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# The Potential of Podcasts for Exploratory Talk in High School

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## ABSTRACT

Educational podcasting may support student collaboration and learning. However, little is known about how students talk with each other when developing podcasts in groups. In this study, eight groups of Norwegian high school students (N=30) developed podcasts about contemporary poems in their literature class. The study focuses on the extent to which on-task student talk was presentational or exploratory, and serves to illustrate occasions of exploratory talk in educational podcasting projects. Subsequent analysis of 50 hours of audio recordings collected throughout the four-week project showed that exploratory talk was most prevalent during the beginning of the project and presentational talk toward the end. Excerpts from two group works show how exploratory talk manifested in group conversations during the project. The study demonstrates that students may engage in exploratory talk when developing podcasts, indicating that such projects in combination with broad pedagogical approaches may foster educational dialogues.

## KEYWORDS

Exploratory talk;  
student-produced  
podcasts;  
dialogic teaching;  
high school students

## Introduction

Curricula across the world aspire to promote educational dialogue due to the clear link between dialogue and learning (Kershner et al., 2020). To harness the educational benefits of dialogue, Wegerif (2013) argues that teachers should teach *for* dialogue as well as *through* dialogue (2013, p. 16). However, our contemporary educational system is rather monological, dominated by the teacher's voice (Nesari, 2015). Conversely, dialogic teaching depends on the active, extended involvement of students and teachers in spoken interactions in the classroom, so that teaching and learning become collective endeavors (Mercer et al., 2019). Such teaching can engage students, stimulate and extend their thinking and advance their understanding (Alexander, 2008a).

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Central to dialogic classroom research is the study of how students and teachers communicate. These studies are, for example, focused on the IRE-pattern (Alexander, 2008b), the asymmetrical relationship between students and teachers (Mercer & Dawes, 2008) and the inclusion of student voices (Scott, 2008). Another key perspective is the study of *exploratory talk*, introduced by Douglas Barnes in the 1970s. Barnes defines this kind of talk as “hesitant and incomplete because it enables the speaker to try out ideas, to hear how they sound, to see what others make of them, to arrange information and ideas into different patterns” (2008, p. 5), and contrasts it with *presentational talk*, where “the speaker’s attention is primarily focused on adjusting the language, content and manner to the needs of an audience” (2008, p. 5). Research has shown that exploratory talk can stimulate the development of reasoning skills (Rojas-Drummond & Zapata, 2004), foster successful discussions amongst students in group work (Barnes, 1992, p. 67), improve the quality of dialogue in mathematics (Solomon & Black, 2008), science (Webb & Treagust, 2006) and literature classes (Pierce & Gilles, 2008), and allow students to recognize the importance of their own voices (Wegerif, 2013, p. 16).

Given these valuable benefits, researchers have tried to pinpoint when exploratory talk arises in the classroom. They found that teaching students what characterizes exploratory talk and raising awareness of its importance, increase the frequency of such talk (Mercer & Littleton, 2007). Placing students into groups and expecting them to engage in exploration is not enough. On the contrary, students may need a careful combination of whole-class teacher guidance and independent group work (Mercer & Dawes, 2008). The teacher should additionally establish some appropriate ground rules for talk in the class (Barnes, 2008; Pierce & Gilles, 2008) and ensure that group activities are well designed to elicit debate and joint reasoning (Mercer & Dawes, 2008). Essentially, pupils need to feel relatively at ease and free from the danger of being aggressively contradicted or teased (Barnes, 2008). Thus, to promote exploratory talk, teachers should talk about talk, establish appropriate ground rules, and design activities that invite students to talk together.

### **Educational podcasting**

The present study investigates the potential of educational podcasting for exploratory talk by examining how high school students talk to each other when developing podcasts in their literature class. Podcasts are “audio recordings that can be delivered directly to consumers’ media devices, including portable music players, computers, laptops and smartphones” (Drew, 2017, s. 48). Considering how flexible and accessible the podcast technology has become in recent years (Norsworthy & Herndon, 2020),

educators in K-12 settings have begun to explore its use in the classroom (Swan & Hofer, 2011).

