their outdoor facilities. In only 3% of the cases climbing apparatus was absent.

According to the open-ended responses, almost all of the centres had some kind of climbing apparatus which were well used by the children.

Q17: “There is a variety and they are safe”.
Q37: “Too little space”.
Q61: “The children are very active and are often climbing”.
Q96: “Very stable and colourful. Inviting to children”.

**Question 4: Swings**

![Swings](image)

**Figure 4.29: Swings**

**Photograph 4.29: Swings in a secluded area outside, ELC 149**

Wellhousen (2002: 253) points out that swings improve balance, stimulate vestibular sense and promote language and cooperative play. Swings ideally must be placed in a remote part of the play area, far enough apart to avoid collisions and away from the other play areas’ traffic to allow sufficient space for movement (Berry, 2001: 93).

A swing area that provides swinging opportunities for five children at a time can be seen in Photograph 4.29. Figure 4.29 mirrors that for the climbing apparatus; 97% of the centres have swings for the children to swing on.
The open-ended remarks about swings were similar to those presented about the climbing apparatus, namely the availability of a sufficient number of swings that varied in terms of size.

Q8: “The swings are in a separate area”.
Q37: “Too little space”.
Q73: “There are five individual swings, each with its own height”.
Q81: “Cordened off as not to hurt any children walking by”.
Q88: “Four different swings in different places”.
Q99: “There are only two swings for the whole school”.

**Question 5: Slide**

![Figure 4.30: Slide](image)

![Photograph 4.30: A slide with a safe landing, ELC 43](image)

Berry (2001: 93) states that an appropriate slide in an early learning centre is one “with a slow finish, so that the body is almost stationary when the child reaches the bottom”. A safe landing is crucial and soft sand or wood chips can be used. The slide in Photograph 4.30 is attached to a climbing frame and a sand box helps to soften the landing. According to Figure 4.30 most of the centres, namely 91%, had slides available in their outdoor play areas.

The open-ended responses revealed that slides are part of the majority of early learning centres. In most instances the centres had more than one slide that varied in terms of size and height.
Q81: “But it landed into the sand”.
Q96: “Four slides in different sizes”.
Q98: “There is a bigger, higher one and smaller shorter one”.
Q205: “Three slides; one is separate and two are attached to the tree house”.

**Question 6: Dollhouse / Fantasy playhouse**

Wellhousen (2002: 86-87) claims that pretending dominates play in early learning centres. She suggests that props should be made available outdoors, for example in an outdoor dramatic play centre like a dollhouse to facilitate children’s understanding of symbols and symbolic play. “When children engage in role-play they deepen their understanding of the world and develop skills that will serve them throughout their lives” (Dodge et al., 2003: 271).

In Photograph 4.31 two girls entering a typical dollhouse can be seen. Figure 4.31 tells us that in just over half of the centres, namely 56%, there is a dollhouse where children can practise dramatisation.

From the open-ended remarks it is evident that in centres where dollhouses were available and in a good condition, they were popular choices amongst the children.

Q8: “The dollhouse is very nice, it is a double story!”
Q48: “The girls enjoy it very much”.
Q59: “The dollhouse is currently being locked because it is broken”.

Figure 4.31: Dollhouse

Photograph 4.31: Two girls are entering an outside dollhouse, ELC 43
Q73: “There is a big dollhouse at the sandpit”.
Q94: “Very few accessories in the dollhouse”.
Q98: “The girls and boys love to play there”.
Q157: “Stunning mini house with brick walls and a little roof”.

Question 7: Fantasy corner(s) outside

Mayesky (2009: 330) points out that provision should be made for fantasy play that occurs in the outdoor area. With more space and fewer boundaries outside, outdoor dramatic play is often robust and highly mobile. Children will use any available equipment and materials in their role play (Mayesky, 2009: 330).

Photograph 4.32 provides an example of an outside fantasy corner that resembles a fire station. Figure 4.32 reveals that 62% of the centres make provision for fantasy corners in the outdoor play area.

The open-ended comments on outside fantasy areas revealed a variety of options available in early learning centres.

Q7: “There is a fairy garden”.
Q48: “Five areas. The classes rotate, once a week”.
Q72: “There are crates with old fantasy clothes”.
Q93: “They had a little town. Very nice!!!”
Q99: “There is a ‘Holiday Inn’ available”.

Figure 4.32: Fantasy corner outside
Photograph 4.32: A fire station for dramatic play outside, ELC 43
Question 8: Area for wheel toys

Wellhousen (2002: 91) claims that an essential component of the outdoor play area is a place for riding tricycles, scooters, pedal and push cars. She explains that children feel autonomous, develop their gross motor skills, learn to follow rules, and role play when they ride on wheel toys under their own power.

