Screening Devices at School
The (Boundary) Work of Inclusion
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Including children with special needs in the common school has become an international political priority over the past 15-20 years. In response, new social technologies have emerged. This article analyses one such technology, an action plan called a SMTTE, and proposes that we understand it as a "screening device". It is a "device" in the sense that it distributes agency, and it "screens" in the word’s multiple meanings: “projecting” as in creating a viewer position; “sifting” and “systematizing” as in discriminating “knowledge” from mere “opinions”; and “protecting” teachers from noise. Using ethnographic data from a Danish school, the article explores, first, the script and agencement of the SMTTE and, second, how the screening properties of the SMTTE are achieved, including how these properties challenge management-teacher relations when the SMTTE travels to other networks at the school. The SMTTE does not form a seamless part of the school. Rather, its screening properties constitute their own trajectory, which interferes with other matters of concern at the school.

Introduction
Including children with special needs in Danish public schools has become a political priority over the past 15-20 years. This trend is rooted in democratic ideals, which assert the human right of children to be included in society (UNESCO 1994). While “inclusion” itself can mean many things, most scholars describe its current vogue as a break with an earlier paradigm of integration (Mittler 2000; Thomas et al 1997). Where the paradigm of integration emphasized the needs of “special pupils” and looked at how such a pupil could be remedied and thus integrated into the school, the paradigm of inclusion foregrounds the rights of all pupils to be included. This implies that the existing practice of diagnosing and then referring pupils with special needs to special schools is increasingly seen as a form of exclusion (Thomas and Loxley 2001; Tomlinson 1987). As a result, new pedagogical ideals and social technologies have emerged in Danish schools to equip teachers and managers to better include pupils who would normally have been excluded via specialist education offers.

Using ethnographic data from a Danish public school, this article analyses such a social technology. SMTTE (pronounced like “smitten”) is a general didactic method for developing quality and performing its evaluation. At this school, it is used as an action plan to monitor and intervene with vulnerable pupils’ behaviour. SMTTE stands for “context”, “goal”, “signs”, “initiatives” and “evaluation”

1 Throughout the 2000s, pedagogies celebrating diversity such as Multiple Intelligences (Gardner 1983) and Learning Styles (Dunn, Dunn and Price 1984) have gained much popularity in Danish pedagogical settings. These are often coupled to inclusive schooling (Reid 2005).
2 I use the term “social technology” (Derksen et al, forthcoming) as a shorthand for tools that originate from psychology and the social sciences rather than the machinic and steely instruments that often are the object of Science and Technology Studies (STS) analyses. While “social” is a disputed term in STS, accused of reifying a dualism between “society” and “nature” (Latour 2005), it is here used to create the sensibility that all kinds of technologies participate in the construction and performance of our society, including those from the social sciences. There is already a well-established tradition for studying “technologies of the self” within the so-called governmentality studies (Foucault 2000; Rose 1996; Dean 1999). I am interested in how “conduct...is not the only possible product of social technologies” and in that regard, STS sensibilities can contribute by exploring social technologies’ “sociomaterial construction...the tinkering involved, and their modes of deployment and circulation.” (Derksen et al, forthcoming).
3 “Vulnerable pupils” is an emic term. While it is performative and obviously involves contingent practices of distinguishing “vulnerable pupils” from the non-vulnerable, this article does not explore the work in making such classifications or coordinations (Bowker and Star 2000). Instead, I use it to signify two aspects: first, that “vulnerable” as opposed to, for instance, “challenging” to a greater extent recognizes that a pupil’s behaviour cannot be reduced to essential problems reciding within the pupil. Second, it is a broad category including pupils who may not have a diagnosis but who are nevertheless problematized in ways that render them subjects for interventions, e.g. through SMTTE.
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(The Sammenhæng, Mål, Tegn, Tiltag, Evaluering) and the developers emphasize a dynamic relationship between each category, asserting that it is a technology for managing a process, rather than setting objectives (Andersen 2000). The SMTTE is a set of social-pedagogical assumptions and procedures about development, in the article analyzed as a “factish” strategy (Latour 1999). These are enacted on paper where each category stands as a headline. Collaboration around a SMTTE action plan often begins with a meeting where each category is to be filled out.

The article proposes that we understand the SMTTE as a “screening device”. Just as Muniesa, Millo and Callon (2007) proposed to study the distributed nature of economic agency through the observation of “market devices”, this paper looks at way SMTTE distributes pedagogical agency in schools. Specifically, I focus on the “screening” properties of the SMTTE: “projecting” as in creating a viewer position; “sifting” and “systematizing” as in discriminating “knowledge” from mere “opinionings”; and “protecting” as in creating a pause from the everyday turbulence and noise, which teachers may experience. The article analyses this as a script embedding a transformation of teacher and pupil identities, turning the teachers’ experiences into inscriptions, which are indexed and used to imagine a future where the pupil is included.

