

The role of structure and interaction in teachers' decision-making during allocation meetings

Janneke P.W. Sleenhof^{ab*}, Marieke C.G. Thurlings^a, Maaïke Koopman^a, Douwe Beijaard^a

Eindhoven School of Education, Eindhoven University of Technology, The Netherlands

^a Eindhoven School of Education, Eindhoven University of Technology,

Postbus 513, 5600 MB Eindhoven, The Netherlands

j.p.w.sleenhof@tue.nl

m.koopman@tue.nl

m.c.g.thurlings@tue.nl

d.beijaard@tue.nl

^b Sint-Joriscollege, Eindhoven

Roostenlaan 296, 5644 BS Eindhoven, The Netherlands

*Corresponding author

The role of structure and interaction in teachers' decision-making during allocation meetings

This study focuses on teachers' group-decision making during Dutch allocation meetings. A previous interview study showed that teachers question the objectivity of decisions due to negative interaction experiences and a lack of structure during these meetings. To characterize the structure and interaction of these meetings, 33 student allocations were observed. Results showed a variety of structures and interactions, including differences in the degree to which the meetings met criteria relevant to achieving objective allocation decisions. It can be concluded that - based on the criteria of acceptance, fairness, and transparency as used in this study - allocation meetings need to be well-prepared and substantiated, to allow for every teacher's opinion to be heard, and follow a procedure that is clear to everyone. In view of students' future school careers, it is important to pay close attention to functional interaction and structured discussions that ensure transparent, acceptable and fair decision-making.

Introduction

This study focuses on group decision-making during teacher meetings in Dutch secondary education at the end of each school year. In these meetings, teachers discuss students that do not meet formal requirements to pass to the following year nor show results that require them to retain without any doubt. These decisions are mainly based on grades: failing three or more classes generally leads to retention, but exceptions for students may be made. Since there are no national allocation regulations, this places these students in a 'grey area' that may differ per school. Consequently, teachers make high-stakes group decisions regarding students' allocation to different academic years, educational tracks, and study profiles that might fit them best. Together teachers have the authority to make the final sorting decisions. These decisions are decisive for the students and are only reconsidered if parents present new arguments to the school board. Teachers have to make such decisions when *havo* and *vwo*¹ track students make the transition from the first (year 1 to 3) to the second phase (year 4 and 5 for *havo*; year 4, 5, and 6 for *vwo*) in secondary education. Students switch from a general to a more specific curriculum by choosing a study profile consisting of a specific combination of subjects (i.e., Culture and Society, Economics and Society, Science and Technology, and

¹ *havo* = senior general secondary education, *vwo*= pre-university education; both tracks prepare students for higher education.

Science and Health). Each study profile provides access to different study programs in higher education.

Collectively allocating students to a specific track (havo or vwo), study profile, or year/grade is a complex decision with far-reaching consequences, such as dropping out, underperformance, and study delay, and must therefore be done deliberately (Elffers, 2012; Boone & Van Houtte, 2012; Vanlommel & Schildkamp, 2019). Several studies have indicated tracking decisions to be inconsistent and teacher expectations to be biased, depending on time and context (de Boer, Bosker, & van der Werf, 2010; Timmermans, de Boer, Amsing, & van der Werf, 2018). School leaders and teachers feel the need to increase standardization of allocation decisions in order to achieve comparability across students and, through that, objectivity of these decisions (Vanlommel & Schildkamp, 2019).

Little is known about the objectivity of allocation decisions. Our interview study (Authors, 2019) demonstrated that teachers often wonder if students in similar situations are offered equal opportunities. They experience that group decisions on student allocation are often unstructured and variable. Lack of objectivity seemed to be reflected in the variety of the *structure* of allocation meetings (procedures leading to a decision) and *interaction* (nature of group discussions) during allocation meetings.

In order to improve the objectivity and thereby the quality of allocation decisions, it is important that - analogous to drawing conclusions in qualitative research - the decision-making process is acceptable, transparent, and fair (Akkerman, Admiraal, Brekelmans, & Oost, 2008; Baartman, Bastiaens, Kirschner, & van der Vleuten, 2007; De Kleijn & Van Leeuwen, 2018; Schwandt, Lincoln, & Guba, 2007; Uhlenbeck, Verloop, & Beijaard, 2002). Are decisions well-substantiated (which makes them *acceptable* for the students involved); are procedures clear and understandable (*transparent*); and are decisions made consistently so that students receive equal opportunities (*fair*)?

The aim of this study is to describe, characterize, and illustrate the structures of allocation meetings in different schools and the types of interaction of the group discussions during these meetings. We also explore possible patterns of how structure and interaction are related. This study addresses the following research question: *How can the structure and interaction of allocation meetings be described and characterized, including the relationship between these two aspects?* The study will contribute to the understanding of allocation decisions made by teachers and provide recommendations for the objectivity of teachers' group-decision making.

Theoretical framework

Group decision-making

Little is known about group decision-making when allocating students, so we lean on literature from a related field of study, namely teacher collaboration. A first aspect of group decisions concerns their role in teachers' practice. Group decisions generally are 'decisions where a group of two or more individuals must collectively select an alternative from a set of two or more alternatives that best satisfies the group's objectives, and no individual has veto power' (Keeney, 2013, p. 103). Individual teachers often struggle to analyze and interpret data (Vanlommel, Van Gasse, Vanhoof, & Van Petegem, 2017). Collaboration and group discussions are considered a key element of teachers' work. These are, for example, helpful to come to a shared understanding of arguments that will be used to decide on alternative options in a decision-making situation (Van Gasse, Vanlommel, Vanhoof, & Van Petegem, 2016).

A second aspect of group decision-making pertains to reaching a shared opinion by participants with different views and roles. Group discussions will increase the number of perspectives considered by other participants and create a complete picture of a student (Brodbeck, Kerschreiter, Mojzisch, Frey, & Schulz-Hardt, 2002). In decision-making situations, teachers tend towards confirming with the group instead of finding allies to seek confirmation of their own opinions (Brodbeck, Kerschreiter, Mojzisch, Frey, & Schulz-Hardt, 2002; Van Gasse, Vanlommel, Vanhoof, & Van Petegem, 2017).

A final aspect regarding group-decision making relates to the substantive contribution of participants. Group members use both intuition and rational thinking to substantiate their arguments (Kahneman, 2003). Rationally, teachers may process information actively and systematically (for example, by using test results or reports), yet intuitively they may rely on prior experiences, gut feeling, and observations during daily practices. Intuition and rational thinking intertwine and make decision-making processes and argumentation variable, depending on the formation of the group and input from the different participants (Schildkamp & Ehren, 2013).

To summarize, collectively making a good (allocation) decision is complex and highly variable, making it difficult for teachers to reach an acceptable, transparent, and fair decision about individual students. In the current study, the aspects discussed above were taken into account when observing allocation meetings and analyzing which teachers participate and share their opinions, including their (substantiation of) argumentation.

Structure

Participants generally are more likely to reach consensus and make more objective decisions in structured rather than in unstructured group discussions (Keller & Joung, 2004). Different elements might be relevant for characterizing the structure of group meetings regarding decision-making. One of such elements refers to the course of a discussion in a series of steps. Keller and Joung (2004) indicated that a teacher meeting may be structured by following a series of steps, such as the opening of a meeting, stating arguments, and reacting to one another.

