Worldschool: Play and Learn

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Summary

During the project we have to come up with games for children between the ages of 4 to 8 in South Africa. We have done this and based them on the games we have in the Netherlands. The games we have made have the same factors as we have here, but according to our client, the materials we used did not match the ones they have in South Africa.

Hereafter we made games with materials that did match the ones the children have, so we also had very different games. Eventually we realized that the games did not achieve the goals of our client, so we have come to a different conclusion and solution for this problem. Which you can read at the of this report.

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Chapter 1. Introduction

1.1 Project

During this project, we got the assignment to make a game which will help the children learn, hence the name Play and Learn. The game also needs to motivate children into making a better future for themselves; by making and playing their own games, the children will see that there is more to the world than the one they are living in at the moment.[3]

1.2 Client

Our client is Ton van der Smit from the foundation Eye For Others. This foundation provides help for people in need in South Africa. This project is mostly done by volunteers.

Ton van der Smit has been organising project trips to South Africa with volunteers since 2003. As a result of these trips, he founded the organisation Eye For Others. Van der Smit self has been visiting South Africa for several years now and still visits it several times a year.

The organisation mainly gives attention to people who are vulnerable, for example: neglected children, orphans, widows, physically impaired, and pregnant woman.

Eye For Others organises trips to South-Africa every year to execute several projects. During these trips they also build shelters and organise sport and play activities, with the purpose of making the lives of people there a little better.

They are currently working on different projects. Not only are they building classrooms and making a traffic park, but they are also working on one really big project, namely: building and arranging a multifunctional child-centered centrum in Douglas

1.3 Our Choice

All four of us chose this project to help other people. Still we individually had our own motives for choosing this project.

Daniël: The reason I chose this project was because helping the children is the main key for all the problems in South-Africa. If we could make a good generation of people (children) then there will be hope for the country.

Hatim: The main reason why this project grabbed my attention so much, was because of the fact that I have always been interested in helping others and more so helping the less fortunate. Children whom never had the same opportunities as us here, deserve at least as much as we do.

Isolde: When I first saw this project it got my attention right away. On the paper that we got you could see that there was a game we had to invent for young children. I really like to communicate and interact with young children. So making a game for them really appealed to me. With this game that we make for children in South-Africa you can make their lives better. I was glad to make a contribute on that.

Rania: I wanted to give the children in a less developed country the same chances we get here, which is to learn. Doing that by making a game sounded like a challenge, which seemed like an interesting thing to do, so I chose for this project.

Chapter 2. Motivation and relevance

2.1 Our situation

2.1.1 Problemsketch

A lot of people see South Africa as one of the most developed countries of Africa. Yet a lot of adults and children live in extreme poverty. Adults are unemployed and as a result of that, they do not have any money to provide themselves or their children with food.

Not only are children in hunger, most of the time they are in pain of having the illness aids or are sexually abused. This results in 80% of the girls between the ages 4 to 6 years no longer being virgins. This is a shocking percentage. A lot of children do not only have to deal with these problems, but also with alcohol problems. The reason for them to turn to alcohol, or even drugs is to forget their pain, but we all know that is not case.

Thankfully there are organisations trying to help these people, for example: Eye For Others. As stated before, this organisation wants to help the lives of neglected children, orphans, widows, physically impaired, and pregnant woman. During this project we mainly focused on the children.

The organisation wants us to find a way to soften the pain of the children's troubles, without the aid of alcohol and drugs. They want us to make a game, a game that eventually makes them want to go to school, work and own money.[3]

2.1.2 Meeting the client

For this project, and of course every other project, it was very useful to keep contact with our client. This way we received a lot of information we needed to do this project, for example the situation in South Africa and what the client actually expects from us.

We communicated through mail and eventually decided to meet in person, because this was easier and it created a better relationship between client and executors of his project.

During the meeting we received information about the children in South Africa, whom live in poverty and are really bored with their everyday life. To fix this problem van der Smit wanted us to make several games, not only so the children can enjoy themselves, but to also let them see that there is more to the life they are leading. The game has to motivate this purpose, so the children can go to school, get a job and make money for a better life.

''From nothing, to something'', a quote from van der Smit. He repeated this multiple times to remind us of what we had to to. Which was to make games that require nothing valuable, because everything that is valuable gets stolen and sold to make money from it. So our assignment was to make several games out of things the children can find on the streets, like plastic bottles and twigs. This way the games will not get stolen and it will not cost anything.