Using the empirical example of the action plan for the boy John, the article explores how this script is enacted. This exploration is related to teachers’ and managers’ articulations of the challenges of working with vulnerable children. In the office of the manager, teachers can articulate experiences in a language that is not possible in writing up a SMTTE. The article explores the difference between “talk” and “writing” and proposes that we understand the office as a place that slows down and transforms experience through the interplay of talk and writing. We learn that the engagement of managers may be necessary for the SMTTE to delegate agency to teachers. It is argued that the socio-material framework of a meeting screens its participants from the school’s rhythm by temporarily suspending it. This interruption is used to provide a place where identities and reactions to anticipated events can be transformed and redistributed, i.e. the interruption works as a moment of translation (Callon 1986).

The article then explores how the action plan is realized. The use of the SMMTE is not just an actualization of its inherent script but becomes a platform for negotiating professional boundaries between the school management and teachers. While the flexible principles of the SMTTE are meant to motivate the ongoing adjustment of the action plan, it also adds a certain complexity to teacher-manager relations. On the one hand, its explicit flexibility produces uncertainty among teachers, forcing them to continuously ask for management’s recognition of their plans. On the other hand, the amplifying effects of the SMTTE suggest that teachers give other concerns and networks at the school a lower priority. In both cases, management intervenes rather ambivalently.

While the SMTTE allows for imagining the inclusion of vulnerable pupils as a future outcome, then, it also produces a need for ongoing boundary work between management and teachers. In this regard, analyzing the SMTTE as a “screening device” helps us conceptualize the relation between a device and a collective such as “the market”, in the case of Callon’s work, or “the school”, in the present case. Rather than understanding a device as a seamless part of a larger collective, the article argues that we see it as constituting its own trajectory. This trajectory interferes with other matters of concern at the school, and thus triggers time-consuming efforts to stitch up everyday plans. These implications are explored in the conclusion.

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4 This is a pseudonym. For reasons of confidentiality, the gender, name, ethnicity, and age describing John in this article may have been changed. While the school and the social services department are involved in various forms of intervention with John’s parents, this is not part of the present analysis. The case study also involves small alterations of the “actual events” as part of the ethical agreement with the school.
From Integration to Inclusion

Problematizing the practices and institutions of special education was a key element in the constitution of inclusion as a ‘solution’. Critical sociological theory argued that the “pupil with special needs” is a social construct rather than an objective, medical condition (see e.g. Barton 1987; Oliver 1986). This gave way to a critical examination of the special education system (Thomas and Loxley 2001, p. 4, Fuchs & Fuchs 2005; Fulcher 1989; Slean 2001). Mobilizing the ideal of “inclusion” to criticize a needs-based conceptualization does more, however, than dispose of an old problem: it also constitutes new objects of knowledge and governance. Rather than finding the problem within the individual child, the problem is now located in institutional procedures and practitioners’ mindsets (see e.g. Egelund 2003; Thomas and Loxley 2001, p. 46).

Denmark has carried out a range of policy initiatives and programmes to retain pupils in the common school and reduce the number of referrals (e.g. Danish Ministry of Education (DMoE) 2003; Zobbe et al 2011;). DMoE has defined inclusion as a “confrontation with frozen pedagogical traditions and positions” and emphasizes the need for schools to adapt to the new “educational paradigm” through “continuous reflection over their own practice and the school’s role in society” (DMoE 2003, p. 7, 111). Against this backdrop, we see new social technologies, which are to make teachers more reflective and flexible through practices of systematic documentation, all of which are assumed to facilitate inclusion.

The SMTTE is as a general didactic technology. The school I studied uses it actively in its efforts to include vulnerable children. Many of the ideals of flexibility and reflection present in the discourse of inclusion are also articulated in texts describing the SMTTE. Therefore, in this article the SMTTE is considered part of a larger and heterogeneous governmental assemblage aimed at inclusion. While we can assume that the SMTTE works as a “screening device” in other didactic contexts than that of inclusion, it is only explored in this specific context here.

Empirical Resources

The findings of this article emerge from a research project that explores the management of inclusion. The empirical material is based on ethnographic observations of four school managers working with a set of heterogeneous practices, which they describe as inclusive. The observations were carried out in May and December of 2010. The school is of medium size by Danish standards (in 2009 the average size was 377 pupils per school; see Hornbek 2009), and ranks low in the so-called welfare index, a statistical mapping of the best and worst-off parishes in terms income, employment participation rate, education, life expectancy, and health (Juul 2010).

In order to follow the many sites where school managers worked with inclusion, I adopted “shadowing” as my principal means of observation. I followed the school’s four managers to explore the various sites of organizing. As Barbara Czarniawska argues, doing so opens up possibilities for moving across domains that are usually seen as separate, and serves to illustrate how the ongoing achievement of organizing involve many different human and non-human actors and physical locations (Czarniawska 2008).

In addition, extensive recorded informal conversations and semi-structured interviews were conducted with managers and teachers throughout and after the period of shadowing. The study did not include the perspectives of children, however. This means that the present article’s account of John’s story emanates from how it was narrated by teachers and managers. Had I spoken to John, a very different account would undoubtedly have emerged (see Gilliam 2008 for an account of how “problematic” and “unruly” ethnic minority boys experience school).

