NHLStenden University of Applied Science

International Teacher Education for Primary Schools

Location: Meppel, The Netherlands

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Bachelor Thesis

Hand in: 31.05.2021

What is the influence of using students' perceptions of the psychosocial learning environment (PLE) as a reflective tool during lessons on students' learning experiences?

Word count: 10.844

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Abstract

This thesis examined how students' perceptions of the psychosocial learning environment can be used as a reflective tool for teachers in a grade 3 class (age 8-9) in Germany. The relevance of involving students' perceptions, already existing theories and methods is elaborated on.

The main question of this research is: *What is the influence of using students' perceptions of the psychosocial learning environment (PLE) as a reflective tool during lessons on students' learning experiences?*

A variety of data collection methods were used to obtain at the results. Firstly, students were given a questionnaire to assess their perceptions of the current psychosocial learning environment (PLE) in the classroom. Secondly, semi-structured interviews were conducted with students following the questionnaire, as well as with teachers at the school, to elaborate on teacher perspectives on this topic.

The closure of the school due to the federal government passing the Amendment to the Infection Protection Act 'The Emergency Brake' in consequence of the rising numbers of Covid-19, limited the data that could have been gathered. It was not able to conclude if the use of students' perceptions as a reflective tool during lessons would have influenced students' learning experience.

Nevertheless, the conclusion, deriving from the results that could be made, is that the findings of the questionnaire identify clear aspects of the PLE such as the noise level in the classroom and respectful behaviours, which would have been addressed in the intervention phase. Furthermore, the interviews conducted with the teachers identified under what terms and conditions student perceptions can be integrated into lessons.

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1.0 Rational

1.1 Objectives

Students have their own understanding and perceptions of the learning environment and those might be different compared to that of the teacher. A teacher, for instance, can have the impression that they are supporting all the students equally, however, some students can feel that the teacher focuses more on other students and feel left behind. Within the specific context of evaluating students' perceptions specifically, this thesis aims to explore and evaluate the influence of using students' perceptions of the psychosocial learning environment as a reflective tool during lessons on students' learning experience. A part of this project aims to develop an understanding of how students perceive the learning environment, and under which conditions they choose and prefer their personal learning environment. Moreover, to observe if students' perceptions vary after considering their preferred learning environment during lesson planning. These considerations can influence how the teacher is planning lessons. When planning in accordance with the preferred learning environment by considering the students' perceptions, the teacher could be able to adapt certain teaching methods or adjust their personal way of interacting with the students. The process of first asking for students' perceptions, reflecting on what students think, and then implementing students' perceptions and preferred learning environment into lesson planning, might help to create a more pleasant learning environment for the students and the teacher.

1.2 Motivation

I became interested in working with students' perceptions after reading about multiple studies that have used students' feedback as a reflection tool for teachers. In my perspective it is very important to critically reflect and think about how to improve my teaching and the methods I use, therefore, this research aims to develop a tool that supports me in developing new understandings and reflection methods. I plan to accomplish a better understanding of aspects of the psychosocial learning environment in my classroom. I also want to investigate if reflection on the perceptions of students helps me as a teacher to develop a better learning environment.

A personal important aspect is the focus on developing lessons that are relevant for students in my classroom. I hope this research will help me to develop my

interpersonal skillset regarding my awareness including my personal behaviour as a teacher which influences the student's overall well-being in my classroom. Hereby the focus would be on creating a friendly, cooperative, inclusive, and understanding classroom atmosphere. I aim to develop a good understanding of my students' perceptions and how I can implement those into my lessons most effectively. Furthermore, this process will support my development in the competency of reflection and development due to me actively reflecting on student's perceptions and my lessons and their influence on the classroom learning environment. This supports me to get new insights into my way of teaching and gain new perspectives based on students' and teachers' responses.

1.3 Research question

Answers to the following research questions are sought in this study:

What is the influence of using students' perceptions of the psychosocial learning environment (PLE) as a reflective tool during lessons on students' learning experiences?

1.3.1 Sub-question 1

What is the current and preferred learning environment according to students?

1.3.2 Sub-question 2

Under what circumstances and on what terms can students' perceptions on PLE be integrated into lesson planning?

1.3.3 Sub-question 3

What are the differences in students' perceptions of PLE after changing the lesson planning in accordance with this?

1.4 Definition of terms

Relating to the research question, at this point important terms used in this thesis, will be defined as they are understood in this thesis.

Psychosocial learning environment (PLE)

The term 'psychosocial learning environment' (PLE) will be defined as it is understood in this thesis. PLE can be defined as the nature of the interactions between the teacher and their students, or between students and their peers. Looking at the classroom as a social community, this interaction creates a specific atmosphere or climate known as the psychosocial learning environment, which may influence what and how students learn (Walberg and Anderson, 1968; Malik & Rizvi, 2018).

Perception

In this thesis student's perceptions are used as a reflective tool for teachers. The term perception refers to a student's ability to see, understand something clearly (Cambridge University Press, n.d.) and interpret aspects of the environment.

1.5 Significance

The research aims to evaluate the influence of using students' perceptions of the psychosocial learning environment as a reflective tool during lessons on students' learning experience. This includes examining the actual and preferred learning environment in accordance with students' perceptions and the aim of improving the learning environment in the classroom. The study offers some important insights into students' perceptions of the psychosocial learning environment of a grade 3 class in an international school and how these can be used as a reflective tool for teachers. Additionally, this study aims to help to develop a better understanding of what psychosocial aspects of the learning environment are most relevant for students (age 8-9). Moreover, how planning lessons following this, might help teachers to improve the learning environment in their classroom. This thesis provides an important opportunity to advance the understanding of how teachers can use student perceptions of the PLE as a tool for their lesson planning and examine and evaluate to what extent, using students' perceptions can lead to an improvement of the learning environment.

The approach to involve students in the assessment of the learning environment, and not to involve outside observers, may be more beneficial due to outside observers changing the behaviour patterns of the classroom which can affect the measurement of the actual learning environment (Malik & Rizvi, 2018). In primary education, student perceptions are rarely used to evaluate teaching quality (Scheer, Bijlsma & Glas, 2019; Hamre & Pianta, 2010), although recent studies have shown that student perceptions of the learning environment can provide accurate and relevant data for both formative assessment and research purposes (Furguson & Danielson, 2014; Scheer, Bijlsma & Glas, 2019). The evaluation and reflection of teaching methods and the learning environment can be seen as desirable characteristics of teachers due to them leading to a reflective analysis of one's behaviour. Most often when teachers reflect on lessons, they seldom reflect on their interpersonal skills, neither do they engage their students in the reflective process (Khine & Lourdusamy, 2006). Arends (2007) stated that for students' social and academic learning, careful and reflective thought are required. This research will focus mainly on students' perceptions and will therefore evaluate how the implementation of students' perceptions in the reflective process of lesson planning may affect teachers' work and the learning environment. Furthermore, Tunçsiper and Mutlu (2020) point out that research on student perception is mainly dominated by quantitative research designs. Therefore, to understand the real nature and dynamics of classroom learning environments, there is a need for qualitative research studies to be carried out, with teachers and students in focus.

2.0 Literature review

2.1 Learning environment

The concept 'learning environment' is a broad and inclusive definition that incorporates all kinds of activities and processes of learning and teaching (Tunçsiper & Mutlu, 2020). The learning environment in the classroom can be defined in multiple ways and can refer to the tone, ambience, or atmosphere within the classroom created by the teacher (Aldridge, Fraser & Sipho Ntuli, 2009; Dorman, Fisher & Waldrip, 2006). According to Arends (2007), the classroom environment may seem similar when compared with others but is very different when processes and procedures are observed. There are two key components in the classroom environment, namely, the

physical and human components. The physical component involves all the physical items present in the classroom, such as blackboard, chairs, lighting, projector, books, computers, etc., while the human component consists of people in the classroom, i.e., teachers and students.

Arends (2007) draws attention to students' differences in the preferred learning environment in aspects such as sound, light, seating patterns or emotional support, degree of structure, or interactions with peers. The time spent on building a productive learning environment will help the teacher to minimize frustrations and the expertise of teachers will be extended to achieve student support and engagement in academic tasks. The quality of the learning environment has a significant influence on students' learning (Dorman, Fisher & Waldrip, 2006). The hypothesis that student results are impacted by the way teachers organize the learning environment is supported by a wide body of study (Darling-Hammond, 2000; Rockoff, 2004; Nelson & Christ, 2015). The methods and decisions of teachers affect the academic involvement, encouragement, effort, and achievement of students (Roorda, Kommen, Spilt & Oort, 2011; Skinner & Belmont, 1993).

How students learn and accomplish their goals, according to Khine (2001), depends on the dynamics of the physical environment in the classroom and the psychosocial experiences between them (Loh, Pang, & Lajium, 2020). Social, psychological, and pedagogical characteristics that affect student performance and attitudes are part of the learning environment (Skordi & Fraser, 2019). Moos (1974) and Walberg and Anderson (1968) had a contributing role in the emergence of the concept of the learning environment. Moos (1974) identified three basic dimensions that are components of any learning environment a) relationships; b) personal development; and c) system management and change. The dimension named relationships, as the name suggests, refers to the verbal and non-verbal interactions between human beings that take place. To provide opportunities for personal growth and promotion, the dimension called personal development reflects the characteristics of the environment. The dimension of system management and change emphasizes the environmental characteristics of being consistent and regulated as well as transparent and responsive to change (Skordi & Fraser, 2019).

The learning of a person is affected by the learning environment which consists of the physical, psychosocial, and emotional conditions and the social and cultural influences. Fraser's (1994) definition of learning environment dates back to Moos

(1974) and identifies three categories, which are psycho-social, social and physical in defining the term learning environment. Fraser and Hebert (1991) stated that the classroom learning environment has a variety of meanings; it generally refers to the overall climate, structures, processes, ethos within classrooms that are integral elements that affect the learning of the students. In addition, variables such as instructional materials, physical environments, teaching strategies, peer engagement, and contact between teachers and students may be classified as factors of the learning environment (Tunçsiper & Mutlu, 2020).

2.2 Psychosocial aspects of the learning environment

Fraser (1998) focuses mainly on the psychosocial aspects of the learning environment and defines the classroom learning environment as a social, psychological, and pedagogical context in which learning occurs and influences the success and attitudes of students (Loh, Pang, & Lajium, 2020). Aspects of the psychosocial environment involve the nature of the interaction of the teacher with their students or students with their peers. This interaction generates a particular atmosphere which is referred to as the psychosocial environment (Malik & Rizvi, 2018). Walberg & Anderson (1968) believed that the psychological or social environment of the classroom refers to climate or atmosphere as a social community that possibly affects what and how students learn. The psychosocial factors of the learning environment (e.g., interaction between students, students and teachers, students and environment) in a classroom have an important role in the establishment of a productive learning environment (Khine, Fraser, Afari, Oo & Kyaw, 2018; Ahmad, Shaharim & Abdullah, 2017). According to Zandvliet & Fraser (2005), students' satisfaction with their learning and learning environment can be directly associated with their perception of the psychosocial aspects of the environment. Furthermore, Ahmad, et al. (2017) point out that the physical and psychosocial aspects of the classroom learning environment will contribute to teaching and learning satisfaction and have a significant impact on students' learning. The psychosocial learning environment has a significant effect on students' motivation to learn, productivity, and comfort among the teacher and students and encourages active participation.

2.3 Measuring students' perceptions of psychosocial learning environment

Perceptions of students can be used as a measurement instrument to provide data and insights on the learning environment and the strengths and concerns that need to be addressed. Student impressions are a valuable source of knowledge about the learning environment, according to Fraser (1998), since they experience several different learning environments and spend enough time in the classroom to develop an accurate opinion (Loh, Pang, & Lajium, 2020). Moreover, the experienced classroom environment might be perceived differently by the teacher and students, therefore the learning environment can be improved by focusing on students' perceptions due to them ultimately responding to what they perceive as important (Nelson & Christ, 2016; Rodriguez, 2008; Waxman, Padron & Keese, 2020).

Research in the domain of learning environments has a strong focus on investigating students' perceptions of the learning environment (Fraser, 2002). Several studies have also attempted to explore the correlations between these views of the learning environment and the cognitive and affective outcomes of students, resulting in a large number of studies with correlational study designs (Den Brok, Brekelmans & Wubbels, 2004; Den Brok, Bergen & Brekelmans, 2006; Fraser & Fisher, 1982; Fraser, Aldridge & Soerjaningsih, 2010; Kim, Fisher & Fraser, 2000; Mutli & Yildirim, 2019; Ovbiagbonhia, Kollöffel & Brok, 2019; Wei & Elias, 2011; Yang, 2015; Tunçsiper & Mutli, 2020). Past studies have used students' perceptions as a method to improve the learning environment based on the perceptions of the actual and preferred learning environment. The same procedure was mainly used which included a five-step process. Firstly, the process involves the assessment of the learning environment based on students' perceptions. Secondly, based on students' responses the teacher would look at the feedback given by the students. Thirdly, the reflection process would start including a discussion about findings. Fourthly, the teacher decides on intervention methods and carries them out over some time. Lastly, the students will be asked to anew the questionnaire to determine whether their perception of the learning environment changed in comparison to their perception in the previous questionnaire (Aldridge, Fraser, & Sipho Ntuli, 2009).

The use of students' perceptions in research also raises some concerns about the validity and reliability of the perceptions of the data (Jong & Westerhof, 2001; Ferguson, 2012; Kunter & Baumert, 2006). This generally involves the question to

what degree learners' have the ability to distinguish between the various aspects of teaching. It is debatable whether students can distinguish between different teaching quality constructs and whether student perceptions are confounded with teacher popularity (Fauth, Decristan, Rieser, Klieme, & Büttner, 2014). Fauth, et al. (2014) point out that research on the perception of teaching quality in primary education by students is limited, and therefore additional research is needed to assess the degree to which such perceptions could be used to measure the quality of educational practices.

A relevant method for research on learning environments is the 'What is Happening in this Class' (WIHIC) questionnaire, which was developed in 1996, by Fraser and further refined by Aldridge and Fraser in 2000 (Dorman, 2008). The questionnaire WIHIC is a frequently used method to evaluate students' perceptions of the learning environment mostly with the focus on the psychosocial aspects of the learning environment. Since then, the WIHIC has been integrated and used in multiple studies all over the world, for example in Indonesia (Wahyudi & Treagust, 2006), Canada (Zandvlier & Fraser, 2005), Australia (Dorman, Fisher & Waldrip, 2006), Turkey (Telli, Cakiroglu & den Brok, 2006), India (Koul & Fisher, 2006), New Zealand (Saunders & Fisher, 2006), Singapore (Khoo & Fraser, 2008), the USA (Allen & Fraser, 2007; Martin-Dunlop & Fraser, 2008; Ogbuehi & Fraser, 2007), and Canada, England and Australia (Dorman, 2003; Dorman, 2008). 56 items allocated to seven underlying scales (student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation, and equity) are included in most of those questionnaires. Using a five-point frequency format, students respond to items (Almost Never, Seldom, Sometimes, Often, Almost Always). The distinction between the actual and preferred learning environment is of particular importance. While the actual form obtains information about what students consider to be the present atmosphere in the classroom, the preferred form measures the perceptions of students about what environment they want in the classroom (Dorman, 2008). Other recent research methods are the Responsive Environmental Assessment for Classroom Teaching (REACT) formative assessment tool or the Constructivist-Oriented Learning Environment Survey (COLES) - an instrument to assess students' perceptions of the classroom learning environment, in which six of the eleven scales are based on the WIHIC questionnaire (Bell & Aldridge, 2014).

3.0 Research design

3.1 Participants and context

The research took place in an international school in Bremen, Germany. The school offers an English-language education from kindergarten to grade 12 for approximately 380 students and a workplace for 60 plus staff members. The international school follows the International Primary Curriculum (IPC) in the early learning centre and the elementary section of the school, the International Middle Years Curriculum, and the International Baccalaureate Diploma Programme (IB DP). Participants were chosen based on purposive sampling (Wellington, 2015).

3.1.1 Teacher participants

For the purpose of this thesis, two teachers were interviewed to integrate the teacher's perspective. The participants in this study are the homeroom teacher of grade 3 (8–9-year-olds) in the class where the research is being conducted, as well as the elementary department coordinator who also teaches part-time in grade 1 (6-7 yr. olds).

3.1.2 Student participants

In total 18 students from a grade 3 classroom, participated in the research project. The class consists of 12 boys and 6 girls. The overall age is between 8-9 years. Although English is the most common spoken language in the classroom, the majority of students have a different mother tongue or speak one or more additional languages.