After our meeting with our client we made a list of requirements, on which we had to base our game.

1. The games have to enforce playing together. This includes losing and waiting for your turn.
2. It would be also nice if this game includes the developing skills such as math, language and/or social-emotional development. Including school subjects such as biology, history and/or geography is also possible. It is also possible to teach children argumentation and solving puzzles.
3. If it is possible they will appreciate it if we included a therapeutic effect in the game, because many children were abused at very young age.
4. They want to have the materials assembled in South-Africa on location.
5. We need to make a useful manual, in which we write down all the materials necessary for the games and explain the games as easy as we can.
6. The organisation would also like to see the games tested among children from the ages 4 to 8. We don't need to have a very large group to test the games. It is prefered that we take pictures and make a video of the test situation, which we can include in our manual.[3]

2.1.3 Main question and subquestions

In order for us to make several games, we first had to answer a couple of sub questions, which will eventually answer our main question.

Main question	Is there a game that can motivate children to change their future?
Subquestions	Whereupon do we base a game?
	What are the differences between the games in South-Africa and the games in the Netherlands?
	Which materials are there in South-Africa that we can use for our games?
	What is the difference between the development of preschool children in The Netherlands and children in South Africa?
	What kind of games are being played by children between the age of 4 and 8 in The Netherlands?
	How many children between the age of 4 and 8 understand our game immediately?

2.2 Practical relevance

2.2.1 Expectations of the main question and subquestions

We use the subquestions to get an answer on making the perfect game. Our expectation is thus that we can develop a successful game after answering the subquestions.

2.2.2 Desired outcome of the main question and subquestions

Subquestions:	Hypothesis:
Whereupon do we base a game?	If we know what children play often and what they like in a game, than we got a good game for the children.
What are the differences between the games in South-Africa and the games in the Netherlands?	If we know what the difference is between the games in the Netherlands and the games in South-Africa, than we know what to put in our game and what not.
Which materials are there in South-Africa that we can use for our games?	If we know what materials in South-Africa and Namibië are, than we know what materials we can use for our game.
What is the difference between the development of preschool children in The Netherlands and children in South Africa?	If we know how developed the children in South-Africa are around the age 4-8, than we know for what kind of niveau we can make games of.
What kind of games are being played by children between the age of 4 and 8 in The Netherlands?	If we know what games children play in the Netherlands, than we can use that information to make a proper game for the children in South-Africa.
How many children between the age of 4 and 8 understand our game immediately?	If the children understand our game immediately, than our game is clear enough for them to play it.

Main question	Main question detailed
Is there a game that can motivate children to change their future?	If we can make a game that motivates children to change their future, than they could eventually follow education, have a home and earn money with a job.

Chapter 3. The goal in this project

3.1 The elaboration of the subquestions

Subquestions	Elaboration
Whereupon do we base a game?	We want to know what children like in a game and why they play games. This is very important, because if we know this answer we can make a game reliable on those things children like.
What are the differences between the games in South-Africa and the games in the Netherlands?	We wanted to do research on the games in South-Africa and the games in the Netherlands. Maybe we could use some games that are played in the Netherlands for South Africa or we could make the existing games in South Africa better.
Which materials are there in South-Africa that we can use for our games?	We have got to make a game that requires materials that are already in that country. Before we can make a game we need to know what we can use.
What is the difference between the development of preschool children in The Netherlands and children in South Africa?	We want to know how developed children in South Africa are, then we know on what difficulty level we can make a game.
What kind of games are being played by children between the age of 4 and 8 in The Netherlands?	This is our first field research. We want to go to a primary school to see what games they let the children play. From those games we can get some inspiration.
How many children between the age of 4 and 8 understand our game in one time?	This our second field research. We can only answer this question if we already have a game, so we can test it and see whether they are easy to understand or not.

3.2 The elaboration of the main question

Main question	Elaboration
Is there a game that can motivate children to change their future?	We want to make a game that motivates children to change their future. This game can ensure that more children will go to

	school, get a job and make money to make their lives better.

Chapter 4. Theoretical frame

4.1 Literature Subquestions

Whereupon do we base a game?