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5 The narrative construction of the past as problematic is a common way to make way for new policy (Shore and Wright 1993, p. 3).
The SMTTE emerged as a central actant in the managerial efforts of making teachers work with inclusion. Regarding SMTTE as an actant, it is an outcome of the research process rather than an initial assumption. In the analysis, I make claims about the SMTTE. By analyzing it as a screening device, which has agency in particular configurations, I show that the use of SMTTE has consequences for the accountability relations between teachers-pupils and teachers-managers. Also, I show that there are contingencies involved in its enactment of accountability. The same relativism as I apply to SMTTE, of course, applies to the present analysis. Like the screening device, my analysis emerges from an interpretation and translation of my interactions with the field. In that respect, my account is not a gaze from nowhere, but a situated and partial account whose construction involved both messiness and contingency (Haraway 1995, p. 179). Like the SMTTE, my analysis traces its own trajectory within the context of investigation, creating its own interferences with other matters of concern in the school.

The SMTTE is not the only monitoring technology at the school. It circulates in a complex network of devices and texts, which includes the tests and reports conducted by the school psychologist, emails between managers, teachers and parents, the online class log where teachers write down daily observations, and databases across a variety of welfare service providers. In that way, the children addressed by the SMTTE circulate across institutional boundaries in many different "formats", their monitoring thus leaving traces on multiple screens (Arnold 2002, p. 229). In the present article, however, the focus remains on the SMTTE, and on how we can understand it as a screening device.

Is SMTTE Society Made Flexible?

While the SMTTE is enacted at the school as a word-template with the five different categories, this is just the pointy-end of a more extensive assemblage. Originating from the Pedagogical Centre in Kristianssand, Norway, the SMTTE’s introduction to Danish schools was mainly driven by the writings of Frode Boye Andersen⁶, an action researcher and consultant at a University College. He learned about it in the action-research project “Project School Evaluation”, which he uses as a best practice example in his writings (Andersen 2000; 2006; Hartit 1998). The experience circulates in a pamphlet format book (Andersen 2000), and as a chapter in an anthology about reflexivity in pedagogical practices (Andersen 2006). Both describe the SMTTE’s didactic principles along with instructions, examples, and advice in how to work with the model in practice.

SMTTE has spread well beyond these two formats. A quick Google search of “SMTTE site:dk”, for instance, gives 13,400 hits.⁷ These range from colleges of education and the Danish Ministry of Education over municipalities and individual institutions (schools, after-school care institutions, kindergartens, pedagogical psychological counselling (PPR)) to consulting firms and private blogs. This suggests that a large network of different actors is involved in the circulation of this social technology in Danish pedagogical settings. Further, the SMTTE resembles other social technologies of evaluation, such as the "quality star" and the "development spiral", introduced in the Danish Ministry of Education’s evaluation campaign in 2007.

Andersen and many of the web pages illustrate the SMTTE in a star-shaped form (figure 1). This is intended to emphasize its processual rather than linear character, and to illustrate how it takes into account all aspects of a development process. The star illustrates how a change in one category also leads to changing others. The process is to be imagined from the vantage point of a desired end result (which itself can be changed during the process).

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⁶ All quotes from his work are translated by the author.
⁷ On March 22nd 2011. In the first 706 pages, only 9 were not this specific social technology. The rest were omitted in the first Google-sorting: “To show you the most relevant results, we have omitted some of the results very much similar to the 706 already displayed”.

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An important aspect of the SMTTE is its simultaneously realist and constructionist approach. The “signs”, which are to bridge value with practice, have a dual status. On the one hand, they have to be concrete in order to allow the description of practices: “The big challenge in deciding on signs is in making the signs sufficiently concrete or observable. In this regard, the observable is not just what is visible but any kind of sense impression” (Andersen 2000, p. 31). A manager explained how signs were used to create a distinction between teachers’ “opinioning” (a barbarism also in Danish) and “knowledge”. For example, “opinioning” would be to claim that a child cannot concentrate; describing the signs would mean stating that the pupil cannot sit still on the chair and finds it difficult to concentrate for more than five minutes. This, the manager explained, would constitute “knowledge”, because it would provide a neutral description of the pupil’s behaviour, enabling other people’s judgment and not just that of the teacher. Not surprisingly, it was not always easy to establish consensus about when a description would be sufficient or neutral enough to count as “knowledge” rather than “opinioning”, and often the managers were concerned about teachers who did not master the skills of neutral descriptions. In this way, signs are observations that are constructed so that they can appear to live independently of the teacher’s judgment.

At the same time, signs have the explicit status of social construction. They are not presented as something out there simply to be observed. As Andersen writes, “Signs are something which we decide. Signs express the vision through a number of pictures from practice. Signs are the concrete emergence of our ascribed quality and show the way we would like to see quality unfold in praxis” (Andersen 2000, p. 29). Here, the emphasis is on the constructed and ascribed aspect of sociality. Rather than assuming that signs represent a reality, signs are ascribed a quality; rather than constructing signs from something “out there”, they obtain a flexible quality and can be changed if they do not match the school’s vision. Combined with the descriptive status, the “signs” category has an explicit “factish” status, where signs are at once a belief about value that is projected onto objects (fetish) and constructed as existing in their own right (fact) (Latour, 1999).

This factish status is to be handled systematically through reflection. The SMTTE guidelines suggest that a didactic teacher should reflect systematically:8

![Diagram](image)

Fig. 1: The SMTTE-star. The present figure is made by the author to have a model in English.