3.2 Research methods and methodology

This research aims to evaluate students' perceptions, reflect on, and interpret their response and change educational practice by implementing the interpretations made into lessons (Wellington, 2015). An interpretivist paradigm is employed since the aim is to explore perspectives of students and professionals, to develop insights into the classroom situation, and see where modifications can be made. Furthermore, the interpretivist approach accepts the influence of the researcher on the collected data for example the questionnaire was done with the students to answer sub-question 1 and 2, which is taken into consideration in the analysis (Wellington, 2015). To ensure

that data are comparable, methodological triangulation seemed to be a suitable way to ensure this. Methodological triangulation, which involves 'within method' triangulation, i.e., the same method used on different occasions, and 'between method' triangulation, when different methods are used concerning the same object of study (Wellington, 2015). The methods chosen for this research, questionnaire, and interview, are used multiple times on different occasions, to increase the reliability and validity of the data for the research project and to answer the main question, if there is a measurable influence on students' learning experience when using students' perceptions as a reflective tool. This study focuses specifically on the psychosocial aspects of the learning environment and the importance of the PLE on students learning experience is reflected on.

4.0 Data collection

The research data in this thesis is drawn from two main sources: questionnaires and semi-structured interviews. Qualitative methods offer an effective way of giving descriptive data for exploratory/evaluative studies, therefore the focus on qualitative data seemed a suitable choice. These methods give insight into students' perceptions and experiences regarding the PLE and teachers' perspectives regarding the topic of using students' perceptions as a reflective. The PLE is linked to students' motivation to learn, productivity, and comfort among the teacher and students and encourages active participation (Ahmad, et al., 2017).

4.1. Qualitative questionnaire

The acquired data from the students' questionnaire is qualitative in nature because it seeks to understand their opinions and perceptions on the PLE (Wellington, 2015).
To assure that the questionnaire would cover relevant aspects of assessing the learning environment, the categories of this questionnaire were inspired by the categories of the questionnaire 'What is happening in this class' created by Aldridge and Fraser in 2000. The homeroom teacher of the class was asked to review the questionnaire to ensure that the questionnaire is appropriate for the class and its students. Moreover, an introduction phase took place with a lesson for the students to introduce what a questionnaire is, how to work with it and what the purpose of this method is. Students' satisfaction with the learning and the classroom environment can

be directly associated with their perceptions of the psychosocial aspects of the learning environment (Zandvliet & Fraser, 2005), which points out the importance of including student's perceptions. Furthermore, the teacher and students can interpret the experienced classroom environment differently, so the learning environment can be enhanced by reflecting on the perceptions of learners because they ultimately respond to what they perceive to be important. (Nelson & Christ, 2016; Rodriguez, 2008; Waxman, Padron & Keese, 2020).

The questionnaire was given to all students in the class to develop an understanding of how students experience the PLE. The categories for the questionnaire are teacher support, student cohesiveness, equity, task orientation, cooperation, and involvement. The students read the statements and provided feedback on how they perceive the current PLE using the Likert scale (1. Almost Never - 2. Seldom - 3. Sometimes - 4. Often - 5. Almost Always). Two additional questions focused on how they would like the learning environment to be like (preferred PLE). This data is used to assess how students perceive the PLE and what factors should be considered when making changes regarding the PLE by the teacher.

4.2 Semi-structured interview

The semi-structured interviews took place after the questionnaires have been analysed to elaborate on the findings and to gain a more in-depth understanding of the data. The semi-structured interview was chosen as a method due to the flexibility to decide on the range and order of questions quite spontaneously, depending on the interviewee's responses (Austin, 2016). Furthermore, doing a follow-up interview after the questionnaire allowed to investigate and prompt things that were not discovered in the questionnaire, as well as develop a better understanding of the responses, including the participant's experiences, feelings, and perceptions.
(Wellington, 2015).

4.2.1 Interview students

After the questionnaire, the semi-structured interview took place, interviewing 8 students of the class. The aim was to evaluate the responses given in the questionnaire in more depth and to get more elaborative data to widen the understanding of students' responses. The collected data of the questionnaire and

interviews was used to identify where the teacher can make changes in their lessons and what the focus would have been for the intervention phase. This would have mainly relied on students' responses and what the majority of the class identifies as the preferred aspects of the PLE.

4.2.2 Interview teachers

The interview with the teachers aimed to answer sub-question 2 'Under what circumstances and on what terms can students' perceptions on PLE be integrated into lesson planning?'. The aim was to get an insight into the perspectives of the teachers on their experiences with including and elaborating on students' perceptions of the PLE in their lessons. Moreover, what aspects teachers believe are important to consider and must be taken into consideration. This data aided in determining which important factors should be considered during the research process and in gaining multiple perspectives on the subject.

5.0 Analysis questionnaire and interviews

The student questionnaire provides an overview of participants' perception of the current and preferred learning environment. The data of the questionnaire is used to gain an overview of what is most relevant for the participants. The analysis process based on Wellington (2015), includes the following stages:
1. Immersion
2. Reflection
3. Taking Apart/Analysing Data
4. Recombining/Synthesizing Data &
5. Relating and Locating Data.

In the stage of immersion, the aim is to get an overall feeling of the data, this includes writing down initial thoughts, highlighting keywords, or selective transcribing of both the questionnaire and interview. The reflection process involves processing the initial thoughts and reflecting on the data. For example, was there any response surprising or is there already a noticeable pattern in the responses. The next step is to break the data down into different components for example small units and start coding. The categories are used to identify which categories should be chosen for further evaluation in the interview. The interviews are transcribed, and later codes are applied.

The codes for the interview with students mainly arise during the analysis of the questionnaire. After breaking the data down into different components, the next step is to identify recurring patterns, themes, and regularities in the data. Which means to connect and compare different pieces of the data of the questionnaire and interview. Afterwards, the next step is to compare and contrast the data from similar research and what the benefits and challenges are compared to other research. This process will be repeated after the intervention phase. This will allow identifying if the intervention phase has changed the participants' perceptions of the PLE. The categorization of the data enhances the chance of finding patterns or developing a theory. Following the paradigm, the data analysis is based on interpretations that are mentioned in any conclusions that are drawn from this as a disclaimer.

6.0 Results

In this chapter, the collected data is analysed. Also, the difference between the plan for data collection and processing and its execution is described. The research questions are stated and a clear description of the link between the data and each question is made.

6.1 Sub-question 1

What is the current and preferred learning environment according to students?

To answer this question a questionnaire (appendix 1) was given to 14 students and interviews with 8 students were conducted (appendix 3 & appendix 4). The questionnaire provided an overview of how the students currently perceive the psychosocial learning environment in the classroom. The research proposal stated that the questionnaire would be given to student's multiple times during the research process. During the timeframe when the data collection should have taken place, the federal government has passed the Amendment to the Infection Protection Act 'The Emergency Brake', which led to the closure of the school during this period. Due to the changing circumstances and the lack of information when schools would reopen it was concluded that it would not be possible to collect enough data which could provide a clear measurable influence on students' learning experience. The decision was made to distribute the questionnaire to students once, but to conduct additional interviews to gain a more in-depth understanding of their responses.

6.1.1 Questionnaire students

The questionnaire was distributed to 14 of 17 third-grade students. Two students are home-schooling due to the Covid-19 circumstances, and one student was absent.

The statements in the questionnaire are based on the categories of the WIHIC questionnaire: student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation, and equity (Dormann, 2008). Due to the age of the students and after evaluating the questionnaire with the homeroom teacher of the class, 12 statements were chosen for the questionnaire. Those statements were intended to convey an overall impression of the PLE in the classroom. In addition, it was concluded to use symbols (emoticons) instead of numbers, due to it being more visually appealing to the students and leading to a better understanding of the meaning of their responses. The duration of the questionnaire (15min) was of suitable length for this age group. Before distributing the questionnaire to students, the purpose of the questionnaire and the overall topic of the questionnaire were explained. To avoid ambiguity and misunderstandings among students, the term "learning environment" was defined and explained. To avoid misunderstandings and ensure that students understood the meaning of each statement in the questionnaire, each statement was read aloud, and students were given the opportunity to ask for clarification if necessary. The word 'psychosocial' was removed from the students' questionnaire because it might have led to confusion and it would not have added specific value to students' responses.

Before the analysis process of the questionnaire, it was decided to look at each questionnaire without knowing who filled it in. This allowed to write down comments and highlight sections without having presumptions. The data for both tasks were processed through Excel and developed into a diagram for an immediate overview of the responses. This enables patterns to be identified and to gain an overall feeling and sense of the answers. Task one showed that 50% of the students rated the classroom environment as 'very good' (5 stars) and 43% as 'good' only 7% rated it as 'okay' (figure 1). This can be interpreted as students having a generally positive attitude toward the classroom environment. Task 2 showed that students were most concerned with statement g), regarding the feeling of being treated equally in the classroom and statement c) asking if students think they work well with other classmates (figure 2).

How many starts would you give the learning environment in our classroom?
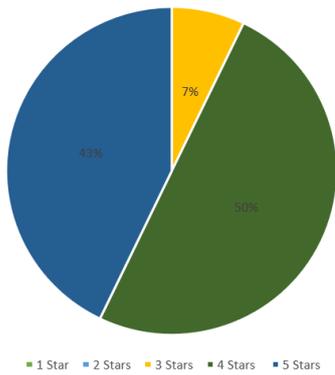
Image 1

QUESTIONNAIRE STUDENTS
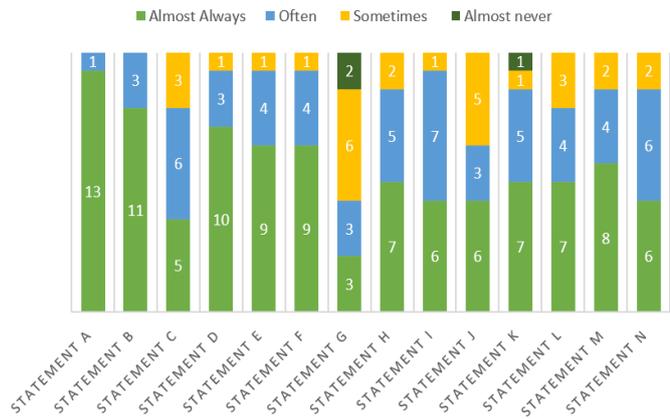
Image 2

The data from tasks 3 and 4 were collected in a table for each student (appendix 2). During this process, the sections that immediately stood out and showed clear patterns were highlighted. This showed whether there were surprising responses or if there was already a noticeable pattern in the responses.

When looking at the data of tasks 3 and 4 the following codes were applied: Noise level in the classroom, bullying, nicer behaviour towards each other/respect, fights or hurting others and general classroom aspects. These codes are based on the recurring statements made by the students. 12 out of 14 children mentioned that the noise level in the classroom is too loud and that there is a lot of screaming in the classroom, which is affecting the environment. 9 of the students wished for nicer behaviour and more respect towards each other. Six students also stated that they do not want any bullying in the classroom. Five of 14 stated that they do not like the conflicts appearing between students. Furthermore, students mentioned that they would like more creativity, more space, group work and more laughing in the classroom which is linked to the code 'general classroom'. In task 4 students were asked to give examples of how they think the classroom environment could create a nicer learning environment.

Task 3: Aspects students are concerned with regarding the learning environment

Image 3

Task 4: How students think they can create a better learning environment
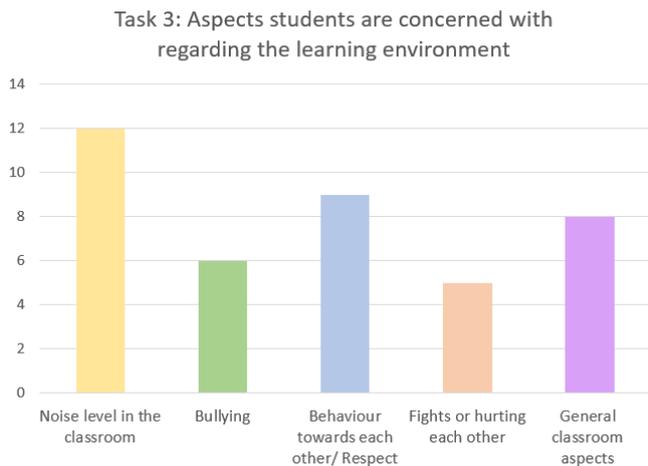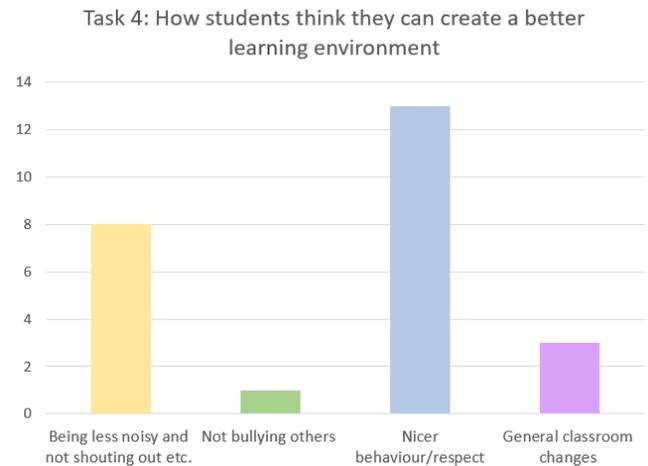
Image 4

These results provided an overall feeling for the students' perception of the PLE in their classroom and the aspects they most care about. All students did not have any problem filling in the questionnaire. The definition of terms before and during filling in the questionnaire helped with clarification and allowed all students to respond to all questions and statements. Therefore, the questionnaire seems age-appropriate and shows reliable data.

6.1.2 Interviews students

The student interviews aim to evaluate the responses given in the questionnaire in more depth and to get more elaborative data to widen the understanding of students' responses. In the original planning, in the first phase of data collection, only four students would have been interviewed to reflect on the responses in the questionnaire and additional interviews would have taken place after the intervention phase. Due to the circumstances, the intervention phase did not happen, nevertheless, the data gives an overview of how students currently perceive and what the preferred PLE is. In total 11 out of 14 students were able to participate in the interview. Based on parents' consent, students consent and the responses in the questionnaire it was decided to interview 8 students. It was taken into consideration to interview students with different perspectives according to the answers in the questionnaire, four of whom had a more positive perception of the PLE and four students who showed a more negative perception towards some of the statements in the questionnaire. The questionnaire of each student was taken into the interview, so the researcher could directly refer to the answers given by the interviewee.

For the analysis, the interviews were transcribed, and codes were applied. The codes for the interview were based on the codes of the questionnaire (1. Noise level in the class, 2. Bullying, 3. Being treated equally, 4. Behaviour/ Respect, 5. General classroom aspects). The aim was to identify recurring patterns, themes, and regularities in the data. Which meant to connect and compare different pieces of the responses of the students and the data of the questionnaire and the interview (appendix 4). The interviews with students went well and it was possible to create an open dialogue with the students about their perceptions. Using the questionnaire helped to start and guide the conversation. All students seemed confident to answer all the questions.

The interviewees may not be able to distinguish between the various aspect of teaching (Fauth, Decristan, Rieser, Klieme, & Büttner, 2014) due to their age. However, most students seemed to be able to reflect and elaborate on their responses in the questionnaire. It still must be taken into consideration that at the point when the interviews took place students knew the researcher which might have influenced their responses. Nevertheless, the answers given by students revealed a clear link to the answers in the questionnaire and deepened the understanding of students' responses. In the following section an overview of each code and the findings is given, to evaluate the responses and explain the interpretations made, based on the data of the questionnaire and interview.

6.1.2.1 Noise level in the class

According to the questionnaire, interviewees believe that a decrease in the noise level within the classroom would improve the environment. When students were asked if they like the learning environment in the classroom the responses showed that students mostly like the environment in the class, but that the noise level in the classroom is affecting them and their learning, for example, student 2: "*Most of the time I can work very well, just the shouting is disturbing and annoying sometimes.*", or student 4: *Interviewer: How, is the noise affecting you?*" S.4: "*Um, too loud. I can't listen to what others say. Interviewer: And what does it do to your learning? Can you still concentrate when it's that noisy?*" S.4: "*No. Hmm.*" and student 9: "*Yes. Just sometimes it is too loud, so I am scared to say something. And my mom says that I need to tell the teacher when it is too loud, but I am too shy. And often they keep shouting at each other and there is not a lot happening.*" And student 11: "*Sometimes*

when everybody behaves badly and loud I can't really concentrate. I always try to think about what the teacher said but I can't really concentrate. I can't do that when it's so loud."

These findings link to the responses and finding in the questionnaire regarding task 3 and 4. Part of student cohesiveness is classroom functioning which is also concerned with students' corporations, friendships, and communication furthermore the aspect of involvement concerns the extent to how engaged students are in class, how much they participate in conversations, and how much they enjoy it (Dorman, 2008). The data shows that the PLE, specifically the aspects and student cohesiveness and involvement, may be affected by the noise level in the classroom. As the PLE involves the nature of the interactions of the students with their teacher and peers (Malik & Rizvi, 2018), the noise level possibly generates the atmosphere and affects how the students in the class learn and feel (Walberg & Anderson, 1968).