A second element of structure pertains to the content of the discussion and the information that is shared. Structuring and subsequently sharing that information leads to better decisions (Mesmer-Magnus & Dechurch, 2009). When making a decision, groups tend to use information that is known to most of the group members. The group would benefit from unique information known to only one or a few members, because that enhances the group's knowledge and may contribute to improving the objectivity of the decision (Brodbeck et al., 2002). As stated before, information sharing is a vital part of group decision-making. When group discussions are highly structured by procedures that guide each participant's input to the discussion, information sharing can be encouraged and more substantiated decisions are made (Hauer et al., 2016).

A third element relates to following explicit procedures and regulations during decision-making. A team can use different procedures to collectively select a decision (Keeney, 2015). For example, when allocating students, teachers can make a decision by voting, by using serial turns to express opinions, or by having an open discussion.

A fourth and final element that might be relevant for our study is the role of the discussion leader. Leadership styles can have a great impact on the course of a group meeting in terms of influencing and improving structure in a meeting (Bouwman, Runhaar, Wesselink, & Mulder, 2017; Scribner, Sawyer, Watson, & Myers, 2007). Discussion leaders can utilize different strategies to structure a meeting. For example, good leaders combine transformational and relational strategies to enhance participation and positive collegial relations (Holmes & Marra, 2004). They are capable to avoid potential conflicts and lead the team to a collective decision (Hauer et al., 2016; Holmes & Marra, 2004). Harell (2019) showed that teacher groups in discussion situations feel discomfort and limited participation when their discussion is scarcely structured. When discussion leaders provide structure and give participants the opportunity to actively discuss issues, decision-making is experienced as

democratic and participants are engaged in the process (see also Popp & Goldman, 2016; Scribner et al., 2007).

For the current study it is relevant to pay attention to steps in allocation meetings, to the content of the discussion (the information and arguments that are shared), to decision-making procedures (how does the team collectively make a decision), and to the role of the discussion leader.

Interaction

The nature of interaction influences group decisions in several ways, for example through positive or negative statements expressed by group members (Horn & Little, 2010; Lehmann-Willenbrock & Kauffeld, 2012). Groups that display a functional interaction, by expressing proactive and constructive statements (for example, that a suggested idea seems worthwhile), are significantly more satisfied with the meeting and its outcomes than groups with a dysfunctional interaction (for example, in cases of negative procedural statements or complaining). Such dysfunctional interaction leads to negative relationships, conflict, demotivated group members, and dissatisfaction with the outcomes of a meeting (Lehmann-Willenbrock & Kauffeld, 2012; Main, 2012).

The role and personality of different team members may also influence the team's interaction. Teams often deviate from making an objective decision, because group members use the discussion to strengthen their individual pre-discussion ideas, hereby overruling others (Mesmer-Magnus & Dechurch, 2009). Group members may be dominant or have a high status because of seniority, experience, or confidence and because of which role they play in a meeting (Bang & Frith, 2017; Barton & Bunderson, 2014; Zarnoth & Sniezek, 1997). In the context of the current study, this may pertain to the role of being a teacher or a mentor², and to which subject they teach: Mathematics may be of more importance for the allocation than Arts. A study by Cialdini and Goldstein (2004) on social interaction demonstrated that individuals may adapt their ideas actively to each other's knowledge and to dominant participants, due to a desire to fit in or the belief that others possess better knowledge. Arguments can thus be decisive in a discussion, and persuade others, not only because of good substantiation (as described in the *Structure* section), but also because of who presents the argument. Nelson et al. (2010) reported that teacher groups often tend to skim the surface

² Mentor= the additional task of teachers to coach and guide a group of students. A mentor has specific responsibilities, such as monitoring students' study progress and ensuring their personal wellbeing. Mentors are a student's primary contact person to talk to in case of personal or school-related issues.

in a discussion, avoiding conflicts, rather than engaging in substantiated, critical discussions. Although some research on democratic decision-making values conflict in the process and does not view this as a sign of dysfunction (Achinstein, 2002), we know from our interview study, that in the context of student discussions conflict was often accompanied by negative reactions and feelings.

Finally, as well as in structuring the meeting, the discussion leader plays a part in enhancing interaction among teachers. For example, a study by Dobie and Anderson (2015) on teacher meetings using conversation analysis, showed that the number and length of statements in a discussion depend on the form of the discussion. In discussions involving serial turns, when teachers were asked by the facilitator to respond one by one, Dobie and Anderson found that only half of the teachers participated. Teachers that participated only spoke once and felt limited in sharing ideas. By contrast, in an open discussion, teachers experienced more room for expressing (contrasting) ideas.

Relevant for our study are the participants' role in the meeting (teachers and subject they teach, discussion leader, or mentor), the degree and way of participation by the teachers (serial or open interaction), the type of the interaction (functional or dysfunctional interaction). We will also examine how teachers are persuaded by others and which arguments can be decisive in the discussion.

Method

Participants and meetings

Four Dutch secondary schools were selected to participate in this study. Selection was based on types of schools. Interviews with team leaders, and schools' mission statements revealed different views on allocation and different visions of teaching and learning. At each school, two to four meetings were attended and video-taped (11 in total), with every teacher's consent. We attempted to involve different teams, mentors and team leaders per school in this study, to create a diverse and complete image of allocation meetings in practice. We observed meetings at the end of year 3 and 4 of havo and vwo, depending on consent of the team leaders and on the possibility to attend. Meetings were attended by the team leader, and the class's mentor and teachers. Each meeting, the formation of the team varied from 8 to 17 teachers of different subjects. Although group compositions differed per team, gender or race of the group members was not an issue in the analysis of the meetings.

In each meeting, one class was discussed. During the first part of the meeting, students that pass or retain without discussion were mentioned. We focused on the next part of the meetings in which students in the 'grey area' were discussed, ranging from one to four student discussions per meeting. In total, we observed 33 student discussions (Table 1). Discussion lengths ranged from 2 to 26 minutes per student, with an average of 7.4 minutes. All students and teachers were anonymized.

[Table1]

Instrument

All 33 allocation meetings were video-recorded. To prepare and structure the data for analysis, we focused the observations on general characteristics of each discussion, and on different aspects that characterized the structure of and interaction during these discussions.

In *general* we determined for each discussion the participants per meeting (teacher and subject s/he taught, mentor, or team leader), who made each statement, and substantiation of arguments (based on personal opinions, observations, or data such as grades). Additionally, we made memos on remarkable issues which helped to characterize the discussion (such as: 'Teacher 3 was dominantly present and took over the leadership of the meeting', or 'Exceptionally long discussion including many anecdotes, that did not seem to add anything substantially to the discussion'). These general focus points helped to form an overall image of group decision-making in each meeting, after which we could focus observations on structure and interaction.

With regard to *structure*, we specifically focused on steps in the discussion that lead to the final decision, which define the procedure and course of the meeting. We observed steps such as 'stating the proposal' (for example, retain a year, pass to the next year, or no stated proposal), 'reaction to proposal', and 'change of discussion'. We also observed (shifts in) the focus of the content of the discussion (for example, focus on grades or on wellbeing of the student) and the decision-making procedure that was used (for example, by voting or a decision by the mentor after an open discussion). Finally, the discussion leader was taken into account (mentor, team leader, or non-existent), and their role in the group decision-making.

