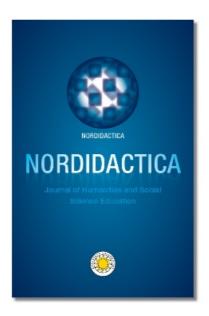# Theories of justice among eight-year-olds: Exploring teaching for an emerging ability to critically analyse justice issues in social science

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Theories of justice among eight-year-olds: Exploring teaching for an emerging ability to critically analyse justice issues in social science

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Abstract: The study addresses the question of what conditions of teaching that benefits the development of the ability to critically analyse issues of justice in early social science and civics education. It also presents some indications of this emerging ability, where students treat the concept of justice not as a stated or explained fact or viewpoint but as a contested concept that needs critical examination. The analysis shows the possibility for eight-year-olds to start learning how to reason about justice as an essentially contested concept and to start participating in critical analyses of societal issues of distributive justice in a qualified way. This article discusses how teaching can be designed to help younger students develop and qualify the ability to analyse justice issues and proposes indications of such an ability.

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The ability to reason, analyse and think critically is an explicit goal for social science and civics education in most democratic countries and has long been recognised by scholars as crucial for social science education and as a prerequisite of good citizenship (Case, 2005; Karabulut, 2012; 2015). However, there are conflicting ideas on when and how it is meaningful to introduce critical thinking about key concepts of civics in social science education. The assumption that grown-up and disciplinary thinking is more accurate and advanced than the thinking of younger students is often a premise for the education system at large - one of the purposes of education is to support students' development in this direction. However, the earlier predominant view that students' conceptual understanding develops in a certain direction with age has been questioned by later research focusing on students' understanding of societal concepts and ideas. Studies of students' thinking in areas such as economy (Webley, 2005), moral thinking (Helwig & Turiel, 2011), politics and government, geography (Brophy & Alleman, 2005) and public decision- and law-making (Avery, 1988) show them having well-developed ideas about societal phenomena and an ability to reason about societal issues 'in more sophisticated ways than many educators expect' (Barton & Avery, 2016, p. 989).

Several scholars argue that developing the ability of critical reasoning is intertwined with one's understanding of specific content knowledge in that particular subject area (cf. Case, 2007; Willingham, 2008; Sandahl, 2015). Certain concepts and ideas in social science probably ought to be emphasised early on, as they are fundamental to the subject and can contribute to the development of students' ability to critically analyse societal issues central to social science. These disciplinary concepts often designate different aspects of social constructions, influenced by ideologically underpinned cultural ideas. A prominent example is the concept of justice, which is crucial to one's understanding of societal issues because of its central role in shaping different political ideologies (Lippl, 1999; Schmidtz, 2006). The ability to reason critically about issues of justice in social science (*samhällskunskap*) was the main focus in an earlier study of Swedish upper-secondary education (Tväråna, 2014), which found that this ability seems to demand that justice be seen as an *essentially contested concept* (Gallie, 1956; Ruben, 2010), rather than as a personal or universal value, and that critical reasoning in social science is experienced as a critical analysis of different principles, rather than as an analysis of causes for or descriptions of something. This way of reasoning, where the premises and arguments for different perspectives on justice are analysed, can be described as essential to a qualified social science practice. The findings implied that the ability to reason critically about justice issues requires the concept of justice be understood as changing in relation to different perspectives and values. These kinds of concepts are described by Gallie (1956) as essentially contested concepts and have multiple coexisting meanings or interpretations, resting on conflicting, but themselves valid, basic assumptions. In social science, several concepts within the practice of the subject ought to be discussed this way, for example 'justice', 'freedom' and 'common good'.

Drawing upon these earlier results about what appear to be critical aspects for students' ability to reason critically about justice issues, the study presented in this

article aims to examine the necessary teaching conditions that benefit the development of critical reasoning about justice in early social science education. To accomplish this goal, this study will discuss the indications of developing critical reasoning about justice among eight-year-olds.

Purpose and research questions

The study presented in this paper investigates teaching critical reasoning in issues of distributive justice in second-year primary school within the subject of social science. It aims to explore which teaching that benefits the development of an emerging ability to reason critically about issues of justice in social science as well as to highlight indications of such an ability among eight-year-olds. To this end, two research questions are formulated:

- **What are indications** that students are beginning to develop the ability to reason critically about issues of justice?

- **What teaching activities** appear to promote this developing ability among younger students?

