The use of self-definitions tasks to improve teacher-student interaction

Thomas Gaastra, 6535402

Master Educational Sciences, Utrecht University

Master's thesis

First assessor: Dr. Monique Verhoeven

Second assessor: Joris Beek MSc

June 7, 2021

Words count: 7989

Abstract

Teachers in Special Educational Needs Schools (SENS) tend to experience difficulties with teacher-student interaction. In a SENS, students tend to have trouble communicating their needs to teachers and may consequently develop negative relationship patterns with them. Through a single case study the present study aims to explore the experience of a teacher and his students with using students' self-definition tasks (SDTs). Students constructed the SDT 'Make a manual of yourself', which was analyzed by the teacher. The aim of making and using this SDT was for the teacher to be able to draw upon students' Funds of Identity (FoI) as learners so as to better understand the students and foster teacher-student interaction. Interviews with six students and their teacher were conducted. Results indicate that the teacher used information from SDTs to adapt lessons to students' needs, and that students used their SDT to communicate their needs to the teacher. The researcher also identified differences between teacher's and students' use of SDTs, for example information about preferred classroom conditions from SDTs were more utilizable in the classroom for teachers. Moreover, the teacher noted that in certain situations SDTs could improve teacher-student interaction, mainly in situations when teachers lack knowledge about students.

Key words: teacher-student interaction, self-definition tasks, funds of identity, special educational needs school

The use of self-definitions tasks to improve teacher-student interaction

Wouter, a newly employed teacher in a Special Educational Needs School (SENS), has had the same classroom experience for a few days now. He encountered interactions with students where he did not know what to do anymore. For example, Wouter wanted to kick-off his class session by explaining the learning goals, but got interrupted by his student Derek. Derek wanted to grab the attention of his teacher, to inform him about his overstimulation. The crowded classroom in combination with features of his diagnosis ADHD made him not able to attend the class anymore. Wouter, not aware of the individual circumstance of Derek, decided immediately to punish him for his interruption. Subsequently, Derek, feeling misunderstood, reacted overly emotional and this interaction between Wouter and Derek affected the rest of the lesson in a negative way for everyone. Wouter reflected afterwards: "I should have taken Derek's signs into account, maybe if I knew he suffers from overstimulation, I would have reacted differently".

The anecdote above represents how teachers in SENS struggle with teacher-student interaction (Jordan & Stanovich, 2001). Misunderstandings in teacher-student interaction are more likely to occur in SENS, because SENS students have difficulties in understanding or communicating their needs to teachers (Lindsay et al., 2014). These difficulties could partly be attributed to SENS students' diagnosis of ADHD, ADD, and ASD, which are characterized by difficulties in social interaction, communication and stereotyped behavior (American Psychiatric Association, 2013). Misunderstandings in teacher-student interaction could also occur because of the gap in knowledge (newly hired) teachers have on students' identities whilst interacting, which make teachers not able to respond in ways that alleviate problems (Allen et al., 2013; Pianta et al., 2012). The gap in knowledge teachers experience could be associated with SENS

students' difficulties in communicating their needs to teachers. Therefore, SENS students are more likely to develop negative relationship patterns with teachers than students in regular schools (Ladd & Burgess, 1999), which could be an indicator of SENS students' lower school engagement scores compared to regular schools (Admiraal, 2015).

One research field that could provide insights to address the issue discussed above is concerned with students' Funds of Identity (FoI). FoI scholars have established ways for teachers to fill the gap in knowledge they have on their students while interacting with students. FoI research makes a plea for building on previous (out of-) school experiences that students identify with and that may not be recognized by teachers, in order to foster students' school engagement and the student-teacher relationship (Barton & Tan, 2009; Llopart & Esteban-Guitart, 2017; 't Gilde & Volman, 2021). Fol scholars have developed tools to detect these previous (out of-) school experiences of students with self-definition tasks (SDTs). SDTs can be defined as artbased tasks that invite students to think about their identities and lives (Poole, 2017). These are tasks that reflect students' understanding of themselves (Esteban-Guitart & Moll, 2014). However, it is still unclear what role this knowledge about students can play in improving teacher-student interaction. This study therefore explores the experience a teacher has while using SDTs to be able to draw upon students' FoI so as to better understand the students and foster teacher-student interaction. In doing so, this study tries to contribute to the understanding of how teachers can pedagogically employ students' FoI to improve teacher-student interaction in SENS.

Funds of Identity

Many students in secondary school encounter discontinuities in their current school experiences on the one hand and previous (out of-) school experiences on the other hand

(Esteban-Guitart & Moll, 2014). Research of Cone et al. (2014) illustrate how differences between previous and current (out of-) school experiences as learners can have a negative influence on student engagement. These previous (out of-) school experiences contain the experiences that students have had as learners throughout their educational career (in several contexts), which they identify themselves with (Charteris et al., 2018; Poole & Huang, 2018). Their teachers do not always recognize this discontinuity between current school experiences and previous (out of-) school experiences, since teachers may have had for example different cultural backgrounds than their students or were not present in previous school years (Poole & Huang, 2018). Because of that, previous positive or negative learning experiences that students have had, are not drawn upon in school. Furthermore, the discontinuity between previous and current school experiences can mean that, in particular marginalized or vulnerable students, experience lower school engagement or perform below their ability (Bronkhorst & Akkerman, 2016).

The FoI scholarship tries to overcome this discontinuity by putting emphasis on previous learning experiences that students have had in (out of-) school contexts. The FoI concept is an extension of the Funds of Knowledge (FoK) concept, that declares that teachers are able to decrease the gap between home and school, by drawing upon the skills and knowledge that students have acquired in communities or families (González et al., 2005). FoK becomes FoI when students use these skills and knowledge to define themselves (Esteban-Guitart, 2014, 2016; Saubich & Esteban-Guitart, 2011). However, this study does not focus on skills and knowledge that students use to define themselves, but focuses on previous learning experiences that students have acquired in (out of-) school contexts to define themselves as learners. Therefore, the present study employs a new type of FoI as *FoI as learners*. The previously acquired learning experiences include learning situations in which students (respectively positively or negatively)

thrive or do not thrive and which students identify themselves with (e.g. Charteris et al., 2018; Poole & Huang, 2018).

FoI as learners

Over the years, the basic notion of FoI has remained unchallenged, but several FoI scholars have proposed to add new types of FoI (Hogg & Volman, 2020). A similar type of FoI as *FoI as learners* that also focuses on previous experiences that people identify with is Dark/Existential FoI. Subero et al. (2015) and Poole (2017) first established the type of Dark FoK, which contains knowledge and skills related to previous experiences of students with challenging situations, such as discrimination. Charteris et al. (2018) remarked that dark experiences and knowledge are also pertinent to personal identity construction. They coined the term of Dark FoI, which they used to describe FoI that arose from students' negative school experience. In addition, Poole and Huang (2018) proposed to add Existential FoI, which could be referred to positive and negative experiences that students use to define themselves. According to them, negative emotions and experiences are often not accommodated and drawn upon in classrooms. Existential FoI include for example falling out with a school friend or the feeling of releave when passing exams.

In the present study, previous negative or positive learning experience that students define themselves with are conceptualized as *FoI as learners*. This type of FoI zooms in to students' personal interests in school, preferred learning conditions or teacher approaches (Schachter, 2005). In doing so, FoI focusses on the needs of individual students, rather than viewing them as community representatives (Hogg & Volman, 2020). Because of that, various FoI studies demonstrate higher levels of student motivation when applying the FoI concept into education (Ordóñez et al., 2018; Subero et al., 2018). FoI scholars have noted that a focus on FoI

in education could also enhance teachers' ability to make education more personally meaningful (Hogg & Volman, 2020), because teachers are enabled to draw upon previous learning experiences that students have had with SDTs. As a result, teachers are capacitated to fill their gap in knowledge on SENS students.

Self-definition tasks

Teachers and scholars often attempt to detect FoI through SDTs. A SDT contains important aspects of people's lives, such as interests, activities, artefacts and experiences (Esteban-Guitart & Moll, 2014). In the last few years, scholars have designed various SDTs, like written or drawn self-portraits. To illustrate, Saubich and Esteban-Guitart (2011) asked a girl during a home visit to make a self-portrait by asking her to draw "who you are at this moment in your life" and "artefacts, people and activities that are important to you". They asked her mother to draw a significant circle, which summarized important objects, activities and people in their daily lives on a single page, where the most important are closest to the center of the circle. These methods are still commonly part of FoI research (Marsh & Zhulamanova, 2017; Moulton, 2018).

More recently, the repertoire of methods used to identify students' FoI expanded. Home visits have lost their primary context for data collection, and the school or classroom became the scene where identity artefacts are created (Hogg & Volman, 2020). Several FoI scholars have examined the use of SDTs as educational tools (Subero et al., 2017; Subero et al., 2018; Llopart & Esteban-Guitart, 2017; Charteris et al., 2018). In their literature review, Hogg and Volman examined articles with reoccurring steps of SDT implementation in the classroom: 1) teachers recognizing students' existing resources (e.g. by SDTs) that are important for students' self-understanding; 2) teachers using their insights in students' FoI pedagogically; 3) teachers

improving their teaching by drawing on students' FoI. That way, SDTs could be used as a bridge; to identify previous learning experience that students define themselves with by SDTs and link it to the current learning experiences students have in the classroom. That is why it is worthwhile to see how SDTs can be used to foster teacher-student interaction.

Teacher-student interaction

This study is concerned with teachers drawing upon students' SDTs and is particularly focused on the role that SDTs can play in supporting the emotional support domain of teacher-student interaction, as conceptualized by the Teaching Through Interactions (TTI) framework (Allen et al., 2013; Hamre & Pianta, 2007; Pianta et al., 2012). The emotional support domain of TTI covers the affective relationship between teachers and students (*emotional climate*), the teacher being responsive to the cues and needs of students (*teacher sensitivity*) and teachers regarding and providing opportunities for students' ideas and thoughts (*regard for students' perspectives*).

These three indicators of effective emotional support in TTI consider the interaction between students and teacher as bidirectional and reciprocal in nature, which means that the way a teacher approaches the students influences the way students will respond (Reinke, Herman & Newcomer, 2016). This way, teacher-student interaction lends itself to interventions that target both teacher behavior and student behavior (Reinke et al., 2016). Therefore, tailored teaching methods and pedagogical strategies could provide students in SENS a feeling of understanding and inclusion, because teachers are prepared to respond to typical behavioral manifestations of the disorder (Marks et al., 2003). Thus, SDTs that gives teachers insights into students' *FoI as learners*, may ameliorate teacher-student interaction.