Every practitioner has a repertoire of initiatives he draws on. Routines are a coherent chain of intuitive and automatized initiatives that line up to get at known situations. (...) But the school’s professionals cannot settle with being practitioners (...) [but] must be di-

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8 In that regard, the SMTTE is similar to other social technologies promoting reflection. These have been analysed as “discursive tool for self-regulation and self-production [where] teachers are gradually disciplined to judge and normalise their everyday practice with tools not from their own practices but from those of their discursive captors” (Erlandson 2005, p. 669). For other critical assessments of such reflection technologies, see Gilbert, 2001; Pors 2009; Rolfe and Gardner, 2006.
didactic teachers. Didactic competence is not simply actions (...) but a systematic reflection of these actions. (Andersen 2000, p. 18)

In the context of inclusion, the SMMTE becomes a solution to the problem of relying on routines that might exclude vulnerable pupils. The SMTTE’s potential is to unravel existing practices, to produce something that is different from what exists. The SMTTE turns pupils and teachers into a “virtual object”, containing “all the differences as real potentials” (Brown and Middleton 2005, p. 710).

As a document template, the SMTTE is spatially flexible: there are no predefined restrictions on the number of statements, and teachers are able to make additions or changes over time. Rather than being a container of information already there, a place to transfer information from practice, however, writing is “a material operation of creating order” (Latour and Woolgar 1986, p. 245). The SMTTE is not a “modest witness” but rather performs and translates the pupils and teachers that are inscribed in the plan (Haraway 2004).

Compared to technologies conventionally studied within STS, the use of the SMTTE is not a matter of deleting the inscription process to give it an aura of objectivity (Shapin 1982). It is, in fact, the reverse. Instead of “black-boxing” the world, contingency is a strategic resource to keep all decisions open through the medium of teachers’ reflections. In the words of Nigel Thrift, the possibility of continuously re-describing the categories provides “a peculiarly open means of framing the world as a set of becomings which keep... the possible possible” (Thrift 2001, p. 429). The SMTTE is not a script to make society durable (Latour 1991): instead it is to make society flexible by producing the ideal of a continuously reflective and flexible teacher.

Devices: Symmetry and Agencement

The notion of “device” has been widely used in STS and anthropology, as a means to explore how processes of cognition and interaction are entangled in material and visual practices involving nonhuman components. It is thus recognized that devices do more than simply represent or transfer information: they enable and mediate our ways of knowing and producing relationships (Latour 2005). Most famously, the laboratory’s “inscription devices” are apparatuses that “can transform a material substance into a figure or diagram” (Latour and Woolgar 1986, p. 51). In other writings, we learn of “experimental” and “future generating” devices (Jensen 2004). Here, “device” is taken to be a mediator “effecting conceptual or practical transformation” (Jensen 2004, p. ix). This article, however, follows the trajectory of a “market device”, defined as “the material and discursive assemblages that intervene in the construction of markets” (Muniesa et al 2007, p. 2).

Muniesa et al.’s use of device brings objects to the foreground by symmetrically accounting for the relational aspects of agency. Emphasizing the ontologically fluid process of achieving agency, “device” and “subject” are not to be understood as distinct entities with predefined characteristics (Muniesa et al 2007, p. 3). Instead, they describe the distributed agency of a “device” and “subject” as agencements. In another text, Michel Callon (2008) illustrates this with the example of a pilot who becomes a pilot through an ensemble of air-traffic controllers, radars, gyroscopes, landing strips, international regulations, etc. Agencement has two central characteristics. First, it brackets how agency is distributed among discourses, procedures and technologies, which collectively assist a human in obtaining an identity (ibid, p. 38). Second, while agency is shared collectively, it can be ascribed to an individual who is considered its source (ibid, p. 37). In the case of the SMTTE, this means that the device is not simply a neutral tool to be used by the systematic and didactic teacher. Rather, SMTTE’s particular “factish” rhetoric, its
procedural infrastructure and material aspects (may) equip the teacher with such competences.

The SMTTE, of course, is not a market device but a device used in pedagogical settings, and is here understood as a screening device. The word “screening” does not modify device like “market” does. Instead of signifying the site of its use (market or education), “screening” refers to the properties of the device (like “inscription device”). In that way, my use of “device” is not simply a way of importing the concept from the market collective, but rather a subscription to Muniesa et al’s understanding of device as agencement.

In order explore the SMTTE’s particular screening properties, I will look at the boy John, who got into too many fights, his concerned teachers, and their managers, who assisted with the SMTTE.

**John + stories + bicycle + broken arm = SMTTE**

The following is a story about how a SMTTE came about. A number of events were necessary in order for John to be rendered sufficiently “problematic” to be described in a SMTTE. These events were not enacted by John alone but gained their degree of severity from the presence and coupling of other *actants*: stories narrated by his teachers, a bicycle, and a boy’s broken arm. Together, I argue, they made up a threshold, which the teachers and managers interpreted as an obligation to intervene through a SMTTE.