Previous research

The development of critical analysis of societal issues and structures using different perspectives and social science concepts and models includes argumentative reasoning and assessment in relation to different sources and viewpoints. These are quite extensive abilities, directed towards issues that are easily perceived as all-encompassing (Moore, 2011). The educational discussion on the meaning of these abilities and the specific subject content of social science, as well as on the relation between them, is ongoing and important. Critical thinking within social science is not only regarded as crucial to social science qualification, that is, to developing knowledge, skills and dispositions characteristic of the subject, but it is also seen as a way in which social science contribute to the subjectification of students (cf. Biesta, 2009; Hasslöf & Malmberg, 2015). In this study, critical reasoning is understood as including argumentation skills—that is, 'reasoning about the advantages and disadvantages, pros and cons, causes and consequences, of alternative perspectives' (Mason & Scirica, 2006, p. 492). The aspect of critical reasoning addressed in this study involves the validation or rebuttal of beliefs and assumptions used to support different principles of justice. This means that a principle of justice is understood as an argument, consisting of data and warrants in the form of assumptions about how the world works, making up backings for claims about what is just or fair in a given situation (cf. Toulmin 1958/2003). In upper-secondary students' learning of argumentative reasoning, or *making good arguments* in the field of science, their ability to specify certain conditions of the issue at hand and act in relation to the purpose of a scientific discussion seem important (Rudsberg, Öhman & Östman, 2013). The aspect of critical reasoning explored in this study should rather be understood as the *critical examination of the validity of someone else's argument*. It is

worth noticing that, although the ability to critically examine the validity of other people's arguments is not the same as making one's own or taking a personal stand in normative or ethical issues, it may be an important step towards qualifying these related abilities.

Younger students' critical thinking in social science education

Many studies on students' conceptual understandings and affections about subject content in social science education focus on their relation to social background and conclude that students' ideas interact with their lifeworld experiences and cultural identities (e.g., Schulz, Ainley, Fraillon, Kerr & Losito, 2010; Torney-Purta, Lehmann, Oswald & Schulz, 2001; Weinger, 2000). The results from these studies show the importance of considering students' experiences and understandings of the subject content when realising the intended goals of the social science curriculum. Most classroom studies about younger students' critical thinking in societal issues and social science focus on the forms of teaching and tools that promote students' engagement in deliberation. Such forms include collaborative reasoning, open participation and safe classroom environments with a practice of sharing with and challenging one another (cf. Hauver, Zhao, & Kobe, 2017). There is also evidence that peer dialogue in an inclusive classroom climate and opportunities to discuss conflict issues in depth lead to important civic and academic outcomes for students (cf. Bickmore & Parker, 2014).

Results from various studies indicate that students as young as first graders can engage in meaningful civics discussions (Silva & Langhout, 2011) and that peer dialogue promotes students' civics learning (Torney-Purta, Lehmann, Oswald, & Schulz, 2001; Schulz, Ainley, Fraillon, Kerr, & Losito, 2010). Beck (2003) found that adopting tools for questioning and challenging peers was necessary but insufficient in engaging fourth-grade students to deliberate on significant court cases and that students also benefit from support that provides them the right and responsibility to use these tools, by taking on a 'role' usually played by the teacher. Hauver and colleagues (2017) argued that students feel free to take on such new roles in collaborative reasoning practice once they gain trust in their peers' competencies and abilities to act in caring and respectful ways. The researchers also underlined the importance of including a practice of collaborative reasoning early on in elementary education. Less attention has been paid to how different aspects of the subject content itself are treated in the social science practice and how this affects what students discern and learn.

Justice issues as controversial issues in social science education

While justice as a concept lies at the heart of social science and creates a foundation for ideological and political controversies, it is highlighted neither in the written curriculum nor in most study materials for primary school. The concept of justice also refers to the judicial domain, but when it functions as an aspect of ideologies, it is often mainly perceived as distributive justice—the fair sharing of any good. Distributive justice is philosophically described by Walzer (1983) as including different justice principles corresponding to different spheres of life and different goods, in contrast with

the normative theory of justice by Nussbaum (2002) or the more monistic, universal value of justice presented by classical philosophers such as Rawls (1971) or Nozick (1974). In this study, the focused object of learning considers only distributive justice, especially the three classical principles of distribution that can be attributed to primary ideological positions: the principle of equality, which refers to goods distributed as equally as possible among different parties; the principle of needs, which refers to distributing goods according to the parties' different needs; and the principle of desert, or merits, which refers to goods being distributed according to what the parties deserve (Schmidtz, 2006). Of course, different interpretations abound as to what these premises mean, such as the definition of 'needs' or 'deserve'—does it mean having earned a lot of money, holding a great desire, having worked hard, or something else?

This ideological charge in issues of justice may explain why the inherent character of the concept as contested has been overlooked in social science education for younger students. It seems that teachers' desire to stimulate discussions in which students can reach a consensus through deliberation is often in conflict with their conviction about the importance of encouraging discussions where opposing views are openly expressed without necessarily resolving the issues at hand (Byford, Lennon & Russel, 2009). Issues of justice are not necessarily controversial in the sense that they evoke strong personal feelings and create societal tensions. However, when treated as an essentially contested concept, according to Gallie's definition, justice always concerns issues in which ontologically based differences of opinions exist (cf. Hess, 2009). A recent research project on controversial issues education (Ljunggren, Unemar Öst & Englund, 2015) concluded that such issues are an important part of civic education and social science, but they require qualified knowledge among teachers about the right didactical choices when introducing them.