So far, the characteristics of FoI research and teacher-student interaction have been investigated. On the one hand, we have seen that teachers' knowledge about SENS students is important for teacher-student interaction (Pianta et al., 2012). On the other hand, SDTs might give teachers insights into students' *FoI as learners*, which could be pedagogically applied (Hogg & Volman, 2020). Nonetheless, we do not know how a teacher can use SDTs to improve teacher-student interaction and what benefits students experience when a teacher draws upon students' SDTs. Therefore, the research question and subquestions of this study are: *How do students and teachers use students' self-definition tasks to further improve teacher-student interaction?*

- What information about the students does a teacher derive from a self-definition task about the students' FoI?
- How do students use SDTs to share their FoI with their teacher?
- How does the teacher utilize this information in the classroom to improve teacher-student interaction?
- Do students and their teacher experience differences in the teacher-student interaction after the teacher engaged with students' self-definition tasks?

Method

Research context

This study examined a seventh grade classroom and their teacher/mentor in a prevocational education program in a SENS. In this SENS, every class had one mentor, that both supervised students and taught several subjects. In this study, this person will be called 'teacher'.

Students in SENS require special-need support to graduate secondary school due to their neurological or developmental disorder. Special-needs education is a way of educating students

in an individually planned learning environment with adapted equipment and materials. These students were advised by their primary school teachers to enter a SENS so as to maximize their success in their educational career.

This study took place at a SENS where the researcher was employed at the time. The SENS is situated in a small rural village, with approximately 400 students and 40 teachers, that reflect the ethnic and socioeconomic diversity in the Netherlands reasonably well. Students in this SENS can enroll in the pre-vocational track, the senior general education and the pre-university track.

Teachers in this SENS were familiar with utilizing similar identity tasks as a self-portrait in the classroom. Despite that teachers got to know students more by analyzing these identity tasks, they did not implement the information in their lessons yet. The researcher got the idea to make a SDT based on Saubich and Esteban-Guitart (2011), to examine how teachers and students utilize SDTs in the classroom. In doing so, the teacher got the opportunity to implement the information from a scientific SDT in his lessons.

For this study, the researcher created a FoI-related activity called 'Make a manual of yourself', in which students created their SDT that contained their FoI as learners. All students received a piece of paper, on which they were asked to draw themselves in combination with explanatory phrases, emphasizing their FoI as learners. This kind of FoI represents what students identify with as learners, including all their previous (out of-) school experiences while learning. The researcher was informally attending the class session in which the FoI-related activity was done. The presence of the researcher was to help the teacher make sure students followed the guidelines of the SDT (Appendix 1). Guidelines of the SDT were constructed because SENS students have difficulties with abstract tasks. From the researcher's teaching experience at this

SENS, students need strict, structured task guidelines to be able to execute a task properly. The guidelines of the SDT were partly based on the written self-portrait used in the research of Saubich and Esteban-Guitart (2011) and were altered to classroom situation in SENS, e.g. diagnosis of students, personal rules or behavioral manifestations. For example, we asked them: What is important for you in a lesson? or How would you define yourself as a student? To examine the research question, it was crucial that these tasks contain the student FoI as concretely as possible, without divergencies.

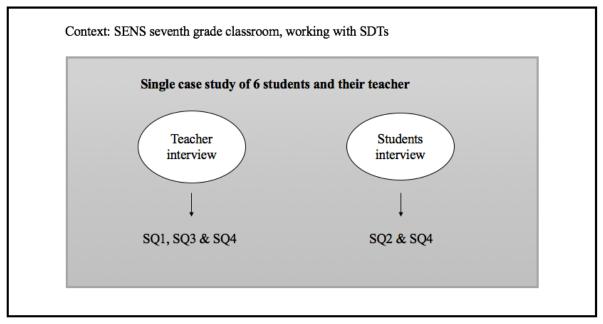
When all students finished their task, the teacher collected the tasks to analyze them right away and possibly ask students further questions about their tasks while analyzing them. The teacher was in charge of these follow-up steps and the way the SDTs were analyzed. This was done to capture authentic answers in the interview about information the teacher got from the SDTs.

Research design

This study was grounded in an interpretive perspective that highlights the socially constructed and locally negotiated nature of experience (Mehan, 1992). As this study examined the use of SDTs by a teacher and students in the classroom, the research design and analysis focused on collecting and interpreting classroom experiences over a substantial period of time (ca. 2 weeks) through interviews with a teacher and students. Therefore, this study utilized a single case study to explore the use of SDTs in a particular classroom context by a teacher and students, see Figure 1 for an overview. According to Yin (2009), single case studies enable an explorative examination of contextual in-depth experiences. Thus, to gain insight into the use of SDTs in the classroom, a single case study could provide a description of in-depth experiences of a teacher and students regarding the ways in which SDTs may foster their interaction.

Figure 1

Research design of the study



- SQ1: What information about the students does a teacher derive from a self-definition task about students' FoI?
- SQ2: How do students use SDTs to share their FoI with their teacher?
- SQ3: How does the teacher utilize this information in the classroom to improve teacher-student interaction?
- SQ4: Do students and their teacher experience differences in teacher-student interaction after the teacher engaged with students' self-definition tasks?

To explore how students and a teacher use SDTs in a classroom, and as teacher-student interaction is considered a bidirectional phenomenon, interview data were collected among both the teacher and the students. As asking questions is a plausible way of measuring experiences (Marshall et al., 2013), semi-structured interviews will be held with a teacher and students to get meaningful information about how teachers and students use SDTs in the classroom and how this informed the teacher-student interaction. Semi-structured interviews allowed for the operationalization of variables (e.g. Funds of Identity and teacher-student interaction), because the same open-ended interview questions were asked to all participants (Creswell & Poth, 2016). Moreover, semi-structured interviews with open-ended questions allowed participants to open up and share their unique experiences, thoughts and beliefs that were relevant to them. According to Boeije (2010), when the participant is enabled to give explanations and guide the focus of the

interview, misinterpretations are less likely to occur. Furthermore, semi-structured interviews allowed for optional follow-up questions, to gain in-depth information about the use of SDTs in the classroom and their possible role in the fostering of teacher-student interaction. Answers to these questions could create a rich, detailed, contextualized description of teacher's and students' experience, which could be generalized to theory of FoI and teacher-student interaction.

Participants

In consultation with the team leader of the SENS, a class with a newly employed teacher in SENS (months of employment = 15) was chosen who experienced struggles in his interaction with students. This school was the first SENS employer for the teacher. Before, the teacher had been working in regular secondary education for one year. The case selection was based on the expectation that this classroom was characterized by a variety of teacher-student interaction experiences and would benefit from working with SDTs, thus leading to meaningful insights in the interviews. The teacher taught several subjects to this class, among which information science, societal science and mathematics. The SENS class consisted of nine students of 12 to 13 years old, of which six students were interviewed. The students in this SENS class had learning, behavioral or mental disorders, like ADHD, ADD or ASD.

Instruments

One interview was conducted with the teacher of the SENS class. Six interviews were held with six individual students. The interview guides were constructed based on literature (Appendix 2). First of all, to examine what information about students' FoI the teacher got from SDTs, the teacher was asked: *Can you tell me if you got (new) information from SDTs?*, with information about students and information about students' identification as indicators.

Students were asked about their use of SDTs to share their FoI with their teacher. For example, students were asked: 'What did you have in mind while creating your SDT?', with communication to teacher as an indicator. To indicate how the information from SDTs was utilized by the teacher to foster the teacher-student interactions, questions about classroom interaction and pedagogical application were constructed. For example, it was asked 'How did insights into students' SDTs change your teaching?' or 'Did you manage to apply these insights pedagogically in the classroom?', with experiences of enhanced relationships with students, recognition of cues and needs of students and responsiveness to student interests as indicators of teacher-student interaction.

Furthermore, interviews with students and a teacher were constructed to gain insights in whether or not they experienced a difference in interaction after the teacher engaged with students' SDTs. For example, students were asked: 'Did your relationship with the teacher change after the FoI-related activity?', to assess whether and how students experience the interaction with their teacher, when teachers drew upon their SDTs. Furthermore, the teacher was asked: 'How did you change your teaching after you analyzed students' SDTs?', to assess differences in interaction experienced by the teacher.

Procedure

In line with faculty's ethical requirements, the teacher, all students and their parents first received an information letter on the research (Appendix 3a) and an informed consent form that could be filled out in case they wanted to give permission and participate in the research (Appendix 3b). The researcher had send the information letter to students' parents and to the teacher through email. The informed consent of the teacher was signed in person. If parents did not want their children to participate in the research, their child would not be interviewed.

Second, a interview appointment with the teacher and students were planned for at least two weeks after the FoI-related activity. This was done to make sure the teacher and students were able to notice possible differences in teacher-student interaction after this class session.

All interviews were held at the SENS. The interview with the teacher took 35 minutes, the interview with students lasted 20 minutes on average. The teacher interview was conducted after school time, the student interviews were performed in mentor hours. The audio of the interviews was recorded. After every interview, the researcher explained how data would be used and stored. The interviews were transcribed and saved anonymously in a YoDa folder, according to research guidelines from Utrecht University. At last, all participants were anonymized utilizing numbers instead of names, to disguise participant information.

Data analysis

In order to answer the research question and sub-questions, teacher and students interviews were analyzed by means of directed content analysis. Directed content analysis is usually used in a research design that describes a phenomenon (Hsieh & Shannon, 2005), such as FoI and TTI. This allowed the analysis to be both inductive in nature – because unexpected categories could arise from data – and deductive in nature – because it utilized prior research about FoI and TTI to associate concepts (Braun & Clarke, 2006). Hence, the researcher allowed codes to emerge from data, while keeping the theoretical framework in mind.

The data analysis started with reading all data repeatedly to achieve a sense of the whole data package (Hsieh & Shannon, 2005). After that, the researcher started open coding with Nvivo, by identifying and assigning initial and intuitive labels to fragments that appeared to capture key thoughts or concepts (Boeije, 2010). Axial coding was used to sort these labels of codes into a list of (new) categories. These emergent categories are used to group codes into

meaningful clusters (Hsieh & Shannon, 2005). At last, the researcher looked for connections between categories by selective coding (Boeije, 2010). For an example of open, axial and selective codes of FoI, see Figure 2. Throughout the analysis, the researcher was reflexive and conceptually orientated, which enhanced the likelihood of generalizations to theory and knowledge accumulation (Polit & Beck, 2010).