With regard to the *interaction* between the participants of a meeting, we focused the observations on the degree of participation in the discussion (for example, the number of statements per participant), the amount of positive (functional) or negative (dysfunctional) interaction (for example, did a statement add to the discussion or did it distract from the aim

of the discussion?), implicit (also non-verbal) or explicit interaction, the form of the discussion (for example, open or serial), and the way in which the discussion led to a decisive argument. These observations indicated how teachers collaborate and listen to each other, and provided insights in relations between the participants and who raises (the most) important arguments.

Data analysis

The following steps were taken for the analysis of the data collected around the aforementioned points of attention for observation of the student discussions:

1. Transcripts of the 33 student discussions were made. Each discussion was transcribed using 'turns'. We define a turn as 'a stretch of communicative behavior produced by one speaker, bounded by periods of inactivity or by activity of another speaker' (Petukhova & Bunt, 2007). In some cases participants interrupted each other, or talked simultaneously. In these situations we nonetheless considered interrupted turns as one. For example: *Teacher 1: 'I believe this student can do better, and ...'* *Teacher 2: - interrupts turn- 'Yes, he is lazy.'* *Teacher 1: -continues turn- '.. and should therefore be pushed harder to do his best.'* was considered as one turn for Teacher 1.
2. Next, we summarized each student discussion in order to characterize the **structure** of the discussions, especially focusing on steps in the discussions. After summarizing 15 discussions, five recurring structures were found. Each structure represents a different course of the meeting, visible in different decision-making procedure and a different sequence of steps. We strived to define a limited number of structures and therefore allowed small variations in steps within a structure, for example reactions may be positive or negative and some steps may be skipped (see Figure 1). Similar steps occurred in almost all the discussions: they generally contained at least a proposal and a decision. However, the sequence and quantity of the steps differed per structure: where one discussion went straight from a proposal to a short discussion followed by a decision, other discussions were characterized by many changes and numerous shifts in turn-taking. One structure we found, for example, was characterized by a change of focus in argumentation during the discussion. While the discussion started focusing on one aspect of the student, halfway through the meeting the focus shifted to a new aspect. The names that we gave to each structure, resulted from characterizations such as these. This structure was thus named: *Two sides to a story*.

3. After discussing these five structures with the other authors, formulations of the steps in the course of the meetings were refined. The first author checked if structures of the remaining 18 discussions corresponded with the found structures. Saturation was reached: all discussions appeared to follow one of the five structures we defined earlier. Extensive characterizations and examples of all structures are presented in the Results section.
4. The following step entailed describing the type of **interaction** in each discussion in order to find overall interaction types. We searched for patterns across the different meetings, that characterize the way in which participants interacted with each other in order to reach a decision. We found four different types of interaction, that were discussed with the research team. The types of interaction were refined and then labelled by using studies on interaction. For example, the first type is named *Open interaction*. This term is found in research by Dobie and Anderson (2015) and reflects the open style of discussion in which participants are free to respond to each other in a random order. Extensive characterizations and examples of these four types of interaction are presented in the Results section.
5. Finally, we examined **relations between structure and interaction** in the allocation discussions. After having analyzed each discussion for structure and interaction, we examined coherence between structure and interaction types of the meetings. We searched the full transcripts for emergent patterns across the data set to generate ways in which structure and interaction are related: for example, was an open interaction mostly combined with many changes in the steps of the discussion? We determined how often these structures occurred per separate interaction type. Interpretations were discussed with research teams.

Reliability of the study

Several measures have been undertaken to guarantee the reliability of this study. The analysis steps were thoroughly discussed and approved by the entire research team. Representative quotes derived from the primary data are an essential part of the results of this study, not only for the purpose of illustrating the findings but also for the sake of transparency and acceptance of the results (Baartman et al., 2007). To further ensure reliability, an audit procedure was conducted by an independent researcher to critically check the different methodological choices, data analyses procedures, and interpretations of data (Akkerman, Admiraal, Brekelmans, & Oost, 2008; De Kleijn & Van Leeuwen, 2018). Following Akkerman et al.

(2008), we decided on an audit procedure that addressed the same quality criteria that we discussed in the introduction of this study for assessing the objectivity of decisions regarding the allocation of students. Acceptability, transparency, and fairness of the research were found satisfactory. The audit procedure led to minor alterations in formulations to enhance transparency, such as the description of step 2 in the data analysis. The complete audit report is available upon request.

Results

Structures of the student discussions

Five discussion structures were found. Each structure followed different steps that lead to a decision (Figure 1).

[Figure 1]

Structure 1: straightforward

The eight discussions that followed this structure were relatively short (5 minutes on average, ranging from 2 to 7 minutes), since (most) teachers appeared to agree with the provided arguments. The main characteristic of student discussions with a straightforward structure is the limited amount of time and steps needed to reach a decision. After the proposal, the mentor usually sketched an image of the student that seemed quite complete (see Table 2 for an example). Few different perceptions were shared and most or all arguments were already known. The more complete and detailed the preparation appeared to be, the fewer reactions were needed, apparently, to reach a decision.

When the discussion followed this structure, the mentor seemed to be well-prepared and had consulted different sources. For example, they talked to different colleagues, had a talk with the student or their parents, consulted the student monitoring system, and checked grade lists. This provided the mentor with the input to sketch a clear picture of the student and tell a convincing story. In some situations, we observed that a decision was already discussed in previous meetings, therefore just repeated and confirmed in the final student meeting. In these situations, discussions did not occur.

[Table 2]

Structure 2: two sides to a story

We observed six student discussions that followed this structure, with an average length of 9 minutes (ranging from 2 to 17 minutes). What stood out in these cases was the change in focus of argumentation that occurred over the course of the discussion. Usually the mentor or team leader started a student discussion by expressing a proposal or a question regarding the allocation of this student and sometimes providing supporting arguments. This proposal was followed by reactions of participating teachers. During this step, it became clear that information or certain arguments were lacking in order to form a complete picture of the student. These were brought into the discussion by one of the teachers or the team leader, which provided a different view on the situation and led to new reactions, either positive or negative (Table 3). One argument in this discussion was decisive, after which the decision-making procedure was started and a decision was made. The remainder of the discussion was usually quite short after the focus shifted.

We noted that the proposal at the beginning of the meeting seemed to influence the decision: a question or an open proposal more often led to the student retaining a year than a closed, positive proposal (to pass) did.

[Table 3]

Structure 3: a new proposal

In six cases (length: 7 minutes on average, ranging from 2 to 15 minutes) we observed that a new proposal replaced the initial one. It became clear that the mentor's point of view was not shared by his/her colleagues, and agreement could not be reached: the stated proposal did not suit the specific student. This led to a new proposal which was suggested by the mentor or one of the other teachers. For example, in one student discussion the proposal regarding a student in year 3 of the vwo-track was to retain a year. Yet, during the meeting, the opinion was shared that this student did not belong to the vwo-track, therefore a new proposal was to pass to the havo-track (Table 4). The sequence of steps could deviate among the discussions within this structure: first the discussion changed, which led to a new proposal and a longer discussion, or the negative reactions led to a new proposal straight away.