6.1.2.2 Bullying

In tasks 3 and 4 of the questionnaire, students listed bullying as an aspect of the classroom that they would like to discuss. The topic of bullying was not directly part of the designed questionnaire but arose in task 3 when students had to think independently of aspects that concern them in the classroom. The definition of bullying was not previously discussed with the students which led to different interpretations of the word 'bullying'. When students were asked to give examples of when they feel that bullying is happening in the class, laughing about each other, hurting each other and exclusion were mentioned. For example, student 8: "*Sometimes in this class, some children just get bullied by other children in the class sometimes and are not fair when we work in the groups. They don't want to play together outside and don't want to sit with them during lunch*". or student 4: "*Sometimes people are laughing about them, or they don't want to be in a group with them*". When asked how they feel about it and if it affects their learning, student 13 said: "*Hmm sad. Sometimes I don't like to say something in class.*" Interviewer: "*So it is affecting your learning?*" S.13: "*Yes.*". Even if certain students have a different understanding of bullying, this does not rule out the possibility that student-to-student interactions and behaviour are not ideal. The psychosocial factors of the learning environment, for example, classroom interactions play a significant role in the creation of a productive learning environment (Khine, Fraser, Afari, Oo & Kyaw, 2018; Ahmad, Shaharim & Abdullah, 2017).

6.1.2.3 Being treated equally.

In the questionnaire statement g) 'Everybody in class is treated equally/the same' only three students said that it is almost always, on the other hand, two said that it is almost never. The responses to statement g) were the most outstanding and were therefore addressed in the interview. The responses to why students felt this way were quite different and might show a different interpretation of this statement. It seemed difficult for some of the students to evaluate their answers and they were not able to explain their reasoning. For example, student 4: Interviewer: "*Do you have the feeling that the teachers are reacting the same towards every student*?" S.4: "*Middle*" Interviewer: "*Why*?" S.4:*" I don't really know.".* Student 2 who said that students in the class are only sometimes treated equally/the same explained his/her answer as follows: "*You know, as somebody is doing some work in here, other people on the other team is not doing the work. So some of the group have to do the work and the others still get the good grade for it. That is not very equal.*". It seems that he or she is concerned when working in groups and that some students are not doing the same amount of work. Another example was given by student 11.: "*Because sometimes somebody says something about somebody that is not true. And sometimes* ▮▮▮▮ *is not very nice to her friends and tells them what to do. But she is still always treated very nicely. And other people like* ▮▮▮ *are not being treated nicely, that is why I said it is only sometimes.*". This student seems more concerned with how students treat each other and that some students in the class are not treated as nicely as others. Statement g) stood out the most in the questionnaire since students rated it mostly negative compared to others. Nonetheless, the interview revealed different interpretations of this statement by the students, which would need to be addressed if the students had to fill out the questionnaire again.

6.1.2.4 Behaviour/ Respect

The questions in the interview regarding the behaviour/respect in the classroom were based on the answers given to statements c), d), j), k), and m), which were concerned with the behaviour towards each other and how much students enjoy working with each other. Overall, the responses to these statements were mostly positive (see Image 2). When students with a more negative attitude towards these statements were asked to reason their responses, they explained that some behaviour in class towards

peers and the language in class can be something that is bothering them, for example, student 4: Interviewer: "*Do you think that everybody is like treating each other nicely*?" S.4: "*Not always because sometimes they are behaving very naughty.*" Interviewer: "*How do they show naughty behaviour? What are they doing*?" S.4: "*Because they are often not listening to the teacher or they are being silly to you.*". Moreover, 'naughty' and 'silly' language were examples of not nice behaviour. Overall, all students seem to be happy with how students in the class are behaving towards each other and show a positive attitude towards the learning environment.

6.1.2.5 General classroom aspects

The PLE also includes the interaction between students and their environment (Khine, Fraser, Afari, Oo & Kyaw, 2018; Ahmad, Shaharim & Abdullah, 2017). Overall, as task 1 shows students perceive the learning environment as good. When students were asked if the learning environment is affecting their learning environment in a good or negative way the majority of students responded that it is in a good way e.g., Interviewer: "*All right. So do you have the feeling the environment is affecting your learning in a good or a more negative way*?" Student 4: "I*n a good way. Yes.*" A more specific example about the physical was given by Student 8: "*I did. I did this one because the classroom is also a bit messy, it can be cleaner.*" Interviewer: "*All right. So we can keep the classroom more clean, that would improve the learning environment*?" S.8: "*Think so.*". Another student compared the environment to her previous school and explained that she thinks that teachers are not strict enough and that being stricter might influence the noise level in the classroom.

According to Arends (2007), students have different perceptions of their ideal learning environment, which includes sound, light, seating arrangements, emotional support, degree of structure, and peer interactions. Therefore, it is not surprising that the answers given by students differ. Nonetheless, the student's responses do show that the majority of the class feels comfortable in regard to the PLE.

6.2 Sub-question 2

Under what circumstances and on what terms can students' perceptions on PLE be integrated into lessons?

To answer this sub-question 2 teachers from the school were interviewed. The interview with the homeroom teacher of grade three had to be done online due to the closure of the school. The interviewee agreed that the interview could be done via the online platform Zoom. The interview was recorded via Zoom and additionally recorded with the phone. The interview with Mr ■ took place in school and was recorded with a voice recorder and with the phone. Both interviewees signed a consent form which allowed the interviewer to record and use the collected data (appendix 7).

The interviews were recorded and transcribed (*appendix 8 & appendix 9).* During the analysis of the interviews, the codes for the analysis were developed 1. Do teachers think the PLE is relevant for students' learning? Furthermore, why is it important to include students' perceptions? 2. Methods used by teachers 3. When do teachers ask for students' perceptions? 4. What are the challenges? Afterwards, the data was transferred into a table to have a better overview of the responses given by both teachers. This enhanced the findings of patterns and similarities.

6.2.1 Do teachers think the PLE is relevant for students' learning? Furthermore, why is it important to include students' perceptions?

One of the first aspects that were mentioned by the interviewees regarding why it is important to include students' perception was that the learning is socially situated. The development of students personally and academically is linked to their interactions with each other and the teacher, interviewee 1: *"So they have their social indirect interaction is is a huge for development, and the development of language and the development of just your actual social behaviours. You know, in general, you know, the, the fact that there is the ability to be compassionate, you know, (…), be a good friend to be a good person. And they learn a lot of that from being around each other."* Asking for students' perceptions regarding the social environment and checking in on how students feel is important due to students needing these relationships, interviewee 2: "*The fundamental question about what good teaching is, which is a relationship. So the relationship comes first before learning did, and developing a good relationship with learners is essential. Ehm, it can really, really be one of the defining*

factors of of success for the child. It is the type of relationship that they have with the teacher. And how the child sees himself as a learner." Both teachers agree on the importance which comes with relationships and social interaction in the classroom and the effect it has on students' learning. As Khine (2001) stated, the dynamics of the physical environment in the classroom, as well as the psychosocial interactions within them, influence how students learn and achieve their goals (Loh, Pang, & Lajium, 2020). Interviewee 1 furthermore mentioned that sometimes the peers in class are the ones having a huge influence on the behaviour of a child "*But children will always test the boundaries, and it's their friends that will actually snap them into place, (...). So the social aspect is, is huge, not only just for their actual academic learning but also for the personal development too*". Taking students' perceptions of the PLE will help teachers to reflect on different aspects of their lessons. As interviewee 1 stated when implementing students' perceptions, it can be seen as the assessment for learning. It gives teachers the chance to reflect on themselves, on the lesson, how students engage in the lesson, what went well and what did not work. Furthermore, interviewee 1 emphasized the importance of reflecting on the small things when working in an international setting with people from various cultural backgrounds and personalities "*It's always good to reflect on little things like that. Ehm and especially when you've got a culture of just completely different personalities*". Further, interviewee 2 emphasized the importance of understanding how culture influences our way of seeing the world and how, as a result of having such diverse backgrounds, there are more sources of data and different ideas coming into play that influence the classroom.

Not just the cultural differences need to be considered but also the differences in teachers and students' perceptions of the PLE. As Nelson and Christ (2016), Rodriguez (2008) and Waxman, Padron and Keese (2020) stated the experienced classroom environment might be perceived differently by the teacher and students. Interviewee 1 said that getting students' perceptions on multiple levels of the lessons and the classroom is important "*So I think perceptions on (…) the lesson itself, the learning environment itself, their strengths and their weaknesses, ehm what they learned what they achieved, ehm always what they would have done differently. Anything they could change, if there was anything they could add, they could do differently. At the end, so ehm yeah, perceptions on every level, (...)*". Moreover, the feedback and perceptions of students can help teachers to reflect on lessons and activities which can shape the curriculum and the way students learn.

To include students' perceptions to shape the curriculum and lessons encourages the voice of the child and might also be linked to the aspect of democracy according to interviewee 2 "*Yes, I think (…) that your theory kind of lends itself to that idea of democracy in your classroom, that people should be heard".* That teachers actively involve students' perceptions and use them as a tool can therefore also be linked to the aspects of human rights "*I think I think that anything that's that encourages the voice of the child. Ehm, and there are the aspects of human rights as well, the child has the right to, to have their opinion consulted on any matter that affects them. So the fact that we follow that line of of thinking. Everything affects them in school, they have a right to give their opinions on, and for them to be listened to. (…), they do have a right to offer opinions. I think it's good to see that and frame that in terms of human rights".* To involve students' perceptions will give students the chance to be heard and actively influence the classroom and curriculum which may lead to a more understanding and cooperative PLE.

6.2.2 Methods used by teachers.

Based on the variety of research that used the WIHIC questionnaire it was utilized as a guideline for the design of the questionnaire in this research to identify students' perceptions of the PLE. To explore potential additional methods, the interviewees were asked what approaches and methods they use to question students about their perspectives of their learning environment. The following approaches and methods were identified.

The preferred method, based on the answers given by the interviewees, was to let students give oral feedback. According to interviewee 1 oral feedback tends to have more meaning for students "Whereas *when I do oral feedback, it tends to have more meaning because they're interacting with each other and they can hear what other people are saying. And it gives them an opportunity then to share you know,* (...)". These methods, according to the interviewee, can be a way to move positive behaviour forward and discuss with the whole class what could be changed.

When asking for students' perceptions it is important to consider according to interviewee 2 that students know why you ask for their perception, that you are specific for example by clearly explaining the criteria, reasoning, and purpose and by modelling the answers and giving examples. Furthermore, frame it in terms of human rights and assure that students know that it is okay if they do not want to give an answer and

make them feel comfortable. Moreover, the teacher needs to assure that the methods they are using are inclusive, interviewee 2: "(...), *giving children alternative ways to express that answer because we've got to be inclusive. So if you've got an atypical, a cognitive, really typical child, they might not be able to, they might not have the cognitive tools to get that. But they have the right to be included. In an answer, you have to give them the right kind of tools. I think it's good to be very specific, not too general, to model things. It's like teaching, how would you normally do, you would be very specific you model, to be inclusive. And I think all these things apply for those as well."* Therefore, the use of multiple tools and methods, being specific and clear may help teachers to engage all students and get a good understanding of students' perceptions not just of the PLE but of the whole learning environment in the class.

6.2.3 When do teachers ask for students' perceptions?

The timing when teachers ask for students' perception also varies based on the intentions of the teacher. Interviewee 1 mentioned multiple points when asking for students' perceptions for example, at the end of a unit, at the end of a school year (especially before report writing) or more often after group activities. The examples given were mostly focused on the activities and lessons, less on aspects of the PLE. The example given by interviewee 1 when asking for students' perception of the learning environment and how they feel about the behaviours in class, seems to be a process that is integrated into classroom routines and due to it being mostly orally the timing seems to be quite flexible.

6.2.4 What are the challenges?

Previous research raised concerns regarding the validity and reliability of the use of student's perceptions (Jong & Westerhof, 2001; Ferguson, 2012; Kunter & Baumert, 2006), due to the question of students if learners can distinguish between various aspects of the learning environment (Fauth, Decristan, Rieser, Klieme, & Büttner, 2014). Moreover, if students can distinguish between different teaching quality constructs and whether student perceptions are confounded with teacher popularity. Based on this research also the interviewees were asked if they think that students of this age can judge the PLE. Interviewee 2 stated that it might be difficult to judge the validity of the answers given by students "*It depends on the questionnaire because the kids it depends. It depends on how you present it to them. Because that will, will*

affect I think, that will affect the kinds of answers that they give in the questionnaire. So they might be some of the older kids might be. They might be thinking, What's the teacher expecting me to write in this questionnaire? So it's difficult to judge the validity.". Moreover, interviewee 2 points out that the validity of the answers can be questioned "*As a researcher, from a from a research point of view you you have to question the validity. And I don't mean that in a nasty way that we should, (…) question what children are telling us, I think we should all be believing children. However, from from a technical research point of view, from a scientific point of view, again, it's the question of the child's thinking. Okay, what does this person want me to say*?" It should be considered that the methods the researcher is using might influence students' responses and that also the social aspects of the classroom might influence the responses given by students. Students might not give honest answers or have things that they do not want to share with others, as interviewee 2 pointed out: "*And they're not really, they might not actually be that honest. And they might have things that they don't want to say about the learning environment. Because it might be about you, actually I don't like you in this learning environment because you shout at me. You know, and that would be a perfectly valid thing for the child to express. But you're not going to get that. The validity, it is difficult. Also, as well, you have groupthink and and, you know, groups in social psychology, where that's one of the drawbacks of circle times and things like that, as young children is that they say what others and what they say, because they think about what others want to hear on the other side or they mirror what others say. (...). And it's that idea of wanting to belong and to be together that gets in the way of what it triggers.*". These examples and responses of the interviewee show that research needs to consider that the social aspects and the methods used, will influence the responses given by students and can influence the validity and reliability of the data. Nevertheless, both interviewees agreed that it is important for teachers to include and reflect on students' perceptions in their practices.

Furthermore, both interviewees agreed that not all teachers might be interested in including students' perceptions due to it being time-consuming and challenging their teaching approaches. Both interviewees explained that there will always be teachers that are not interested in students' perceptions and ideas and will not create the conditions to ask for students' perceptions and will rather not change their practices "*I know some teachers know that fear of what what's going to come out they also don't like to relinquish their kind of like control on the learning*" or "*I appreciate that some*

teachers need that control. They don't like flexibility, they don't like change, they don't like adaptability.". Moreover, interviewee 1 pointed out that sometimes teachers just run out of time and if students for example enjoy an activity, therefore having the time to actively ask for students' perceptions might be limited. The conditions teachers create, and their interest and engagement have a huge influence on how students can and might also want to engage in the process of reflection.

6.3 Sub-question 3

What are the differences in students' perceptions of PLE after changing the lesson planning in accordance with this?

This research aimed to observe if there would be an influence on students' learning experience when using students' perceptions of the psychosocial learning environment (PLE) as a reflective tool during lessons. To answer sub-question 3, it would have been necessary to collect the data over a longer period as it was planned in the research proposal. Due to the closure of the school and the unpredictable circumstances, if schools would reopen or not, this was not possible and led to less data than previously hoped for. Therefore, this research was not able to answer this sub-question. Nevertheless, when looking at the data of sub-question 1, the intervention phase would have most likely been concerned with the noise level in the classroom.

6.4 Reliability and validity during the research process.

To support the reliability and validity during the research process multiple aspects were taken into consideration. The term reliability refers to the idea to what extent the research can be replicated in a different context to give the same result. Validity refers to the degree to which a method, a test, or a research tool measures what it is supposed to measure (Wellington, 2015). To enhance the reliability and validity of this research the use of multiple methods and pre-testing of the methods are important aspects that were part of the research process. In cooperation with the homeroom teacher both methods, questionnaire, and interview questions for students were reviewed, to check if both methods including the questions, statements, and layout, are suitable for the target group and do not include any leading statements or biases. Furthermore, the questionnaire and interview were checked by multiple parties, for

example, the mentor teacher and peers. The cooperation with the mentor teacher improved the questionnaire and assured the reliability of the answers given by students.

The questionnaire is inspired by the 'What is happening in this class' questionnaire, which has been used in multiple studies (see section Measuring students' perceptions of psychosocial learning environment). Therefore, the validity of the statements is supported. Additionally, by having a follow-up interview after the questionnaire, the validity of the answers given increased. The interview supports the understanding of the responses and helped to check if interpretations made are corresponding with the answers.

6.5 Ethics

The following ethical considerations in this research are based on Wellington (2015) and Austin (2016). The participants in this research were given detailed information about the purpose of the study, the methods used, and their role in the process. All participants in this research agreed to participate on a voluntary basis and have the right to withdraw from the research at any time. They were informed that all gathered data is used only for the research project and is handled with care for anonymity and confidentiality about what is shared. It was assured that all participants feel comfortable, are treated fairly, and that statements and questions in the methods are sensitive, unbiased, and not judgemental. Due to the student participant being under the age of 18, a consent form was given to all legal guardians of the students and had to be signed before the data collection took place (appendix 5).