Studies have shown several educational benefits of letting students produce podcasts. It can allow use of higher-level thinking skills as they create the content, formulate the scripts, and edit their final products (Putman & Kingsley, 2009). Students learn to do research as a part of the production process, and to effectively communicate with their listeners (Besser et al., 2021; Sprague & Pixley, 2008). As a result, students become active producers, rather than passive consumers, of knowledge (Bolden, 2013). This can make the learning process more engaging and enjoyable (Coutinho & Mota, 2011; Goodson & Skillen, 2010), which contributes to increased academic efforts from students (Sprague & Pixley, 2008). Studies have as well shown that educational podcasting promotes collaboration, student engagement and motivation (Cain, 2020), while giving students the opportunity to express and discuss their ideas freely (Cain et al., 2021; Dversnes, 2022). The comfort and ease of the medium allows students to record wherever and as frequently as they want (Juana & Palak, 2011). Consequently, students generally view podcast assignments as a useful assessment method (Horpestad, 2021). Lastly, if the podcasts are meant to be published to an authentic audience (i.e., another public than just the teacher), students tend to put in extra effort to produce high-quality work (Smythe & Neufeld, 2010).

Some research exists on how students talk to each other in their final podcasts. A master thesis by Horpestad (2021) found features of exploratory talk in student-produced podcasts, and Dypedal (2021) identified that students distributed the podcast time evenly between each other. However, there is limited research on how K-12 students talk to each other when developing podcasts and what kind of educational discourses this opens up for. Therefore, this study explores to what extent on-task student the talk is presentational or exploratory and provides examples of exploratory talk in a literary podcast project. We examine the first aspect to identify types of student talk during collaborative podcast development and the second to better understand *how* they engage with each other when creating podcasts. Through a quantitative analysis of on-task and off-task as well as presentational and exploratory talk, we will obtain an overview of the tendencies across different groups and conversations. Further, it will allow us to sample relevant episodes to analyze qualitatively to provide a more in-depth understanding of what characterizes students' talk when making their own podcasts.

While we believe dialogic teaching has value in any school subject, we were particularly interested in investigating the potential of podcasts and exploratory talk in a literature classroom. The reason for this is that there is ample research suggesting that while teachers consider it important to

discuss literature in class, it is also very demanding to elicit students' understanding of literary texts and prompt students to share their ideas, interpretations, and sense-making about what they read (Murphy et al., 2009). Observational studies of students and teachers talking about literary texts from a Nordic context, often find that it is rare to succeed with dialogues and shared interpretations of literary texts in a classroom setting (Nissen et al., 2021; Tengberg et al., 2022). The fact that literature teachers tend to both value dialogue about literary texts—and struggle to enact such exploratory dialogues—made the literature classroom very compelling for the present study.

## **Methods and data**

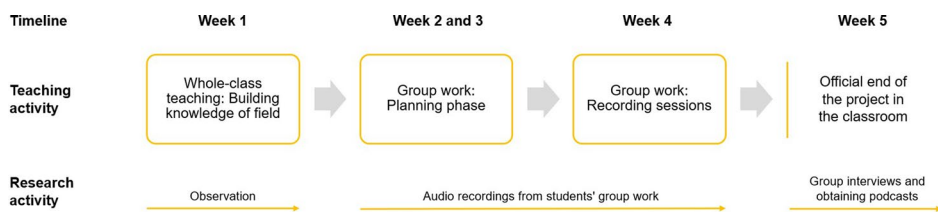
An exploratory study on the potential of podcasts in a dialogic classroom setting requires a teacher committed to promoting educational dialogue and letting students create podcasts while being willing to share their practice with researchers. We deemed a design-based research project (DBR) appropriate for studying student communication about podcasting in a K-12 setting. According to Wang and Hannafin (2005), DBR is:

[...] a systematic but flexible methodology aimed to improve educational practices through iterative analysis, design, development, and implementation, based on collaboration among researchers and practitioners in real-world settings, and leading to contextually-sensitive design principles and theories. (2005, pp. 6–7)

In DBR, researchers and practitioners collaborate to address educational issues to improve current practices. It often requires introducing innovations and evaluating their effectiveness (Snow, 2015). Educational podcasting represents such a pedagogical innovation (Norsworthy & Herndon, 2020). Few studies have addressed how it can be included in a classroom setting to promote exploratory talk, which is why this method is particularly relevant to our study.

## ***Participants and context for the study***

The teacher that we collaborated with in this study, worked at a high school located in southwest Norway. She had around 10 years of teaching experience and was recruited for this study by the first author, who had contacted the department of her school with an open invitation to collaborate on a research project. Prior to this project, her literature teaching typically involved students working in groups discussing texts before assessing them through literary conversations. As she wanted to try out new ways of working with literature, she joined the project.