We focused on games that could be played outside, because playing outside has been proven to be more efficient and fun at the same time, but it is even more than that. Playing outside contributes to the development of the child. It ensures that the child learns the rules of society. It should be a moment in which the children come to stand for choices and have to weigh them together. In addition, through playing outside a child finds his own place for the world around him. Enough reasons for playing outside.[1]

What are the differences between the games in South Africa and the games in the Netherlands?

In The Netherlands most of the games are digital, for example they play a lot of games on their Ipad, but in South Africa, the children play on the streets.

The purpose of the games in the Netherlands is for the children to have fun, but at the same time to also teach them something. The games that are being played in South Africa are just for fun or the children play to pass some time.

Which materials are there in South-Africa that can be used for our games?

There are a lot of materials that are laying, as trash, on the ground. The materials that you can find in South-Africa are:
- Rope
- Wire
- Plastic: For example bottles
- Water
- Sand
- Clay
- Bamboo
- Wood
- Stones

Most of those materials are not so useful to make a game. We did want to make a couple of games out of clay, because children can make different kinds of shapes out of it and that way design their own game. The only problem was that we can only use clay if it is put in the oven for a certain amount of time to let it become hard, but do not have an oven in South-Africa for this. So we had to choose other materials for the games.

When we spoke to our client he said that there is lots of plastic (bottles) just lying on the streets, as well as stones, twigs and wire. Throughout the rest of this project we focused on these materials for making the games.[1]

<u>What is the difference between the development of preschool children in The Netherlands and children in South Africa?</u>

In Europe, preschool children between the ages of 4 and 8 get more control over their body. Balancing plays an important role, but there are more things, such as:

- Motility
- Social-emotional
- Speech and language
- Growth

Motility:
The child develops physically, for example: the child can stand on one leg, run faster and hop on one leg.

Social emotional:
In general, children look for contact. Most children are in contact with each other when they are in school. For example: When a toddler is playing in school, he makes contact with other children. Playing, but at the same time, dealing with another toddler. This way the child gets to develop socially and mentally. He plays for example, role playing games such as Mommy and Daddy. It learns to deal with conflict and strive for victory.
He can expel his emotions better and he will approach adults if he is not pleased. The child is being more social with children and with adults.

Speech and language:
At this age the child makes sentences, which are getting longer. He knows a lot of words and learn new words every day.

Growth:

A child at this age grows about 6 inches per year. Some children can grow faster and suffer from growing pains. But we will not go into that part of the situation in this project.[2]

Chapter 5. Work methods

5.1 Field research

<u>**Question:**</u>
What kind of games are being played by children between the age of 4 and 8 in The Netherlands?

<u>Problemsketch:</u>
Above you already read that a lot of children in South Africa are in extreme poverty. To make their lives a little bit better we want to make a game.

<u>Purpose:</u>
We want to go to a primary school to find out what games they offer to the children. With that information we can adjust those games to fit in South Africa or the games can give us other great ideas to make games for those in South Africa.

<u>Hypothesis:</u>
If we know what games children play in the Netherlands, than we can use that information to make a proper game for the children in South Africa.

<u>Working process:</u>
We are going to the school: De Mijlpaal, where we are going to take a look at the games the children between the age 4 and 8 are playing. We make a lot of pictures of those games and use those pictures to come up with a similar game, or even make a whole new game.

<u>Results:</u>

These are some pictures that we took during our visit to De Mijlpaal. Those pictures show us the games that they are playing there. You can see that at a young age the children in the Netherlands are already reading and learning words.

Children at that age in South Africa do not play those games, but are more likely to only play a game that is enjoyable for themselves. Though, we want to put something in a game that is somewhat useful.

Conclusion:
We want to make a game for children in South Africa that enforces them playing together and that teaches them something. The games in the Netherlands also do that but more in a learning kind of way, like counting and reading. We mainly want to let the children in South Africa focus on the playing together part, on which we want to base our game.

Games that we play in The Netherlands are the one who stimulate the social and mental part of the child.

Question:
How many children between the age of 4 and 8 understand our game immediately?

Problemsketch:
We made a game, but we do not know how to children are going to react to the game and if they even understand our game.

Purpose:
We want to test our game among children to see if they understand our game after one try. If they do not understand it, we have to change our game to make them understand the game better. Also we have to see if they like the game. If they do not like it, we also have to change our game, or come up with another one.

Hypothesis:
If the children understand our game immediately, than our game is clear enough for them to play it.