Methodology

Instead of focusing on older students, which is common in most research on social science and civics teaching, this study sheds light on teaching that is designed to enhance younger students' critical reasoning about societal issues using results from a previous study on older students' learning. Earlier findings about what older students need to experience and discern, *critical aspects* (Marton, 2015), are used here to design teaching in the same knowledge area for younger students. Despite being a somewhat unconventional move in learning studies based on variation theory, it was an important part of the motive for this study. When discussing the critical aspects of the ability to reason about justice issues among upper-secondary students with primary-school teachers, it became clear that the same structural aspects may be critical for younger students as well. A possible reason for this is that aspects deemed critical address the structural rather than the referential level of the learning object (cf. Marton, 2015). Thus, this study operated on the hypothesis that earlier findings can be used as a vantage point for designing teaching that enables even young students to learn how to reason about justice as an essentially contested concept and to start developing the ability to reason

critically about the backings for different principles of justice. One reason for founding the teaching design on these earlier findings was the primary-school teachers' recognition of these very aspects as probably relevant for their students. Another was the questioning of the common assumption that this ability is an exceedingly advanced learning object for younger students, in light of the studies mentioned above, indicating that younger students can engage in meaningful discussions in civics.

Theoretical point of departure

In the theoretical framework of phenomenography and variation theory (Lo, 2012; Marton, 2015; Marton & Pong, 2005), an object of learning, a knowing of any kind, is seen as a phenomenon related to and part of a certain practice (Marton, 2015). Any phenomenon in the world is, to some extent, experienced in different ways by different people and in different contexts, and these varying ways of experiencing a phenomenon can be divided into several categories of experience—categories of conceptions. A theoretical standpoint of phenomenography and variation theory is that one's ability and incentive to act in a certain way are related to how they experience a certain phenomenon (Marton & Booth, 1997). In the previously mentioned study of upper-secondary students' conceptions of justice (Tväråna, 2014), phenomenography was used to interpret the students' ways of reasoning about issues of justice, that is the students' actions as expressions of their respective conceptions of justice. These conceptions of justice found among the students could be categorised into three qualitatively different categories: justice experienced as a universal value, justice experienced as a personal value and justice experienced as several contesting principles—an essentially contested concept. Students' actions corresponded to the categories of conceptions of justice as shown in Table 1:

TABLE 1

Students' actions (SAs) as ways of reasoning and the corresponding conceptions of justice (adapted from Tväråna, 2017).

Students' actions: ways of reasoning	Conceptions of justice
SA 1 *stating* a fact	*a universal value* to be stated as a fact
SA 2 *stating* views	*personal values* to be stated as views
SA 3 *explaining* views	*personal values* to be explained as causes of having views
SA 4 *stating* arguments	*contesting principles* to be stated as arguments
SA 5 *explaining* arguments	*contesting principles* to be explained in terms of premises for arguments
SA 6 *critically examining* arguments	*contesting principles* to be critically examined in terms of the validity of arguments

These categories of conceptions are not seen as descriptions of the individuals' stable conceptions but rather as different descriptions of ways to experience and relate to a phenomenon (cf. Marton, 2015). Thus, an individual may participate in a practice in ways that correspond to different categories of conceptions. How we experience justice influences our ability to talk about, write about or act in relation to justice issues. When experiencing justice as a universal value (which was common among the students), it is impossible to explain the causes or premises of justice, only to state it as a fact. Also, when experiencing justice as someone's personal values, it is impossible to critically examine the validity of the underlying assumptions of different justice principles. A critical examination of the assumptions of principles of justice becomes possible only when justice is experienced as a contested principle (Tväråna, 2017), which, at the same time, does not *necessitate* a critical examination of the assumptions of different principles—it is entirely possible to only state the assumptions or premises of contesting principles (as in SA 4) or explain them (as in SA 5).

An essential idea in phenomenography and variation theory is that learners must in some way experience, or discern, different features of an aspect to understand and recognise it. The aspects that have not yet been discerned are what separates one category of conception from another and are thus described as critical. One needs to discern these aspects to experience an object of learning in a qualitatively different way so that his or her participation in a subject practice would be more nuanced or diverse. The aspects of reasoning about justice, which were found to be supposedly critical to the students' ability to reason critically about issues of justice in a qualified way, were the following (Tväråna, 2014):

CA 1, *the contesting perspectives of justice*: that different ideas exist of what justice or fairness is

CA 2, *the premises of different principles of justice*: that different ideas of justice rest on varying assumptions of how people function and on different values

CA 3, *the analysing/investigating aspect of reasoning*: that the practice of reasoning about societal issues in social science is focused on analysing and investigating issues, not only on describing them

CA 4, *the aspect of critical examination in reasoning*: that the analysis of societal issues about justice, in the practice of social science, focuses on critically examining and validating the premises of different justice principles

These critical aspects constitute the qualitative differences between the categories of conceptions shown in Table 1. When using variation theory for designing teaching, the critical aspects of a learning object are focused on in the design (Marton 2015; Lo, 212). In this case, the critical aspects from the earlier study was adopted when designing the teaching interventions in the present study, as described below under 'Teaching design in the intervention study'.