**Figure 1.** Overview of teaching and research activity during the four-week podcast project.

The podcast project was conducted in one of her Norwegian classes for 16-year-old students, where she did all the teaching, but the first author helped with developing the overall instructional design. This class consisted of 30 students, who all provided written informed consent in accordance with guidelines from the Norwegian Center for Research Data (NSD). During the four weeks of the project, which combined whole-class teaching and group work (see [Figure 1](#)), students produced podcasts that lasted 10–15 minutes where they discussed self-chosen contemporary poems. The group work sessions were audio recorded and the groups were interviewed after the project.

During the first week of the project, the students were introduced to the assignment (see [Figure 2](#)) and to the theoretical foundation of how to analyze poems. The assignment was as follows:

- Create a podcast of approximately 10 minutes based on one of the poems in the poetry booklet that you have been given. Record and edit the podcast by using Anchor. Make sure to address the following points in the podcast:
- Recite the poem
  - Analyse the poem based on relevant theory
  - Present an interpretation of the poem
  - Create a great listening experience for your audience

**Figure 2.** The podcast assignment.

From the second week onward, the students worked together in groups of three to four students, with a total of eight groups. Each group had six sessions to analyze a poem, outline a podcast about this poem and then record it. We worked with the teacher to create a booklet of eight contemporary poems that students could choose. We ensured that these poems had not been analyzed on the internet because we wanted to challenge the students to analyze and interpret the poems on their own. During the fourth and final week of the assignment, all groups finalized their podcasts.

Throughout the project, the teacher prompted dialogic teaching. Two weeks before the project started, the teacher put up a poster in her classroom with four ground rules for exploratory talk developed by the first author based on research. These guidelines were to (a) actively listen to each other, (b) build on each other's ideas, (c) challenge each other to

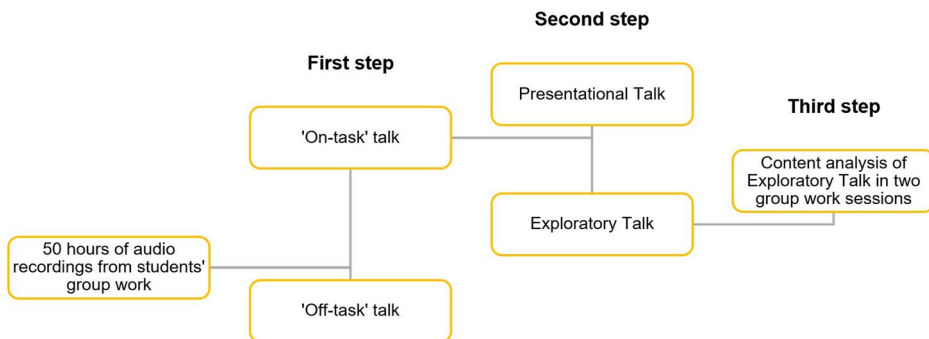
justify opinions and, lastly, to (d) appreciate and respect disagreements. These guidelines were visible to the students throughout the project, and the teacher consistently commented upon and referred to them in whole-class settings and when she visited the groups. For example, while visiting one group, she encouraged the students to include a disagreement about the poem in their podcast:

**Teacher:** In the podcast, I think it's just fine if it turns out that some of you have different opinions about the poem and that you disagree with one another. Just remember, then, to appreciate and respect the disagreements that may arise.

### *Data collection and analysis*

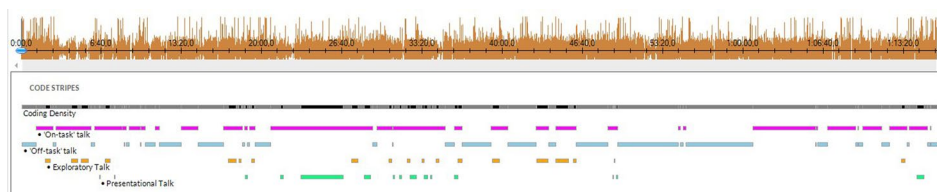
Our analysis draws on 50 hours of audio recordings from the group work collected in the second, third and fourth week of the project. We analyzed the audio recordings in three steps (see [Figure 3](#)).