We mainly observed this structure when an incomplete or unclear picture of a student was sketched, and when new arguments or facts were presented. The cases we often complex, for example in the case of a student with personal and psychological problems and in the case of a student with learning disabilities.

[Table 4]

Structure 4: delayed conclusion

This structure was observed in only four discussions (length: 5 minutes on average, ranging from 4 to 15 minutes). In these discussions the final step, the decision-making procedure, was relatively long. A student was discussed and different arguments were shared, after which the decision-making procedure started. This did not lead to a conclusion and closing of the discussion, but the discussion returned to a previous step with new reactions from other participants. These teachers had not yet had a chance to express their opinions, or they only then provided important arguments and information that were overlooked at first. Many questions regarding procedures, possible options for the student and background information were asked for.

We observed that leadership in these meetings was not very strict and responses or arguments were hardly structured. The decision-making procedure was unclear or started too soon, resulting in more discussion (Table 5).

[Table 5]

Structure 5: change after change

The nine student discussions that followed this structure were characterized by a long discussion (9 minutes on average, ranging from 4 to 26 minutes) and a chaotic course of the meeting, mostly starting with a disorderly opening (Table 6). Discussions started without a proper introduction, proposal or question. In most cases, the mentor seemed ill-prepared, and fulfilled a relatively small role in the discussion.

The lack of structure and leadership seemed to provide the possibility for all teachers to participate at random and to present any argument they considered relevant. As a result, many different arguments were stated, and the focus of the discussion shifted again and again. We frequently noticed how an issue was raised or a seemingly relevant argument was stated, but was not further discussed, because a new remark was already mentioned by someone else. Several discussions were characterized by empty remarks (such as anecdotes, personal comments, and jokes), without a clear purpose. In four out of nine discussions, questions were asked regarding the procedure (for example, whether the grade lists were complete or whether a test had been made), again shifting the focus of the discussion.

This structure entailed many changes in the quite extended discussion. Some were interrupted because there was no time left to address the last issue that was raised. The group did not fully conclude the conversation before decision-making procedures started by intervention from a team leader.

[Table 6]

Interaction types during the student discussions

We observed four different types of interaction during the discussions, each characterized by a different manner in which the group of teachers interacted.

Type 1: Open interaction

Open interaction was found in 12 discussions. Participants were free to respond to each other and to the proposal or question stated at the beginning. After a proposal was made, teachers were asked to share their opinions, experiences and/or advice regarding the student. Since there were no explicit rules for interaction, and everyone could join the discussion, many teachers participated in the discussion. We observed extensive discussions, in which a large number of the attending teachers participated, and multiple teachers responded more than once (Table 7). Within these meetings, at least half of the participants joined the discussion. Statements were both positive and negative, and different arguments and opinions were shared to collectively paint a complete picture of the student's situation. When all opinions were heard, the team leader or mentor generally summarized the argumentation and drew a conclusion.

Implicit, non-verbal interaction was mainly positive: although the discussion was open and all participants could respond to the proposal, teachers listened to each other and let everyone participate in the discussion.

The decisive argument was stated in the course of the discussion by one of the teachers or the mentor, after which others agreed and the decision-making procedure could start. We observed different arguments being decisive: behavior in combination with the student's capacities were most often the crucial arguments to decide whether a student could pass.

[Table 7]

Type 2: Serial interaction

In five discussions, interaction seemed to be relatively strict: after the proposal or question at the start, teachers were asked to respond directly. The discussion leader asked the teachers one by one to respond to a specific question or proposal and made sure participants got a chance to speak (Table 8). Either all teachers were involved in the meeting or those who teach specific subjects related to the study profile a student had chosen.

With respect to the number of participants contributing to the discussion, we found a distinctly large number of group members that participated. However, they only had limited opportunity to respond, and the number of talking turns was significantly lower than in open discussions (respectively 22 vs. 42 talking turns on average). Participants seemed alert and active during these meetings, ready to share their opinion when asked.

The decisive argument was often mentioned at the beginning. Mentors subsequently asked directly for views on the student's capacities, and as such there was less room for other arguments or digressions.

[Table 8]

Type 3: Limited interaction

In eight discussions we observed very limited, restrained interaction. These discussions were quite strict, with a clear role for the discussion leader. After the proposal was put forward, only a limited amount of responses was requested or even possible. Not all teachers were involved in the discussion or got the opportunity to share their opinions. Sometimes, it was a matter of making statements, instead of being asked for reactions. It seemed difficult to share diverging opinions and at times teachers who wanted to say something were ignored. One or two teachers dominated, making it hard for others to participate. Some of these other teachers were clearly discouraged to join the discussion.

These discussions were generally short, with little room for anecdotes or exchanging arguments. Non-verbal communication and attitudes were noteworthy. For example, a mentor discouraged others to participate by his loud voice and overruling attitude (Table 9).

The decisive argument was usually stated at the beginning of the discussion by the mentor or team leader, and usually focused on the student's grades. Teachers appeared hesitant to express contrasting ideas and arguments. They accepted the mentor's proposal to pass the student in seven out of eight discussions.

[Table 9]

Type 4: Conflicting interaction

Eight discussions were characterized by negative, conflicting interaction. While open or serial interaction provided the opportunity for everyone to speak, and limited interaction was characterized by little opportunity to speak, the main characteristic of this type of interaction was negative conflict. We noticed dysfunctional interaction: many interruptions, participants hardly listened to each other, overruling teachers and at times a negative atmosphere (Table 10). We also observed how some teachers even waited with their hand in the air to speak, but were ignored by the discussion leader. Interaction switched from arguments, to questions about the procedure, to personal opinions, making it difficult to follow a clear line in argumentation.

During these discussions, the person with the loudest voice was heard and at times it seemed to be a situation of ‘survival of the fittest’. The mentor’s role was unclear, and he or she could be overruled by dominant colleagues. Teachers were rarely asked to participate, it seemed easy to simply not join in the discussion at all.

The way the discussion lead to a decisive argument was unclear and differed per discussion. An argument could be mentioned by one of the teachers or the mentor, after which others agreed or not. At some point a decision had to be made (sometimes due to a lack of time), even though the discussion was not fully completed.

[Table 10]

Relations between structure and interaction type

In the final step of data analysis, we examined relations between interaction and structure of the meeting. We have found several similarities in different discussions, related to these two aspects. Table 11 contains an overview of relations, displaying frequencies of observed structures per interaction type. Specific types of interaction appeared to relate to how a discussion is structured. We present the findings per interaction type, because discussions generally started with the discussion leader stating explicitly how each student would be discussed, choosing an interaction type.

[Table 11]

In discussions with an Open interaction we most often observed Two sides to a story and Change after change. Teachers were free to respond to an open question or proposal, and subsequently different arguments led to a decision. Teachers had the opportunity to state different arguments and to shift the focus of the discussion (Table 12).

[Table 12]

In student discussions with a Serial interaction we mostly observed a change of focus in the discussion (structure Two sides to a story: see Table 13), and little need or opportunity for discussing diverse points of view. Teachers all received the opportunity to respond at least once to the proposal and seemed less inclined to change their views after they were heard.