At the end of each questionnaire that is given to students, the students also had to give their consent that their responses are used in the research project (appendix 1). Additionally, in the questionnaire, the students were asked if they would be willing to volunteer to participate in an interview. The meaning of the word 'volunteer' and what it means to be part of the interview was explained to students. This assured that all students were aware of what is expected of them and can make their own decisions based on that knowledge. Moreover, before the start of the interview, each student was asked if they are still sure if they want to participate in the interview and that they agree that the interview will be recorded. Furthermore, it was explained that everything that is said during the interview is confidential and will only be used for this research.

7.0 Conclusion

This research intended to answer the following question: ***What is the influence of using students' perceptions of the psychosocial learning environment (PLE) as a reflective tool during lessons on students' learning experiences?***

The study was conducted to identify if there would be an influence when using students' perceptions of the PLE as a reflective tool during lessons on students' learning experience. Due to the circumstances and the research process being affected by the Covid-19 government restrictions, it was not able to observe an influence on students' learning experiences.

The following sub-questions have been investigated using a questionnaire and interviews.

What is the current and preferred learning environment according to students?

A questionnaire based on the widely used WIHIC questionnaire developed in 1996, by Fraser and further refined by Aldridge and Fraser in 2000 (Dorman, 2008), was used to identify the current and preferred PLE of students in a grade 3 classroom. Furthermore, interviews with students took place to deepen the understanding of students' responses. The classroom learning environment has a significant influence on the learning of students (Dorman, Fisher & Waldrip, 2006) and identifying students' perceptions of the PLE enhanced the understanding of different aspects of the PLE and helped to identify points of improvement in the classroom based on students' perceptions.

Students in the grade 3 classroom identified the noise level in the classroom and behaviour towards each other as the main aspects of a preferred learning environment in this grade 3 classroom. Also, if students' perceptions and their preferred learning environment might differ (Arends, 2007) it can be said that these aspects are the most outstanding and would have been taken into the intervention phase and would have been addressed as focus points. During and after the intervention phase it would have been observed if students' perceptions of those specific aspects can be influenced when using students' perceptions as reflective tools.

Under what circumstances and on what terms can students' perceptions on PLE be integrated into lessons?

Additionally, interviews with teachers were conducted to uncover teachers' perspectives on how and under what terms students' perceptions of the PLE can be implied into lessons. The interviews identified the following aspects as essential and important when asking and integrating students' perceptions into practice:

- Teachers need to be aware of what methods they are using and their influences on student's responses.
- Both interviewees agree that students' perceptions can be used to improve the overall classroom environment, including the PLE, and play an important role in the establishment of a good classroom climate.
- The social aspects such as group thinking and need to be taken into consideration and will likely influence the validity of the responses of students.
- Oral feedback seems to be preferred due to it being more meaningful to students and showing more advantages according to the interviewees.
- Asking for students' perceptions can be time-consuming and not every teacher might be interested to reflect on their practices and include students' perceptions in their reflections.
- The time when students' perceptions are included as part of lessons and teaching itself, seems to be based on individual preferences and practices.

What are the differences in students' perceptions of PLE after changing the lesson planning in accordance with this?

To answer this sub-question, more time in the classroom and a longer intervention phase would have been needed. A second questionnaire and possible follow up interviews would have been done after the intervention phase based on the data relating to sub-question 1. The closure of the school due to the federal government passing the Amendment to the Infection Protection Act 'The Emergency Brake', limited the data that could have been gathered and it was not possible to conclude if the use of students' perceptions as a reflective tool during lessons would have influenced students' learning experience.

7.1 Recommendations for further research

Based on the results and the conclusion, the following recommendations for researchers and teachers have been formulated:

- Concerning going deeper into this study and to create a more generalized result, more students and classrooms would need to be observed.
- Further research may concern if teachers' perceptions of the PLE are significantly different compared to students' perceptions and if this might influence the PLE.
- Further research needs to be made to identify if using students' perceptions of the PLE as a reflective tool influences student learning experience.

7.2 Limitations

- Influence of being the researcher and teacher at the same time: the relationship can influence the responses students give in the questionnaire or interview. Therefore, the influence of the interviewer on the outcomes of the data is taken into consideration during the analysis.
- Not naturalistic research: The researcher affects the environment e.g., students do not know the researcher or first must get used to the individual teaching style, which can influence their interaction and communication with the researcher.
- It could be argued that just by looking at the responses of the questionnaire the reasoning behind the response is not visible (Gillham, 2008). To gain a better understanding of the responses of students, the semi-structured interview took place after the analysis of the questionnaire.
- The interpretivist approach is reliant on the researcher. The conclusions made are based on personal reflections and are very much situation based and cannot, therefore, be generalized.
- The closure of the school due to the federal government passing the Amendment to the Infection Protection Act 'The Emergency Brake' in consequence of the rising numbers of Covid-19, limited the data gathering.

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Appendix 1 - Questionnaire Students

Questionnaire   **Name:**

   1) Look at the question and choose how many stars you want to give.

1 Star = Very bad

2 Stars = Bad

3 Stars = Okay

4 Stars = Good

5 Stars = Very good

How many starts would you give the learning environment in our classroom?

2) How do you feel about the following statements? For each statement colour in <u>one</u> smiley.

 = Almost Always

 = Often

 = Sometimes

 = Almost Never

a) The teacher supports me when I struggle with a task.

b) The teacher thinks about my feelings.

c) I work well with other classmates.

d) I am friendly to my classmates.

e) I help my classmates if needed.

f) I have the chance to ask questions if I need to.

g) Everybody in class is treated equally/the same.

h) I feel supported when working alone and in groups.

i) The instructions of the teacher are clear and help me learn and understand the tasks.

j) When I work in groups, there is teamwork.

k) During group work, we are nice towards each other.

l) Working with my classmates is fun.

m) I respect my classmate's opinion.

n) The classroom environment is nice.

3) Can you give examples of things that you do not like about the learning environment and that could be different?

_____

_____

_____

_____

4) How could we change the things we do not like about the learning environment?

_____

_____

_____

_____

☐ I agree that my answers can be used in Ms Klee's research.

☐ I would be okay to participate in an interview with Ms Klee to answer some more questions.

Name: _____ Date: _____

Appendix 2 - Overview data Questionnaire Task 3 & 4

Students	Response's students - Task 3
Student 1	Less noisy No bullying
Student 2	I want some harder work and longer gym classes
Student 3	No fights More respects Don't hurt kids No time wasting No bullying No screaming Nicer to teacher
Student 4	Less noisy Nicer No more shouting No hurting each other No bullying
Student 5	Sometimes the classroom is too loud We can be nicer to the teachers No bullying in the classroom No screaming in the classroom
Student 6	More creativity Less noisy No screaming Harder work
Student 7	Be nicer to the teacher Be nicer towards each other Less noise No fights
Student 8	Easy and hard maths Less loud Good behaviours No time wasting because of noise
Student 9	Less noise and not hard work Be nicer towards each other No nasty stuff

Student 10	The behaviours if that changes then its 100% good. No fights and no screaming
Student 11	Bad behaviour No bullying
Student 12	More art Being nicer to others No hurting each other Less noisy
Student 13	More group work No bullying More laughing Less noise More fun
Student 14	More small group voice Have more space Be nicer The teacher should not need to scream

Students	Responses students - Task 4
Student 1	Be nicer to classmates Put hands up before talking
Student 2	My expectations for the next lessons are less shouting in lessons
Student 3	Join the lesson Listen to the teacher Don't talk with others when the teacher is talking
Student 4	Listen better to the teacher
Student 5	I can do my work better I respect the teacher I help other children
Student 6	I put my hand up before I speak Respect other children in class
Student 7	Be more nicer and respect Be more kind

| Student 8	No more screaming Showing more respects Listening to teacher Learning more Lego tricks We have to keep the classroom clean Fun activities
Student 9	Nicer to the teachers and children in class No bullying and screaming
Student 10	Listen to the teacher No more people shouting out and interrupting people or screaming
Student 11	Listen better to the teacher
Student 12	Put my hands up when I want to talk Listen to the teachers
Student 13	More teamwork and give the other respect
Student 14	Listening to the teacher Better learning from the students

For the analysis the following codes were applied:

- Noise level in the classroom
- Bullying
- Behaviour towards each other/respect
- Fights or hurting each other
- General classroom aspects

Task 3: Aspects students are concerned with regarding the learning environment
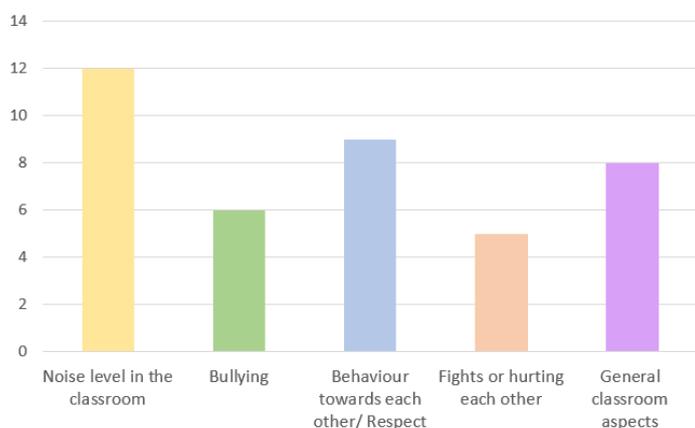
Task 4: How students think they can create a better learning environment
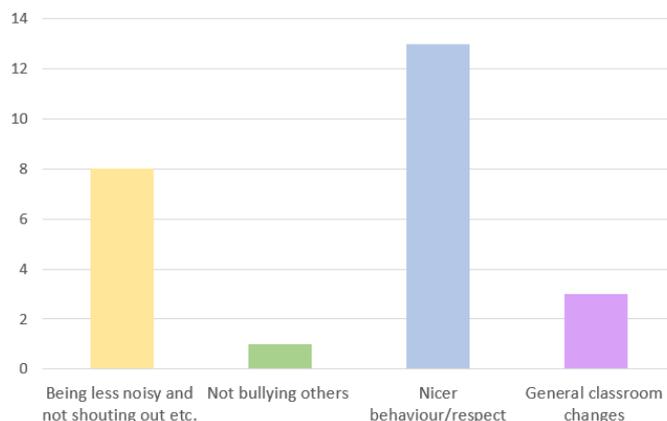
Appendix 3 - Interview questions students

1. Could you explain to me why you think … Regarding the statement …
2. Many students filled in that one thing that bothers them most is that it is very noisy in the classroom. Why do you think this is so?
3. Bullying - do you think there is a lot of bullying happening in the class?
4. Do you think everybody in class has a good relationship with each other?
5. Some students said that they do not feel treated equally compared to other students, what do you think about that?
6. Do you have the feeling that the environment, as it is now, affects your learning?
7. If there would be something that you could change about this classroom, what would it be?

Appendix 4 - Interview transcripts students

Student 2

Interviewer: Okay. The recording started. Now looking at the questionnaire from last week. It seems like you really like the learning environment in this classroom. Is that right?

S.2: Yes just the shouting a little bit

Interviewer: So you would say that it is a bit noisy in the class? Do you have the feeling this is affecting your learning?

S.2: No not really affecting me it is just a little bit disturbing sometimes. But I still get all my work done.

Interviewer: That is very, very good. So some of the students said that, that they are feeling that there's some bullying happening in this classroom, what do you think about that?

S.2: There is.

Interviewer: Okay. Can you give some examples?

S.2: So like, um, I can't say names. So sometimes when we are outside play football we trip them over, or kick each other and sometimes they push them over

Interviewer: Okay. That is not very nice. Isn't it? So is this something happening in the class during lessons as well, or not that much, so more during the break time?

S.2: Ehm it is less in the classroom more during break time. Billion times more during break time.

Interviewer: Okay. Do you think that everybody in class was nice towards each other?

S.2: Yes. Some people are some of the time aren't. But some are most of the time. Some are very good.

Interviewer: All right. Um, so statement G everybody in class is treated equally the same. There were some students that said that doesn't happen that often. What do you guys think about it?

S.2: So sometimes some are treated the same and other times not so much.

Interviewer: But why are they not treated equally? Can you give an example?

S.2: You know, as somebody is doing some work in here, other people on the other team is not doing the work. So some of the group have to do the work and the other still get the good grade for it. That is not very equal.

Interviewer: That is very true. Um, and you said, that the classroom environment is nice. You said that's only often, not always. Why do you think that?

S.2: Actually most of the time it is actually always. Most of the time I can work very well just the shouting is disturbing and annoying sometimes.

Interviewer: So do you think that everybody in the class is nice towards each other, and is respecting each other?

S.2: Hm almost always sometimes only sometimes.

Interviewer: Okay, how does it show when they don't?

S.2: When they sometimes push each other or say something rude to each other, that is not very nice.

Interviewer: Do you feel that the learning environment now is affecting your learning in a good or in a not so good way?

S.2: It's okay

Interviewer: So it's okay. So you're able to learn the way you want to?

S.2: Not really. I don't know how to answer that. It is just a really loud classroom. When you walk through the school oh my gosh they are loud. But I am used to that from my old school, so I am used to be in a loud class.

Interviewer: Okay. So if that would be one thing that you could change about the learning environment, what would that be?

S.2: I would like to spend more time in class and maybe more gym time would be nice. It is so much fun.

Interviewer: Okay good to know. Do you think that everybody in class had a good relationship with each other?

S.2: Yes I think, yes actually I think everybody in class is friendly towards each other.

Interviewer: Yes okay, that is great to hear. All right. I think that were already all of the questions that I had, that was very good. Thank you very much for your time. Do you have any questions otherwise I will stop the recording now.

S.2: No

Interviewer: Okay, great.

Student 4

Interviewer: So overall you sat that you gave the learning environment five stars, so you need really liked the learning environment. Do you?

S.4: Yeah.

Interviewer: All right. So, but I noticed that in the questionnaire, one of the things you did not like was that everybody in class is treated equally the same and that, that is happening sometimes. Could you explain why?

S.4: Because some of them are not doing what they should and that disturbs me very much and some of them are always making silly noises or being silly. Some of them are okay.

Interviewer: Do you have the feeling that the teachers are reacting the same towards every student?

S.4: Middle

Interviewer: Why?

S.4: I don't really know.

Interviewer: Okay. That's totally fine. Yeah. Do you have the feeling that everybody gets a chance to ask questions and that everybody is treated nicely in the class?

S.4: Yeah.

Interviewer: Do you think that everybody is like treating each other nicely?

S.4: Not always because sometimes they are behaving very naughty.

Interviewer: How do they show naughty behaviour? What are they doing?

S.4: Because they are often not listening to the teacher or they are being silly to you.

Interviewer: Yeah. Now this statement, when I work in groups there is teamwork. You also say often, but not always, why sometimes?

S.4: Sometimes they do not let me write because I am too slow at writing.

Interviewer: All right. So the work is not divided evenly?

S.4: Yeah.

Interviewer: Um, so some students wrote down, I think you did as well. That, um, there's sometimes bullying happening in this classroom. Could you explain why you wrote down bullying or give examples?

S.4: Because there is sometimes bullying happening to ████████ and ████.

Interviewer: Okay and what is happening? Can you give examples of what is happening?

S.4: Sometimes ███████ is laughing about them, or they don't want to be in a group with them.

Interviewer: Did you ever feel bullied in the class?

S.4: No

Interviewer: All right good. And do you feel comfortable in this class?

S.4: Yeah.

Interviewer: All right. So do you have the feeling the environment is affecting your learning in a good or a more negative way?

S.4: In a good way. Yes.

Interviewer: Okay. Um, I would say would be one thing that you could change in the classroom environment. Do you have any idea what that would be?

S.4: Less noise and more silence in class.

Interviewer: How, how is the noise affecting you?

S.4: Um, too loud. I cant listen to what others say.

Interviewer: And what does it do to your learning? Can you still concentrate when it's that noisy?

S.4: No. Hmm.

Interviewer: Do you think that everybody in class has a good relationship with each other, that they are good friends with each other and that they get along and that they are nice towards each other?

S.4: Often but not always. Often it is too loud and the sound is kind of too loud. Some are very silly and too loud. There's a lot of shouting in the classroom and also sometimes hurting when we are at lunch in the cafeteria.

Interviewer: Do you tell the teacher when something like the hurting each other is happening?

S.4: Yes I do.

Interviewer: Good. All right. Thank you very much that is already the end of this interview. Do you have any questions before I stop the recording?

S.4: No

Student 6

Interviewer: All right. Now, in the questionnaire you gave the classroom environment four stars. Can you explain why? And maybe why not five?

S.6: Because it's, it's often very noisy.

Interviewer: Okay so the noise level is something you do not like in the classroom?

S.6: Hm yes

Interviewer: Um, you also said that you are helping your classmates if needed, sometimes. Could you explain why?

S.6: Yeah only sometimes. I actually don't really know why. I just. I could help others more often I think.

Interviewer: Okay. I can see that for statement G everybody is treated equally the same, that that is only sometimes and you erased that and said often. Could you explain why and maybe can you come up with examples? Why do you think not everybody in class is treated equally or the same?

S.6: I don't know.