John is 10 years old. While he is described as an intelligent and smart boy, who functions well in the classroom, there have been several episodes where the teachers depict his behaviour as aggressive and disturbing. He is seen to start, participate, and intervene in conflicts. These conflicts occupy much of the time allocated to teaching. They include an episode where John cycled into a group of boys, which resulted in a broken arm and a set of very unhappy parents. John would claim it was an accident, the boys and the teacher, who had watched, would say that it was an intentional action. After this event, some teachers and parents would ask for John to be moved to a specialist school. The event came to constitute a threshold, a discontinuity that carved the world into a “before” and an “after” (Luhmann 2005, p. 131).

The school psychologist’s testing of John concluded that his cognitive abilities were above average but that he lacked the ability to “calculate consequences”. He could not calculate the dangers involved in bicycling into people. Because his IQ level was “above average”, however, they could not refer him to a specialist school. This became the beginning of a SMTTE. The following shows an excerpt from the action plan written in collaboration between a manager and teachers.

**Context:** John is a boy who often has difficulties during breaks where he enters into fighting with other pupils. John often intervenes in others’ conflicts and thus becomes party to these conflicts (…)

**Goal:** We wish to ensure that John will have comfortable breaks with his friends – without conflicts or defeats.

**Signs:**
1) A boy who smiles more and is happy during breaks
2) Fewer conflicts during breaks

**Initiatives:** (…) Structured play activities [adults structure games and playing during breaks] (…)

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9 As the reviewers pointed out, “importing” the notion of market devices to the school could help explore how the school is “marketed”. Undoubtedly, many changes have been introduced since the late 1980s which turn schools into competitors on quasi markets (see e.g. Fitz et al 2000; Hartley 1999). As an action plan for vulnerable pupils, however, I do not see the SMTTE as such a device (as opposed to, e.g., the publishing of student results). Rather, it is to render a former “challenging” pupil “includeable” through a planning process which I analyze as “screening”.

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Evaluation: (...) [describes the procedures and the frequency of the evaluation]

The SMTTE’s form is somewhat recursive in the way it establishes quite linear links between John’s (and his teachers’) problems and the imagined solution. The problem is described in a way that holds its own goals and signs: a smiling boy with fewer conflicts during breaks. Deciding upon initiatives (structured play activities) happened through a generalization. A manager would ask in which situations John functions well to generalize these conditions and would be told that it happens mainly in classes that have “structured activities”, which allowed for the plan of “structured play activities” during breaks. As such, the SMTTE establishes a correlation between John’s problems and the teachers’ role in facilitating/preventing them. Other information, such as John’s or his parents’ accounts, have been omitted. These may have performed the problem-solution constellation differently. As a text, the SMTTE describes John and his characteristics as an existence external to the text. And it does more than perform John: it also performs problems, goals and solutions.

Screening as “projecting”, “sifting”, “systematizing”, and “multiplying”

While the SMTTE is not a screen in the usual sense (such as a computer screen), screens are involved in its production. The SMTTE is transformed from a paper draft, typically written in the set-up of a meeting, into a digital draft on a computer screen where it is presumably read as it circulates through email. It is not due to these aspects, however, that I want to suggest “screening” as a metaphor. Rather, “to screen” has several different meanings, many of which are relevant to understand how the SMTTE is used. In that respect, I do not use “screen” as a single metaphor, but draw upon its many different meanings. In order to emphasize the procedural aspect of the SMTTE, the verb “screening” (to screen) rather than the noun “a screen” is chosen. To screen, to make phenomena visible, is a doing, an achievement, rather than an a priori characteristic.

One important aspect is the association with “seeing”. Karin Knorr Cetina characterizes the screen as a scopic system, “an instrument for seeing or observing” (Knorr Cetina 2009, p. 64). John Law explores how the manager’s screen becomes a place for accessing statistical information of how manpower is spent, enabling surveillance, comparison, and self-reflexivity (Law 1994, p. 151-158). Other characteristics of the screen include its flat surface, which allows for a particular way of constructing and manipulating information. Screens, then, enable a viewer position where something that is previously unseen (and perhaps unknown) becomes visible, a mediation which creates an object of contemplation and interpretation. In that respect, “screening” is always a translation changing that, which is seen, making certain interventions and not others plausible. Related, to screen also refers to the selection of certain versions of truth over others, as in “to sift by passing through a ’screen’” (Oxford English Dictionary).

Two other meanings of “to screen” are important: “to project on to a screen” and “to examine systematically in order to discover suitability for admission or acceptance” (Oxford English Dictionary). At the school, the SMTTE is used for systematic examination of vulnerable pupils through documentation. That is, it “screens” the teachers’ experiences with John (in the sense of systematic examination, dividing “opinioning” from “knowledge”) and documents this through writing (in the sense of inscribing, or projecting, onto a flat surface). “Acquiring” this knowledge involves writing sentences on a flat surface, a screen, which allows for mediating teacher-pupil relations. By writing statements out, the experience and hopes of a different future are refied and turned into something that can be contemplated, planned, evaluated, and manipulated through engagement around writing (Cooren et al 2006, p. 545). The emphasis on “signs” produces a generalization from the classroom (where John was seen to
“function well”). The translation from a “challenging pupil” towards a detailed description enabled imagining a different pupil, enacted through structured play activities. This, of course, also produced new responsibilities for teachers, who were now committed to realizing the planned initiatives.