Figure 2

Examples of codes of FoI per coding phase

Selective code	Axial codes	Open codes	Interview fragments
Info teacher got from	Preferred teacher	What student	"I wrote down in my
SDTs (about	approach	needs/likes in class	SDT [] that I need
students' FoI)			the teacher to check
			my work before I
			finish". [P1]
	Identity	Diagnosis	"I found it important
	characteristics as a		to write down what I
	learner		have [] that is the
			reason I attend this
			school". [P3]
		Who student is as a	"I wrote down []
		learner	that I work too fast
			and want to get rid of
			it quickly". [P6]

Quality assurance

This study warranted the reliability, validity and quality throughout the data analysis. To ensure reliability within the data analysis, the researcher conducted an audit trail (De Kleijn & van Leeuwen, 2018). While analyzing the data, an external auditor looked into the process

documents to trace back decisions made by the researcher. This document contained memos of coding and a description of the collection of data. The recommendations by the external auditor were used to verify the data analysis and results, which contributes to the reliability of the study (Akkerman et al., 2008).

Second, the use of deductive analysis warrants the validity of the data analysis. Johnson (2013) claimed the use of theory in coding contributes to measuring what is supposed to measure. Third, when all the interviews with teacher and students were held and transcribed, a member check was done to increase validity of the results. The researcher met with the teacher and students and discussed the results to assess if the conclusions were accurate. The teacher and students agreed that the conclusions made were consistent with their own understanding.

Results

The data analysis resulted in an understanding of the way a teacher and his students used SDTs in a SENS classroom. Below, the subquestions will be answered in respective subsections.

Information from SDTs

With respect to the subquestion on what information the teacher derived from students' SDTs about their FoI as learners, the teacher mentioned in the interview that he was able to derive three kinds of information from students' SDTs about their FoI as learners. The first kind of information the teacher reported to have acquired through the SDTs concerns students' abilities to look at themselves as learners. The teacher reported how remarkably different students reacted to the FoI-related activity 'Make a manual of yourself'. There were different reactions among students, but also within students. To illustrate, the teacher described a difference within a student:

For example, how student P9 did the activity. He finds it very difficult to talk about and look at himself. However, he made a clever manual of himself! I found that special, since he usually gets blocked with other similar activities, but now he seemed to succeed.

The teacher compared student P9 to student P5, displaying a different reaction to the FoI-related activity among students:

For example, student P5 could not write anything down in his SDT. As a teacher you have to be constantly involved in the process of creating his SDT and eventually I started writing down things in his SDT about him. Since he could not do the task himself, it shows what he is like.

As presented in these quotes, the teacher obtained information about whether or not students were able to think about themselves during the creation of their SDT, and not while examining the finished SDTs. The teacher described how the reaction of students towards the FoI-related activity 'Make a manual of yourself' revealed whether or not students know with what they identify as a learner, and consequently was informative for the teacher.

Second, the teacher derived information from students' SDTs about their preferred classroom conditions or teacher approaches. An example of this kind of information was a student's preference for a quiet and serene classroom environment. Another example was that a student needed a teacher to explain the content of a lesson in a structure manner. The teacher elaborated on this kind of information being applicable to his teaching:

19

Student P4 has written something very concrete, which could immediately be applied to my teaching. When you read something like that, you know then, if you do not implement that in your lessons, you can create a conflict with that student.

The teacher mentioned that he derived two or three new preferred classroom conditions or teacher approaches from students' SDTs. Although the teacher got some new information about students' FoI as learners, the teacher shared that most information of this kind was already known to him.

The third type of information the teacher reported to derive from the SDTs regards identity characteristics of students, such as their diagnosis or learning style. In discussing this, the teacher raised once more the difference in kinds of information he derived from SDTs among students. To demonstrate that difference, the teacher made a comparison with two kinds of information from SDTs (preferred classroom conditions and identity characteristics):

I was able to derive from some students' SDTs how they have a more pleasant lesson.

Other students did not write that down. They mainly wrote down "who/how am I". They wrote something down about their disorder or diagnosis for example. [P7, teacher]

The teacher brought up that identity characteristics were not informative or applicable to teaching, since he already knew these characteristics about students.

Utilization of SDTs

Student's use of SDTs

SELF-DEFINITION TASKS TO IMPROVE INTERACTION

20

As intended, the SDTs were mainly used by students to communicate with their teacher

about their FoI as learners. Four students brought up that they exclusively used their SDTs to

inform the teacher about their identity characteristics (such as diagnosis or learning style) as a

student. Student P2 elaborated on his SDT that contains his primary and secondary diagnosis

(being ADD and ADHD): "That is what it says [in the manual]. Those are the important things

about me too. So then I think the teacher would understand me. Then the teacher knows what

helps me." The quote of student P2 highlights the intention that this student had with making the

SDT. Furthermore, student P3 was asked about the information in his SDT and realized that he

broadened his FoI as a learner during the online lesson period, which demonstrates an example

of FoI as learners in a SDT:

R: I like physical classes. I would have liked to add that to my SDT.

I: Why?

R: Well, that is because physical classes works better for me. I learn more and I have

more contact with students and teachers. In the online period, I was only playing video

games. I was more distracted.

In addition, three out of these four students mentioned that the SDT could be used as a tool to

communicate their FoI to their teacher, as is illustrated in a fragment from the interview of P1

below.

I: Could the manual help to show or tell the teacher who you are as a student?

R: Yes, I think so.

I: Why?

R: Well, because the manual describes what is appropriate for me. And then the teacher knows what I want and [...] knows what is important to me in class.

Besides students using their SDT as a communication tool, students mentioned how this kind of communication differs from communicating with a teacher in a conversation. Four students broached how they preferred the written SDT as communication tool compared to addressing their needs to a teacher in a conversation. Of these four students, two students mentioned that they were not socially skilled, but by means of the SDT were still able to address their needs to the teacher. Student P4 reported how the communication through a written SDT was more strict compared to addressing his needs in a conversation. The clear phrases in a SDT could (according to the student) not be interpreted wrong, compared to communication in a conversation could be heard incorrectly.

Furthermore, students referred to the personal nature of the SDT. Three students mentioned how their SDT is a personal message to their teacher. Student P2 elaborated on the SDT being an individual, unique artefact:

The manual is very personal. Then the teacher really knows something about me. That comes from the student itself, and not from the parents or other teachers. [..] That teachers see that a student has written it down themselves.

As presented in these quotes, students remarked how they perceive their SDT as a representation of their identity. Two students (one the same, one different) explained how the use of a SDT made them feel heard by their teacher.

I like it when I am heard by my teacher. That it is clear to the teacher what I need. It is nice if the teacher sees me when I do not find something clear or when I do not understand something.

Students noted how the fact that they got the opportunity to make a SDT, made them feel that their perspective was taken seriously by the teacher.

Teacher's use of SDTs

The teacher brought up how the utilization of information from SDTs did not substantially change his teaching. The teacher explained that he did use some information from SDTs in interaction with students or setting up a lesson, but overall the information from SDTs did not have an impact on his teaching. Furthermore, the teacher reported how SDTs could be utilized in situations when teachers lack knowledge about students to improve their teacher-student interaction.

First, the teacher pointed out how the information from a SDT was utilized in daily interaction with students. To illustrate that, the teacher gave an example: "P8 wrote down that he wanted teachers to let him finish when he is talking. When I was explaining something, he was interrupting me. So I mentioned his remark in the SDT and he understood that". As presented in the quote, the teacher elaborated how a teacher could refer to SDTs of students and bring the

content of SDTs up in interaction. As a result of that, students' SDTs stay relevant because students are reminded by their teacher about what they wrote down in their SDTs.

Second, the information from students' SDTs enabled the teacher to adjust the setup of one lesson. The teacher broached how two students wrote down preferred classroom conditions in their SDT, which capacitated the teacher to adapt his lesson to the SDTs. The teacher explained that on the one hand a student wrote down in the SDT that he/she needed personal instruction at the beginning of a lesson, and on the other hand a student wrote in the SDT that he/she wanted to work independently and ask questions when needed. The teacher explained how he specifically adjusted this lesson to meet the FoI as learners that were written down in these two students' SDTs.

Lastly, the teacher described that he already knew the identity characteristics of students well, but noted how subject teachers could benefit from information from students' SDTs:

And if the subject teacher reads something like that [...] that would be good. For example, how a subject teacher should respond to certain situations. A concrete example in class is that when student P8 writes down in his SDT "let me finish when I am speaking". And when the subject teacher talks through student P8, that's why he gets annoyed. That way, you get a conflict. And it could have been prevented by reading into his SDT beforehand.

This quote demonstrates the difference in teacher-student interaction between the teacher and subject teachers. The teacher explained that as subject teachers spend less time with the students they could use the information of SDTs to understand students better and as a results of that, may

prevent misunderstandings and improve their teacher-student interaction. Despite the limited use of information from SDTs, the teacher recognized how information from students' SDTs could improve the bond between a (subject) teacher and a student:

A teacher then knows better what goes on in the mind of a student. Without knowing that, you just fill in what happens to a student. But, through using the SDT, you know what is happening. You can make a more educated guess. That way, you can create a better bond.

In addition, the teacher brought up how information from students' SDT would have had more impact on teacher-student interaction at the start of the schoolyear:

If you implement the manual at the beginning of the schoolyear, you know what to do in certain classroom situations. When a student writes something about themselves, for example 'I get overstimulated when the class is very crowded'. When you do not know that student, and you see that student behave overstimulated or completely blocking, then you do not know what is going on. And when you have a manual about that student, then you know the crowded classroom has been bothering him. You could address the class and make sure that the student feels better again.

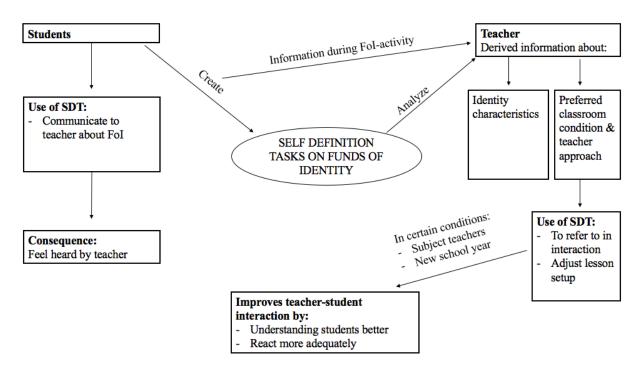
Despite that the teacher already knew its students well, he recognized that in situation with less knowledge about students (subject teachers and start of schoolyear), SDTs could provide teachers with information about students' FoI as learners. The teacher explained that more

knowledge in these situations about students' FoI as learners would enable teachers to react more adequately to students.