Interviewer: Okay. Can you think of an example? When did you, do you sometimes don't feel treated equally or the same, like somebody else?

S.6: Um, I don't know.

Interviewer: Okay. Um, you also said when you are working in groups, there is only sometimes teamwork.

S.6: That's because, when I work in groups for example ▇▇▇ she is often doing all the work. And then ▇▇ and I could only do the searching online and could not add anything to the poster.

Interviewer: All right. So you're not doing the same amount of work and that is affecting your learning, is that right?

S.6: I think so.

Interviewer: Do you have the feeling that everybody's treated, um, nicely in this classroom that everybody's treating each other nicely?

S.6: Sometimes.

Interviewer: Why not always?

S.6: Um, I don't know just have the feeling.

Interviewer: Okay. That's okay. So, um, a few students in this class said that they, they feel that there's quite a lot of bullying happening in our classroom, what do you think about that?

S.6: That that it is bad

Interviewer: Yes true that is not very nice! Have you ever experienced any bullying in the class?

S.6: I don't know. I don't think so.

Interviewer: So you have not been bullied. That's very good. That's good to hear. Um, do you think that everybody in class, um, is treated nicely?

S.6: Yes, often

Interviewer: Okay. Um, do you have the feeling that the learning environment, how it is now, is affecting your learning?

S.6: Um

Interviewer: There's no right. No right or wrong answer can say whatever you think.

S.6: I can sometimes work very good and other times not that good.

Interviewer: All right. There would be one thing you could change about the classroom. What would that be?

S.6: Noise and stuff.

Interviewer: What do you mean with stuff?

S.6: Just more quiet times and quitter voices no screaming

Interviewer: So you would like it to be more quiet and less noisy in the classroom?

S.6: Yes.

Interviewer: How could we do that as a class?

S.6: That you don't shout all the time, don't call out answers. Yes that's it.

Interviewer: Okay. Very well. That was already it. Thank you very much. I will stop the recording now, or do you have anything you would like to add?

S.6: No

Interviewer: Okay, thank you again

Student 7

Interviewer: Now in your, um, questionnaire, you gave the ehm learning environment, four out of five stars. Could you explain why? Also why not five stars?

S.7: No.

Interviewer: Okay, so you just felt like giving four stars?

S.7: [nodding his head]

Interviewer: Okay, so you said for statement G everybody in class is treated equally the same. You said that that is only happening sometimes or often. Can you explain why?

S.7: Because sometimes we pick on each other, fighting and these stuffs.

Interviewer: Okay. Anything else? Any other examples?

S.7: [Shaking his head]

Interviewer: Do you feel you're treated equally or the same in this classroom?

S.7: Um, yes.

Interviewer: In the questionnaire you say that the classroom environment is nice often, but why not always?

S.7: Because of the noise and the distractions.

Interviewer: Okay, do you have a feeling that you are getting distracted by other students?

S.7: [nodding his head to agree]

Interviewer: All right. So that is also what some other students say, that, that they are very, um, uh, noisy and distracted by the noise level in the classroom. Does that fit with you as well?

S.7: [nodding his head to agree]

Interviewer: All right. Um, um, some students also said that they feel bullied or that there's bullying happening in the classroom. What do you think about it?

S.7: Sometimes

Interviewer: Can you give an example?

S.7: Sometimes before because of their food.

Interviewer: Okay. Why because of their food?

S.7: They think it is not good food.

Interviewer: Okay. And that's not very nice. Do you have any other examples?

S.7: [Shaking his head to say no]

Interviewer: That's okay. Do you have the feeling that everybody in class has a good relationship with each other, that they are good friends and that they're getting along very well.

S.7: Sometimes

Interviewer: Can you explain why sometimes? When are you not getting along so well?

S.7: Sometimes when someone keeps shouting at a person when they do not want something they want.

Interviewer: Is shouting something that is happening more often in your class?

S.7: [nodding his head to say yes]

Interviewer: All right. Do you feel that the learning environment, um, is affecting your learning?

S.7: No.

Interviewer: So you so have the feeling that you can work good in this classroom?

S.7: Yes

Interviewer: Okay good. Do you feel that everybody's treated equally in this classroom? Is everybody treated the same like everybody else?

S.7: [nodding his head to agree]

Interviewer: Okay if there was something that you could change in this classroom, what would that be? Is there something that you would like to be different?

S.7: I could raise my hand before I speak.

Interviewer: Okay. Why?

S.7: Because sometimes I don't raise my hand and shout out the answer.

Interviewer: Okay. That's a good idea. And for the whole class, what could the whole class do differently to make it nicer?

S.7: Be nicer to each other.

Interviewer: In what way?

S.7: Not bully each other.

Interviewer: Okay. So the whole class could be a little bit nicer to watch each other.

S.7: Yeah.

Interviewer: That fits with your answers in the questionnaire you wrote down that in the class we can be nicer, be more respectful and more kind. Is there anything you would like to add?

S.7: [Shaking his head to say no]

Interviewer: All right. That is great. Thank you very much. That was it already. I will stop the recording now.

Student 8

Interviewer: All right. So in the questionnaire you gave the learning environment and our classroom four out of five stars. Can you explain why?

S.8: That one? [pointing at task 1 of the questionnaire]

Interviewer: Yes

S.8: I did. I did this one because the classroom is also a bit messy, it can be cleaner.

Interviewer: All right. So we can keep the classroom more clean, that would improve the learning environment?

S.8: Think so

Interviewer: Okay. Is there another reason why you gave four, not five stars?

S.8: A little bit, but yeah. About my own behaviour.

Interviewer: Okay, why?

S.8: Because sometimes I do not behave very well and that is what can be annoying.

Interviewer: Okay, can you give examples for that?

S.8: Maybe [takes a few seconds to think], shouting out answers maybe. I need to listen to the teacher better.

Interviewer: Alright, you are reflecting on your own behaviour that is very good. Now I look at your answers and I see that statement G that you only say that it's happening sometimes that everybody in class is treated equally the same. Why do you not think that everybody is treated equally?

S.8: Sometimes in this class some children just get bullied by other children in the class sometimes and are not fair when we work in the groups. They don't want to play together outside and don't want to sit with them during lunch.

Interviewer: Okay. So do you think it's something between the students and students that they sometimes do not treat each other equally, or can it also be the teacher that is not treating students equally?

S.8: I think it's by the students because the teacher is the one making them being mean to them.

Interviewer: So the teachers are not treating students the same?

S.8: Yeah.

Interviewer: What are the teachers doing?

S.8: Ask me nothing.

Interviewer: What do you mean? Do you have the feeling that teachers treat every student in class equally or the same?

S.8: Yeah.

Interviewer: Okay. So you have the feeling that the students treat each other, not equally the same, but the teacher does?

S.8: Yeah. Um, because everybody knows that the humans don't always like each other.

Interviewer: You don't have to like everybody, but you still need to treat everybody nicely and with respect, right?

S.8: Right.

Interviewer: You also say that, um, you often don't feel supported when working alone and in groups can you explain why?

S.8: Um, I feel support groups only sometimes. Well, sometimes because I just know though they, sometimes want something I don't and well mh. The teacher sometimes does not agree with me and yes. Sometimes others will do less work. And I know but they don't.

Interviewer: Okay. Do you feel like you are working well in groups?

S.8: Yeah. Actually, yes I do. Absolutely because I will. I am very good in group working, then you can build Lego. That is the word? All the kind of good things in groups, there is some things that are built together. We were just, work good together as a team.

Interviewer: You said that working with your classmates is sometimes fun. So, it's not always fun to work with your classmates?

S.8: I think it is more fun to work with my relatives.

Interviewer: So you don't like to work with the classmates here in class that much?

S.8: No not really.

Interviewer: Okay, can you explain why?

S.8: No

Interviewer: That is okay if you do not want to explain. Now there were some students talking about bullying. They said that there is some bullying happening in this classroom. What do you think about that?

S.8: Yes. Yes, I do. Mainly in PE and that's fine. Um, what was the word? Oh, children. They are choking other children, and taking things sometimes. And not showing respect. They are really loud.

Interviewer: Do you think that everybody's in class is respecting each other?

S.8: Not really, not really. I don't think we have the confidence to do that. I think we try to do that but it is not happening often.

Interviewer: So do you think that everybody in class has a good relationship with each other, like a good friendship, are they nice to each other and communication well with each other?

S.8: Uh, yeah, most times sometimes they're talking swear words to each other, saying mean things to each other that is happening in class.

Interviewer: All right. So, um, do you have the feeling that the environment is affecting your learning, can you learn good in this classroom?

S.8: Hmm let me think about that [walks away and thinks about his answer]. Yes sure. I think so. Yes

Interviewer: That's good. Is there anything that could change to make work even better? Do you think there's something that the whole class could change?

S.8: I think sometimes I could change. Working on laptops. Actually no wait. I think to me, I would change instead. I was working on laptops. No.

Interviewer: If that would be one thing in this class, if you could change, what would that be?

S.8: Have golden time every day, in the end of the day. And class parties too, that would be great.

Interviewer: All right, yes that would be nice. But do you have the feeling that everybody is treated nicely and that you're working nicely with each other?

S.8: Because sometimes we work in groups and not everybody is working, and then people are confused and they start getting angry and they start to all get angry too.

Interviewer: Okay, let me check I think this is the last question.

S.8: Oh really?

Interviewer: Yes, it's a very short interview that's to look at your answers of the questionnaire and that everything is correct. Now I will stop the recording.

Student 9

Interviewer: Now, so I could see that I want to answer this questionnaire. Did you do like the learning environment or classroom, right?

S.9: Yeah.

Interviewer: So I see that you put a lot of happy smileys in your questionnaire, but one thing I notice is statement G, everybody in class is treated equally and the same. And you say that it is only sometimes. Can you explain why?

S.9: Oh, I think I wanted to colour in the other one. I did not. I am not sure.

Interviewer: Okay right now would you say you think that everybody in class is treated equally.

S.9: Yes I think so.

Interviewer: All right. You, can you think about some other aspects when they might not be treated equally?

S.9: No.

Interviewer: All right. Um, you also said that you I work well with other classmates mostly sometimes. Could you explain why?

S.9: I don't really know why. Sometimes when I work with ▆▆▆▆▆. She. I. She. Sometimes she can be a bit bossy. But I like her and want to be with her. But then I have to do what she wants, also when I don't want to. And then I feel like I have to and that is sometimes difficult. She can be very bossy.

Interviewer: Okay. Now you also said that, um, when you work in groups, there is teamwork, that that is also only sometimes. Why do you think that?

S.9: Because last time when we worked in group with ▆▆▆▆, ▆▆▆▆▆▆ and me, we worked together I did not feel like there was teamwork. I could not really do what I wanted. ▆▆▆▆▆▆ didn't let me work on the laptop and I had to do all the writing.

Interviewer: How should a team work together? What could the team to differently next time to make everybody feel better?

S.9: Um, that we work more as a team. Because when I look at other teams, they often ask each other hey can I do that and that and they are nicer to each other. I have to talk more with my group.

Interviewer: Yeah. All right. So you should divide the work and also swap jobs during the groupwork?

S.9: Yes, because sometimes she always wants to work with the laptop and she tells me to do this all the time. When we were working on this poster she was always on the computer and I wanted to and she didn't allow to.

Interviewer: Okay so you cannot do the same amount of work and you can't to the jobs that you would like to do, do I understand that right?

S.9: Yes.

Interviewer: Do you think, um, that in the class, in general, there is a problem with teamwork, or do you feel more confident only when you're in a group with ▆▆▆▆▆ or is it also with others?

S.9: No also with other. They also sometimes don't let me use the laptop and are not very nice about it. And they can also be very crazy and loud so I don't really like that.

Interviewer: Yes okay I understand. Some people also talked about, and you did as well about bullying in this classroom. Do you have a feeling there is a lot of bullying in this classroom?

S.9: Yes often it is about ███. Often they say oh ███ did this and this and then they laugh about him.

Interviewer: So is them bullying specifically about Leon or also about other people?

S.9: No also about other people. ███ for example

Interviewer: Do you sometimes feel bullied in this classroom?

S.9: Yeah, because I am shy and don't always want to say something or don't know the answers and then I don't say anything.

Interviewer: Okay, so you say about yourself that you are a little bit more shy and that's why they're bullying you?

S.9: Um yes.

Interviewer: Okay. Um, okay. Do you like the learning environment in the classroom? Do you like learning here?

S.9: Yes. Just sometimes it is too loud, so I am scared to say something. And my mom says that I need to tell the teacher when it is too loud, but I am too shy. And often they keep shouting at each other and there is not a lot happening. In my old school when someone would hit someone they had to go home and got in a lot of trouble. You could only be loud two times then you would be sent home or to another class.

Interviewer: Oh, would you say that the teachers here are not strict enough?

S.9: No I would say. No yes, yes in my old school they were more strict.

Interviewer: Do you have the feeling that in the classroom, the environment, how we interact with each other in the class, is that affecting your learning?

S.9: Sometimes, uh, I can't do the learning and I don't really understand what the teacher means. It is very loud, and I am too shy to asked again

Interviewer: Do you have the feeling like you can't ask questions, or do you feel bad about asking questions?

S.9: I don't know. I am just too shy to ask. I want to ask but I am too shy to ask.

Interviewer: Okay. That is okay. It is good that you noticed that about yourself. And it is okay to be shy. Um, okay next question. If there would be something that you could change about this classroom, what would it be?

S.9: The manners.

Interviewer: Okay what specifically?

S.9: I don't like the loudness in class, it's loud, it can be quite loud in the class. And when the teacher tells them to be quiet, they are often still loud and scream and then my ears start to hurt.

Interviewer: Yes, that is what some students also wrote down. That's it's a little bit too noisy.

S.9: Yes, sometimes when I go home and I want to sleep my ears start to hurt. Then I close my eyes and I can hear them. I don't like it when they scream so much.

Interviewer: Okay yes I understand that. Do you think everybody in class is nice to each other?

S.9: Sometimes because sometimes we are not nice to each other.

Interviewer: Can you give an example for that?

S.9: No

Interviewer: That's okay. All right. That was everything. Do you have any questions, or would you like to say anything else? If not I would stop the recording now.

S.9: No.

Student 11

Interviewer: So this interview is about the questionnaire you filled in last week. You remember? So overall you gave some learning environment, four stars? Could you explain why?

S.11: Because sometimes our behaviour is silly and that is why I gave 4 stars and not 5.

Interviewer: Okay. So how are they behaving silly? Can you give examples?

S.11: Sometimes ████ is running around the classroom being silly and shouting. And sometimes ████ is annoying others with his bottle. It has this special smell that is not very nice. And he is not putting it away when the teachers asks him to.

Interviewer: All right yes I know what bottle you mean. So I looked at, uh, what you say about the different statements here. And you thought that everybody in class is treated equally is the same only sometimes. Why do you think not everybody is treated the same and equally all the time?

S.11: Because sometimes somebody says something about somebody that is not true. And sometimes ████ is not very nice to her friends and tells them what to do. But she is still always treated very nicely. And other people like ███ are not being treated nicely, that is why I said it is only sometimes.

Interviewer: Okay. Do you have the feeling everybody is treated equally by the teachers as well?

S.11: Yes. I think the teacher always acts fairly.

Interviewer: Okay. That is great to hear. Um, you also say that you only sometimes can ask questions if you need to. Can you explain why you think you can only do that sometimes?

S.11: Yes, because sometimes I cannot really ask during IPC.

Interviewer: Why do you have the feeling that is happening?

S.11: Hm. Because there are many students in the class and they also want to ask questions.

Interviewer: How do you think, how could the teacher make sure that everybody is able to ask questions?

S.11: Um, well, maybe longer school days or everybody gets a number of turns to ask.

Interviewer: All right. Did you ever tell your teacher that you would like to have more time to ask questions?

S.11: No.

Interviewer: Do you think that might be an idea?

S.11: Maybe

Interviewer: All right. You also say that you only sometimes respect your classmates' opinions. How come?

S.11: Because sometimes they say this or that and I think the other one.

Interviewer: okay do you think you discuss these things in a nice way? Or are that moments when people are not so nice towards each other?

S.11: Um, sometimes. Sometimes not.

Interviewer: All right. Do you have a feeling everybody in class is treated nicely or they're treating each other nicely?

S.11: Not really because sometimes they are bullying others.

Interviewer: Yes this is what you wrote down here as well [pointing to task 3]. And some others said that as well. Why do you think there's bullying happening? Can you give examples?

S.11: Because people say like, not nice things about example L. and that he smells even if that is not true. And sometimes I get treated badly when I make a goal during football. I just play were good and sometimes others don't like that that much.

Interviewer: Okay. So why do you think they are doing that?

S.11: Because I think they do not think about their actions and they don't want me to score that goal.

Interviewer: Would you say that everybody in class is nice towards each other?

S.11: Ehm no.

Interviewer: Okay. Do you maybe have an idea how we could change that?

S.11: Um, I guess a lot of, so we can sit alone and more apart from each other. So further away so we cant talk that much anymore.