Photograph 4.33 is an illustration of a spacious purpose-built wheel toy area with a play petrol pump, different tricycles and concrete roads where children develop their gross motor skills, and ability to balance; and where they can dramatise in pretend play in their roles as ‘motorists’. In 69% of the centres there are areas where children can practise how to balance and ride on wheel toys, as is evident from Figure 4.33.

It is clear from the open-ended responses that some centres have interesting areas for wheel toys. It appears that variety and sufficient space seem to be important considerations.

Q48: “Very popular”.
Q73: “There is a big wheel toy area with a variety of bicycles for boys and girls and there are tricycles as well”.
Q84: “Motor track with rubberised road to make falling less painful”.
Q103: “I think they could add enough toys because the children were fighting over them”.
Q105: “A big area with different wheel toys”.
Q116: “Mini traffic road”.
Q118: “Big area with different kinds of wheel toys that are being rotated daily”.
Q140: “They have a ‘road’ for bicycles, tricycles and scooters”.

Figure 4.33: Area for wheel toys

Photograph 4.33: An area for wheel toys with roads and a petrol pump, ELC 158
Question 9: Block play

“Block play and outdoor explorations give children many opportunities to investigate, test and change objects and it is from these interactions that children build their own model of the world” (Charlesworth & Lind, 2003: 540). Bullard (2010: 255) and Feeney et al., (2006: 238) point out that children need adequate space and sufficient time for block play, therefore it is advisable to present block play as an outdoor activity.

Photograph 4.34 is an illustration of children who are cooperatively building a simple structure with blocks in the outside play area. In 84% of the centres there are indoor block play facilities (Figure 4.9) and 67% of the centres have an outside area for children to explore their block building skills, as Figure 4.34 shows.

The open-ended responses about outside block play indicated that block play was present in some centres, however no remarks about any accessories or the condition of the blocks were made.

- Q8: “Not used often”.
- Q39: “There is a big mobile cupboard with all kinds of blocks”.
- Q73: “There is a big area for the children for block play”.
- Q84: “In the sandpit”.
- Q153: “They use different blocks every day”.

Figure 4.34: Block play Photograph 4.34: Children are building a block structure outside, ELC 158
Natural materials, like sand and water, provide opportunities for activities that are sensory rich, soothing and therapeutic. Sand (an open-ended material) provides unlimited creative possibilities, while it also supports physical, social, emotional, cognitive and language development (Schirrmacher, 2006: 46-47).

Photograph 4.35 shows three boys playing with plastic shovels and buckets in a sandpit outside. Figure 4.35 demonstrates that 69% of the centres have sandpits for learners to play in.

In their open-ended remarks about the sandpit, the student-participants indicated that in most instances, enough space, shade and accessories were available.

Q48: “Well-cared for sand”.
Q78: “Shaded and big enough for all children”.
Q79: “Under cover, most children played in the sand”.
Q84: “Lots of apparatus”.
Q103: “It was huge but not that interesting because of the unchanged toys being displayed”.
Q116: “Learners play once a week”.
Q125: “Children enjoy sandpit most of all”.
Q152: “Enough toys, but unorganised and most of them were broken”.
Q186: “The sandpit is very clean and in the shade to prevent the children from sunburn”.
Q205: “Sandpit with many sandpit toys under the tree house”.

Question 10: Sandpit
Question 11: Water play

Jackman (2005: 237) states that water play can be lively and relaxing at the same time. She further points out that children are naturally drawn to water which can be seen when they are running through a sprinkler, playing at a water table, bathing dolls in a plastic tub, filling and emptying water containers or watering plants.

Photograph 4.36 shows a group of children actively participating in water play in the outdoor play area. They are pouring water to and fro from a variety of plastic containers. Figure 4.36 tells us that 61% of the centres present water play activities for their learners.

From the open-ended responses it is clear that centres offering water play, had various types of water areas and interesting activities and apparatus available for the children.

Q29: “Not every day, only on special occasions”.
Q61: “Sometimes when it is hot outside”.
Q81: “A water tray table was available to all learners outside”.
Q84: “Two water stations”.
Q97: “Changes every day: bubbles, sea animals etc.”
Q104: “A water track and big bath that is being filled up daily with soapy water”.
Q119: “Water play changes every day: colour of the water, warm/cold; bubbles in”.
Q125: “They have a fountain that gets a lot of attention”.
Q137: “Big rock dam with tap and gravel on the bottom”.
Q157: “Four troughs of water with toys available for children”.
Question 12: Sensopathic table

Using the senses for learning helps children make sense out of their world. A primary mode of learning for young children is through the tactile sense that provides information on shape, texture and temperature (Entz, 2009: 149-150; Essa, 2011: 316). Feeney et al., (2006: 241) remind us that mud, sand, water, dough and clay are traditionally the materials used for the sensory development of children. They propose dry alternatives like rice, beans, macaroni, oatmeal, sawdust and aquarium gravel that can be used for pouring and feeling. Mixtures of wet and dry materials can also be used and are ideally played with at sensopathic/sensory tables outdoors (Feeney et al., 2006: 241).