To sum up, Figure 3 shows the differences between students and the teacher while using SDTs to improve teacher-student interaction. The figure illustrates how students mainly use SDTs to communicate their FoI to the teacher, which consequently makes them feel heard by their teacher. Furthermore, the teacher reported that preferred classroom conditions and teacher approaches were mainly applicable to his teaching. Moreover, the teacher noted that in certain situations SDTs could improve teacher-student interaction, mainly in situations when teachers lack knowledge about students.

Figure 3

Role that SDTs play in teacher-student interaction



Difference in interaction

Only one student (P3) claimed to have experienced a difference in teacher-student interaction after the teacher read his SDT. This student was relatively new in class, and wrote

down in his SDT that he particularly disliked to be insulted by peers. Before the student had made the SDT, the teacher would not react upon these insults. The student mentioned that after making the SDT, the teacher regularly addressed the insults of peers towards this student. So, due to the information in the SDT, the teacher was able to be a more sensitive teacher by responding to the cues and needs of this student.

All other five students claimed to have experienced no real differences in interaction between them and the teacher. However, two students broached the possibility of improved interaction with their subject teachers.

If the subject teacher had read my manual for the next class session, the session would be a lot better. That is because the subject teacher then knows when I am overstimulated [...] and understands that. Then the subject teacher would understand why I react in a certain way. [P6]

The teacher mainly reported minor differences in teacher-student interaction after SDTs had been made. The teacher described one small difference in a classroom situation in which he implemented the information from a student's (P4) SDT in his lesson. Student P4 wrote down that he needed clear instructions at the start of the lesson. While implementing this in his lesson, the teacher recognized that the student was tranquil and comfortable in his lesson, which he reckons to be attributed to the student trusting the teacher, as he now knows the student and behaves in accordance to his needs.

Hence, the value of SDTs is recognized, but both students and the teacher identified under what conditions this value would come to the fore most clearly.

Discussion

Many students and teachers in Special Educational Needs School (SENS) experience misunderstandings in teacher-student interaction (Jordan & Stanovich, 2001). Misunderstandings in SENS occur frequently because on the one hand SENS students tend to have difficulties in communicating their needs to teachers (Lindsay et al., 2014), and on the other hand teachers seem to experience a gap in knowledge about their students' identities while interacting with students (Pianta et al., 2012). Recently, Funds of Identity (FoI) scholars have established ways for teachers to fill the gap in knowledge teachers have in teacher-student interaction by means of Self-Definition Tasks (SDTs). SDTs can be defined as art-based tasks that invite students to think about their identities and lives (Poole, 2017). This study employs SDTs to detect students' Fol as learners, by emphasizing previous learning experiences from (out of-) school contexts, that students use to define themselves as learners (Charteris et al., 2018; Poole & Huang, 2018). However, FoI scholars have yet to examine the pedagogical application of students' FoI as learners, especially in the context of SENS. To address that gap in research and improve teacherstudent interaction in SENS, the present study examined how students and their mentor in SENS use SDTs to improve teacher-student interaction.

Based on interview data with six students and the teacher, it was first explored what information about students' FoI as learners the teacher could derive from students' SDTs.

Findings show what different kinds of information the teacher derived from students' SDTs, namely preferred classroom conditions or teacher approaches and identity characteristics. Most information from students' SDTs were not new for the teacher. However, findings indicate that the teacher derived new information about students' identities by observing students in the FoI-related activity 'Make a manual of yourself'. The teacher mentioned that the FoI-related activity

was in itself informative, since it showed students' ability to look at themselves as learners.

However, this kind of information could not be attributed to students' FoI as learners, since it does not contain knowledge about what students define as important for them as learners, like the other two kinds of information.

Next, it was examined how students use SDTs to share their FoI with the teacher. In doing so, the present study found that students used SDTs to communicate their FoI to their teacher. Students reported the benefit of communication to their teacher through a written artefact, instead of addressing their FoI in a conversation. Furthermore, findings indicate how students perceived their SDT as an opportunity to share their FoI with their teacher. Hence, while utilizing SDTs, students felt heard by their teacher.

Furthermore, the present study explored how a teacher used the information from SDTs to improve teacher-student interaction. Here it was found that the teacher did not substantially change his teaching after engaging with students' SDTs. However, the teacher reported that he ones used SDTs to refer to in interaction with students and once adjusted the setup of a lesson to meet a student's FoI. The teacher brought up that SDTs did not provide him with new knowledge about students and thus could not utilize SDTs to improve teacher-student interaction. However, the teacher recognized that in situation with less knowledge about students (for instance, subject teachers or start of a schoolyear), information from SDTs would enable teachers to understand students better and, as a result react more adequately to students.

Overall, this study examined how students and their teacher use SDTs to improve teacher-student interaction. Students and their teacher did not report substantial differences in teacher-student interaction after the utilization of information from SDTs. However, the findings indicate that students on the one hand use SDTs to communicate their FoI to their teacher and on

the other hand that teachers could use information from SDTs to refer to in daily interaction and adjust the setup of a lesson based on students' FoI.

The abovementioned results can be confirmed or elaborated on by prior research. First, whereas it was already known how a teacher experiences the pedagogical application of students' FoI in the classroom ('t Gilde & Volman, 2021; Poole, 2017; Saubich & Esteban-Guitart, 2011; Ordóñez et al., 2018), the present study aimed to expand this line of research by not only providing insights into experiences of a teacher but also showcasing the way students make use of SDTs to communicate their FoI to their teacher. This way, the present study demonstrates that SDTs may be of use to students too when it comes to communicating who they are as learners to their teachers. This underscores once again that interaction is never one directional, but should be investigated from both the perspective of a teacher and students (e.g. Reinke et al., 2016).

Second, this study not only explicitly acknowledges the reciprocal nature of teacher-student interaction, but also contributes to the understanding of the use of information from SDTs to improve the emotional climate, teacher sensitivity and regard for students' perspective, which are indicators of the emotional support domain of teacher-student interaction. Results indicate that SDTs provided the teacher with information about students' FoI in general.

Additionally, it was found that SDTs can make teachers more sensitive to students' specific cues and needs. Both these factors are known to contribute to teacher-student interaction (Allen et al., 2013; Pianta et al., 2012).

Lastly, the present study proposed to add a new type of FoI to the FoI scholarship, namely *FoI as learners*. Previous research (Charteris et al., 2018; Poole, 2017; Poole & Huang, 2018; Subero et al., 2015) already demonstrated types of FoI referred to positive or negative

experiences that students use to define themselves. This study suggests that insights into students' learning experiences may be especially insightful to foster the teacher-student interaction in school. Therefore, this study is a valuable addition to prior research about types of FoI, because it suggests that previous learning experiences can be captured in a SDT and be drawn upon by a teacher in a lesson to improve teacher-student interaction.

Limitations and future research

The present study is limited by the fact that the teacher and its students already spend eight months together when the data got collected, which resulted in the teacher and students having a good bond that could not be further improved. This can be an explanation why this study reported (almost) no differences in teacher-student interaction after the teacher engaged with students' SDTs. Participants mainly broached about the importance of the use of SDTs, instead of sharing their experiences in the classroom, since participants did not experience a real difference. To overcome this issue, future research should study the effect of SDTs at the beginning of a schoolyear, when a teacher and students do not know each other yet. Furthermore, a future study could add the perspective of subject teachers, to examine whether they are able to utilize SDTs to improve teacher-student interaction.

Another issue of this study could be attributed to the prominent role of the teacher in the research design. This limitation entails how the researcher had no control over the way the teacher executed the activity 'Make a manual of yourself' with students and the corresponding follow-up steps that needed to be taken. As described in the method section, the researcher was informally present when the students made their SDT. The teacher explained the task properly, which resulted in SDTs that contained students' FoI as learners. Afterwards, the researcher had some follow-up steps in mind, based on Hogg and Volman's study (2020). For example, after the

teacher analyzed the SDTs, the researcher advised the teacher to interview some students about their SDT. This follow-up step was suggested because Marsh and Zhulamanova (2017) explain how SDTs have the most meaning for students when they explain the content of the SDT to another person. However, the teacher did not take these advises up. After the teacher analyzed the SDTs, they disappeared from the classroom, which diminished the chance of the teacher and students talking about SDTs. As a result of that, SDTs were possibly not utilized to their greatest potential. Future research should enable students to be interviewed about their SDT by their teacher. The main reason for the prominent role of the teacher, was to generate authentic experiences in the interview, and that worked out well. Therefore, future research should consider shared responsibility in a research design, to generate valuable thoughts and experiences in a later interview.

Practical implications

Insights from this study might hold meaning for studies in the FoI scholarship and for teachers in SENS. The present study makes a contribution to decrease misunderstandings in teacher-student interaction in SENS. Findings suggest that in situations with a lack of knowledge about students' identities, information from SDTs make teachers understand students better and consequently, enable teachers to be more sensitive by responding to cues and needs of students. Hence, this study can inspire teachers in SENS to improve teacher-student interaction by establishing SDTs in their teaching. A practical implications is to share the FoI-related activity 'Make a manual of yourself' with teachers in SENS, so that teacher are able to draw upon students' FoI and students find the opportunity to communicate who they are to their teacher. The FoI-related activity should be spread by team leaders of a SENS, by putting emphasis on utilizing SDTs at the start of the schoolyear.

In summary, the present study makes a step forward in connecting FoI to teacher-student interaction. It gives valuable insights into how a SDT is used by a teacher and students and in what conditions it might improve teacher-student interaction. With the use of SDTs, the classroom situation between Wouter and Derek described in the introduction, could have ended on a different note. While utilizing SDTs in the classroom, Derek would find another way of communicating his needs and Wouter would have understood Derek's behavior and reacted more adequately.