[Table 13]

Limited interaction related clearly to the Straightforward structure. In these discussions we observed either a limited need or limited opportunity for input from different teachers. These discussions followed a straight course, with few changes in the discussion and little room for anecdotes (Table 14).

[Table 14]

When interaction was characterized by Conflict, we found discussions often changed direction (structure Change after Change; Table 15). A conflicting interaction also seemed to be the prevalent type of interaction for structure New proposal. In these discussions, the focus changed completely and a new proposal was introduced by one of the teachers.

[Table 15]

Discussion and conclusion

This study described, characterized, and illustrated the structure of and the interaction in allocation meetings in relation to criteria that are relevant to achieve objective group decision about a student in these meetings. During these meetings, teachers collectively make a decision regarding allocation of students to a specific track, year, and study profile. Findings

revealed five *structures* that characterize the course of a meeting: Straightforward, Two sides to a story, A new proposal, Delayed conclusion and Change after change. Each structure represents an increasingly extended discussion with more steps needed to make a decision. Differences between these structures can mainly be explained by: 1. types of leadership (the opening of a discussion by the team leader appeared to greatly influence the structure of the discussion) and 2. substantiation of the proposal and argumentation (an unclear, or even absent proposal led to more steps and changes in the discussion than a clear and substantiated proposal suggested by the mentor). *Interaction* was found to be characterized by Open discussion, Serial interaction, Limited interaction, and Conflicting interaction. During Open or Serial interaction, mostly functional interaction could be observed: discussions were characterized by constructive reactions, few interruptions, and high participation. Dysfunctional interaction (for example, interruptions and complaining) often occurred during discussions where the interaction was limited or conflicting. Conflict could lead to a positive discussion, but in this study it was associated with negative behaviour and responds.

This study contributes to the understanding of group decision-making in several ways. First, it confirms that making a group decision is highly variable: decisions depend on input from different team members and the variety of perspectives and ideas in a group (Brodbeck et al., 2002; Schildkamp & Ehren, 2013; Van Gasse, Vanlommel, Vanhoof, & Van Petegem, 2016), as illustrated by the types of student discussions we observed. Second, in line with Keeney (2015) and Keller and Joung (2004) we found that discussion leaders can have a great impact on decision-making by structuring the meeting and by following explicit regulations. When regulations were unclear and the opening of the meeting was unstructured, discussions were often chaotic and disorderly. When a structure is not provided, teachers may be less engaged (Popp & Goldman, 2016), and, as we observed, may even withdraw themselves from the discussion completely. Third, the interaction types we found confirm that a participant's role and personality influence the type of interaction among teachers (Dobie & Anderson, 2015; Lehmann-Willenbrock & Kauffeld, 2012; Nelson et al., 2010). For example, we observed that the teacher with the loudest voice was heard and hesitant teachers were overruled by dominant types or by a discussion leader. Most of our findings are confirmed by the literature, except for the study by Nelson et al. (2010) indicating that teacher groups avoid conflict and critical discussions. We observed many meetings characterized by conflict and heated discussions, for example, when overruling teachers dominated the discussion, hereby discouraging others to participate.

In several student discussions, we believe teachers were able to achieve objective decision-making. It appeared that the factors acceptability, transparency, and fairness all need to be met to make an objective decision. These factors were met in case of Open interaction in combination with the structure Two sides to a story: every teacher got the opportunity to respond to a proposal and discuss their ideas. In these discussions we mostly observed functional interaction (cf. Lehmann-Willenbrock & Kauffeld, 2012). Serial interaction combined with Two sides to a story may also lead to objective decision-making, more specifically when the mentor was prepared, the proposal was clear, and argumentation was well-substantiated. In these cases, procedures were transparent, and in addition, decisions appeared acceptable and fair. This result is in line with research by Dobie and Anderson (2015), who indicated that serial interaction provides the opportunity for all participants to share their opinions.

Conversely, we observed several student discussions in which acceptability, transparency, and fairness were not met and decision-making seemed variable, unclear, and unfair for students. Especially the combination of Conflicting interaction and the structure Change after change should be avoided, because this mainly seemed to result in dysfunctional interaction and frustration among teachers about both process and outcomes. The course of these discussions was not transparent, because the focus of the discussion changed randomly, and not all information and arguments needed for an objective decision could be shared. Decisions were not acceptable, because arguments and proposals were hardly substantiated. During Conflicting as well as during Limited interaction, the decision was influenced by a small group of dominant teachers where others could be overruled or ignored, which may affect the fairness of the decision (Mesmer-Magnus & Dechurch, 2009). We assign this finding to the personality and status of the dominant teachers, not to gender, race or age issues. In Dutch (educational) culture, there is very limited hierarchy and speaking your mind is widely accepted.

This study has three main implications for enhancing the objectivity of decision-making processes in allocation meetings. First, a well-prepared and substantiated proposal by the mentor or team leader provides the basis for a structured discussion and, through that, the acceptability of the decision. Second, in order to enhance fairness of the decision-making process, discussion leaders must involve all teachers in the discussion and allow for diverse opinions. Third, transparency of the decision is ensured when it is based on explicit procedures that are similar in every meeting. A professional development program for teachers with a focus on these implications may help teachers to make more objective

decisions. Our study contains numerous illustrations that can be included in such a professional development program and, as such, function as reflection materials to support the importance of these three implications.

A first limitation of this study pertains to the focus of this study on the objectivity of the decision-making *process*. The effect of the decision itself remains unclear: is the student allocated to the right year, track and profile? Future research could study the impact of this decision by following students who were previously discussed in allocation meetings during their future school careers, for example: do they graduate without any delay? An additional question to be asked is: what is the best decision as far as a students' personal development is concerned? Second, although we have provided insights in how an objective decision can be made collectively, we have not addressed the argumentation extensively. We have concluded that preparation is essential, and proposals should be well-substantiated. Unclear is which information is needed to form a complete student picture and to what extent each argument (background, grades, attitude, motivation, etc.) should be taken into account in the collective decision. Future research could therefore zoom into the content of the discussion and investigate the argumentation needed to make an objective decision. Our study indicates the need for enhancing teachers' objective decision-making in allocation meetings, for example by a professional development program. The aforementioned implications of the present study should be incorporated in this program, and future research could examine the outcomes of this program.

Conclusion

Our previous interview study showed that teachers reported a lack of objectivity in their group decisions about student allocation (Authors, 2019). In their opinion, this lack of objectivity is related to the structure and interaction of the allocation meetings. In order to gain a better understanding of this issue, the current study closely scrutinized the structure and interaction of those meetings. This observation study confirmed the results of the interview study, namely that the structure and interaction of the meetings indeed influence the objectivity of allocation decisions. We base this finding on the variety revealed in structure and interaction of the meetings and the degree to which justice is done to criteria to achieve objective allocation decisions in a meeting. In general, it can be concluded that - based on the criteria of acceptance, fairness, and transparency as used in this study - these meetings need to be well-prepared and substantiated, to allow for every teacher's opinion to be heard, and follow a procedure that is clear to everyone. This study puts forward several suggestions based on

examples from educational practice to meet these criteria. At the same time, we advocate doing more research into what is considered a very important topic for students' educational career path.