The children in Photograph 4.37 are experimenting with dried lentils and yoghurt glasses at a sensopathic table in the outdoor play area. Figure 4.37 shows that in only 26% of the cases learners had access to sensopathic tables outside for the development of their tactile abilities.

The open-ended responses to this area are similar to those about the indoor sensopathic areas. It seems that centres who did have these areas were using them well and exposed the children to a variety of materials.

Q30: “It is only being used during summer”.
Q122: “Being used a lot”.
Q125: “Powder table”.
Q140: “Discovery table with shells, wood cuttings, seeds etc.”
Q143: “They have a sensopathic road”.
Q153: “Apparatus changed daily. They combined two different materials (pebbles and dinosaurs)”.
Q193: “Several sensopathic trays”.

Figure 4.37: Sensopathic table

Photograph 4.37: Dried lentils for tactile learning at a sensopathic table, ELC 46
Experiences with the natural world are vitally important for young children who spend most of their time indoors. An outdoor environment should have plants, dirt, trees, grass as well as the creatures that inhabit them. A small garden or garden box where children share in the responsibility of caring for plants, is one way to provide first hand experiences with nature and offer meaningful opportunities to dig, sow, water, observe and harvest plants (Feeney et al., 2006: 229; Wellhousen, 2002: 92).

Photograph 4.38 is an illustration of a garden box with herbs, vegetables and flowers cared for by one class in an early learning centre. The children are actively involved in the various stages of sprouting of seeds and planting of seedlings, and with the facilitation of their teacher, they care for the small garden. Vegetable or herb gardens seem to be part of preschools only in a few instances. Figure 4.38 informs us that only 17% of the centres had herb or vegetable gardens.

Very few centres had gardens for the children. The open-ended responses mostly indicate what were present in the gardens, but did not really reveal much about the children’s involvement.

Q64: “Herb garden / fairy garden”.
Q94: “The children’s vegetables are also coming from the garden”.
Q104: “Learners are being encouraged to work in the garden and water the plants”.
Q125: “The whole garden has been laid out in a sensory way. Each class has a little space to plant herbs/vegetables”.
Q135: “There is a plant, that when a learner cuts himself they are told to put the plant on the wound”.
Q153: “They have a trail in the garden so they feel like they are on a hike”.
Q192: “They had mint, lavender and cabbage”.
Q205: “Every learner has an area where he/she plants different herbs and then learns about the uses”.

**Question 14: Animals**

![Figure 4.39: Animals](image)

*Figure 4.39: Animals*

In Photograph 4.39 two rabbits and two tortoises living in an enclosure at an early learning centre are visible. The children can observe, touch and feed them and in a hands-on way learn about the animals’ characteristics and their way of living. Not many centres had animals living in their outdoor play areas. As seen in Figure 4.39 in about a fifth of the cases, namely 22%, children had exposure to animals at the preschools.

Calitz (in Grobler, Faber, Orr, Calitz and Van Staden, 1996: 46–47) explains that animals living in an early childhood centre must be animals that can be petted and handled by children. Calitz suggests rabbits and guinea-pigs as suitable choices. She reminds us that for a tortoise a permit is needed. Bantam fowls and fantail pigeons are easy to keep outdoors. Indoor animals may include mice, hamsters, small cage birds and gold fish in an aquarium (Essa, 2011: 345; Grobler *et al.*, 1996: 46–47).
The open-ended responses revealed that only a few early learning centres kept animals on the premises. Chickens and rabbits seem to be the most popular choice.

Q30: “There are chickens and ducks”.
Q47: “There are chickens, guinea fowls, a pony and rabbits”.
Q88: “Animals visit the school”.
Q93: “An animal cage with tortoises, rabbits and chickens”.
Q135: “There was a rabbit cage where the children could go sit”.
Q152: “Unfortunately it was too small for the number of animals”.
Q205: “Dogs, rabbits, donkeys, goats, chickens, horses, pigs and ducks”.

4.3 Conclusion

In this chapter, I discussed the quantitative results derived from the questionnaires from the perspective of student-participants regarding the availability of indoor and outdoor facilities, as well as the structured learning activities being offered in the early learning centres. In the next chapter, the results from the qualitative data sources are being explained.