References

- Admiraal, L. (2015). Schoolbetrokkenheid binnen het cluster 4 voor speciaal onderwijs (Master's thesis). University of Amsterdam, Amsterdam.
- Akkerman, S., Admiraal, W., Brekelmans, M., & Oost, H. (2008). Auditing quality of research in social sciences. *Quality & quantity*, 42(2), 257-274. https://doi.org/10.1007/s11135-006-90444
- Allen, J., Gregory, A., Mikami, A., Lun, J., Hamre, B., & Pianta, R. (2013). Observations of effective teacher–student interactions in secondary school classrooms: Predicting student achievement with the classroom assessment scoring system—secondary. *School psychology review*, 42(1), 76-98. https://doi.org/10.1080/02796015.2013.12087492
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders*DSM-5 (5th ed.). Washington, DC.
- Barton, A. C., & Tan, E. (2009). Funds of knowledge and discourses and hybrid space. *Journal of Research in Science Teaching*, 46(1), 50–73. https://doi.org/10.1002/tea.20269
- Boeije, H. R. (2010). Analysis in qualitative research. SAGE Publications.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa
- Bronkhorst, L. H., & Akkerman, S. F. (2016). At the boundary of school: Continuity and discontinuity in learning across contexts. *Educational Research Review*, *19*, 18-35. https://doi.org/10.1016/j.edurev.2016.04.001

- Charteris, J., Thomas, E., & Masters, Y. (2018). Funds of identity in education: Acknowledging the life experiences of first year tertiary students. *The Teacher Educator*, *53*(1), 6–20. https://doi.org/10.1080/08878730.2017.1367057
- Cone, N., Buxton, C., Lee, O., & Mahotiere, M. (2014). Negotiating a sense of identity in a foreign land: Navigating public school structures and practices that often conflict with Haitian culture and values. *Urban Education*, 49(3), 263-296.

 https://doi.org/10.1177/0042085913478619
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE publications, Inc.
- de Kleijn, R., & Van Leeuwen, A. (2018). Reflections and Review on the Audit

 Procedure. *International Journal of Qualitative Methods*, 17(1), 160940691876321.

 https://doi.org/10.1177/1609406918763214
- Esteban-Guitart, M. (2012). Towards a multimethodological approach to identification of funds of identity, small stories and master narratives. *Narrative Inquiry*, 22(1), 173-180. https://doi.org/10.1075/ni.22.1.12est
- Esteban-Guitart, M. (2014). Funds of identity. In T. Teo (Ed.), *Encyclopedia of critical psychology* (pp. 752–757). Springer. https://doi.org/10.1007/9781461455837576
- Esteban-Guitart, M. (2016). Funds of identity: Connecting meaningful experiences in and out of school. Cambridge University Press. https://doi.org/10.1017/CBO9781316544884

- Esteban-Guitart, M., & Moll, L. C. (2014). Funds of identity: A new concept based on the funds of knowledge approach. *Culture & Psychology*, 20(1), 31-48. https://doi.org/10.1177/1354067X13515934
- González, N., Moll, L. C., & Amanti, C. (2005). Funds of knowledge: Theorizing practices in households, communities, and classrooms. Lawrence Erlbaum Associates.
- 't Gilde & Volman (2021). The effects of using students' funds of knowledge on educational outcomes in the social and personal domain. *Learning, Culture and Social Interaction*, 28, 100472. https://doi.org/10.1016/j.lcsi.2020.100472
- Hamre, B. K., & Pianta, R. C. (2007). Learning opportunities in preschool and early elementary classrooms. In R. C. Pianta, M. J. Cox, & K. L. Snow (Eds.), School readiness and the transition to kindergarten in the era of accountability (pp. 49–84). Paul H Brookes Publishing.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, *15*(9), 1277-1288.

 https://doi.org/10.1177/1049732305276687
- Hogg, L., & Volman, M. (2020). A Synthesis of Funds of Identity Research: Purposes, Tools,
 Pedagogical Approaches, and Outcomes. *Review of Educational Research*, 90(6), 862-895.
 https://doi.org/10.3102/0034654320964205
- Johnson, E. (2013). Face validity. Encyclopedia of Autism Spectrum Disorders, 1226-1227.
- Jordan, A., & Stanovich, P. (2001). Patterns of teacher-student interaction in inclusive elementary classrooms and correlates with student self-concept. *International Journal of Disability, Development and Education*, 48(1), 33-52.

https://doi.org/10.1080/10349120120036297

- Ladd, G. W., & Burgess, K. B. (1999). Charting the relationship trajectories of aggressive, withdrawn, and aggressive/withdrawn children during early grade school. *Child Development*, 70(4), 919–929. https://doi.org/10.1111/1467-8624.00066
- Lindsay, S., Proulx, M., Scott, H., & Thomson, N. (2014). Exploring teachers' strategies for including children with autism spectrum disorder in mainstream classrooms. *International Journal of Inclusive Education*, 18(2), 101-122.
 https://doi.org/10.1080/13603116.2012.758320
- Llopart, M., & Esteban-Guitart, M. (2017). Strategies and resources for contextualising the curriculum based on the funds of knowledge approach: a literature review. *The Australian Educational Researcher*, 44(3), 255-274. https://doi.org/10.1007/s13384-017-0237-8
- Llopart, M., & Esteban-Guitart, M. (2018). Funds of knowledge in 21st century societies:

 Inclusive educational practices for under-represented students. A literature review. *Journal of Curriculum Studies*, 50(2), 145-161. https://doi.org/10.1080/00220272.2016.1247913
- Llopart, M., Serra, J. M., & Esteban-Guitart, M. (2018). Teachers' perceptions of the benefits, limitations, and areas for improvement of the funds of knowledge approach. A qualitative study. *Teachers and Teaching*, 24(5), 571–583. https://doi.org/10.1080/13540602.2018.1452729
- Marks, S. U., Shaw-Hegwer, J., Schrader, C., Longaker, T., Peters, I., Powers, F., & Levine, M. (2003). Instructional management tips for teachers of students with autism spectrum disorder (ASD). *Teaching exceptional children*, *35*(4), 50-54. https://doi.org/10.1177/004005990303500408

- Marsh, M. M., & Zhulamanova, I. (2017). Follow the leader: Attending to the cur- riculum making potential of preschoolers. *Early Child Development and Care*, *187*(5–6), 1004–1014. https://doi.org/10.1080/03004430.2016.1223069
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, *54*(1), 11-22. https://doi.org/10.1080/08874417.2013.11645667
- Mehan H. (1992). Understanding inequality in schools: The contribution of interpretive studies. *Sociology of Education*, *65*(1), 1–20. https://doi.org/10.2307/2112689
- Moulton, M. (2018a). Funds of identity and humanizing research as a means of combating deficit perspectives of homelessness in the middle grades. *Education Sciences*, 8(4), 1–18. https://doi.org/10.3390/educsci8040172
- Ordóñez, D., Siques, C., & Esteban-Guitart, M. (2018). "The best way to learn lan- guage is not by doing language." Incorporating funds of identity for learning Spanish in a shared education unit. *International Journal of Bilingual Education and Bilingualism*. Advance online publication. https://doi.org/10.1080/13670050.2018.1551324
- Pianta R.C., Hamre B.K., & Allen J.P. (2012) Teacher-Student Relationships and Engagement: Conceptualizing, Measuring, and Improving the Capacity of Classroom Interactions. In: Christenson S., Reschly A., Wylie C. (eds) *Handbook of Research on Student Engagement* (pp. 365-386). Springer, Boston, MA. https://doi.org/10.1007/978-1-4614-2018-7 17

- Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International journal of nursing studies*, 47(11), 1451-1458. https://doi.org/10.1016/j.ijnurstu.2010.06.004
- Poole, A. (2017). Funds of knowledge 2.0: Towards digital funds of identity. *Learning, Culture and Social Interaction*, 13, 50–59. https://doi.org/10.1016/j.lcsi.2017.02.002
- Poole, A., & Huang, J. (2018). Resituating funds of identity within contemporary interpretations of perezhivanie. *Mind, Culture, and Activity*, 25(2), 125–137. https://doi.org/10.1080/10749039.2018.1434799
- Reinke, W. M., Herman, K. C., & Newcomer, L. (2016). The Brief Student–Teacher Classroom Interaction Observation: Using dynamic indicators of behaviors in the classroom to predict outcomes and inform practice. *Assessment for effective intervention*, 42(1), 32-42. https://doi.org/10.1177/1534508416641605
- Saubich, X., & Esteban-Guitart, M. E. (2011). Bringing funds of family knowledge to school.

 The living Morocco project. *REMIE: Multidisciplinary Journal of Educational*Research, 1(1), 79-103. https://doi.org/10.4452/remie.2011.004
- Schachter, E.P. (2005). Context and identity formation: A theoretical analysis and a case study. *Journal of Adolescent Research*, 20(3), 375-395. https://doi.org/10.1177/0743558405275172
- Subero, D., Llopart, M., Siques, C., & Esteban-Guitart, M. (2018). The mediation of teaching and learning processes through identity artefacts: A Vygotskian perspective. *Oxford Review of Education*, 44(2), 156–170. https://doi.org/10.1080/0305498 5.2017.1352501
- Subero, D., Vila, I., & Esteban-Guitart, M. (2015). Some contemporary forms of the funds of knowledge approach: Developing culturally responsive pedagogy for social justice.

International Journal of Educational Psychology, 4(1), 33–53.

https://doi.org/10.4471/ijep.2015.02

Subero, D., Vujasinovic, E., & Esteban-Guitart, M. (2017). Mobilising funds of identity in and out of school. *Cambridge Journal of Education*, 47(2), 247–263.

https://doi.org/10.1080/0305764X.2016.1148116

Yin, R. K. (2009). Chapter 8: How to do better case studies. *The SAGE handbook of applied* social research methods (pp. 254 – 282). California: SAGE Publications Inc.

Appendices

Appendix 1: Self-definition task template

Je gaat een handleiding over jezelf maken. Hierdoor doe je kennis over jezelf op en deel je deze met anderen. Je mag out of the box denken!