Setting and participants

The study was conducted as an intervention study in collaboration with two primary-school teachers. In a learning study (Runesson, 2017), cycles of research lessons were iteratively planned and revised with the teachers and conducted in different student groups. This research approach relies on the benefits of using the experience of the participant teachers as well as the active involvement of the teacher-researcher in both teaching design and analysis (Thorsten, 2015). In contrast to research approaches where teachers themselves are the research object, the class teachers collaborated with the teacher-researcher in designing and analysing the teaching outcome. The teacher-researcher, on the other hand, was not expected to be a mere objective outside observer but was rather actively involved in the planning of the teaching, applying personal teaching experience both in teaching design and material analysis (Thorsten, 2017).

This learning study had two cycles of teaching. Based on the critical aspects presented above, a lesson unit was designed with the help of two class teachers, one with many years of teaching experience and the other a novice. After studying the disciplinary meaning of the chosen subject, as well as previous subject-didactic research on the object of learning, two research lessons were conducted. The teaching was conducted by the class teacher who usually taught the students and was observed and documented by the researcher, who had a background as a teacher of social science at the upper-secondary level. In total, there were 30 participating students, ranging from eight to nine years old and coming from mixed, middle-class neighbourhoods.

Data collection and data analysis

The research lessons were documented with photos, recordings and field notations, with permission from the students' caregivers. The data material consisted of anonymised transcriptions of teacher instructions, whole-class discussions and seven group discussions of the two research lessons. The transcribed classroom material was analysed qualitatively by identifying students' different ways of reasoning in the transcripts (SA 1–6 in Table 1), and describing what the students were doing that showed that they were experiencing the critical aspects—the *indications of an emerging ability* to critically analyse issues of justice. For example, when students adequately used the subject content concepts provided by the teacher, it was seen as a sign of having grasped the meaning of these concepts.

The teaching was analysed using variation theory (Marton 2015; Lo 2012) and the theory of dialogical intersubjectivity (Matusov, 2001). Variation theory is an extension of phenomenography and is the most commonly used theory for designing and analysing teaching in learning studies. It states that for someone to experience a certain aspect of a phenomenon, the features of that aspect need to be varied while other ones are held constant, creating a contrast. This necessary variation pattern can be created by designing tasks but may also arise from student interaction (Marton, 2015). This means that, in the analysis, the way in which features of the learning object's critical aspects was varied in both teaching and students' interactions was observed. One example of this was the teacher's contrasting of principles of justice when presenting the principles

of equality, needs and merits. These principles are features of the first critical aspect of justice mentioned above, and according to variation theory, the contrasting of these features puts this critical aspect in focus for the students, making it possible for them to experience it. The analysis also describes how the tasks and instructions contributed to a practice characterised by dialogical intersubjectivity (Matusov, 2001). In this theoretical framework, which is compatible with variation theory, knowing is understood as constituted and developed by the practice in which it exists. It offers a theoretical basis for constituting a community of learners in a practice where dialogue and discussion are central parts. Dialogical intersubjectivity consists of three elements: a genuine problem shared by all participants, space for respectful disagreement among participants and engaged and caring practical participation in the shared practice. This was considered an important contribution to variation theory when designing and analysing the research lessons because the team of teachers had concluded that a practice of critical reasoning about justice would not necessarily come about just because of a teaching design that considered justice as a contested concept.

Lastly, the three analytical units—students' actions (their ways of reasoning about justice issues), indications of a developing ability to reason critically about justice and the way critical aspects of justice was focused on in the teaching—were related to each other. These relations are described and discussed under 'Results'.

Teaching design in the intervention study

The core content of the lessons was the practice of analysing and critically reasoning about issues of distributive justice in contexts close to the students' daily experiences, and of generalising from and comparing these issues. One of the main assumptions for the design was the possibility for second-year primary-school students, about eight years old, to grasp the concept of distributive justice as essentially contested (as consisting of several contesting principles). In accordance with variation theory, the three main principles of distributive justice—equal distribution, distribution according to needs and distribution according to desert—were introduced to the students using the same context: a pack of ice cream was to be distributed fairly among three siblings of four, eight and twelve years of age. In the ensuing class discussion, the focus aspects of justice were the backings for different principles of justice, which meant that these varied while the rest of the context (the ice cream and the three siblings) stayed the same in the example.