Working process:
-

Results:
-

Conclusion:
Eventually we did not put through this field test. The reason for this is because we did not think it would be very useful for our project. Our project is focussed on the children in South Africa and not in the Netherlands, so we did not think we could compare these two very different countries.

In the literature research you could read that the children in South Africa are developed in another way than they are in the Netherlands. This is thus why we did not chose to do it.

Chapter 6. Results and conclusions

6.1 Results

The results of this project are, of course, the games we created. We came up with different ideas, made them with the materials that we had and wrote that all down.

Game 1: Stone fishing

Gather a plastic bottle and a piece of rope, remove the bottle cap (if necessary). Tie the rope around the bottleneck and try to pick up the stones lying on the ground.

Who wins the game?
Whoever has the most stones in the bottle after a chosen amount of time.

Materials needed:
- A plastic bottle
- A long piece of rope
- Enough stones on the ground

Purpose:
- Concentration

Game 2: Throw it in the bottle

Each player has one bottle and 15 stones. To stabilize the bottles, you can put it in the ground. Each player has to try to throw the stones in the bottle.

Who wins the game?
Whoever has thrown the most stones in their bottle.

Materials needed:
- A bottle
- 15 stones

Purpose:
- Playing together   - Waiting for your turn,
- Concentration   - Dealing with losing

Game 3: Auto race

Make a car out of a plastic bottle, 4 bottle caps, 2 thin sticks and a piece of rope. Insert the sticks, parallel to each other, through the width of the front and back of the bottle. Also insert each of the sticks through 2 bottle caps to represent the wheels and finally tie the rope around the bottleneck. Cut a hole, about the size of your fist, from the top of the car. Now you can gather stones in the bottle. Hold races with other children to see who end up with the most stones.

When do you win the game?
Whoever has the most stones at the end of the race.

Materials needed:
- A plastic bottle
- 4 bottle caps
- 2 thin sticks
- A piece of rope
- Stones

Purpose:
- Playing together

Game 4: Throw it on the hook

Take a piece of wire, shape it like a hook and wind this around a stick. Pierce this stick through each bottle on the same height, so the stick lays horizontally. Use the other pieces of wire to make rings that you can throw these on the hook. If necessary, stabilize the bottles by putting them a bit in the ground.

Who wins the game?
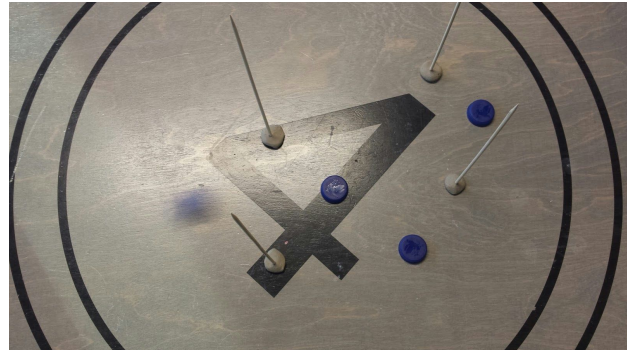Whoever throws the most rings on the hook.

Materials needed:
- 2 plastic bottles, preferably of the same size
- A stick
- A long piece of wire

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Game 5: Frisbees

Gather as much sticks and bottle caps as you can find. Each round, you use 2 sticks to make a goal through which you have to throw the bottle caps. Make each round more interesting by moving the sticks. For example, make the goals smaller or make more several goals behind each other.

Who wins the game?
Whoever throws the bottle caps in the goals after one try, wins that round and whoever wins the most rounds is the winner of the game.

Materials needed: Purpose:
- Bottle caps   - Playing together - Waiting for your turn
- Sticks   - Concentration   - Dealing with losing

Game 6: Take the other teams bottles

Make two teams with the same number of children and gather 10 plastic bottles. Choose which team is the attacker and which team is the defender. The defenders put the bottles next to each other, so that they form a line and stand behind it. The attackers draw a line in the ground, parallel to the bottles, to stand behind it. They are going to try to steal the bottles of the defenders, but the defenders have the chance to tap the attackers when getting too close.

Rules: Once the defenders start running, all the attackers have to run back to their own line:

- If all the attackers are behind their line and the defender hasn't tapped anyone, then the defender is out of the game.

- The defenders who are out of the game can come back, but only if their other teammates tap an attacker who has a bottle in his hand.

- If the defender taps an attacker before he has reached his line, the attacker is out of the game.