Interviewer: Do you think there's good teamwork in this, um, class? Are you working nicely when you work in groups?

S.11: Sometimes because sometimes they say that opinion and you think another opinion.

Interviewer: Does it always mean that the other opinion is wrong, or do you think you learn how to discuss together in a nice way to maybe understand each other better?

S.11: I think we sometimes discuss things in a good way, but not always. Because sometimes you can even like both and don't have to argue.

Interviewer: Okay. Do you feel like the learning environment in the classroom is affecting your learning?

S.11: Sometimes when everybody behaves badly and loud I can't really concentrate. I always try to think about what the teacher said but I can't really concentrate. I can't do that when its so loud.

Interviewer: Yes I understand it can be difficult to focus on your work when it's loud around you. Um, if there would be one thing that you could change in this classroom environment, what do you think would that be?

S.11: Ehm behaviour.

Interviewer: Okay what behaviour, what would that exactly be?

S.11: To change the bad behaviour into good behaviour.

Interviewer: What is the bad behaviour you're talking about?

S.11: The bullying and shouting at each other

Interviewer: Okay, thank you very much that were all the questions that I had. Is there anything you would like to add?

S.11: No thank you.

Interviewer: Okay, then I will stop the recording now.

Student 13

Interviewer: Now, I looked at your, um, questionnaire you filled in last week. And, um, I noticed that you're feeling very good about the learning environment in our classroom, do you?

S.13: Yeah.

Interviewer: Um, some students mentioned that in the last questions and also you mentioned it, that sometimes bullying is happening in our classroom. Why did you write down bullying?

S.13: Because some people don't like other people and then bullying is happening.

Interviewer: How is that happening could you give examples?

S.13: Um, yes they don't like what others are doing and laugh at them and yes

Interviewer: Okay, have you ever been bullied in class?

S.13: Yes

Interviewer: Okay. How does it make you feel?

S.13: Hmm sad. Sometimes I don't like to say something in class.

Interviewer: So it is affecting your learning?

S.13: Yes.

Interviewer: All right. Um, do you think everybody in the class has a good relationship with each other?

S.13: Not really

Interviewer: Why not?

S.13: Um because. Um um yes. Don't know.

Interviewer: That is okay. Do you feel comfortable in the class? Do you like coming here and feel good during class? And that you have friends here in class?

S.13: Yes

Interviewer: That's good. Do you like how everything is in the classroom or is there something you would like to change?

S.13: Hm something maybe about the noise. And more fun activities. In the beginning of the school year in maths we did more fun activities and now only worksheets I would like more fun activities.

Interviewer: Okay that are some important aspects to think about. That was already the last question, do you have any questions or is there anything you would like to add?

S.13: No do not think so.

Interviewer: Okay then I will stop the recording now.

Appendix 5 - Consent form parents

Grade 3 Consent to Participate in Research
Bremen 18.03.21

Dear parents of Grade 3, My name is Annika Klee, I am currently a student teacher at the ███████████████████. I am studying International Teacher Education for Primary Schools (ITEps) at the NHL Stenden University of Applied Science in The Netherlands and I am currently writing my Bachelor Thesis.
I am conducting research on how students' perceptions of the psychosocial learning environment can be used as a reflective tool for teachers during lessons. Therefore, I would like to ask you for your permission that your child can be included in the research.
The participation of this research is entirely voluntary, and you or your child can withdraw at any time during the research. In that case, data that has already been collected from your child will not be included in the research.

The research instruments that will be used for the research include questionnaires and individual interviews with students, that ask about the students' perceptions of the learning environment.
The collected data will be used only for the purpose of the research project and will be handled with care for the anonymity and confidentiality of all children. The conducted data will never include the forename or surname of the child and are used solely for my research, and in no case passed on to third parties.
The research study will be explained to all students in class. They can decide themselves if they are willing to participate in the research study for example filling out the questionnaire or participating in an interview or not.

If you have any questions about the procedure of this study, or need more information, I will be happy to answer them. You can contact me at aklee@isbremen.de.

Thanking you in advance for your help!

Kind regards,

_____

 Annika Klee

Informed Consent Form

I/We hereby consent for my/our child to participate in this study conducted by Annika Klee between March and May 2021.
I understand that the participation in this study is entirely voluntary.
I give permission to use the collected anonymised data for the purpose of the research.
I understand that I can withdraw my child at any time in the future.
I know that the researcher will answer questions I have about the research, now and at any time during or after the research.

Name of the child: _____

Full name Guardian 1: _____

Full name Guardian 2: _____

☐ I/We hereby give the consent that my/our child can participate in the research study mentioned above.

Place, Date: _____

Signature Guardian 1: _____

Signature Guardian 2: _____

Appendix 6 - Interview questions teacher

Layout for the semi-structured interview

- How long have you been working at the ISB?

- What grade are you teaching in?

- How often do you ask for students' perceptions of the learning environment?

- Do you think it can help teachers to reflect and implement students' perceptions of the learning environment to create a good learning atmosphere in the classroom?

- Do you implement students' perceptions of the learning environment into your lesson planning? If yes: Why and how do you do that?

- Can you give reasons why you think this is important? Furthermore, are there specific methods that you are using e.g., questionnaires, individual conversations with students, it is implemented in classroom routines, etc. If not: Can you elaborate on why not?

- Do you think it can help teachers to implement students' perceptions of the learning environment to create a pleasant learning atmosphere in the classroom?

- What do you think are the main benefits of implementing students' perceptions into lesson planning?

- In your opinion, what are important factors that you must consider when implementing students' perceptions into lesson planning?

- Can you think about reasons why not to include students' perceptions in lesson planning?

Appendix 7 - Information and Consent Form Interview

Dear _____

I would like to thank you for being willing to participate as an interviewee in this research project. I appreciate this very much and I aim to make this process as comfortable for you as possible.

With this email, I would like to provide you with all the necessary information needed before the interview will take place. Please contact me anytime if you have further questions or need clarification of any kind.

The research question is as followed: What is the influence of using students' perceptions of the psychosocial learning environment (PLE) as a reflective tool during lessons on students' learning experiences?

Definition: In this research project the term 'Psychosocial learning environment' is used and defined as followed: 'The classroom learning environment can be described as a social, psychosocial, and pedagogical context in which learning occurs and influences the success and attitudes of students (Loh, Pang & Lajium, 2020). Aspects of the psychosocial environment involve the nature of the interactions of the teacher with their students or students with their peers. This interaction generates a particular atmosphere which is referred to as the psychosocial environment (Malik & Rizvi, 2018). Walberg and Anderson (1969) believed that the psychosocial or social environment of the classroom refers to climate or atmosphere as a social community that possibly affects what and how students learn.'

 The purpose of this interview is to understand your personal and professional point of view regarding this research question, including under what circumstances and on what terms students' perceptions on PLE can be integrated into lessons most effectively.

I furthermore need your approval to record the interview and include the recorded data in my findings. The interview data will only be used solely for the research analysis, and in no case passed on to third parties. The Interviewees will stay anonymous.

The consent may be changed or revoked by the interviewee at any time in the future.

By signing this paper, you agree to the stated term and give consent to the use of the recorded data made during the interview for the analysis and conclusions that might be drawn from this.

_____   _____   _____

Place, Date   Full name   Signature

Appendix 8 - Interview Transcript Interviewee 1

Homeroom teacher grade 3, 19.02.2021

Annika: Okay, so I sent you the information letter before, but we are just starting off with just some general questions. So how long have you been working at the █████?

Interviewee: I started working at the ████ in August this year. So I took the job and I've only just been there since August. So I've only been there six months, at IS Bremen. Prior to that, like I said I was at ISW in Ramstein.

Annika: Yes great. What grade are you teaching?

Interviewee: I'm teaching third grade. So I am teaching in a third grade this year.

Annika: All right, what subjects are you teaching?

Interviewee: I am teaching all subjects in the curriculum apart from German, obviously, too bad at the German language obviously. But yeah, I don't do the German, they have a specialist to teach the music, drama, and ICT. So I do everything else that needs to be taught in history, the geography, the science, the art, which is obviously done through their IPC ehm learning, curriculum, and then English and maths.

Annika: Yeah. Alright. So the overall topic was explained to you with the information letter that was sent to you before. And it is about the student's perceptions of the psychosocial learning environment. Can you maybe explain in your own words, what this means to you?

Interviewee: Ehm yes sorry again, I literally only just got to it right before your interview. So I've just scanned quickly through it. Just explain your topic again. So I can I can form an answer.

Annika: Yes, of course. So for me when I did my research and psychosocial learning environment it is about basically the interactions between students and teachers, and how this influences their learning, and the whole environment in the classroom. So ehm the type of psychosocial is really about the interaction between each other, teacher with students and students with students. And my research is basically about how teachers can implement their students' perceptions of the psychosocial learning environment into their lesson planning. And what effect does it have if you actively involve students' perceptions, and see how that might change it?

Interviewee: Yeah, well, and basically, the IPC curriculum that we're teaching at the moment at the school really lends itself well to that kind of learning. Cause, like I said, it's it's a separate curriculum. And the documentation is obviously about a topic. And the topic encompasses all of the areas of the curriculum through that one topic. So it connects the learning on every level, you know, still brings in your Math and English your science or geography, brings in your history. And the great thing about that education is that it gives children the opportunity to have those interactions, where their ideas actually shape the education itself. So when we talk about the topic ehm, and we introduce it in what's known

as a knowledge harvest, so it's kind of like open to the children, what do you know already about this topic, ehm and the children get to give us the information, the knowledge that they've gleaned ehm, you know, from just reading, movies they've watched, you know, things that they might talk about with their family, and and usually, they have a good knowledge base of the topic that we're gonna be investigating. They get really excited about it, and they, you know, are really into the research. So we do a lot of group work, and, you know, small, small group learning, where you would throw out a question to the children, they would run with it, ehm you know, their mind maps everything. They talk amongst it with their, with their, with their partners. And the good thing about the curriculum is the learning goals, and lends itself to collaboration to communication, when the children are showing resilience, they are showing, and, you know, taking initiative, and you'll get your leaders, you'll get the ones that there will naturally take over and lead, ehm you know, the lesson in their groups. Ehm So, the curriculum itself does lend itself well, so you're in a good place for your study. Ehm Because, I have been teaching the last 16 years. So whenever I first came into teaching, it was, it was pretty much all of my training was based in child centred learning. The child is, you know, not a blank slate, that teacher stands and just chalk and talk to you. And you have to involve the children in their learning, because that's when they get involved and they get interested, rather than just you telling them all the information that they need to know. Ehm it's important for them to come up with the knowledge that they think they need to know. Ehm because we always start with what do you already know? What do you think that you might want to find out? You know, then obviously, questions are higher, how we got to find that out, what information can we get, and where can we get that from? And then they should shape their own questions. So they have to ask themselves, what do I want to find and shape their own questions. And then, by the end of the study, when it comes to the big picture at the end, and we finish up at an exit point, we reflect as a class and as a group on what we have done, and how we answered all the questions that we started up to answer, and did we get all the information that we wanted. Have we finished with this topic? And then obviously, any questions that we've missed, or we haven't fully answered, or we can't fully answer, we would take a little bit of time then to finish that, to make sure that the the whole, the whole learning has been.

Annika: And yeah, in this process, where do you focus on how the students feel in the learning environment? So their social interactions with each other? Do you sometimes ask them for feedback? How is that? How does it go for you?

Interviewee: I mean, you do your your kind of informal feedback, you know, your group lessons we ask, you know, when they're sharing, and for example, whenever I do small group work, so the children would feedback, there's always a feedback time. Ehm, you know, sometimes you do run out of time, and I will, that happens often, if they get really into an activity. Ehm but I do try and pull you towards the end, you know, can you share what you find out with the rest of the class? And then you'll say, did anybody else agree with that? Does anybody else get to see an answer? Does anybody else find something different? And we have that kind of feedback together? There's always that and your "thumbs up? Thumbs down?". You know, how to get on? Did you find that? You know, and, you know, did you find it really easy, you know, you know, it was maybe a little bit hard, did you struggle a little bit, you know, did you need support from your friends, was it really bad, did you not enjoy the activity at all. And, you know, did you struggle, it's always good for feedback, especially when it comes to report writing. And it's also good to monitor ehm, you know, obviously,

when the kids are interacting, and you kind of let them go fly free, you would be walking around, you'd be looking around, you would be monitoring all the time, either making mental notes, you know, who has shown to be really good communicator, who has shown good leadership skills, who's maybe setting back, you know, who's not really engaging in this lesson. And, and then that's when you kind of let us sort of intervene, eh, you know, to kind of scaffold and guide the learning sometimes. And some students they would, they're not great at it, they don't know where to how to approach the task, they don't know how to, you know, they know what they want to do, but sometimes they don't always have the initiative to approach the task, in the most effective way. So it's always a good ehm, that's a, that's a point when you would observe for an event, and then when you still see, they're maybe not engaging as, as everybody else is doing. Maybe they're struggling a little bit, that's when you can kind of intervene and, and ask them, you know, is there it's everything? Okay, you know, do you need a little bit help more support? And you know, is there anything I can do? And then you kind of get them engaged in that way. But as you see my class, they don't have any problem getting with their activities or with each other [Laughing]. Very sociable, social beings.

Annika: That's true. So how do you think it can help teachers to actively implement students' perceptions of the learning environment? Like how do you think that supports them in their teaching and the whole classroom environment? What do you think about it?

Interviewee: Well, I think it's, I think it comes hand in hand with, you know, your reflections, you it's always important that not only the children reflect on the learning that they've done that day on the learning goals that they've that they might have achieved. They always reflect on their strengths and weaknesses, it's important for them to know what they're good at and support for them to know what they need to work on. Ehm but also, as a teacher, as well, you know, it's important for you to reflect because when the children have told you I wish, they will tell you, if they did not enjoy an activity, or they find activity boring, or if they find, ehm you know, for whatever reason, they may not have actually enjoyed or engaged in that activity, they will tell you, and it's always good for you. Because when it comes back to doing those lessons, and when it comes to, you're looking at not only the children's engagement, but also your own, what could you have done differently? What, because it always informs planning. Ehm, you know, it's not an exact science, you know, there is a many, many books to tell you how to become a, an effective participator, there is really is no new, new right guide. Unless you're thrown in to defend yourself. And like you said, every day is a new day to school yourself. Not just the children, I've had many lessons where I've had the best laid plans, that's the best way to say it, best laid plans, and they never go too plan. And even though I thought that the lesson has been planned out to a tee and you think that they're going to enjoy it, and it's going to be so much fun, and they're going to get so much out of it. And then you find that it's just like, you know, don't like it at all. And then you are sitting there going, Wow. Okay, so that didn't work. Well, let's look at why. And sometimes, you might have had your expectations were so high, you had all these grand ideas on the children and just look at you and go, That's nonsense. You know, I don't want to do that or that's really boring, or that's really easy. It's, I find that you know, if it's if something's too easy, and that's where the IPC is great for differentiation, and there's always something in there that the children are going to take along with. So it's really important to inform yourself when you don't get it right. Ehm because, you know, we are only teachers, we're only human, and we do get things wrong as well. So it's more of a reflection. It's more

a reflection, you know, assessment for learning, you know, if you can reflect on yourself, as a participator reflect on your lesson, and how you, you know, how did you engage, you know, in the lesson. Ehm why did not work. Sometimes it could be if it's the wrong time of day, and they're tired, and you're wanting a little bit more either than than they are prepared to give. It's always good to reflect on little things like that. Ehm and especially when you've got a culture of just completely different personalities. And as you knew yourself, [Laughing] it's important for them to reflect support for you to reflect and influence future planning. Sometimes you would say that that would be a lesson I'd never do again, because it did not work. Or you could be saying that that's less than that you could have done better. Ehm for whatever reason.

Annika: Do you actively ask for students' perception of the learning environment into your lesson planning? Like you say, okay, once a week, after one lesson, I really want to ask students for their perceptions. And do you use specific methods? Like do you let them fill out a questionnaire? Do you basically do little interviews with them, individual talks, how does that go?