Screening, here, is writing because it allows for experience to be transformed into inscriptions, producing nuances that may wither away in verbal interaction. These inscriptions produce new “versions” of both pupils and teachers: John becomes a pupil with particular descriptions and a centre for organizing teachers’ activities during the break. His body becomes a surface on which to look for collectively decided signs, which can be evaluated and referred back to the action plan. The teachers, too, are to acquire a new identity: the plan weaves out new lines of action with specific responses and an imagined preventive engagement. The projection and translation of experience onto paper enacts new versions of both John and the teachers (however, as the analysis will illustrate, it is not only the writing down itself that achieves this). In that way, screening is a projection and a multiplication.

While rendering the pupils’ lives knowable and manageable, screening is a laborious process of producing still more particular descriptions and plans. This process simultaneously changes what is seen and the one who sees. While the write up of the SMTTE involves relatively mundane artefacts, such as a meeting, paper, and pen, the *agencement* also involves the assumptions and training that equip teachers and managers to do the write up. Rather than a relation between human and tool, the SMTTE and teachers extend each other’s capability: the screening device produces a viewer position, and the teacher, in turn, acquires a new view of a (changed) world. We can understand this vision as partial and situated rather than transcendental, contingent on bodily functions and various technical, nonhuman artefacts (Haraway 1995, p. 179).

Returning to the verb “to screen”, the SMTTE’s potential to enable such capabilities is not an inherent property but rather a possible effect of hard work. While the goal of SMTTE is to make teachers reflective and pupils manageable, this achievement is not always a smooth process. The SMTTE is but a template if not realized with inscriptions and given authority after this inscription process. It depends on teachers to be extended, while teachers depend on finding the assumptions that come with the SMTTE plausible and having the temporal resources to sit down, close the door, and write up an action plan. The following section explores the work that goes into having the reflective teacher come into being through the SMTTE.

**Becoming a Screening Device: Management of Talk and Writing**

Working in schools with a high concentration of vulnerable pupils is a challenging endeavour. In the ideal world, teachers would work with the SMTTE independently, without the intervention of a manager. A manager explained how they had attempted to train the teachers to be “self-managing” in relation to conflicts with the pupils. She told that the managers used to be involved in “too many” conflicts and ended up having the “unruly pupils” in their offices when teachers could not handle them in class. This was not the version of inclusion that they had envisioned, and it resulted in attempts to get teachers to work independently with conflicts, writing up the SMTTE by themselves. This did not always happen. In interviews, teachers would describe occasional feelings of powerlessness, feelings that demanded managerial help. Here is an example of such: I have a group of five students (...). They say “f*ck the school” and don’t care, right. (...) I mean, their honour lies in not becoming included. You simply can’t capture them in anything (...) I have also shouted for help, I have said “No, I can’t. I can’t manage the task”, right. Nothing works out. (...) And I cannot do it. (...) That is extremely frustrating, right? I tell people or start crying
every time someone looks at me. (Interview, teacher, January 2010)

In such situations teachers go to the management asking for help. I asked a manager how he would know what kind of help the teachers needed. He described how he could tell from the teachers’ appearance:

It’s visible when they stutter (...), it’s a sign of ill-being. (...) my goal is first and foremost (...) to create an overview. To give the teachers just a little bit of strength so they can stay in their job in the near future. (...) When it’s in writing we can cooperate (...) systematically. And it’s not just the teachers’ (...) opinioning, right? “Now we have a problem” [imitating teacher voice]. A lot of teachers say that, right? (...) But what is it that the child can’t do and in which situations? In what context and with whom? All these conditions, there is a possibility to ask about them when it’s in writing and it’s not just an opinioning (Interview, school manager, May 2010).

Here, “writing”, as opposed to “opinioning”, is endowed with the possibility of “giving teachers strength” by translating their experience of deadlock into specific descriptions, authorized by the categories of the SMTTE. Acquiring the competence to manage these pupils, the manager claims, is possible through writing.

But what exactly happens in these meetings between managers and teachers? How can we understand that writing delegates agency back to the teacher? The manager understands it as a transformation from opinioning to knowledge. As described in the previous section, instead of a matter of teachers obtaining a more objective understanding of the pupil, the SMTTE transforms both teachers and pupil by affording teachers a new perspective. However, the above citations point to something else. Linking teachers to SMTTE is not necessarily an easy association. Teachers do not automatically collaborate around writing up the SMTTE. Instead, they ask managers for help.

Perhaps we can understand the meeting as a screening in itself. As a screening from something, a kind of protection. The teachers come from the intensity of a classroom full of pupils who need their constant attention. Sometimes, events result in experiences of powerlessness and fear, which take hold of their bodies, producing stuttering or tears, which the managers recognize as the need for help. The office of the manager has a different topology than the classrooms or situations of conflict (Law and Singleton 2005; Ratner 2011).