While the first step mapped the students' talk as either on-task or off-task, the second step examined to what extent the on-task talk sections were presentational or exploratory. Exploratory talk was coded when the students were working on their understanding, either in terms of the poem (e.g. its structure, content and use of literary devices) or the podcast format (e.g. its opportunities and affordances). Presentational talk was coded when the students were working on their final drafts (e.g. writing the script, adjusting their language to the expectation of an audience, and recording the podcast). For the first two steps, we used NVivo (see [Figure 4](#)) to get an overview of student talk while collaboratively developing a podcast. The third step



**Figure 3.** Overview of the analysis process, where we analyzed 50 hours of audio recordings from student group work. In the first step, we coded the recordings as either off-task or on-task talk. Second, when present, on-task talk was coded as either presentational or exploratory talk. Finally, we conducted a content analysis of two group work sessions where we had identified clear features of exploratory talk.





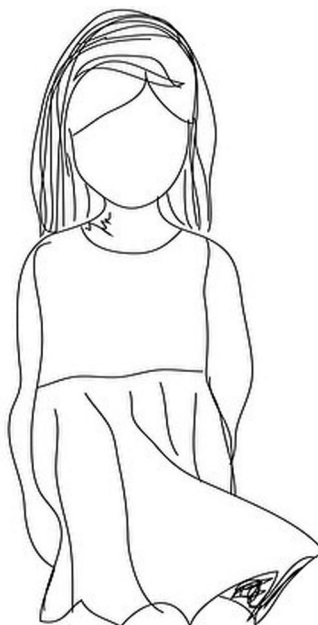
**Figure 4.** Illustration of the coding process in NVivo. On-task talk is coded as pink, off-task talk as blue, exploratory talk as yellow and presentational talk as green. The codes of on-task and off-task are mutually exclusive; the same goes for presentational and exploratory talk. The orange lines represent the sound waves of the students talking on the recording. The axis represents time.

of the analysis consisted of a content analysis of two specific group work sessions from Group 5 and 6, where we identified clear features of exploratory talk. The two sessions of interest were transcribed, and the students' real names were replaced with aliases to ensure anonymity. In both group work sessions, students openly shared their ideas, challenged each other's viewpoints and dealt respectfully with disagreements.

Both Groups 5 and 6, which we will draw on in the final stage of our analysis, analyzed the poem 'To Fathers with Daughters' (see Figure 5) by the Indian-born Canadian poet Rupi Kaur:

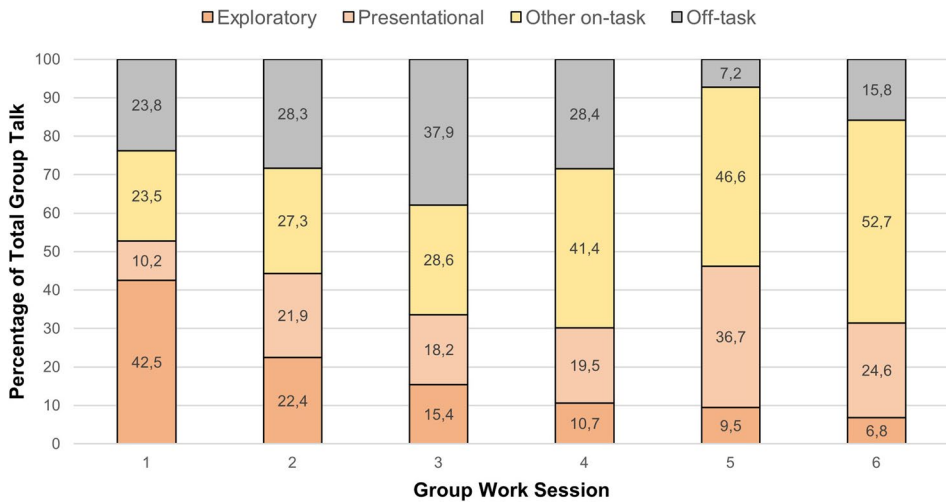
every time you  
 tell your daughter  
 you yell at her  
 out of love  
 you teach her to confuse  
 anger with kindness  
 which seems like a good idea  
 till she grows up to  
 trust men who hurt her  
 cause they look so much  
 like you

*to fathers with daughters - rupi kaur*



**Figure 5.** 'To Fathers with Daughters' by Rupi Kaur. Excerpt from Milk and Honey (2014).





**Figure 6.** Percentage of ‘exploratory on-task talk’, ‘presentational on-task talk’, ‘other on-task talk’, and ‘off-task talk’ of the total group talk per group work session. All talk was recorded during six group work sessions in which students discussed contemporary poems and produced podcasts about these poems. ‘Other on-task’ talk refers to talk that was on task, but not necessarily exploratory or presentational.