CONCEPT

Acknowledgements

We would like to acknowledge the four schools that participated in this study, and especially all the teachers, mentors and team leaders who made this study possible by allowing us to attend and observe their meetings. The openness and engagement of these teachers and mentors is greatly appreciated.

Funding

This work was supported by Ons Middelbaar Onderwijs (OMO), Tilburg, The Netherlands.

CONCEPT

References

- Akkerman, S., Admiraal, W., Brekelmans, M., & Oost, H. (2008). Auditing quality of research in social sciences. *Quality and Quantity*, 42(2), 257–274. <https://doi.org/10.1007/s11135-006-9044-4>
- Baartman, L. K. J., Bastiaens, T. J., Kirschner, P. A., & van der Vleuten, C. P. M. (2007). Evaluation assessment quality in competence-based education: A qualitative comparison of two frameworks. *Educational Research Review*, 2, 114–129.
- Bang, D., & Frith, C. D. (2017). Making better decisions in groups. *Royal Society Open Science*, 4(8), 170-193. <https://doi.org/10.1098/rsos.170193>
- Barton, M. A., & Bunderson, J. S. (2014). Assessing member expertise in groups. *Organizational Psychology Review*, 4(3), 228–257. <https://doi.org/10.1177/2041386613508975>
- Boone, S., & Van Houtte, M. (2012). Why are teacher recommendations at the transition from primary to secondary education socially biased? A mixed-methods research. *British Journal of Sociology of Education*, 34(1), 1–19. <https://doi.org/10.1080/01425692.2012.704720>
- Bouwman, M., Runhaar, P., Wesselink, R., & Mulder, M. (2017). Fostering teachers' team learning: An interplay between transformational leadership and participative decision-making? *Teaching and Teacher Education*, 65, 71–80. <https://doi.org/10.1016/j.tate.2017.03.010>
- Brodbeck, F. C., Kerschreiter, R., Mojzisch, A., Frey, D., & Schulz-Hardt, S. (2002). The dissemination of critical, unshared information in decision-making groups: The effects of pre-discussion dissent. *European Journal of Social Psychology*, 32(1), 35–56. <https://doi.org/10.1002/ejsp.74>
- De Kleijn, R., & Van Leeuwen, A. (2018). Reflections and review on the audit procedure: Guidelines for more transparency. *International Journal of Qualitative Methods*, 17(1), 1-8. <https://doi.org/10.1177/1609406918763214>
- Dobie, T. E., & Anderson, E. R. (2015). Interaction in teacher communities: Three forms teachers use to express contrasting ideas in video clubs. *Teaching and Teacher Education*, 47, 230–240. <https://doi.org/10.1016/j.tate.2015.01.003>
- Elffers, L. (2012). One foot out the school door? Interpreting the risk for dropout upon the transition to post-secondary vocational education. *British Journal of Sociology of Education*, 33(1), 41–61. <https://doi.org/10.1080/01425692.2012.632866>
- Harell, K. F. (2019). Deliberative decision-making in teacher education. *Teaching and Teacher Education*, 77, 299–308. <https://doi.org/10.1016/j.tate.2018.10.015>
- Hauer, K. E., Cate, O. Ten, Holmboe, E., Boscardin, C., Iobst, W., Chesluk, B., ... O'Sullivan, P. S. (2016). Ensuring resident competence: A narrative review of the literature on group decision-making to inform the work of Clinical Competency Committees. *Journal of Graduate Medical Education*, 8(2), 156–164. <https://doi.org/10.4300/JGME-D-15-00144.1>
- Holmes, J., & Marra, M. (2004). Leadership and managing conflict in meetings. *Pragmatics*, 14(4), 439–462. <https://doi.org/10.1075/prag.14.4.02hol>
- Horn, I. S., & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal*, 47(1), 181–217.
- Kahneman, D. (2003). A perspective on judgement and choice: mapping bounded rationality. *American Psychologist*, 58(9), 697. <https://doi.org/10.1037/0003-066X.58.9.697>
- Keeney, R. L. (2013). Foundations for group decision analysis. *Decision Analysis*, 10(2),

103–120.

- Keeney, R. L. (2015). Understanding and using the group decision analysis model. In Kamiński B., Kersten G., Szapiro T. (Eds.), *Outlooks and Insights on Group Decision and Negotiation* (pp. 77–86). Cham: Springer. https://doi.org/10.1007/978-3-319-19515-5_6
- Keller, J. M., & Joung, S. (2004, October 19-23). *The effects of high-structure cooperative versus low-structure collaborative design of decision change, critical thinking, and interaction pattern during online debates* [Paper presentation]. Association for Educational Communications and Technology Annual Meeting, Chicago, IL, USA.
- Lehmann-Willenbrock, N., & Kauffeld, S. (2012). Meetings matter: Effects of team meetings on team and organizational success. *Small Group Research*, 43(2), 130–158. <https://doi.org/10.1177/1046496411429599>
- Main, K. (2012). Effective middle school teacher teams: A ternary model of interdependency rather than a catch phrase. *Teachers and Teaching: Theory and Practice*, 18(1), 75–88. <https://doi.org/10.1080/13540602.2011.622556>
- Mesmer-Magnus, J. R., & Dechurch, L. A. (2009). Information sharing and team performance: A meta-analysis. *Journal of Applied Psychology*, 94(2), 535. <https://doi.org/10.1109/EMR.2012.6172774>
- Nelson, T. H., Deuel, A., Slavit, D., & Kennedy, A. (2010). Leading deep conversations in collaborative inquiry groups. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(5), 175–179. <https://doi.org/10.1080/00098650903505498>
- Petukhova, V., & Bunt, H. (2007). A Multidimensional approach to multimodal dialogue act annotation. In J. Geertzen, E. Thijsse, H. Bunt, & Schiffrin, A. (Eds.), *Proceedings of the seventh international workshop on computational semantics IWCS-7* (pp. 142–153). Tilburg: Tilburg University.
- Popp, J. S., & Goldman, S. R. (2016). Knowledge building in teacher professional learning communities: Focus of meeting matters. *Teaching and Teacher Education*, 59, 347–359. <https://doi.org/10.1016/j.tate.2016.06.007>
- Schildkamp, K., & Ehren, M. (2013). From “intuition”- to “data”-based decision making in dutch secondary schools? In *Data-based Decision Making in Education: Challenges and Opportunities* (pp. 49–67). Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-94-007-4816-3_4
- Schwandt, T. A., Lincoln, Y. S., & Guba, E. G. (2007). Judging interpretations: But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Evaluation*, 2007(114), 11–25. <https://doi.org/10.1002/ev.223>
- Scribner, J. P., Sawyer, R. K., Watson, S. T., & Myers, V. L. (2007). Teacher teams and distributed leadership: A study of group discourse and collaboration. *Educational Administration Quarterly*, 43(1), 67–100. <https://doi.org/10.1177/0013161X06293631>
- Sleenhof, J. P. W., Koopman, M., Thurlings, M. C. G., & Beijaard, D. (2019). An exploratory study into teachers’ beliefs and experiences about allocating students. *Teaching and Teacher Education*, 80, 94–105. <https://doi.org/10.1016/j.tate.2019.01.007>
- Uhlenbeck, A. M., Verloop, N., & Beijaard, D. (2002). Requirements for an assessment procedure for beginning teachers: Implications from recent theories on teaching and assessment. *Teachers College Record*, 104(2), 242–272. <https://doi.org/10.1111/1467-9620.00162>
- Van Gasse, R., Vanlommel, K., Vanhoof, J., & Van Petegem, P. (2016). Teacher collaboration on the use of pupil learning outcome data: A rich environment for professional learning? *Teaching and Teacher Education*, 60, 387–397. <https://doi.org/10.1016/j.tate.2016.07.004>
- Van Gasse, R., Vanlommel, K., Vanhoof, J., & Van Petegem, P. (2017). Individual, co-