- The attackers can get back in the game if their other teammates take a bottle and are all back behind their line.

Who wins the game?
Whichever team takes out all their opponents first.

Materials needed:	Purpose:
- 10 bottles	- Playing together - Waiting for your turn - Dealing with losing

Game 7: Gather them all

Use as much sticks as you can find to make 2 circles, of the same size, for each team. One member of each team has to be blindfolded, so that the other team members can fill the circle with 10 big stones. Once they are finished, the blindfolded members will step into the circles and their team has to lead them to the stones by telling them where to go.
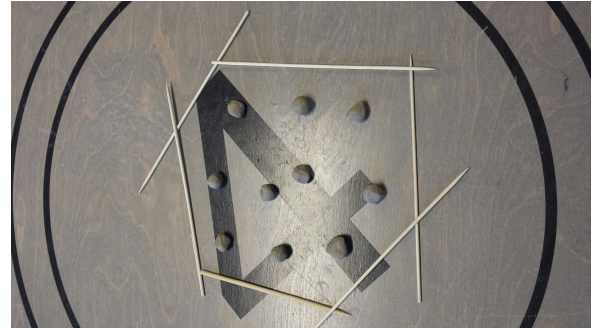
Who wins the game?
Whoever gathers all the stones first.
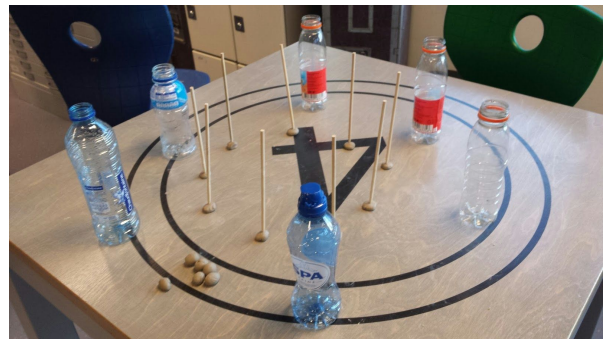
Materials needed:	Purpose:	
- Sticks	- Playing together	- Waiting for your turn
- 10 big stones	- Concentration	- Dealing with losing

Game 8: Hit the bottle

Gather as much sticks as you can find and stick them vertically in the sand. Gather around six bottles and put them around the sticks. With some stones the children can try to throw the stones into the bottle with first touching the sticks.

Who wins the game?
Whoever has the most stones thrown into the bottle in a chosen amount of time.

Materials needed:	Purpose:
- 6 bottles	- Playing together
- 6 sticks	- Waiting for your turn
- Stones	- Concentration
	- Dealing with losing

(This was our first idea we worked out, but eventually it turned out this was not possible)

Game 9: Making figures out of clay

Gather as much clay as you can find and make figures out of it.
Make the figures so that they can fit in each other and you can build
a tower with it.

Who wins the game?
Whoever makes the highest tower.

Materials needed:
- Clay
- A flat surface

Purpose:
- Playing together
- Concentration
- Dealing with losing

<u>6.11 Purpose games</u>

Obviously the games are not made without a purpose. In the sub question: What is the difference between the development of preschool children in The Netherlands and children in South Africa? You could read that there are four important factors for children growing up. We based a few purposes on those four factors:

- Playing together
- Waiting for your turn
- Concentration
- Dealing with losing

<u>Playing together</u>
Playing together is a very import aspect. In South Africa you are very dependant on each other, because you do not have a lot of stuff to play with. So to not get bored all day, you entertain each other by playing a game. In the Netherlands more children are likely to play with themselves, because they have lots of stuff to play with. They can use an Ipad for a game or have dolls and puzzles to play with.

<u>Waiting for your turn</u>
Also waiting for your turn is a very important aspect. When you play in a large group you can not always be the one who is the first to do a certain thing. With the games you learn to wait and not get mad when it is taking too much time.

<u>Concentration</u>
Concentration is needed many games. Concentration can be in games that enforce playing together, but can also be in games that are played alone. Waiting for your turn is something where you need to have concentration for when you play in a group. You also need concentration when you play a game on your own. Sometimes a game does not succeed in one time, then you have got to try a few times again to still complete the game.

<u>Dealing with losing</u>
The last aspect is dealing with losing. Most of the group games are with two teams. In the end, there can only be one winner. It is surely not fun to lose, but it happens sometimes and you have got to deal with it. When you play the games more often and you lose a few times and win some other times.