Wat moet er in ieder geval in jouw handleiding staan?
1. Wie jij bent als leerling op school
2. Hoe een docent met jou om moet gaan in de les
3. Wat een docent moet weten over jouw diagnose
4. Wat jou helpt en wat jou niet helpt in de les
5. Alles wat jij de docent wil vertellen over hoe jij een prettige les hebt

Appendix 2a: Interviewmatrix teacher

RQ	Concept	Indicators	Interview question	Follow-up
				question
What information about the students does a teacher derive from a self-definition task?	Students' FoI: how students define themselves	Information on students	Can you tell me whether or not you got (new) information about your students from the self-definition tasks?	If so, what did you get to know about your students (you did not know yet)? Could you give me some examples? If not, why?
		Information about students' identifications	Do you feel able to tell, based on the self-definition tasks, with what personal characteristics a particular student strongly identifies? Do you feel able to tell, based on the self-definition tasks, how a particular student wants to and can be supported in class to cope with his/her diagnosis?	Why/why not? Could you please elaborate? Could you give a few examples?
How does the teacher utilize this information in the classroom?	Teacher student interaction	Teacher's understanding of students	What behavior of students do you observe, but could not pinpoint?	Could you give me an example?

	insi	cher using ghts into students' pedagogically	How did you manage to apply these insights in the classroom?	Could you give me a few examples?
	drav	uence teaching by wing upon dents' FoI	Can you tell me whether insights into student self-definition tasks influenced your teaching?	If so, how? Could you give me a few examples? If not, could you elaborate?
Emoti		nance relationships h students	Do you think the insights that you derived from students' self-definition tasks enhance the relationship with your students?	In what way? How? Could you give me a few examples?
		cognize cues and ds of students	How did insights into students' self-definition tasks influence the way you recognize cues and needs of students?	Could you give me a few examples? What happened? And what would normally happen?
		pond to student crests	How did insights into students' self-definition tasks influence the way you respond to students' interests?	How did this response to student interest influence your teaching?

Appendix 2b: Interviewmatrix students

RQ	Concept	Indicators	Interview	Follow-up
			question	question
Do students experience differences in the teacher-student interaction after the teacher engaged with their self-definition tasks?	Teacher-student interaction: emotional dimension	Relationship between teacher and student	How would you describe your relationship with the teacher?	
			Have you got the feeling that the teacher knows you well?	If so, could a self-definition task increase that? If not, could a self-definition task help?
			Did your relationship with the teacher change after the class in which you made a self- definition task?	If so, why? If not, could you elaborate?
		Recognize cues and needs of students	Have you got the feeling that your teachers knows what you need in class?	If so, do you think the self-definition task helped to communicate that to your teacher?
				Why? Can you elaborate? Are there things you tried to communicate to your teacher in the self-definition task that he/she did not pick up on? If so, can you elaborate?
				If not, why? Do you think a self-definition task

Providing opportunities for shared students' ideas and thoughts	How does your teacher cope with the newly acquired information about your ideas and thoughts?	could help your teacher to get to know you better? Why? Under what conditions? Why not? Did you refer to your self-definition task?
	Did the self- definition task provide you opportunities to share your ideas and thoughts with the teacher?	Does it make it easier to explain your ideas and thoughts to your teacher when you got a self-definition task?

Appendix 3a: Information letter(s) for students, teachers and parents

Titel onderzoek: Zelfdefinitie taken in het klaslokaal

Datum:

Beste (naam leerling),

Mijn naam is Thomas en met deze brief wil ik je graag uitnodigen om deel te nemen aan mijn afstudeeronderzoek. Dit onderzoek is onderdeel van mijn master Onderwijswetenschappen aan de Universiteit Utrecht. In deze brief zal ik meer informatie geven over mijn onderzoek en wat het betekent om hieraan deel te nemen.

Doel onderzoek

Het doel van het onderzoek is om te verkennen hoe zelfdefinitie taken de onderlinge band van een leraar en een student kunnen ondersteunen. Een zelfdefinitie taak is een creatieve taak waarmee jij aan de leraar kunt vertellen wie je bent en wat jij nodig hebt als leerling. Er wordt gekeken wat een leraar met deze inzichten kan doen in de klas. Daarbij zal ook gekeken worden of leerlingen gemakkelijker hun leerbehoeften kunnen aangeven door middel van een zelfdefinitie taak. Er wordt ook naar leerlingen hun ervaringen in de klas gevraagd wanneer een leraar inzicht heeft gehad in hun zelfdefinitie taak. Met het onderzoek wordt beoogd de volgende onderzoeksvragen te beantwoorden:

Hoe worden zelfdefinitie taken gebruikt in de klas door leraren en studenten om de pedagogische interactie te verbeteren?

Wat voor informatie haalt een leraar uit zelfdefinitie taken van leerlingen?

Hoe kan de leraar deze informatie toepassen in het lesgeven?

Merken leerlingen verschil wanneer de leraar de informatie uit de zelfdefinitie taken heeft ontvangen?

Na afronding van het onderzoek zal er intern (in een database van de Universiteit Utrecht) een thesis worden gepubliceerd.

Procedure

In de mentorlessen zal je een zelfdefinitie taak gaan maken. Hierop laat je zien hoe jij als leerling bent. Vervolgens zal ik met een aantal van jullie in een interview nog verdre in gesprek gaan over deze taak. Dit zal gaan om een eenmalig interview met mij alleen. Het interview zal ongeveer 30 minuten duren. Het interview vindt natuurlijk alleen plaats als jij dit met je ouder(s)/verzorger(s) hebt overlegd en zij ook hiervoor hun toestemming hebben gegeven. Tijdens het gesprek ben je bovendien vrij om op elk gewenst moment te stoppen. Je hoeft geen reden voor het stoppen te noemen. Alle verzamelde data die dan iets met jou te maken hebben zullen direct worden verwijderd en niet meer worden gebruikt.

Risico's en voordelen

Deelname aan het onderzoek brengt geen risico's met zich mee. De opdrachten zullen niet worden beoordeeld voor een cijfer.

Mogelijk kan het gesprek wel leiden tot meer inzicht in de manier hoe je leert of wat je verwacht van een docent.

Vertrouwelijkheid en privacy

Met alle verzamelde informatie zal vertrouwelijk worden omgegaan. De zelfdefinitie taken worden door mij en je leraar bekeken en verder door niemand ingezien.

Met jouw en je ouders goedkeuring wordt het gesprek opgenomen, zodat deze later kan worden uitgeschreven. Dit wordt gedaan om te voorkomen dat informatie verkeerd wordt geïnterpreteerd. Daarnaast zal het interview anoniem worden gemaakt door je naam te niet weer te geven.

De resultaten van de interviews zullen enkel worden gebruikt voor dit onderzoek. De geanonimiseerde data wordt na een voldoende afronding van de thesis verwijderd. De formulieren van de toestemming zullen ook vertrouwelijk worden bewaard tot ene voldoende afronding van de thesis. De formulieren voor toestemming zullen niet worden toegevoegd aan het onderzoek of opgeslagen bij de andere gegevens. De audiobestanden worden conform de richtlijnen van de ethische commissie 10 jaar bewaard in YoDa.

Ethische commissie

Dit onderzoek is goedgekeurd door de ethische commissie van de Universiteit Utrecht. Dit betekent dat wordt voldaan aan de richtlijnen waar sociaal wetenschappelijk onderzoek aan moet voldoen.

Voor klachten kun je mailen naar: Lisette Hornstra: t.e.hornstra@uu.nl Contactgegevens van de Data Protection Officer van de Universiteit Utrecht ("Functionaris Gegevensbescherming") zijn te vinden op de volgende website: https://www.uu.nl/en/organisation/data-protection-officer

Contact gegevens

Voor vragen of aanvullende informatie kan je contact met mij opnemen. Mijn email adres is: t.p.gaastra@students.uu.nl

Met vriendelijke groet,

Thomas

Information letter docent

Titel onderzoek: Zelfdefinitie taken in het klaslokaal

Datum:

Beste (naam docent),

Mijn naam is Thomas en met deze brief wil ik je graag uitnodigen om deel te nemen aan mijn scriptie onderzoek. Dit onderzoek is onderdeel van mijn master Onderwijswetenschappen aan de Universiteit Utrecht. In deze brief zal ik meer informatie geven over mijn onderzoek en wat het betekent om hieraan deel te nemen als participant.

Doel onderzoek

Het doel van het onderzoek is om te verkennen hoe zelfdefinitie taken de onderlinge band van een leraar en een student kunnen ondersteunen. Een zelfdefinitie taak is een creatieve taak waarmee jij aan de leraar kunt vertellen wie je bent en wat jij nodig hebt als leerling. Er wordt gekeken wat een leraar met deze inzichten kan doen in de klas. Daarbij zal ook gekeken worden of leerlingen gemakkelijker hun leerbehoeften kunnen aangeven door middel van een zelfdefinitie taak. Er wordt ook naar leerlingen hun ervaringen in de klas gevraagd wanneer een leraar inzicht heeft gehad in hun zelfdefinitie taak. Met het onderzoek wordt beoogd de volgende onderzoeksvragen te beantwoorden:

Hoe worden zelfdefinitie taken gebruikt in de klas door leraren en studenten om de pedagogische interactie te verbeteren?

Wat voor informatie haalt een leraar uit zelfdefinitie taken van leerlingen?

Hoe kan de leraar deze informatie toepassen in het lesgeven?

Merken leerlingen verschil wanneer de leraar de informatie uit de zelfdefinitie taken heeft ontvangen?

Na afronding van het onderzoek zal er intern (in een database van de Universiteit Utrecht) een thesis worden gepubliceerd.

Procedure

Allereerst wordt er toestemming gevraagd aan docent en leerlingen. Daarna zullen de studenten een zelf-definitie taak maken in de mentorlessen. Hierop laten ze zien hoe ze als student zijn. Als docent zal jij de les geven en waar nodig zal ik als onderzoeker vragen beantwoorden van studenten en mogelijk ondersteuning bieden.

Vervolgens vraag ik aantal studenten verder deel te nemen aan mijn onderzoek. Verder zal ik u als docent interviewen. Dit zal gaan om een eenmalig interview met mij alleen. Het interview zal ongeveer 45 minuten duren. Tijdens het gesprek bent u vrij om op elk gewenst moment te stoppen. U hoeft geen reden voor het stoppen te noemen.

Risico's en voordelen

Deelname aan het onderzoek brengt geen risico's met zich mee. Mogelijk kan het gesprek leiden tot meer inzicht in manieren van adaptief onderwijs aanbieden.

Vertrouwelijkheid en privacy

Met alle verzamelde informatie zal vertrouwelijk worden omgegaan. Met jouw goedkeuring wordt het gesprek opgenomen, zodat deze later kan worden uitgeschreven. Dit wordt gedaan om te voorkomen dat informatie verkeerd wordt geïnterpreteerd. De opnames van het interview worden na de transcriptie verwijderd. Daarnaast zal het interview anoniem worden gemaakt door je naam niet weer te geven.

Ethische commissie

Dit onderzoek is goedgekeurd door de ethische commissie van de Universiteit Utrecht. Dit betekent dat wordt voldaan aan de richtlijnen waar sociaal wetenschappelijk onderzoek aan moet voldoen.