The students were then given a task designed to focus the critical analysis of different principles of justice. In groups of four, the students discussed which of the three principles of fair distribution, given as tools, was best suited for distributing the following goods: Band-Aid from the school nurse, candy, food in the school canteen, the choice of what game to play during recess, help from the teacher and weekly allowance in a family. In this task, the students were given pictures symbolising each of the goods and a big three-column sheet representing the three principles they had to choose from. In the task, both goods and principles varied, creating a pattern of variation called fusion, rather than a contrast (Lo, 2012). This task was designed using principles

of the dialogical intersubjectivity theory as a complementary design tool. The main idea of the task was (1) to encourage a shared focus in the classroom activity by introducing the students to solve a shared and 'open-ended' problem, (2) to create a space for respectful disagreement among participants by inviting them to share and compare their different solutions to the problem and (3) to stimulate an engaged and caring practical participation (cf. Matusov, 2001). After a discussion within the groups, one student from each group was asked to move the pictures of the distributed goods from their own sheets with principles to three corresponding columns on the whiteboard:

FIGURE 1.

Students' choices of principles of justice to use for the distribution of different goods.

Finally, the teacher led a whole-class discussion starting with the distribution of students' choices on the whiteboard. This element of the lesson was also informed by dialogical intersubjectivity. In Table 2 below, the theoretical basis underpinning the design of the activities in the research lessons are summarised, showing how the operationalisation of these design principles focused different critical aspects of the learning object.

TABLE 2

Theoretical basis underpinning the design principles of the main teaching activities.

Design principle	Theoretical basis and focus aspects of subject content	Operationalisation	Intended learning: discernment of critical aspects
1. Modelling the use of relevant concepts.	Variation theory: contrasting *the contesting perspectives of justice*—that different ideas exist about what justice or fairness is. Backings for different principles of justice varied while the rest of the context (the ice cream and the three siblings) stayed the same in the example.	Introduction of the three principles of distributive justice using an example with a pack of ice cream that was to be distributed fairly among three siblings of different ages, in a dialogue with the students.	Experiencing several different perspectives of justice (CA 1).
2. Establishing a practice of analysing and investigating justice issues.	Dialogical intersubjectivity: introducing the students to solve a shared problem by *analysing* or *investigating*.	Students discussed, in groups of four, which of the three fair-distribution principles was best suited for distributing different goods. The students were given pictures of each good and a big three-column sheet representing the three principles they had to choose from.	Experiencing that the practice of reasoning about societal issues in social science is focused on analysing and investigating issues, not only on describing them (CA3).
3. Guiding students' participation in a qualified critical discussion of justice issues.	Variation theory: contrasting *the assumptions of different justice principles.* Dialogical intersubjectivity: creating a space for respectful disagreement by inviting students to share and compare different solutions to the problem and encouraging an engaged and caring practical participation in *critical examination in reasoning.*	After illustrating the groups' different choices of principles for different goods by placing the pictures on three columns on the whiteboard, the teacher led a whole-class discussion starting with the distribution of students' choices on the whiteboard.	Experiencing justice as an essentially contested concept—that different ideas of justice rests on different assumptions (CA 2). Increased ability to critically examine and validate the premises of different principles of justice (CA 4).

Results

The purpose of the study was to identify and describe what feature within the teaching situation develops students' critical reasoning about issues of justice and to describe indications of this emerging ability, of which five different types were

identified. These indications consist of actions and operations that entail a more qualified participation in the practice of social science and should be understood as examples of students' developing ability to reason critically. The indications can be described as follows:

- Students adequately using concepts as tools for discussion
- Students adjusting to the purpose of the task
- Students explaining the underlying assumptions of arguments
- Students validating arguments
- Students attempting to formulate a theory of justice

The following section describes how the teaching design and the students' interaction in the classroom practice highlighted the critical aspects of the learning object and opened up for different student activities.

Modelling and practising the use of relevant disciplinary concepts

One indication of emergent critical reasoning about distributive justice issues was that students sufficiently used the terms of different justice principles as tools. This seemed to be promoted in teaching situations where the teacher was modelling and, together with the students, practising the use of relevant disciplinary concepts. By simultaneously introducing three different principles of distributive justice early on, the research lessons were designed specifically to avoid students referring to an everyday experience of justice as a universal value, or as a personal value, but instead as a contested concept. This proved to be an idea that the students could easily grasp and adequately use in their discussions about the best way to distribute everyday goods. Using the ice cream example, the teacher gave the students names and explanations for different principles of distributive justice. This provided them with concepts as tools for viewing distributive justice as an essentially contested concept. While the discussions were not very articulate, with the students indicating the goods they were referring to mostly by pointing to the pictures, they adequately used the names of principles given to them as tools. Therefore, first goal for the teachers—to raise awareness among the students about the contesting justice principles—was achieved quite easily using explicit instruction with a well-designed example. The teachers modelled the use of relevant disciplinary concepts by explaining their meanings and illustrating and writing them on the whiteboard. This, along with the use of the three-column sheet representing the three principles, enabled the students to separate different justice principles (critical aspect 1) and focused justice as a contested concept, thus providing them with the necessary tools to *state, explain and critically examine arguments* of principles of justice (SA 4–6 in Table 1) instead of only *stating facts or stating or explaining views* about justice (SA 1–3).