Rather than being the responsible agents who are to make decisions and plan interventions, the office becomes a place where concerns and frustrations can be verbalized. The very events that these stories re-present, however, are not inside the room. The events that produced the stuttering and tears circulate in a narrated version, as utterances and words, where they are narrated with the aim of achieving help. In this regard, the office of the manager is a temporary suspension of the everyday activities of teaching. This is a place where the teacher is not expected to be the authority but can be the one asking for help. Behind the closed door, on chairs around a table that enable eye contact and talk, these events can be thematized and turned into problems. This is not possible in the school’s other spaces where pupils and colleagues are present to witness the unauthorizing of a teacher.

In that way, the office is enacted as a “partial detachment” (Jensen 2001, p. 100), and in this version, the office “screens” the teacher from spaces that discourage the performance of the teacher as a fragile and uncertain professional. In this sense, the office, the manager, and the SMTTE collectively screen the teacher in the sense of “to shield or protect from hostility or impending danger” (Oxford English Dictionary). What Arnold (2002) in a different context writes to be a property of computer screens can also be said about the collective achievement of the office, the screen, and the manager:
“The service it provides is to allow us to look through the glass and monitor one another, whilst at the same time providing a screen for our bodies (to hide behind).” (p. 227). Monitoring through the SMTTE happens in a place hidden from the places of the events that gave rise to the SMTTE.

The teachers call for the manager, who in turn calls for them to start writing. But before that writing takes place, words are voiced and, sometimes, a comforting squeeze on the arm is given. Human interaction between the manager and the teacher seems to perform teacher and management relations that are not possible with the SMTTE. The office performs a place where affect and care can be expressed. It offers a place where frustrations can be voiced. As the manager elaborates, in the same interview:

> Of course, I could be provoked [by the teachers’ descriptions of pupils] or I could also, ermm, recite the discourse or the way we speak about the children and say “hey, all children belong to here” or be a little more confronting, but the situation was not for that. And this is such a sensation [fingerspitzengefühl] where it is about, possibly to avoid a notification of illness, it is about being as appreciative as possible. And then we looked at concrete possibilities. We took the children, one after another. (interview with manager, May 2010).

Rather than rejecting the teachers’ complaints, the manager saw the act of listening as a means to start writing. When teachers feel powerless, the agency offered by the SMTTE can be realized when managers allow teachers to perform themselves with different identities than that offered by the SMTTE. Talk may be necessary before the “reflective” action of writing up the SMTTE. Talk, then, facilitates the coming into being of a screening device such as the SMTTE. The non-durability of talk also allows for (mainly negative) expressions and descriptions of the children, which are not turned into ink, holding teachers accountable. For the SMTTE to become a new starting point, the manager, sometimes, allows for teachers experiences to be voiced as ending points.

Thus, rather than simply monitoring pupils, the school manager, the office-space, and the SMTTE collectively achieve the delegation of new goals and a sense of agency to teachers. Doing so sometimes requires a space of detachment from emotionally intense and challenging teaching experiences. Management works strategically by combining acts of listening with the SMTTE’s screening properties. Writing up the SMTTE, however, is not the only procedure that produces interactions between teachers and managers. Managers also interfere when they find that teachers do not actualize the SMTTE in the way they had imagined. In some of these cases, the managers interfere to deal with the mess produced by the SMTTE. An instance of this will be explored in the following.

### Give me a Screening Device and I will Raise the School?

As described earlier, the constitutive properties of the SMTTE include making flexibility durable through its factish positioning. Its categories are to be updated, aligned, redescribed on a regular basis. While social technologies like the SMTTE were meant to empower teachers and make them independent of managers, its factish status appears to have the rather opposite effect. A manager would express how the SMTTE produced new occasions for teachers to visit the managers’ office and discuss these modifications:

> When it comes to the small, small decisions they come and ask “what should we do, what should we do” (…) [They ask for our] participation in meetings, like, “now you know that this is what we do”, they demand for us to take the responsibility (…), just come by and debate
initiatives, “we plan to do such and such with the parents, we're thinking of showing this with the male hierarchy in class”, they, like, seek our accept that it [their plan] is okay. (interview manager, December 2010)

The manager here describes what she experiences as unnecessary disturbance. Rather than empowering the teachers as envisioned, the SMTTE’s procedures of ongoing revision produce the need for acknowledgement and recognition.

Perhaps its factish screening property makes the SMTTE simultaneously very powerful and very fragile. It is powerful because it produces a viewer position that can construct still more information, which enables new lines of action through a viewer position that is flexible and can take changes into consideration. Also, it is powerful because it enacts the ideal of a competent teacher as one that can reflect by translating his or her concerns into writing. It is fragile, in turn, because part of its script is to unravel and reassemble itself as a plan, refusing to achieve closure. As a plan, the SMTTE plans for its own destruction. The viewer position produced is an intended fragile position that gains its power from being explicit on its temporary status. The emphasis on contingency and the constructed nature of signs and quality imply that along with the plan, a form of undecidability is produced. The plans, signs and decision could have been formed otherwise, potentially producing different ways to include the pupil. And the teachers know that. Therefore they sometimes visit the managers to ask for affirmation and acknowledgement.