- operative and collaborative data use: A conceptual and empirical exploration. *British Educational Research Journal*, 43(3), 608–626. <https://doi.org/10.1002/berj.3277>
- Vanlommel, K., & Schildkamp, K. (2019). How do teachers make sense of data in the context of high-stakes decision making? *American Educational Research Journal*, 56(3), 792–821. <https://doi.org/10.3102/0002831218803891>
- Vanlommel, K., Van Gasse, R., Vanhoof, J., & Van Petegem, P. (2017). Teachers' decision-making: Data based or intuition driven? *International Journal of Educational Research*, 83, 75–83. <https://doi.org/10.1016/j.ijer.2017.02.013>
- Zarnoth, P., & Sniezek, J. A. (1997). The social influence of confidence in group decision making. *Journal of Experimental Social Psychology*, 33(4), 345–366. <https://doi.org/10.1006/jesp.1997.1326>

CONCEPT

Tables

Table 1 Overview of observed student discussions

School	Meetings: Class + year	# Student discussions	Level: Havo/ Vwo
A	Class 3a	2	Havo
	Class 3b	5	Havo
B	Class 3a	4	Vwo
	Class 4a	4	Vwo
C	Class 3a	3	Havo
	Class 3b	3	Havo
	Class 3c	4	Havo
D	Class 3a	4	Vwo
	Class 3b	1	Havo
	Class 4a	2	Havo
	Class 4b	1	Vwo
Total	11	33	

Table 2. Example of a well-prepared mentor sketching an image of a student

Role	Statement
Mentor	<p><i>Students X's grade list contains three 5's and two 7's*. Therefore we have to discuss him, because he cannot compensate for insufficient grades with higher grades. My proposal is to let him pass, because of the following reasons: I believe he has potential, has the capacities to pass his exams. And he has grown a lot. His behavior and attitude towards studying have improved, as has been discussed in the previous meeting. Parents agree; they see he has improved his work ethics.</i></p> <p><i>For these reasons, I think he deserves to pass, which will also motivate him, provide a boost to go for it next year. He was very shocked to find out that he might be retained a year, and really wants to go for it this time.</i></p>

*Grades in the Dutch school system are classified on a scale from 1 to 10; 10 being the highest grade a student can achieve. Grades below 5,5 represent an unsatisfactory level of competence.

CONCEPT

Table 3. Example of change (underlined) in the discussion from focus on the student's behaviour to his capacities to pass

Role	Statement
Teacher 1	<i>His behavior was very negative, I would advise to retake the current year.</i>
Mentor	<i>I understand what you're saying and agree with you. That's what makes this decision so difficult: he hasn't shown the best behavior this year and hasn't done much to show he really wants to pass.</i>
Teacher 2	<i>Yes, but that's his problem now.</i>
Mentor	<i>Okay. What do the other subjects think?</i>
Teacher 3	<i>The same as what has been said already: if he doesn't change his behavior and attitude, he will fail my subject. However, if he would work, I believe he could pass and score higher grades.</i>
Teacher 4	<i>I see he has to retake a test that was made this last period. We need to remind him of this, otherwise he'll forget. <u>But we should ask ourselves now: what are the perspectives for next year, can he pass? I believe he will.</u></i>
Mentor	<i>So what I hear is: his behavior in class is negative, but he does have the capacities to pass.</i>

Table 4. Example of a discussion that leads to a new proposal

Role	Statement
Teacher 1	<i>I believe she is a very weak student. Her grade list is insufficient as well.</i>
Team leader	<i>And she has consistently low grades over the last year, hasn't she?</i>
Teacher 1	<i>Yes, only History has improved.</i>
Teacher 2	<i>Which subjects does she choose despite negative recommendations?</i>
Mentor	<i>German, Math and Economics.</i>
Teacher 2	<i>A dangerous choice, especially for someone with such a poor grade list.</i>
Mentor	<i>I agree, and would like to ask <u>a new question</u>: Do you believe she would benefit from retaining a year in 3vwo, or: would she be better off at havo?</i>
Teacher 3	<i>I completely agree. I think havo would be a better option for her than retaining a year.</i>

CONCEPT

Table 5. Example of the start of the decision-making procedure, after which the discussion continues

Role	Statement
Mentor	<i>I think he, as a person, is ahead of the others in his year, in terms of development. He has been through a lot, of course. I can't take away his dyslexia though, and he is obliged to follow Dutch. Do you think he has a chance to turn that 5 into a 6?</i>
Teacher 1	<i>Yes, I believe he has. I wanted to add to my last comment that he scored a 6,2 for his last test. That was surprising to me.</i>
Mentor	<i>Okay, so hereby I would like to <u>start the voting procedure</u> concerning the proposal: pass to 4havo.</i>
Teacher 2	<i>I would like to say one more thing: I also believe he should pass to 4havo. But I do think this is a dangerous situation in this case, because he draws up his own plan. I think someone should guide him next year, if he passes, to keep him focused on school and his homework.</i>
Teacher 3	<i>I agree. If we don't guide him, I fear for the worst.</i>
Mentor (etc.)	<i>But the point is, he doesn't accept help from anyone. ...</i>

Table 6. Example of disorderly opening, without a proposal, after which different arguments are stated

Role	Statement
Mentor	<i>This student has a very poor grade list: he failed two subjects within his study profile, and ...</i>
Teacher 1	<i>-interrupts- There is some improvement in his grades though.</i>
Teacher 2	<i>He has stopped working, and has underestimated this years' required level of competence. I'm afraid he's not up to it to pass to next year.</i>
Teacher 3	<i>I agree. He's done nothing but loafing around this last period. He's a slacker. It's not a matter of granting him, but his attitude is not helping him either.</i>
Teacher 4	<i>And he has some growing up to do.</i>
Teacher 5	<i>He is struggling with different issues, also from a social-emotional point of view.</i>

CONCEPT

Table 7. Example of a discussion with open interaction, with multiple participants sharing different opinions and diverging arguments

Role	Statement
Teacher 1	<i>Even though this student is highly gifted, he is doing other things: interfering with other students, playing with his card game... He does not listen. I don't see how guidance would help him: he needs to change his attitude and start working!</i>
Mentor	<i>Do you think he would pass?</i>
Teacher 2	<i>Not with this knowledge gap. I don't know what he might have learned</i>
Teacher 1	<i>subconsciously. He is gifted though, so this is a symptom of gifted children.</i>
Mentor	<i>Well, we can't look inside his mind to see what he has learned and he hasn't</i>
Teacher 3	<i>shown us that he has learned the things he needs next year.</i>
Teacher 4	<i>He did choose the profile with science and chemistry.</i>
Mentor	<i>He scored a 2,3 on his last test though, and before that a 3,4. It's hard to get grades that bad, even when you've only studied a little. Teachers of German and Arts also vote against proceeding to the next year, but those subjects aren't part of the profile he chooses.</i>