Directing the analysis/investigatory aspect of reasoning

A second indication of developing critical reasoning was that students adjusted their participation to the intended purpose of the given task by accepting different principles as simultaneously valid and comparing these arguments. This was promoted by tasks

that enabled students to experience the analysis or investigatory aspect of reasoning in
social science. The students were asked to analyse and select the suitable principle of
fair distribution for each of the five everyday goods. One group of four students
misunderstood the task at first, thinking it was their job to *distribute* the goods fairly
rather than to *select the appropriate principle for distributing* them. This turned the task
into a mathematical problem since the students, who had not yet learnt how to divide
with residue, were set to equally distribute the two 20 bills representing allowance in
the picture rather than choose a principle. Their common underlying assumption was
that distributing fairly means the same as sharing equally, so when working with the
problem, they were treating 'justice' as a universal value.

By verbally directing these students' focus to the choice between the three principles
and showing them how to use the teaching material, the teacher redirected them to the
purpose of the task. The students then proceeded to discuss and compare the appropriate
principles for distributing the other goods, using the terms of these principles as tools.
This predominant teaching practice—making sure the students are 'getting the idea of
the task'—enabled them to experience the analysis/investigatory aspect of reasoning
(CA 3), making it possible for them to move from reasoning about justice as in SA 1–3
to reasoning as in SA 4 or SA 5.

Treating justice as an essentially contested concept

A third indication was that some students managed to explain their own arguments
in a way that enabled them to evaluate these arguments. This was established when
justice was emphasised as an essentially contested concept, especially when the students
experienced differences in opinions about what principle to choose. When students had
to defend their own opinion about the most applicable principle of justice, they
articulated the underlying assumption of the principle as best as they could. However,
these underlying assumptions were left unstated when the students agreed on which
principle to choose. This highlights the importance of ensuring that the students
understand the whole concept of distributive justice by describing or illustrating the
underlying assumptions of different principles. When the teacher did not do this, the
students struggled to grasp and clearly articulate the underlying assumptions on their
own. When grouped with peers who held differing views on justice, the students had a
better chance of figuring out these assumptions. The promoting aspect of the teaching
can be described as the separation of the premises of different principles of justice,
highlighting justice as an essentially contested concept (CA 2) and thereby encouraging
the participation of students as in SA 5 or SA 6.

Highlighting differences of opinions

Another noticeable indication of emerging critical reasoning was when students tried
to critically examine the validity of the contesting principles. This happened only rarely,
encouraged by the teacher's use of differences in opinion among the students. Even
though the students often treated justice as an essentially contested concept in their
discussions, their reasoning mostly consisted of stating or explaining the contesting

principles more than critically examining them. This may be due to the assigned task focusing on the differences between the principles but not on the questioning of underlying assumptions/values. The most common assumptions that seemed to motivate the students' choices of principles were statements such as 'there are certain rights' and 'people have equal value'. However, these underlying values were not articulated when the students all agreed on one principle being the best for the distribution of a certain good. When a group agreed on a principle, in most cases there was no need for them to explain or validate their arguments, bringing the underlying assumptions to the surface. On the other hand, when the students in a group had different opinions on which principle was the most reasonable, the need to start examining the backings for these principles became immediate. Sometimes, different opinions were not at hand in the group but could be invented by one of the students as a hypothetical opposition. In the following excerpt, when discussing food distribution, Patrick defended the principle of equality in opposition to the principle of desert even though no one in the group had suggested that principle:

> *Patrick: Yes, it is not as if that someone should get less [food], that someone should deserve to get... suppose [the rule is that] you get five meatballs, then no one could deserve to get eight meatballs.*

For the students to start critically examining the different principles, they needed to be put in a situation where it was important to overcome differences on which principle was the best. If the circumstances allowed, these different opinions would already be available in the student group discussion; otherwise, the habit of 'inventing an opponent', as Patrick did, could be fruitful. However, it was hard for students to see the reasons behind a principle they do not agree with. The underlying assumption in Patrick's reasoning in the excerpt above seems to be that everyone has the right to food; thus, it would be unreasonable to adopt the desert principle when distributing food. Since the students often agreed on the spheres of justice (cf. Walzer, 1983) that different goods belonged to, and thus which principle was applicable, this beneficial difference of opinion did not naturally show up very often. However, after the groups placed the pictures of goods in the columns of principles on the whiteboard, it became clear that the different groups had not made the same choices. In the whole-class discussion that followed, the teacher highlighted the cases of disagreement among groups. When asked to explain her group's choice of the principle of needs rather than the principle of equality for 'Choosing game for recess', Emile explained,

> *It is like this that the four-year-old might get crankier if it cannot decide what they should play, so then I think –at least I think, I don't know what the others think but I think–that the four-year-old is a bit more, could get angry easier, and the eight- and twelve-year-olds they should be able to adapt to younger kids since they are older. So, they should be able to adapt to others.*

Emile argued that older children should possess the ability to adapt and that people should demand more from older than from younger children, indicating a difference of needs with regard to the right to decide. She saw the right to decide as one among equals, with the underlying assumption that those with equal rights to decide should be expected

to have equal qualifications (in this case, the same age and thus the same level of patience). When the teacher asked if another principle should apply if the distribution was to be among equals (among only eight-year-olds), Emile agreed. This way, the teacher used the difference of opinions among the groups to highlight interesting cases where different principles could be problematised. This enabled the students to separate the aspect of critical examination in reasoning (CA 4) and highlighted the possibility to understand different perspectives, inviting students as (equal) participants in the subject practice.