Interviewee: Normally, to be honest, I always said it with best intentions, when it comes to things like that, you know, having little questionnaires I used to do, I used to do reflection sheets, where you would ask the children your, you know what they would choose one of their, you know, the activities they've done that week, and they would reflect on it. So I want you to choose an activity you really enjoyed this week, you know, choose an activity, you did really well choose an activity that maybe you you know, ehm you could have done better, and they would reflect on it. And then that would be paperwork, but I find that that took away from the actual interactions, because you know, they don't, you're asking them to write, you know, I think is the best way to put it, you ask them to write something, and they don't see the value in putting it on a piece of paper, they will absolutely talk to you. So if you were sitting, so I usually find oral feedback is the best. And I would jot down the comments that have been said, so that whenever I reflect on my lessons, or I reflect on the end of the unit, something becomes to the point where you are report writing, and you have to write about their progress in each topic, ehm that you teach. And it's all I always like to make sure that whenever I'm reflecting and reporting, that I can be specific for each child. So if I, if I find a piece of work particularly awesome, or in a great pass, you'll particular find, I like to write it down and keep a record of it in my excessive folders, when it comes to report writing, when it comes to I can actually go back to that and say, Oh, yes, that's right. You know, she did say that, and that was really quite, you know, quite clever. And she was able to connect that dot and that was actually quite really, really smart. Or that activity was a really, really well how they would organize themselves present, they source their own materials. Ehm and, you know, so I would, I would usually note that down, ehm, in a group lesson. And like I said, it would be normally you know, you know, how did everybody find that today, guys is that a struggle, you know, thumbs up, thumbs down, give me, sometimes the traffic lights, you know, over the little traffic lights on the end of their pages, and then have to colour it in, you know, such as whenever it comes in to me, they colour in the red, the red one, I knew they struggled and they find it really difficult. If they've coloured yellow colour that I put, you know, I kind of understand where I was going, but I'm not really sure. And then the green being I do not need your help, I'm done. This is really easy. You know, give me harder stuff. So I can sometimes do that the traffic lights, um, you know, where the three little bears. You know, I used to feel that there was one, which was like, the medium where the Daddy bear and the

baby bear? You know, was it too hard? too hard? Too easy, you know? Or was it? Right? You know, and he gets to do that one. And then I used to ask them to give me feedback, you know, comment. Ehm to let me know, whenever they find it difficult, or if they didn't like it, why did they not like it, I used to do that a little comment box at the bottom. And but generally, because your day moves so fast, and you do run out of time, and you know, you do want to get the most out of your lessons as best you can. So when it comes to taking time to write your reflections, I usually tend to not do that individually. Unless it is the end of the year, I would do a questionnaire, you know, and it would mean a questionnaire to reflect on their learning goals. You know, do you feel that you showed resilience? You know, can you give an example, you know, when you showed it, you know, that would be kind of that you know, just to have and really is just to check off the box did they understand what their learning goals were? Could they choose a time that they did it? Whereas when I do oral feedback, it tends to have more meaning because they're interacting with each other and they can hear what other people are saying. And it gives them an opportunity then to share you know, well actually. Yeah, I did really enjoy that. But I didn't like that bit. But you know, why didn't I like that? Well, I didn't like it because, you know, they tend to speak more freely about it, and then I would just jot it down. Ehm and, and then of course, whenever I'm reflecting at the end of my unit, I would be able to say, you know, that what was popular, what they didn't like, what they have suggested that would be that I would do next time, you know, I'm trying to think what they said to me about the dinosaur one, or I'm sorry, not even like the chocolate one, because obviously, we're living in Corona times. And there's the chocolate topic. It is such a nice one. And, and they were so excited, to you know, to make chocolates, and to create their own chocolate bar to go to a chocolate factory, you know, we're in Germany, you there's so many things that they could have done, but because of Corona, they couldn't go. So a lot of my feedback at the end of that unit was, they were disappointed, they were disappointed that they didn't get to do all the things that that we had. Because initially when we when we started planning, you know, what would we like to learn? And what do we know about chocolate? Obviously, I gave them a little gold tickets, and they had the right idea and I knew a thought or an idea or, and you know, we shared them as a class. But then whenever it came to, what would we like to find out? What we like to do what we like to make, what we'd like to see, ehm you know, a lot of it was, you know, I can't we made my own chocolate, I can't until we go to the Chocolate Factory. And then of course, at the end when we reflected, you know, there was a lot that was not was not completed, because we couldn't, you know, we talked a lot about that, you know, yes, we would love to go to a chocolate factory, yes, you would have loved to make chocolate, we absolutely love to, but you know, we talked about the reasons why so they understood why they couldn't have those things. And you know, and we said that if there if it ever came to announce that we would get them a treat, you know. So even if even if it was the next year, when next year's class goes to the Chocolate Factory, they were told to have the chance to go, because we felt bad. But I did have a taste session with them, which I was really careful with, you know, that everyone's individual chocolate, you know, gloves, plates were changed, you know, they enjoyed that activity, they enjoyed eating the chocolate, that was a good feedback from from that one.

Annika: And when focusing on the psychosocial learning environment?

Interviewee: Like I said, I tend to do a lot of like, more oral feedback that I jot down. And when it comes to the end of the year, I would do a questionnaire and I would do an

evaluation. And like I said, ███ is talking about it, we call the pride cloud. And you know, I just choose one piece of work. See, we used to do portfolios portfolios. When I was ███ everyone had a portfolio, and it was being of my existence, I hated those things. Because it was just putting work in a folder for the sake of putting work in a folder. And I just thought this is a waste. For example, one of my units was sustainability and teaching second graders about saving the planet, you know, and not wait, don't be wasteful, reduce, reuse, recycle. And there's 18 children filling up a portfolio of paper that many trees have died for. And each page had to go individually into clear Polly pockets. And I'm like, What am I doing here, and the children would have said to me, it's kind of funny that, you know, we're using all this paper, but you know, think about the trees, and I'm like, sweetie, that's a really good point. Ehm but the only good thing about them, I will say was that the children got to display their work. And then at the end of that unit, they could flick back, choose a piece of work that they really were proud of. And they could write a comment box on it, and ehm choose a piece of work that they felt that they could have done, they could have done better. Kind of having two stars and a wish. They can have two stars, and a wish, you know, two things that you liked, or didn't like. Ehm you know, so but and then the parents will come and the parents will come and you would present your portfolio. And the whole point was that the children would talk about the lessons in the folder, not all of them because you'd be there all day for a week. But they had these, you know, the top five or something and they wouldn't do that. So it had a point. But like I said, you're going to find things that work really well. And you're going to find things that really don't work well, you'll find things that are really time consuming, but worth it, you find things that are absolutely waste of time, and you're never going to use again. And that's what teaching is you just have to find what works for you. So, what I will say is I use a mixture of methods that I would only do that, you know, writing individual and questionnaire if I absolutely had to. Like I said my class are talkers and they prefer to talk than than to write.

Annika: Yeah, that's true. Um, could you mention like some like main benefits in your opinion? Basically, ehm when talking about the social learning environment. How does implementing student perception actively, how does that influence a social learning environment?

Interviewee: Well, yeah, like I said, the children tend to learn a lot from each other. No I can, I could stand there all day and absolutely, you know, stare at the board and explain things to them. And we can have a chat about everything that I know. But as I've come to come to know, with it, even though we are teachers, and we have a wealth of knowledge and a bank of information, children will always surprise you with what they do. And what you don't know will surprise you. You know, what I have found from international classes, children, and to be honest, the classes in general, children will support each other. And I find in my little German class, at the moment, you know, their social and the social interactions, now that each other it is extremely beneficial, especially the language, that language I mean, a couple of my students example, ███, he doesn't always understand the English, you know, he doesn't always comprehend what you're asking him. And ██████ is wonderful at that because she is like a natural leader, I think she will one day probably be a teacher. And she will use German. So she will take what I said in English and she will then say it to him in German, and then you know, he will go oh, so Okay, he will understand, and then he will go ahead and work. Ehm you know. And then she would always say, look over her shoulder to check that he understood, he is doing it correctly for, so they have their social indirect interaction is

is a huge for development, and the development of language and the development of just your actual social behaviours. You know, in general, you know, the, the fact that there is the ability to be compassionate, you know, you know, be a good friend to be a good person. And they learn a lot of that from being around each other. I mean, again, we could stand there all day and say, this is what you can't do it, this is what you shouldn't do. And the reason you shouldn't do this, that's not nice. But children will always test the boundaries, and it's their friends that will actually snap them into place, and say, you know, I don't like that, so I'm not going to go play with you anymore. And then when they leave them behind, they kind of realize, Oh, hang on, I did it wrong, and they don't want to be my friend anymore. Maybe I should, maybe I should go back and change what I've done. So the social aspect is, is huge, not only just for their actual academic learning, but also for their personal development too. Ehm and, you know, they support each other, you know, you know, once somebody picks up a lesson a lot easier than somebody else, you know, and I can stand there till I'm blue in the face to teach something, and they, some students will not pick it up, like, I still don't understand. And it takes a friend who's sitting beside them, I find out with Aditya, and Emelia, you know, Aditya go, like, you know, what she means is this. And he'll start, talk about it with her. And then, he will say Ahh, okay good! and I'm like, dude, I just said that, like, I just said that, you know, I was just looking at her like, how does he just, and, and that's one thing I just love about our classrooms. It's so nice to see that change.

You know, I'm trying to, you know, back in the 80s, whenever I was a kid, myself, and you used to sit there, and you'd sit in silence, it was part of the classroom role. You weren't allowed to talk to your friends, you are delighted to you be quiet in the lesson, you had to sit and focus on the board when the teacher was teaching how to be quite, you know, and then you were told what to do. And you did exactly what you had to do. And when you were done, you had to adapt to this, so your work got marked, and you might have got a happy face, or you might have a sad face. But that was learning, that was how you came through school. And it's been this progression as the years have gone on, and changing classrooms and changing expectations ehm for teachers.

It's wonderful to see, and I've gone from being that kid who was afraid to chat, and misbehave, you know, I'm in a classroom, where my kids, the whole pot point of learning is that they engage in it, you know, that what they get out of it is what they're going to put into it. And the best way to put it, you know, learning does not just happen, it does not happen in silence. You know, I mean, I can honestly tell you that ▮▮▮▮ probably knows more about dinosaurs than I will ever know, in my whole life. And when I'm teaching the unit of dinosaurs, you know, footprints from the past, I'm really some of the things going okay, I get that. I understand that. But I cannot pronounce that name. I do not know what that dinosaur is called. And as I'm trying to mumble through it, ▮▮▮▮ would correct me on this case, this is how you say it was really Oh, come on up here. Come on up here. And you read these words and you tell the children what type of dinosaurs these are. And he would go up and he would he would he would tell them.

Annika: That's great.

Interviewee: So that's for me. That's that's part of the beauty of the curriculum we have at the moment. And it lends itself to children not only being the learners but being the teachers as well. And that for me is important because I Oh, Like to learn. And I'm not ashamed to say there are certain things that I don't know. Which they find quite funny, especially when it comes to technology. And they absolutely suck at that. Absolutely. And they laugh at me all

the time. I have had one of them compensate, all you have to do is turn the computer on. And that's the level we've been at.

Annika: Yeah, so what, in your opinion, the most important factors that you need to consider as a teacher when you talk about or talk with students about their perceptions of the learning environment? What do you think is important?

Interviewee: When I talk about that perceptions of their learning, like as in, I mean, there's lots of different ways to, I mean, sometimes I would ask them, you what they thought of the lessons themselves, what do you think of the activities? So I would ask them, you know, that's feedback for me, you know, what was the activity level like? were you engaged at a high level? Did you find enjoyment in it? And, you know, so when we're building, for example, the rainforest they, they absolutely love that activity I got, you know, they were like, this was brilliant. And I loved all of the resources that we had access to, you know, and they had such fun using all the different materials. You know, they liked to be, you know, doing their heavy metal paintings. They were like, Oh, I loved using the acrylic pencil. I didn't like that. I like the watercolours, you know, all and, you know, why did the watercolours best? Oh, well, because I felt like I could mix it like a lens if you're getting a lot of feedback on the activities itself. So that's one aspect of it. I like to obviously get feedback on that.
The other perception is the classroom environment, I think, is also an important one. It's, you know, how have you, how did you find the environment of our classroom today? Was it a positive environment? You know, especially since I have so many behaviours in my class, I find that more recently, I've had to ask about the classroom behaviour, you know, on the environment, did they find the environment a nice one today? Did you find that it's that you were able to learn everything you needed to learn? Ehm and, you know, and then sometimes ██████ was able to be honest, it was bit noisy today, if I really hard to concentrate, you know, such talking to me is that such kept asking me questions, you and you're getting the feedback on the environment itself. And I always find that the nice one because it is a loud classroom, it is a loud one. And they are sometimes really, really hyper extreme. You can go from enthusiastic behaviour, yeah, we're all enthusiastic, we're having a great day, we're having a lot of fun. But at the same time, then it's like, we need to settle down. And guys, we're trying to learn but we're still on, you've seen yourself, you'll you'll get children. They can't sit still , they're up and they're down and they're in, they are out, or here and they're there. And they're loud. And and, you know, it is important to bring them back, you know, Well, guys, that's, that's look at what ████said it was, it was loud today, you know? Does everybody agree with that? Now, show some hands, you know, and how do they make you feel, you know, and I would get the feedback that way. You know, they're like, Oh, I couldn't concentrate or, or, you know, I find it really noisy, give me a sore head, you know, things like that. And then it's always a good way. Well, guys, you know, maybe tomorrow, let's try and remember that, let's try to remember that, you know, not everybody likes to shout, not everybody likes to you know, listen to noise like that, and you try to utilize that as as as a learning tool. And you are, you know, are everything passionate towards others. But it's also a way to move forward with positive behaviour, you know, and then the next day will be different. So, yeah, perception on their activity level perception on their classroom environment level. And I also like to ask them, you know ehm and I always love doing that, you know, when you come into the end of any unit or any topic, and you ask them, guys, what could we have done, more? You know, is it anything thought of along our way along our journey that we didn't think of at the beginning? Because sometimes we are not when I

reflect, it's like, sometimes I haven't, I haven't gotten everything done. That's number one. You're always going to get there. Certain things didn't get done. And you've got to ask yourself, why time constraints? Whatever the reason might have been, you didn't get it done. But then the children also say that they didn't do it, because they changed their mind. Which I was like that one. You know, we didn't do that one. Because we changed your mind. We decided we didn't want to do that. Actually, we wanted to do this instead. So we did this one instead. And then that's why you changed our mind. Yeah. And now, right, that's all, you know, sometimes they have everything. And as you're going through the unit or the topic, ehm their thoughts change, which is, which is education is always changing. So something that they thought might have been super fun at the beginning, then suddenly, Actually we don't, we don't really want to do that now. We want to do this instead. So I always like to see how their thoughts and their perceptions change as time goes on, because that's what shifts the curriculum. Although we do have a curriculum to follow and they have certain things to learn, and they can learn those things through any activity. You know, I don't necessarily need them to build a 3D rainforest for them to understand the different layers of the reinforced the reinforced cycle, and what animals live there, and why they live in certain areas of the rainforest. I do not need them to build that rainforest in order for them to do that learning, but they want to build that reinforced and they will. So that's, you know, I got a curriculum, yeah, they have to learn about rainforest, they have to learn about the layers. So I would ask them to build our own, we could build a class we enforce, and I want to build my own. And I'm like, okay, so maybe everybody does it in a big group? No, no, I want my own one, I want one of my own. So this is that's why their perceptions do ship the learning as we go along. So, ehm so and because I don't like them to think that whenever we put the ideas on the board, that that's it. So you've given me your ideas, and I'm going to put all that into practice, and we're going to move forward, and they have to see every stage moving forward, you know, I would go back to the ideas board. And I would say okay, guys, so, you know, say for example, ██████ said about the rainforest, okay we have now built, your rainforest that you suggested that we should do in our learning, can you tell me what you learned from doing that? And that's all about the presentation of the rainforest and we can tick it off, you know, as the board we say, Well, did we learn about that? And then they would give you the answer. You know, we learned that and we learned this, you know, and you're you have to take them back to that. Do you remember when you said, did we achieve it? What did you learn? And then you get your feedback through that? Did you enjoy that activity? Or was there something else you could have done differently? So I think perceptions on perceptions on that the lesson itself, the learning environment itself, their strengths and their weaknesses, ehm what they learned what they achieved, ehm always what they would have done differently. Anything they could change, if there was anything they could add, they could do differently. At the end, so ehm yeah, perceptions on every level, but like I said, I mainly do verbal feedback until we get to the end.

Annika: Yes, can you think about, like any reasons why not to include students' perceptions?