Table 8. Example of teachers participating one by one in serial interaction

Role	Statement
Mentor	<i>What are his chances for next year for the subjects he chooses?</i>
Teacher 1	<i>I believe he can pass, for Economics.</i>
Teacher 2	<i>I agree.</i>
Teacher 3	<i>He could do it: he has worked hard, is up to speed now and has performed on tests accordingly.</i>
Teacher 4	<i>Working with texts and different sources is a problem for him, because of his dyslexia. He has to keep practicing his reading skills.</i>
Teacher 5	<i>I believe he has the right capacities to pass.</i>
Mentor	<i>So for the subjects within his profile, except for History, we believe he can pass.</i>

CONCEPT

Table 9. Example of limited interaction in which the mentor is predominantly present

Role	Statement
Mentor	<i>This student needs to be discussed, based on her grades for Math and Physics. Math will be in her study profile and she will drop Physics. I assume these grades for Math are correct?</i>
Teacher 1	<i>Yes, she was a bit behind, coming from a different school. But she caught up, so that's positive.</i>
Teacher 2	<i>But she...</i>
Teacher 3	<i>-interrupts- She has grown a lot, which pleads for her.</i>
Teacher 1	<i>I agree, ...</i>
Mentor	<i>-interrupts raising his voice- So we're positive about her... That's also because of the formation of the class isn't it? And Economics has gone up to a 6,1. Okay, let's vote!</i>

CONCEPT

Table 10. Example of negative atmosphere in conflicting interaction

Role	Statement
Teacher 1	<i>This is exactly the same situation as last year, when she only just passed to the next year. She almost retained a year...</i>
Teacher 2	<i>- interrupts- I agree that parents can choose in this situation, but is she really a havo-girl?</i>
Teacher ?	<i>- unclear talking- No, she is a doer, needs action.</i>
Teacher 1	<i>What I wanted to say is (-sighs-): this isn't new. Last year we already doubted her capacities. She had to prove she could do it, otherwise had to make the transit to a lower track.</i>
Teacher 3	<i>I think she does have the capacities, but hasn't worked enough due to her chattering.</i>
Mentor	<i>I don't believe she has the required capacities.</i>
Teacher 3	<i>Okay, fine, then I'm the only one.</i>
Teacher 4	<i>We have set a digital test for History and she scored a 6,5.</i>
Teacher 5	<i>Can I also say something? 'Cause I've been waiting here decently...</i>

CONCEPT

Table 11. Relation between structures of the discussions and type of interaction

Structure:	1	2 Two	3 New	4 Delayed	5	Total
Interaction:	Straight-	sides to	proposal	conclusion	Change	
	forward	a story			after	
					change	
Open	1	3	1	2	5	12
Serial	0	3	1	1	0	5
Limited	7	0	1	0	0	8
Conflicting	0	0	3	1	4	8
Total	8	6	6	4	9	33

CONCEPT

Table 12. Example of Open interaction in combination with Change after change

Role	Statement
Team leader	<i>What I hear, from the mentor and others, is that she lacks basic knowledge.</i>
Teacher 1	<i>And I believe she should first work on herself. If we really want to help her, we should not be to hesitant, and say: we will try... That's just delaying the problem. Year 5 is a very difficult year.</i>
Teacher 2	<i>She is behind on multiple subjects, including French. She lacks the basics.</i>
Mentor	<i>I'm just saying that there might be a huge gap between what we think is right for her and what she thinks is the right decision.</i>
Teacher 3	<i>You can't separate the one thing from the other. This has been the situation since year 1.</i>
Team leader	<i>I hear different substantive arguments: some say she does have the capacities and some say she doesn't.</i>

CONCEPT

Table 13. Example of serial interaction and structure Two sides to a story

Role	Statement
Mentor	<i>This student only worked for the subjects he chooses next year. The question is: is it enough for him to pass? Dutch?</i>
Teacher 1	<i>He has shown a positive study attitude, his will to succeed is positive. But I think Dutch will be a problem in the next few years.</i>
Mentor	<i>German?</i>
Teacher 2	<i>I think he is a very weak student. Studying vocabulary is okay, but his knowledge of grammar is very poor. He won't make it with an average effort.</i>
Mentor	<i>Math?</i>
Teacher 3	<i>I think he is better off at havo.</i>
Mentor	<i>English?</i>
Teacher 4	<i>I agree for English, he does not have the required capacities.</i>
Teacher 5	<i>It is a very poor grade list, obviously, including for Science, but this is not a realistic image: he missed a lot of lessons.</i>
Mentor	<i>Okay, that's clear, what about the other subjects?</i>

Table 14. Example of discussion with a Straightforward structure and Limited interaction

Role	Statement
Mentor	<i>We talked to student X's parents: he tried really hard. Was excited this year, he even decided what he wants to study in Higher education. His parents are often abroad, which makes his home situation more chaotic. The parents say: it would be a waste to retake this year because he failed one subject too many. They ask for our cooperation and the chance for him to prove himself to us next year.</i>
Team leader	<i>Any other remarks? So, summarizing: he tried his best. Which may be a reason for concern, looking at his grades.</i>
Mentor	<i>That's true. I didn't want to say it, you can all... But my job as a mentor is...</i>
Team leader	<i>Fine. Having heard this, and since there is no one else who..</i>
Teacher 1	<i>I would like to say something: he has been a reason for concern all year long, his grade list is very weak. I think he should retake year 4.</i>
Teacher 2&3	<i>I agree, his capacities are very low.</i>
Team leader	<i>Okay, so three subjects indicate his basic knowledge is quite low. I've heard everything, I still propose passing to the next year.</i>
Teacher 4	<i>But he failed English as well.</i>
Team leader	<i>True, but we have to look at the complete picture. I propose passing to the fifth year. Who agrees?</i>

Table 15. Example of changes in the discussion during conflicting interaction

Role	Statement
Teacher 1	<i>... So, I don't know. He is smart, that's not the problem.</i>
Teacher 2	<i>And I think he is a bit lazy sometimes.</i>
Teachers ?	<i>-Unclear talking-</i>
Teacher 3	<i>He thinks it's enough to do his best. I guess he thought he did his best by talking to student Y and making some notes.</i>
Teacher 4	<i>I get a completely different feeling from his attitude then I get from student Z</i> ...
Teacher 3	<i>Interrupts- Yes, he is a very different student compared to student Z, but he doesn't understand the level of competence that is required. His level is years behind.</i>
Mentor	<i>Mother worries about his social-emotional skills, because he is so introvert and shy.</i>
Teacher ?	<i>Unclear talking- Yes, but ...</i>
Mentor	<i>But I mean, isn't that something that might be the problem, in making contact with you, teachers?</i>
Teacher 5	<i>No, I don't think so.</i>
Teacher 2	<i>Interrupts- But, when I look at his grades for Arts...</i>

Figures

Figure 1: Five different discussion structures. Steps in parentheses may be skipped, steps in bold are distinctive for the structure.