Presenting genuine, shared problems

Finally, one noteworthy indication was the students' attempt to formulate their own 'theory of justice'. This entails generalising from the validation of the supporting ideas for one distributive justice principle in the specific cases in the lesson to a general level of societal distribution. The teacher may have promoted this by presenting the class with a genuine, shared problem. In the excerpt below, three students talked about whether it was more important to look to equal rights or to needs when distributing help from the teacher, healthcare from the nurse and food in the school canteen. In these cases, where the students can identify different needs among people, they suggested the principle of needs as a reasonable distribution method:

> *Kirsten: 'Eating in the school canteen'. I think one should get [food according to] 'needs', because some people eat more. That is, the twelve-year-old eats more than the four-year-old.*
>
> *Leia: Yes, one is in need of needs, right?*
>
> *Johannes: I'm more thinking 'equal', should I tell you why? Because everybody does not get to eat unevenly much, everybody has to eat like seven meatballs each.*

Here, Kirsten and Leia argued that the principle of needs *should* apply to food distribution because people do have different needs with regard to food. Johannes, on the other hand, described how food really *is* being distributed in the school canteen–not according to needs but according to equality (everyone gets to eat seven meatballs). While Kirsten and Leia saw the task at hand as leading to a normative judgement of which principle is the most reasonable, Johannes described which one was actually followed in their own school cantina. In both cases, the students treated justice as an essentially contested concept that explains the underlying premises of contesting principles. However, while Kirsten and Leia focused on the fact that everyone has different needs, Johannes was fixated on the reality known to him—that this is not being considered when food is distributed. As the discussion went on, Johannes became more drawn into a more normative way of discussion because the other students gave examples of contexts where they deemed it unreasonable to distribute food according to the principle of equality:

*John: But in different places [than in the school cantina], for example in
maybe, maybe in a retirement home, people need really much food because
they are old and [have] big stomachs, while…*

[…]

John: Or in day care, maybe you only need three meat balls.

*Kirsten: Maybe you only get seven, but then maybe that four-year-old cannot
eat more than three.*

Johannes: Then it is also 'Needs'.

Kirsten: I know!

*Hannah: But then maybe the eight-year-old is hungrier, so it gets the
meatballs [that the four-year-old didn't eat], and that is 'Needs'.*

In the excerpt above, the students all questioned and evaluated the premises for the
different principles, problematising whether the equality principle is a good solution to
the problem of food distribution, since there are obvious differences in needs that ought
to be satisfied. The task seemed to lead the students towards reasoning about distributive
justice in accordance with the view by Walzer (1983)—that different spheres of life and
different goods correspond with different principles of distributive justice. How the
goods are distributed into different spheres of justice may depend on the students'
experience of normality in their culture (cf. Lundholm & Davies, 2012). When the
students disagreed about which principle was the best for distributing a good and tried
to convince one another of their own view, they seemed to equate their own idea of what
was a fair distribution of goods with what they saw as the normal distribution of that
good in the 'real world'. In their discussions, they referred to what seemed to be the
innate properties of the goods discussed. In general, the students argued that goods that
everyone has a need of and a right to (most commonly food or choosing games) ought
to be distributed equally, while those that people have different needs of (help from the
teacher or Band-Aid) ought to be distributed according to needs, and those that everyone
wants but no one has a right to should be distributed according to desert. However, there
were some instances of students trying to generalise one of the principles for all kinds
of goods. At the end of the lesson, Johannes generalised from all of the discussed
examples, arguing that the principle of need is the best suited to fairly distribute all
goods:

*Johannes: Ehm, I think that almost … because almost everything is sort of
what one needs. That is, some might not need very much candy but–we could
remove that one but–I was thinking that almost everything belongs to what
one needs.*

Teacher: Okay

*Johannes: Maybe one needs more food, maybe one needs some more Band-
Aid, maybe one, maybe one has something that makes one need more help–
one could get angry or mad easier, then maybe one needs to decide the game
for recess even if the others don't like that game. And the need to put up you
hand, or getting help, that is also part of what one needs if one cannot write
or if one cannot read, or, if one only can do it a little, then one can be first on*

> *the list [for help] [...] almost everything except for candy. And candy*
> *somewhat, some maybe need more sugar and so…*

Johannes described needs as something immanent in all goods and, in doing so, left
the Walzer paradigm of different goods relating to different spheres of justice and was
instead trying to formulate his own theory of justice, although rudimentarily. The
teaching practice exemplified here consisted of the teacher's presentation of a genuine
problem in accordance with the dialogical intersubjectivity theory. The teacher directed
the purpose of the discussion (CA 4) and engaged with the students as moral subjects,
enabling their co-participation in the intended practice (SA 6).