Interviewee: Ehm, to be honest, no, I mean, I know that some people get that fear, you know, when they bring up a subject, and there's that fear of oh my goodness, what are they going to say, you know, what am I going to get? Ehm you know, is it going to be? You know, rude? You know, if you talk about inventions, then you know, ██████ and ██████ and ██████ are really interested in toilets with poop. You know, and yes, it is silly and it is a little

bit, you know, ehm nonsensical, but at the same time, a toilet is an invention, so we try to steer them in the best possible way. No, okay. Yeah, there's a toilet. Yeah, haha, it's funny. And then you steer, you know, did they always have a toilet? What was it like in the olden days? They take them you know, try and engage them in that way, you know, you would use a hole in the ground? What Really? Yes, sort of dark hole in the ground? You know, and then why and then change them from being silly to actually being engaged. I don't think there's any negative balance or anything negative about having children children's involved with at all. I know some teachers now that fear of what what's going to come out. They also don't like to relinquish their kind of like control on the learning. A lot of teachers that I've worked with in the past would utilize the same, ehm, diary. So every teacher has a diary. We all have one and you can keep daily schedules in there, you keep all your information in there. What lessons you did you put a little blurb in beside one that really was a bad lesson than that didn't go well? Well, you know, this was terrible. do not do that again, you know, you put that in your diary. But over the years, I've had teachers who had those diaries and they bring them out every year. So after the one year is over, they'll next year, okay. So what did we do on this day last year? What laps do we teach and they get stuck in that rigidity of it. For them they can plan the whole year, through the summer. And then they feel like you know, they've got like control. I know where I'm going. I know what lessons I need to do. I know what part of the curriculum map type check off. I know exactly what these children need to learn before they go on to the next the next grade. And that's they're focused and ready to go. And the children are just little drones that are in school and they all learn the same thing. And they all write the same thing. And they all create the same thing. And everything looks exactly the same. And, ehm and I understand those teachers, I understand them, I understand their need to minimize their their duties, I think is the best said, but teaching is crazy. It is constantly moving, it's constantly chaos. And there's always something else to do, there's always a new thing to do. And it is hard, and it is exhausting. And it is a lot ehm of work to involve the children every single day, and to try and engage them every single day and to get all their ideas every single day and just keep moving forward. But the rewards are so amazing. So even though you come home, and you're like, you know, I can't cope anymore, and I need to sleep. There's a huge benefit there. And the results of learning, I think, speak for themselves. So I appreciate that, I appreciate that some teachers need that control. They don't like flexibility, they don't like change, they don't like adaptability. Which is quite ironic, because these are the learning goals, we're trying to teach these children, we're trying to teach them to adapt to be flexible, to have their own minds to have their initiative, their own initiative to think for themselves, you know, to plant that seed, and then watch it grow, where you're just standing back. And you might sprinkle a little bit of water on it every now and then when you see them flagging. But, you know, that's the mean, that's the main aim of education at the moment. And I think, I think that a lot of teachers, you know, I don't like to generalize and say, the older generation, because I've known quite a lot of teachers who are very practical and very involved the children, you know, so I don't like to generalize that older generation, because that's not necessarily true. I think that teachers, they they like things, how they like them, I'll just put that there. It's like me with my pins, like me with my coloured pins, teachers like things the way they like them. And I can appreciate that. Some teachers like to help themselves planned by the summer. So they know, as soon as that first term comes, they know what they have to do. And if it's not done by them that term they like, Well, why didn't I get this done? You know, and they can reflect themselves? And I can appreciate that, you know, there, there's a lot going on. But I don't think in any, I don't think in any situation it would, it would benefit you at all to have the children just sit and

listen. I think education is come too far. Far too far. We don't. We don't talk and talk anymore. We had the whole point did we throw that idea out? And like a boomerang? And we see what comes back? Yeah, we see what we see what we what we what we throw out and what we get back and get a lot more out of it. Because they can see, they can see themselves in their learning. They can see themselves they can say oh, I said that. And I remember doing that. And I, that was my idea. You especially when they're doing group work, especially when they're doing class presentations. And they're, they're showcasing at the end of their exit point what they have achieved and what they have learned. They can see themselves at the centre of that learning. And they can see how it started here, and how it's gone here and how it's gone here or here or here. And they can see where they were in every aspect. And that's the importance of what we're trying to do. Yeah.

Annika: So, yeah, that was basically a really great ending. Is there anything you would like to add anything you would think is still very important regarding this topic?

Interviewee: Ehm I think, I think I got it all. I hope I gave you everything you need. You know? I hope I gave you everything you needed.

Annika: Yes of course thank you for your time.

Interviewee: I hope I hope that will help you to write what you need to write. You know, because I was trying to read your little thing early on, and it was just a good time. You'll remember that from my teaching studies? No, no, we are not a blank slate.

Annika: No, definitely not. Um, do you have any feedback or anything you would like to say?

Interviewee: Teaching teaching is awesome. It is exhaustingly rewarding in every aspect. So, I will, I will that will be my final statement. It is exhaustingly rewarding. Ehm So always stick with it. And like I said, even even in your worst days, where nothing was right. And everything you have planned, and every idea and thought that you've had and then as the children ticket dying and rip it to pieces, and you come home feeling well, that was an awful, awful experience. I'm terrible. And every day is different. Every day, it is a different opportunity to learn, it's a different opportunity to achieve and like I said, any teacher that goes home at the end says, I know everything there is to know about teaching, needs to retire and quit. Because you will never go home and say that. Every day is different, every day is, ehm, a new experience. It is tiring but rewarding. What the children put in and what you see comes out is rewarding for yourself as a teacher. That is all I have to say

Annika: Well great. I will make a transcript of this interview, let me know if you want to see it after and read through it before I use it for my data. Just let me know. And I think I will stop the recording now.

Appendix 9 - Interview Transcript Interviewee 2

Coordinator of the elementary department at the ██, 02.03.2021

Annika: Yes. All right. So I first have some general questions. What is your position at the ██?

Interviewee: I'm the coordinator of the elementary school. This is a position I have done since last March, when the previous, ehm, at that point the position was called the head, head of elementary. And then she, she left early, and ehm we had to fill the position quickly. And ehm we had to react to Covid. So I am being, I am being the Covid, the Covid coordinator. So I've been in the position since since Covid basically.

Annika: Yes, Alright.

Interviewee: So I haven't really experienced normal life. And I don't know if we will ever go back to normal life. While I suppose this is also the normal life now.

Annika: I guess it is, I mean it has been going on since a year.

Interviewee: So before that I was the class teacher in grade one, grade two. And when I took over the position of coordinating, I was also a full class teacher up until December. So now I am teaching part time and coordinating the rest of the time.

Annika: Okay. How long have you been working at the ██?

Interviewee: Ehm yes. Are you German?

Annika: Yes I am.

Interviewee: I have to ask because eh I've been teaching here for a long time and my German is still not great. I've been here, I've been teaching here for since 2008.

Annika: Okay.

Interviewee: So pretty much since when you were a child.

Annika: Yes that's true. Alright. So the general topic of my thesis is about the psychosocial learning environments. So how teachers can use the students' perception of that, actively in their lessons. And how they can include that, so what effect does it have if you actively involve students' perceptions, ask them directly for their perceptions and reflect on it with them. So could you give your own definition of psychosocial learning environment, what does this mean to you? How does it affect your work in the classroom, your learning? Just in general.

Interviewee: Ehm, I can't really give a definition of this. Because I have only really, this term I haven't come across, ehm, so I haven't read up on it specifically. Ehm, it is possibly possibly part of a larger and more fundamental question about what good teaching is, which

is a relationship. So the relationship comes first, before learning did, and developing a good relationship with learners is essential. Ehm, it can really, really be one of the defining factors of of success for the child. It is the type of relationship that they have with the teacher. And how the child sees himself as a learner. Right ehm, would you would you give me a short paragraph that made me think about it. I come from a background of inclusion, pedagogy. And we have this term called transformability, which is to do with the idea that IQ itself is not fixed. Children have the capacity to transform their their way of learning, but it's based around how they how they see themselves, and how the teacher sees them, and how the teacher reflects that positivity back to them. So it kind of feels a little bit like your psychosocial theory. But I'm not really I am I am not in that theory. And you have to talk about I can't really give you anything, specifically.

Annika: No that's totally fine. So also the psychosocial learning environment is really about the interactions between students and students and also students with teachers. So how that relationship that interaction with each other how that really influences the learning. So this is a focus on the social aspect of the classroom. So what you already said, that relationship in the classroom.

Interviewee: Yeah, I think I think I mean, learning is socially situated anyway. It's placed in a social, a social setting. And when you think about things like Vygotsky, that is a good one, in terms of thinking about how children use language, to convey meaning and to reconceptualize ideas and how that's shared with other human beings. I guess that's a good one. Ehm, I think I also think teachers have to have to develop a really good. They have to develop the right conditions for that, that the social processes that occur in the classroom, and sometimes they can be constrained by their own ideas about what constitutes good pedagogy. Some may be that they really don't want to do a lot of partner, in group work. It may be that they want to have ability grouping, but I think ability grouping has a big impact on on this area you're talking about, because children can scaffold each other's ideas, through interaction, and different abilities, can they hope sometimes to teach each other. And when we are at the ability level, grouping the children by abilities, it can make those things difficult. They get less and less of an experience of different ideas. Also, as well, in an international school where we live in an increasingly more multicultural state, even in state schools. That you get, you get, you've got a wider pool of different ideas and different ways of seeing the world. As kids express it through their language. And there's more. There's more sources of data or sources of different ideas coming in, than say, my parents' generation or grandkids generation, binary, Scottish or British type, very specific kind of values and ideas about how the world is. But yes so what we believe, that I think has an influence on that in the classroom.

Annika: When you are in a classroom teaching, do you use specific methods as an example when you ask for students' perceptions. Like for how they feel what they think, their psychosocial learning environment is like. Do you ask them in a specific way, is there a specific method that you use? Like as an example in my research I am …

Interviewee: I've just come up, I've just come across this psychosocial theory, so it is difficult for me to answer. So you've got to go to reframe your question in a different way.

Annika: Yes okay. So as an example, my basic idea is that I will ask for students' perceptions with a questionnaire, in order to see what they think the learning environment is like. For example what they think, for example I am aiming to help my peers, we are friendly towards each other. And then I want them to create a classroom goal, in order to see how we can improve the learning environment. And there are different methods that you can use, for example a questionnaire. For example, Ms ████████ said she normally does this orally, asking for oral feedback in the classroom. Instead of doing a questionnaire.

Interviewee: Yeah, those are, I mean, there's nothing wrong with using a questionnaire. Ehm. It depends on the questionnaire because the kids it depends. It depends on how you present it to them. Because that will, will affect I think, that will affect the kinds of answers that they give in the questionnaire. So they might be some of the older kids might be. They might be thinking, What's the teacher expecting me to write in this questionnaire? So it's difficult to judge the validity. Have you used Yeah, I think I think, I think I think that anything that's that encourages the voice of the child. Ehm, and there's the aspects of human rights as well, the child has the right to, to have their opinion consulted on any matter that affects them. So the fact that we follow that line of of thinking. Everything affects them in school, they have a right to give their opinions on, and for them to be listened to. So even even, even when it's with tables and chairs out to the board as to how long it'll break for how we work, table work, group work, all of that stuff, they do have a right to offer opinions. I think it's good to see that and frame that in terms of human rights.

Annika: Yeah.

Interviewee: Yeah, it's, it's also, there's that, but there's also what kinds of metacognitive strategies used in the classroom generally, as well, I think. I think the young kids are really, really honest with what they say and what they want, and how they can, they highly articulate their thoughts. Yeah. And I think the older they get the more aware of the more aware of the kid of subtext. So they will, they might approach a questionnaire in a different way to a younger child. Ehm, It can depend on the teacher, really can depend on the teacher, you will get teachers who want to know what the child is thinking, and encourage the voice of the child and everything. Even if it's just a display, you'll get the children to write down. We learned this, and I did it this way. And I thought this, you know, they'll put that up on the wall with the display. And then you'll get other practitioners who are not really that interested in the child. So it can really depend on the teacher, really a lot of hands on the teacher and then. We have an example of that great, in grade 5, just know that they they felt that their needs were not being taken into account in terms of the playground, the use of the playground. So they said, Why are we always in the courtyard, so grade 5. Why are we always in the courtyard? We also want to use the playground because there's a football pitch and there are basketball nets. And there's a climbing frame. And we always have to go to the courtyard. Now, the real blunt answer was, we just needed to separate keep you separated because of the Covid. But actually, they made a really good judgement about their learning environment. They said, we want these things, these things, these things are good for us. Why do we always have to have that? And then we spoke about our responsibility. And we spoke about their right to play one of the rights of the child is the right to play and yeah, right 14 or something. And they said, they said, we frame it in that way. Yeah, you've got the right to play, you have the right to access these things. Yeah. And so they have, they have one day in the planning, and they can go to the playground to access those things.

Okay. So, so yeah, it's listening to the voice of the child, and having it everywhere on a display and having all the timetables and play table it's structure. Ehm, yes that's a big part of it

Annika: Yes, so very democratic. Their voices are heard.

Interviewee: Yes, yes. Yes, I think I think I think that your theory kind of lends itself to that idea of democracy in your classroom, that people should be heard. Yes.

Annika: What do you think could be a risk when you allow, allows for those aspects in your classroom? For your classroom or for the teacher?

Interviewee: Ehm, I think we have to define risk. Because I think that risk is different to hazard. And I think that risk is actually a necessary component for brain development and learning. You know, this kind of pedagogy of learning needs to have risks, and that helps children to build new neurological networks in different areas, because they're being challenged by a new experience that could be risky. So the risk element of I think, is another word for risk is challenge moving into challenging territory. And so for me, I wouldn't be frightened. I want that, I would want that. But I also know that some teachers might not want that. And ehm but something hazardous, that's a different, a different question altogether. So if the kids when they were talking about this, that's great. If they said we want to play over in the field with the broken machinery or something, then I would say no, that's, that's hazardous. Yeah. But as long as there's risks, then I think children have to be challenged. And they have to be challenged, with challenging situations. And I think that's a good thing.

Annika: What do you think are important aspects to consider, that are important to consider as a teacher?

Interviewee: When you ask students of what?

Annika: For their perceptions and their opinions and their perceptions of all things of the learning environment, as an example, when you ask students what they think about the learning environment.

Interviewee: As a researcher, from a from a research point of view you you have to question the validity. And I don't mean that in a nasty way that we should, we should question what children are telling us, I think we should all be believing children. However, from from a technical research point of view, from a scientific point of view, again, it's the question of the child thinking. Okay, what does this person want me to say? And they're not really, they might not actually be that honest. And they might have things that they don't want to say about the learning environment. Because it might be about you, actually I don't like you in this learning environment because you shout at me. You know, and that would be a perfectly valid thing for the child to express. But you're not going to get that. The validity, it is difficult. Also, as well, you have groupthink and and, you know, groups in social psychology, where that's one of the drawbacks of circle times and things like that, as young children is that they say what others and what they say, because they think about what others want to hear on the other side or they mirror what others say. So in circle time and I'll say I ate a cake yesterday, suddenly, everyone ate a cake yesterday, oh I ate a cake yesterday as well. And

it's that idea of wanting to belong and to be together that gets in the way of what it triggers. Yeah, so what was your question again?

Annika: Ehm what the important factors are that a teacher needs to consider.

Interviewee: Well, I think also, you have to be honest, and say why you're asking them? You have to give a very clear reason why is that you want to give them the right. And also, and to get in the frame in terms of human rights, you have the right not to give me an answer. And for them to do that in a way that doesn't make them feel uncomfortable. And there's lots of different techniques that can be used for when children are pushed to disengage. So yeah, I would say that they have the right to, to not get it and not answer. It should be, it shouldn't be. It might just become unconstructive, it just becomes complaints, and then they argue with each other, but then again, it's not necessarily a bad thing. so well.

Annika: There's also research that, that that responses of students are not reliable, which states that that children are not able to judge their environment. What would you say about that?

Interviewee: I think children are able to judge their environment, even a young child when you can hear them, they are judging the environment. Are they doing it while they're doing it with their body? They're using their limbs, they're using their senses. They're responding to the environment. Certainly, kind of are, I think it just maybe the tools they use, the adults giving the kid the tools. Maybe they're not the right tools. It's not necessarily the case. as it were, it's not the kids fault that they can't judge the environment. I don't know, I am not very familiar with that.

Annika: Ehm, so what do you think are the circumstances of what you're saying are important to ask for students' perceptions. What are for example the circumstances for getting an honest answer from students. How do you achieve that?

Interviewee: Ehm, I think, I think, namely that you need to specifically, you need to give them specific criteria and things that you want them to talk about not just, what do you guys think about this is much more. Let's talk about this aspect of the environment specifically, you might like to model answers and show them how different possible ways of giving an answer to this. giving children alternative ways to express that answer because we've got to be inclusive. So if you've got an atypical, a cognitive, really typical child, they might not be able to, they might not have the cognitive tools to get that. But they have the right to be included. In an answer, you have to give them the right kind of tools. I think it's good to be very specific, not too general, to model things. It's like teaching, how would you normally do, you would be very specific you model, to be inclusive. And I think all these things apply for those as well. Yeah.

Annika: Yes so that were basically all the questions that I had. Would you like to add anything or do you have any feedback?

Interviewee: No, I've never, I've never heard of this. I found it difficult to answer your question at the beginning, because I've never heard of this. Yeah, first time to kind of almost think about how they relate to a lot of things I knew.

Annika: Yes, which is totally fine, it is very interesting. For me, it also gets a different perspective from me. Look at this topic as well. So it was very helpful. All right. Obviously, I'm going to transcribe this interview. If you would like to read it. Please let me know. If you would like to check it. If you at any point say that you don't want this data to be included, please let me know then I will not use it.

Interviewee: Yes, my human right.

Annika: Yes, it's very important. Is there anything you would like to add, otherwise I would stop the recording now.

Interviewee: No, that's fine. I'd like to see the final paper that would be good.

Annika: Yes that's no problem.