Voor klachten kun je mailen naar: klachtenfunctionaris-fetcsocwet@uu.nl.

Contactgegevens van de Data Protection Officer van de Universiteit Utrecht ("Functionaris Gegevensbescherming") zijn te vinden op de volgende website:

https://www.uu.nl/en/organisation/data-protection-officer

Contact gegevens

Voor vragen of aanvullende informatie kan je contact met mij opnemen. Mijn email adres is: t.p.gaastra@students.uu.nl

Met vriendelijke groet,

Thomas Gaastra

Information letter ouder

Titel onderzoek: Zelfdefinitie taken in het klaslokaal

Datum:

Beste (naam ouder),

Mijn naam is Thomas en met deze brief wil ik toestemming vragen voor de deelname van uw kind aan mijn scriptie onderzoek. Dit onderzoek is onderdeel van mijn master Onderwijswetenschappen aan de Universiteit Utrecht. In deze brief zal ik meer informatie geven over mijn onderzoek en wat het betekent om hieraan deel te nemen als participant.

Doel onderzoek

Het doel van het onderzoek is om te verkennen hoe zelfdefinitie taken de onderlinge band van een leraar en een student kunnen ondersteunen. Een zelfdefinitie taak is een creatieve taak waarmee jij aan de leraar kunt vertellen wie je bent en wat jij nodig hebt als leerling. Er wordt gekeken wat een leraar met deze inzichten kan doen in de klas. Daarbij zal ook gekeken worden of leerlingen gemakkelijker hun leerbehoeften kunnen aangeven door middel van een zelfdefinitie taak. Er wordt ook naar leerlingen hun ervaringen in de klas gevraagd wanneer een leraar inzicht heeft gehad in hun zelf-definitie taak. Met het onderzoek wordt beoogd de volgende onderzoeksvragen te beantwoorden:

Hoe worden zelfdefinitie taken gebruikt in de klas door leraren en studenten om de pedagogische interactie te verbeteren?

Wat voor informatie haalt een leraar uit zelfdefinitie taken van leerlingen?

Hoe kan de leraar deze informatie toepassen in het lesgeven?

Merken leerlingen verschil wanneer de leraar de informatie uit de zelfdefinitie taken heeft ontvangen?

Na afronding van het onderzoek zal er intern (in een database van de Universiteit Utrecht) een thesis worden gepubliceerd.

Procedure

Allereerst wordt er toestemming gevraagd aan docent en leerlingen. Daarna zullen de studenten een zelfdefinitie taak maken in de mentorlessen. Hierop laten ze zien hoe ze als student zijn. Vervolgens vraag ik aantal studenten verder deel te nemen aan mijn onderzoek. Dit zal gaan om een eenmalig interview met mij alleen. Het interview zal ongeveer 45 minuten duren. Tijdens het gesprek bent u vrij om op elk gewenst moment te stoppen. U hoeft geen reden voor het stoppen te noemen.

Risico's en voordelen

Deelname aan het onderzoek brengt geen risico's met zich mee. Mogelijk kan het gesprek leiden tot meer inzicht in de manier waarop uw kind leert.

Vertrouwelijkheid en privacy

Met alle verzamelde informatie zal vertrouwelijk worden omgegaan. De self-definition tasks worden door mij en de leraar bekeken en zal verder door niemand worden ingezien. Met uw goedkeuring en die van de student wordt het gesprek opgenomen, zodat deze later kan worden uitgeschreven. Dit wordt gedaan om te voorkomen dat informatie verkeerd wordt geïnterpreteerd. De opnames van het interview worden na de transcriptie verwijderd. Daarnaast zal het interview anoniem worden gemaakt door namen te verwijderen

Ethische commissie

Dit onderzoek is goedgekeurd door de ethische commissie van de Universiteit Utrecht. Dit betekent dat wordt voldaan aan de richtlijnen waar sociaal wetenschappelijk onderzoek aan moet voldoen.

Voor klachten kun je mailen naar: <u>klachtenfunctionaris-fetcsocwet@uu.nl</u>. Contactgegevens van de Data Protection Officer van de Universiteit Utrecht ("Functionaris Gegevensbescherming") zijn te vinden op de volgende website:

https://www.uu.nl/en/organisation/data-protection-officer

Contact gegevens

Voor vragen of aanvullende informatie kan je contact met mij opnemen. Mijn email adres is: t.p.gaastra@students.uu.nl

Met vriendelijke groet,

Thomas Gaastra

Appendix 3b: Informed consent for students, teachers and parents

Beste docent/student/ouder,

Allereerst hartelijk dank voor uw interesse om deel te nemen aan dit onderzoek. Met deelname aan dit onderzoek wordt bedoeld dat u geïnterviewd zal worden. In deze brief vindt u meer informatie over het onderzoek. Voordat u besluit deel te nemen aan dit onderzoek, is het van belang om te begrijpen waarom dit onderzoek wordt gedaan en wat de inhoud precies is. Lees de volgende informatie dus aandachtig door. Vraag de onderzoeker naar verheldering als er iets niet duidelijk is, of als u meer informatie nog dient te hebben.

Doel van het onderzoek

Het doel van het onderzoek is om te verkennen hoe zelfdefinitie taken de onderlinge band van een leraar en een student kunnen ondersteunen. Een zelfdefinitie taak is een creatieve taak waarmee jij aan de leraar kunt vertellen wie je bent en wat jij nodig hebt als leerling. Er wordt gekeken wat een leraar met deze inzichten kan doen in de klas. Daarbij zal ook gekeken worden of leerlingen gemakkelijker hun leerbehoeften kunnen aangeven door middel van een zelfdefinitie taak. Er wordt ook naar leerlingen hun ervaringen in de klas gevraagd wanneer een leraar inzicht heeft gehad in hun zelfdefinitie taak. Met het onderzoek wordt beoogd de volgende onderzoeksvragen te beantwoorden:

Hoe worden zelfdefinitie taken gebruikt in de klas door leraren en studenten om de pedagogische interactie te verbeteren?

Wat voor informatie haalt een leraar uit zelfdefinitie taken van leerlingen?

Hoe kan de leraar deze informatie toepassen in het lesgeven?

Merken leerlingen verschil wanneer de leraar de informatie uit de zelfdefinitie taken heeft ontvangen?

Na afronding van het onderzoek zal er intern (in een database van de Universiteit Utrecht) een thesis worden gepubliceerd.

Interview

Dit onderzoek bestaat uit een interview met een docent van 60 minuten en ongeveer 10 interviews met 10 leerlingen van 30 minuten. De interviews zullen gaan over de ervaringen van de docent en de leerlingen bij het maken van zelfdefinitie taken. De docent zal vooral gevraagd worden in hoeverre hij nieuwe informatie heeft kunnen verstrekken uit de zelfdefinitie taken en wat hij met deze informatie heeft kunnen doen in de klas. De leerling maakt een zelfdefinitie taak. De leerling wordt gevraagd in hoeverre deze taak geholpen heeft om zijn leerbehoefte te communiceren naar de docent. Verder zal de leerling gevraagd worden of hij verschil in de

communicatie met de docent ervaart, nu hij een zelfdefinitie taak heeft gemaakt. Samen met de onderzoeker zal worden afgestemd waar en wanneer dit interview plaats zal vinden.

Data

Het interview zal worden opgenomen met een audio-recorder, ingebouwd in een laptop. De informatie zal vervolgens anoniem verwerkt worden. De onderzoeker zal het audio-bestand verwijderen. Het interview zal anoniem verwerkt worden. Dat betekent dat het interview niet getraceerd kan worden door participanten doordat de onderzoeker uw persoonlijke gegevens (zoals naam en leeftijd) heeft geanonimiseerd. De data zal gedeeld worden met de thesisbegeleider van de universiteit. Uiteindelijk zal er een membercheck met u worden gedaan. Dat betekent dat er wordt geverifieerd of de informatie uit het interview juist verwerkt is.

Vrijwillige deelname

Uw deelname aan dit onderzoek is geheel vrijwillig. Het is aan u om te beslissen of u wil deelnemen of niet. Mocht u besluiten deel te nemen aan het onderzoek, wordt er van u gevraagd om een toestemmingsformulier te ondertekenen. Na het ondertekenen van het toestemmingsformulier, is op elk gewenst moment mogelijk, zonder reden of opgaaf, om u terug te trekken uit het onderzoek. Als u zich terugtrekt uit dit onderzoek, heeft dit geen invloed op de eventuele relatie met de onderzoeker. Als u zich terugtrekt uit het onderzoek, worden uw gegevens vernietigd.

Vragen

Mocht u later nog vragen hebben over het onderzoek, dan kunt u contact opnemen met Thomas Gaastra, de interviewer/onderzoeker. Mocht het zo zijn dat u vragen heeft over het onderzoek, maar liever niet met de onderzoeker spreekt, kunt u contact opnemen met de thesisbegeleider Monique Verhoeven.

Toestemming

Ik heb de verstrekte informatie gelezen en begrijp deze. Ik heb de gelegenheid gehad om vragen te stellen. Ik begrijp dat mijn deelname vrijwillig is en dat ik me te allen tijde kan terugtrekken uit het onderzoek, zonder reden of kosten. Ik begrijp dat ik een kopie van dit toestemmingsformulier zal ontvangen. Ik ga vrijwillig akkoord met deelname aan dit onderzoek.

Als u besluit deel te nemen aan dit onderzoek, verzoek ik u vriendelijk hieronder uw handtekening te plaatsen en de datum te noteren.

Participantennummer: Datum: Handtekening:

Toestemmingsformulier ouder

Bijlage 1

Actieve consent ouders

Toestemmingsformulier voor deelname aan het onderzoek 'Zelfdefinitie taken in het klaslokaal'.

Hierbij geef ik toestemming dat mijn zoon/dochter deelneemt aan het onderzoek. Ik ben schriftelijk volledig op de hoogte gesteld van het doel van het onderzoek en van de manier waarop de gegevens zullen worden verwerkt. Ik weet dat mijn zoon/dochter op elk moment mag stoppen met het onderzoek, zonder dat hier uitleg voor nodig is en zonder dat hier consequenties aan verbonden zijn.