While the SMTTE turns endpoints into new starting points, these are accompanied with a gnawing sense of contingency, the knowledge that different signs would reveal different potentials. The very durability of the SMTTE’s much celebrated flexibility produces a call for management, an outer instance of authority to grant the SMTTE momentary closure and suspend its virtual capacities. Management describes this constant request for confirmation as an unsettling of their identity:

In the management group we disagree about what a manager is and who manages whom. Are they managing me by defining what I need to participate in? Personally, I truly want to manage where people need me. (...) I feel quite divided in my own expectations (interview, manager, December 2010)

What defines a manager, the manager asks. Is it to be there for the employees with the consequence that they are in charge of how one’s time is spent? The SMTTE produces uncertainty in this regard. Its authorization of constant attunement produces new occasions for teachers to “need management”. Rather than being a matter of teachers managing the managers, perhaps it is in part the SMTTE that produces the need for teachers to call for management. The SMTTE, then, manages both managers and teachers by challenging the boundary between them.

The factish status of the SMTTE, however, is not the only way in which the SMTTE introduces uncertainty. Management also needs to deal with other unintended consequences of the SMTTE.

The relationship between screening device and school is not one of part to whole, where the reflective competence of the SMTTE fits seamlessly with other aspects of the school. Instead, the SMTTE has implications for other relationships in the pedagogical context. Its power rests in its ability to exclude other matters of concern by offering a viewer position that zooms in on the pupil in question while allowing other issues fade into the background. As Don Ihde writes (about technologies): “with every amplification, there is a simultaneous and necessary reduction. And .. the amplification tends to stand out, to be dramatic, while the reduction tends to be overlooked” (Ihde 1979, p. 21). It would seem that SMTTE is used as a filter, to amplify and translate teachers’ experiences. While this allows for imagining interventions and creating different criteria for
success, it simultaneously produces "reductions", which may ricochet back to teachers at other times and places.

Returning to the action plan for John, we remember that it equipped the teachers with the goals of structuring play during breaks. However, rather than simply being a solution to the problem of how to deal with John’s involvement in conflicts, it produced new challenges by interfering with other responsibilities. A manager describes the new problems when John’s action plan was to be realized:

[we help them with the SMTTE/action plan] and then it is their task to decide how they as a team live up to that action plan, how they structure such as day. (...) and then I realize that they in a lot of meetings had been discussing schedules and structure, that is, who has him and when. In my head, this is not how they are to spend their time. They should spend their time on their subject matter and the content. (...) and then it became, like, "then you need help with the structure", they shouldn’t spend their time on that. And that’s how [another manager] and I ended up sitting with the structure. (interview, manager December 2010).

In this case, the management ended up taking back the responsibility for adjusting the action plan. As a screening device, it performed too well in the sense that the initiatives lined out in the SMTTE extended to - and interfered with - other networks, encouraging teachers to neglect tasks such as planning the subject content. Creating a “shadow schedule” for John took up too many resources. Making a weekly schedule turned out to be a complicated endeavour with two breaks’ structured play activities to be planned for each and every day.

As a screening device, the SMTTE gains its strength through an amplification of certain realities at the expense of others. These re-emerge when the SMTTE is to be made compatible with other plans. When this does not happen, management may interfere and take back the responsibility for (and labour of) adjusting the SMTTE.

Conclusion
In this article the notion of “screening device” has been proposed to account for the ability of the didactic social technology “SMTTE”, an action plan, to be performative in everyday efforts to include vulnerable pupils in schools. I have chosen to describe SMTTE as a "screening device", rather than an “educational” or “schooling” device, to shift our perspective away from understandings of the device as simply an element in a larger collective. While market devices bring attention to the different technologies that perform and assemble the market, the screening device does not necessarily perform the school. Rather, it performs certain translations of pupil-teacher and teacher-manager relationships that do not fit with other expectations. As the analysis has illustrated, its particular performance may actually go against other goals and interests. In the case of John’s action plan, this screening had the consequences that other concerns were neglected. In that respect, a screening device does not raise the school as a whole. Rather, it performs a version of inclusion that potentially collides with other settlements, including the division of labour between managers and teachers.

The SMTTE is not an unusual social technology in a pedagogical setting like the Danish schools, which has been the object of multiple interventions that all aim to make teachers more reflective (Pors 2009). While it may be difficult to disagree with the hopes and assumptions that accompany this social technology, my analysis illustrates that in its everyday enactments, the SMTTE is far from simply a ‘solution’. It has effects on how time is administered and spent, and on how the boundary-work between teachers and managers is made and re-made. Tools such as the SMTTE may actually produce more work for management and teachers.
In light of current calls for more self-management among teachers (most visible with the introduction of self-organizing teacher teams in 1993), for teachers to spend more time in class and less on meetings (Skolens Rejsehold 2010, p. 29), and the big-sizing of schools to reduce management resources, it is questionable to what extent management will be able to respond to the several different effects of teachers’ use of a social technology such as the SMTTE. The burden of dissolving fundamental ambiguities about how to prioritize, translate, and organize complex social interactions around vulnerable pupils might be deferred to teachers to an even greater extent than it is already done. Future research could explore how this puts much pressure on the teacher profession, and what the implications are for the vulnerable pupils, who become the subjects of such intervention strategies and who have relatively little voice in intervening in the decisions that structure a large part of their childhood.

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