Discussion

The analysis implies that teaching can be deliberately designed to promote younger
students' emerging critical reasoning about issues of distributive justice through an
emphasis on *contesting principles to be critically examined in terms of the validity of*
arguments as an object of learning. It also shows that in doing this, critical aspects for
older students' comprehension of this object of learning can be a fruitful vantage point
when designing teaching for younger students. The results describe indications of
students emerging critical analysis of societal issues of distributive justice. The use of
variation theory and dialogical intersubjectivity as theoretical basis for design principles
was a successful strategy.

The analysis of the material suggests that the disciplinary knowledge of the subject
content is of prime importance for teachers' didactical choices but that it should be
related to knowledge of how the subject content is understood and expressed by students
of a certain age group. The study suggests that it is worth considering introducing
critical thinking and the concept of justice early on in social science education,
presenting a propaedeutic approach to this subject content.

Didactical choices that promote students' emerging critical reasoning

The modes of work used in the lesson design that seemed beneficial for the teaching
activity were setting up discussion groups, visualising the different principles using
columns on a sheet and on the whiteboard as well as using pictures of the goods that
were to be distributed and the teacher deliberately selecting the groups with a difference
of opinion in the whole-class discussion. These teaching activities were all connected
to how the subject content was presented. Principles of justice, their underlying
assumptions, the analysis/investigatory aspect and the critical examination aspect in
critical reasoning were all varied so that it was possible to experience them. This was
sometimes part of deliberate and planned design, like the ice cream example and the
illustration of goods and principles. At other times it was the unplanned, but conscious,
choice of verbal intervention from the teacher—modelling and practising the use of
relevant disciplinary concepts, focusing on critical examination as the purpose of the
activity at hand and solving and discussing genuine, open-ended problems. Sometimes
it was part of the students' unreflective handling of the subject content presented to

them, discussing it in groups. Almost none of the students viewed justice as a universal value even though this seems to be a common way of treating justice in other contexts (Tväråna, 2014). This could be attributed to both the use of variation theory for designing tasks that highlighted critical aspects of the learning object and the use of the three distinct principles as a vantage point for task design and in the teaching itself, explained explicitly to the students.

The situations where the teaching design opened a secure space for students' respectful disagreement and sharing of a genuine problem, as well as the collaboration towards solving it, enabled them to experience the critical aspects of the critical analysis of justice. The design principles behind this teaching were based on dialogical intersubjectivity and applied the value conflicts that were immanent in the discussed distributive justice issues.

The findings contribute to the evidence described in the beginning of this article, showing that peer dialogue and role taking promote students' deliberation and civics learning. When the students got to choose different principles for different goods, they understood justice more as situated and contextual, with different goods belonging to different justice spheres. When the teacher emphasised disagreements in a mutually respectful dialogue about a common, open problem, the students changed from merely stating principles as arguments to trying to critically examine the backings for these principles.

Didactical knowledge about the critical analysis of justice

The teaching design in the research lessons uses earlier findings of aspects that were critical for older students to discern. When designing teaching on the same subject area for younger students, the use of critical aspects found in material from older students was in itself a novelty. The results indicated that it may be productive to use, or build upon, a learning object's critical aspects for older students when designing teaching for younger ones. This does not mean, however, that this ability manifests the same way in students of different ages. One example was the younger students' lack of experience in discussing the inherent values of the different principles' underlying assumptions. While collaborating on solving the problems with a decision whether a certain good 'belonged to' a certain principle, the students' explanations were mostly formulated as 'this is reasonable', and the underlying values were not expressed in terms of rights, needs or rewards.

When social science teachers and teacher-students study the concept of justice, during teacher education or in-service training, it might be particularly valuable to discuss justice as an essentially contested concept. For teachers of older students, it may be important that the monistic character of the classical theories of Rawls and Nozick are contrasted with the situated character of Walzer's and the more normative character of Nussbaum's (2002). Nevertheless, this disciplinary knowledge also ought to be accompanied by insights into the aspects of justice and of critical reasoning about justice issues that are particularly hard for students to experience. Teachers' didactical subject knowledge includes an understanding of how students both experience and relate to the

subject content, of how teaching can be designed to highlight critical aspects of the subject content, and of what aspects of the disciplinary content are especially relevant in relation to what students need to experience and discern about the subject content. In a time when the pendulum of the educational debate is swinging towards emphasis on facts and 'basic knowledge', it is important not to forget this relation between disciplinary content and the subject-specific abilities that characterise the practices of school subjects. Investigating and describing students' ways of participating in the subject practice, as well as their respective conceptions of central phenomena and concepts, seemed potent for designing teaching that benefits many students. Deeper knowledge about the meaning of knowing a specific subject content enhances the possibility to design efficient instruction and can also serve as a guideline for selecting the relevant disciplinary content knowledge for teacher training.

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