6.2 Conclusions

In the end, the client wants the children to see that there is more than the suburbs. That there lays a whole future for them. The client does not want the children to end up like their parents in the suburbs. He really wants the children to go to school, get a good paid job and then find a stable home.

It is very difficult to say that to a child when he does not see anything other than the suburbs where the have been living their whole life. That is why our client wanted to invent a game that can motivate them to see that there is more.

We made a few simple games that can stimulate the basics of a child. Hopefully the brain of the child gets trained to be more curious about the world by playing those simple games. Those games that only enforce those simple, worthless stuff.

But the actual problem is that the children do not have a good example. They do not have an education, loving parents or a good environment, so they only see the bad stuff around them. They have never had a good example to look at, which they need as a motivation to change themselves. Then we are expected to make a game as a motivation? Any game can achieve this. So it is not about the game itself, but about who shows the children how to play it. They have to show them how to handle certain situations, which can be useful in their future. For example, how it feels to win or lose and how to work together with friends. Also how to respect other people in these kind of situations. That is why adults from the children's environment, who have achieved greatness should be this example.

Chapter 7. Discussions and recommendations

7.1 unanswered questions

The unanswered question is: Do the children in South Africa like the games that we have invented? To answer this question the children in South Africa have to make the games with the materials they have there. While they are searching for the materials, you can see if the children understand the game well. After they have played the game you can see if they really liked it and if they have learned something from it. Were they playing well together or were they fighting? Were they waiting on their turn or were they stealing stuff from each other? When they play our games multiple times, hopefully the result is that the develop their skills in a positive way. We could not answer this question, because unfortunately we could not go to South Africa to test our games among them.

7.2 Learning moments

Working on this project in a group of four made us learn a lot of things. Not only on how to invent a game, but also some personal things, like:

- Dealing with setbacks
- Collaborating with each other
- Emphasize eachothers strengths

Dealing with setbacks
Through this project we especially had a lot of setbacks. The first setback was: What is now actually our project? We got a paper with the assignment on it, but we could not actually see on this paper what our assignment really was. To find a solution for this we thought about contacting our client, which helped us a lot. After contacting and meeting him we got a clearer image of what our project was all about.

Another setbacks was that we could not find a proper idea for a good game. We found it very difficult because it is hard to empathize ourselves in the situation of the children that live in South Africa. We truly asked ourselves the question: why we should make a game? What is actually going on over there in South Africa, which requires us to make a game? These questions were eventually answered by our client, but that does not take away the fact that we lost useful time during the project.

After finally creating a good game, came setback number three. This was after we went to a preschool to learn more about games. We thought of letting the children use clay and making figures out of it, so they can play and learn at the same time. Only after we met with our client, almost done with working out our idea, we found out that using clay was not possible, as stated before. Eventually we also overcame this setback by making a couple of smaller and easier games, using other materials.

Collaborate
Sometimes it was difficult to work together, especially because our group contained four completely different personalities. We did not always see eye to eye on some things, but we tried to talk these things out. This way we could come up with solutions, where everybody was content with. Even if it meant we had to compromise.

Emphasize eachothers strengths
Everybody in the group has their own strengths and because of this we could help each other. Sometimes we had to do things we were not good at, but together as a group we complemented one another.

To give you a better understanding of this situation, we will tell you about Daniël and Rania. Daniël is a very good speaker; he can come up with great arguments and has the ability to convince people by using his words. His difficulty was putting these on paper. On the other hand, Rania is really organised and knows how to put her words on paper, especially in English. By combining each others strengths, Rania could help Daniël with putting his thoughts on paper.

7.3 Recommendations

As stated in our conclusion, we think that the solution to the problem is to give the children an example. This example is not the games that are being played, because every game has the same principle: you can win and lose, which is an example of respect. So it is about the accompaniment of the games, which shows the children what they are supposed to do and how they are supposed to handle certain situations. It has to show them that even after losing, they can say 'Well played'. All of this can be achieved by using adults in the children's environment, whom have achieved greatness as an example.

Chapter 8. Literature

8.1 Sources

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Chapter 9. Logbook

9.1 Planning

Our planning is in the attachment.

9.2 Logbook

Our logbook is in the attachment.

Chapter 10. Attachments

Attachment planning:
Planning

Attachment logbook:
Logbook