Datum:	
Naam ouder/verzorger 1:	Naam ouder/verzorger 2:
Handtekening ouder/verzorger 1:	Handtekening ouder/verzorger 2:
Toestemmingsformulier docent	
	Bijlage 2
Ac	ctieve consent docent
Toestemmingsformulier voor taken in het klaslokaal'.	deelname aan het onderzoek 'Zelfdefinitie
volledig op de hoogte gesteld van het d gegevens zullen worden verwerkt. Ik w	cent deel te nemen aan dit onderzoek. Ik ben schriftelijk loel van het onderzoek en van de manier waarop de veet dat ik op elk moment mag stoppen met het onderzoek, zonder dat hier consequenties aan verbonden zijn.
Datum:	
Naam docent:	

Handtekening docent:	
Toestemmingsformulier leerling	
	Bijlage 3
	Actieve consent leerling
Toestemmingsformulier votaken in het klaslokaal'.	oor deelname aan het onderzoek 'Zelfdefinitie
volledig op de hoogte gesteld van h gegevens zullen worden verwerkt.	leerling deel te nemen aan dit onderzoek. Ik ben schriftelijk net doel van het onderzoek en van de manier waarop de Ik weet dat ik op elk moment mag stoppen met het onderzoek, en zonder dat hier consequenties aan verbonden zijn.
Datum:	
Naam leerling:	
Handtekening leerling:	

Appendix 4: FETC form

Section 1: Basic Study Information

1. Title of research:

The use of self-definitions tasks to improve teacher-student interaction

2. My project will be part of my master in:

Educational Sciences

3. Intended period of data collection

My data collection will take place during 1 February 2021 – 1 july 2021

4. Student information

Thomas Gaastra

t.p.gaastra@students.uu.nl

6535402

5. What is the study's (main) research question?

How do students and teachers use self-definition tasks to further improve teacher-student pedagogical interaction?

6. Will you be following a FERB-approved research line?

No

7. Where will the study (data collection) be conducted? If this is abroad, please note that you have to be sure of the local ethical codes of conducts and permissions

The Netherlands

Section 2: General questions

8. My study will consist of the following activity:

New data collection: Open or semi-open interview

Section 3: Protocol observations using audio and/or video recordings

- 9. Will you be following a FERB-approved research programme of your supervisor? No.
 - 10. New data collection: I will be using:

Open or semi-open interview (recorded audio)

11. Where will the study (data collection) be conducted? If this is abroad, please note that you have to be sure of the local ethical codes of conducts and permissions

The Netherlands

- 12. Collecting video and/or audio data is essential for answering the research question? Yes, because the answer a participants gives in an interview is too quick to write it down immediately. The audio recording of the interview is only used later to write the answers down properly.
 - 13. Apart from video and/or audio recordings, there are no personal data.

Correct

14. All personal data are/will be deleted immediately after recording

Yes

15. All possible measures have been taken to prevent subsequent identification of persons

Yes, only measure of transcription of audio will be taken.

16. The observational data are linked to other data, e.g. questionnaire data

Yes, because interviews will be held with students and a teacher

17. It is ensured that persons who have not given informed consent do not appear on the video and/or audio recordings.

Correct: the camera is not aimed at these participants

18. What is observed cannot be interpreted as invasive.

Correct.

19. I will approach:

Adults and children from 13 to 15 years old.

20. I will approach a vulnerable group:

Yes, I will approach students in Special Educational Needs School (SENS) of age 13-15 years old. SENS students are students that are diagnosed with neurological or developmental disorders, like ASD, ADHD or ADD. Research claims that especially these students struggle to build a positive relationship with their teacher. The present research aims to contribute to fostering such relationship, that would benefit their learning, inclusivity and well-being in the classroom, but for this it is crucial that these students' experiences and perceptions are identified and that their voices are heard. To prevent the interviews with the SENS students from being invasive various measures are taken. First, the interview questions are not intrusive. Students will be asked to describe their day-to-day school experiences (e.g., How would you describe your relationship with the teacher?) without trying to dig into any negative emotions the students may experience so as to not upset them. Second,

the interviews are performed by someone they know well and who knows them well. This will help the students to feel comfortable during the interview and allows the interviewer to monitor the stress levels the interviewees may, despite the first measure just mentioned, experience and to end the interview early when the interviewer feels that would be better for the student.

21. I am going to approach the participants using:

A recruitment form on a SENS school, at which I work

22. I use the following resources:

Letter/email

23. Participants receive PPU or financial compensation in proportion to their efforts: No, unfortunately that is not possible, but this is why the time and effort of the research participants is kept to a minimum

24. I'm going to ask consent to preceed using:

An written procedure prior to data collection (informed consent)

25. This investigation cannot lead to coincidental findings

Correct

26. This study does not use deception:

Correct

27. If deception is used, I will ask permission from the participants again immediately after the data collection

Not applicable

In accordance with the instruction document the information letter contains these elements:

28. Aim of the study:

Yes

29. It is emphasized that it concerns student research

Yes

30. Type of tasks, duration, load

Yes

31. How the data are handled

Yes

32. Right of removal (unless completely anonymous

Yes

33. Being able to stop voluntarily at any time without adverse consequences

Yes

34. Contact persons for questions

Yes

35. Information letter in understandable language tailored to target group

Yes

36. Participants will be given the opportunity to remove their personal data

Yes

37. Informed consent: For adults, I ask informed consent:

Actively (via 'wet' signature)

38. Informed consent: For children, I ask informed consent from one parent Actively (via 'wet' signature)

39. Data are or will be stored on faculty servers (YODA and or FSBS research storage) in

Yes

40. Access to data is limited to student and supervisor:

accordance with faculty protocol

Yes

41. Storage period is in accordance with faculty protocol and or additional statutory provisions

Yes

42. Data are not shared with external organization

Correct

43. The video or audio recordings were made with equipment that meets safety and privacy requirements

Yes

44. After closing the data collection, the recordings will only be stored on the faculty's secure server and thus removed from the personal devices

Yes

Section 4: Protocol interview data

45. The topics of the interview are not invasive

Correct

46. The interview takes less than 45 minutes

No, the interviews with students take 30 minutes. The interview with the teacher takes 60 minutes. This is because this is a singular interview and the teacher's experience is important for

answering the research question. Because I will interview approximately 10 students, this interview takes less than 45 minutes.

47. Who are you going to interview

Individuals and groups of individuals

48. I will approach:

Adults and children from 13 to 15 years old.

49. I will approach a vulnerable group:

Yes, I will approach students in Special Educational Needs School (SENS) of age 13-15 years old. SENS students are students that are diagnosed with neurological or developmental disorders, like ASD, ADHD or ADD. Research claims that especially these students struggle to build a positive relationship with their teacher. The present research aims to contribute to fostering such relationship, that would benefit their learning, inclusivity and well-being in the classroom, but for this it is crucial that these students' experiences and perceptions are identified and that their voices are heard. To prevent the interviews with the SENS students from being invasive various measures are taken. First, the interview questions are not intrusive. Students will be asked to describe their day-to-day school experiences (e.g., How would you describe your relationship with the teacher?) without trying to dig into any negative emotions the students may experience so as to not upset them. Second,

the interviews are performed by someone they know well and who knows them well. This will help the students to feel comfortable during the interview and allows the interviewer to monitor the stress levels the interviewees may, despite the first measure just mentioned, experience and to end the interview early when the interviewer feels that would be better for the student.

50. I am going to approach the participants using:

A recruitment form on a SENS school, at which I work

51. I use the following resources:

Letter/email

- 52. Participants receive PPU or financial compensation in proportion to their efforts: No, unfortunately that is not possible, but this is why the time and effort of the research participants is kept to a minimum
 - 53. I'm going to ask consent to preceed using:

An written procedure prior to data collection (informed consent)

54. This investigation cannot lead to coincidental findings

Correct

55. This study does not use deception:

Correct

56. If deception is used, I will ask permission from the participants again immediately after the data collection

Not applicable

In accordance with the instruction document the information letter contains these elements:

57. Aim of the study:

Yes

58. It is emphasized that it concerns student research

Yes

59. Type of tasks, duration, load

Yes

60. How the data are handled

Yes

61. Right of removal (unless completely anonymous

Yes

62. Being able to stop voluntarily at any time without adverse consequences

Yes

63. Contact persons for questions

Yes

64. Information letter in understandable language tailored to target group

Yes

65. Participants will be given the opportunity to remove their personal data Yes

66. Informed consent: For adults, I ask informed consent:

Actively (via 'wet' signature)

67. Informed consent: For children, I ask informed consent from one parent Actively (via 'wet' signature)

68. Data are or will be stored on faculty servers (YODA and/or FSBS research storage) in accordance with faculty protocol

Yes.

69. Access to data is limited to student and supervisor

Yes

70. Storage period is in accordance with faculty protocol and/or additional statutory provisions

Yes

71. Data are not shared with external organization

Correct

Attachments

- (1) Questionnaire teacher
- Can you tell me whether or not you got (new) information about your students from the self-definition tasks? If so, what did you get to know about your students (you did not know yet)? Could you give me some examples? If not, why?
- Do you feel able to tell, based on the self-definition tasks, with what personal characteristics a particular student strongly identifies? Why/why not? Could you please elaborate? Could you give me a few examples?
- Do you feel able to tell, based on the self-definition tasks, how a particular student wants to and can be supported in class to cope with his/her diagnosis? Why/why not? Could you please elaborate? Could you give me a few examples?
- What behavior of students do you observe, but could not pinpoint? Could you give me an example?
- How did you manage to apply these insights pedagogically in the classroom? Could you give me an example?

- Can you tell me whether insights into student self-definition tasks influenced your teaching? If so, how? Could you give me a few examples? If not, could you elaborate?
- Do you think the insights that you derived from students' self-definition tasks enhance the relationship with your students? In what way? How? Could you give me a few examples?
- How did insights into students' self-definition tasks influence the way you recognize cues and needs of students? Could you give me a few examples? What happened? And what would normally happen?
- How did insights into students' self-definition tasks influence the way you respond to students' interests? How did this response to student interest influence your teaching?

(2) Questionnaire student

- How would you describe your relationship with the teacher?
- Did that relationship change after the class in which you made a self-definition task? If so, why? If not, could you elaborate?
- Have you got the feeling that your teachers knows what you need in class? If yes, do you think that the self-definition task helped to communicate that to your teacher? Why? Can you elaborate? Are there things you tried to communicate to your teacher in the self-definition task that he/she did not pick up on? If so, can you elaborate? If not, why? Do you think a self-definition task could help your teacher to get to know you better? Why? Under what conditions? Why not?
- How does your teacher coop with the newly acquired information about your interests? Did you refer to your self-definition task? Does it make it easier to explain your needs/interests to your teacher when you got a self-definition task?