## Analysis and results

In general, the podcast assignment was well received by the students. Throughout the 50 hours of collected group talk, which corresponds to about 6 hours of talk from each group, the students discussed their poems, shared ideas on talking about them in their podcasts and became familiar with the podcast technology. All groups outlined their podcasts, and some groups scripted them as well.

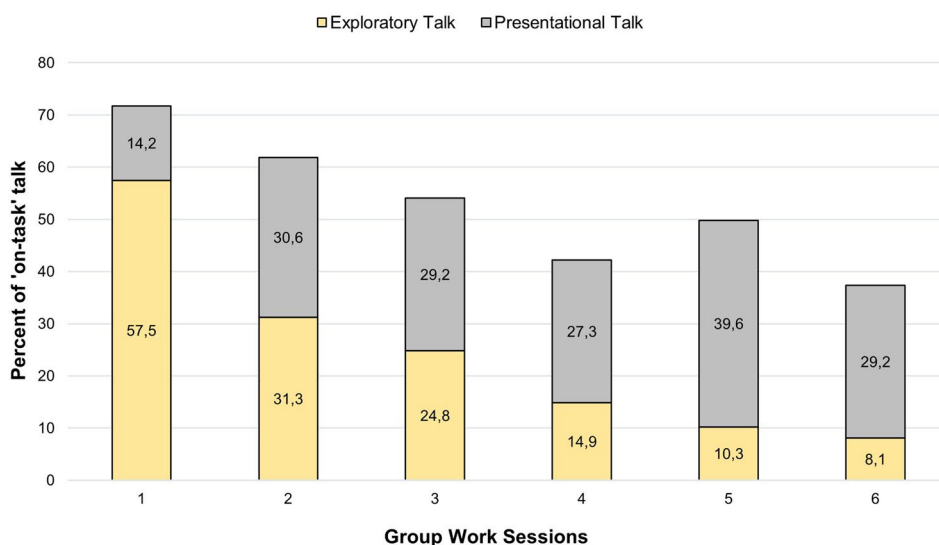
### *Distribution of talk in the podcast project*

Figure 5 gives an overview of the distribution of on-task talk versus off-task talk during this podcast project, and specifies what kind of on-task talk that occurred (‘exploratory talk’, ‘presentational talk’ or ‘other on-task talk’). On average, student talk was on-task for 77% of the time, ranging from 62% in Group 1 to over 92% in Group 3. Across all groups, the lowest proportion of on-task talk was found in the third session (62%) and the highest in the fifth (93%). The amount of exploratory talk was at its highest in the first session (43%) and lowest in the last session (7%). The fifth session accounted for the highest (37%) and the first for the lowest level (10%) of presentational talk.

If we delve deeper into the distribution of *on-task talk* specifically, the analysis shows that roughly 28% of all on-task talk in this project was

**Table 1.** Overview of exploratory talk and presentational talk within the category on-task talk throughout a four-week podcasting project, in which students developed a podcast about a contemporary poem.

	Exploratory talk	Presentational talk
Group 1	24,7 %	29,4 %
Group 2	24,2 %	26,0 %
Group 3	22,1 %	26,0 %
Group 4	28,8 %	26,8 %
Group 5	19,3 %	27,8 %
Group 6	28,9 %	27,8 %
Group 7	21,7 %	29,3 %
Group 8	28,4 %	28,4 %
Average	24,8 %	27,7 %



**Figure 7.** Overview of the development of 'exploratory on-task talk' and 'presentational on-task talk' during a four-week podcast project. The vertical axis represents the percentage of on-task talk across the groups, and the horizontal axis displays the six group work sessions during the project. The level of exploratory talk decreased, and the level of presentational talk increased or was stable throughout the project.

presentational and 25% was exploratory (see Table 1). The prevalence of exploratory talk decreased throughout the six sessions (see Figure 7). During the first session, when students collaborated to interpret their poems, a large proportion (57,5%) of the on-task talk was classified as exploratory. This was almost halved (to about 31%) during the second session and continued to decrease throughout the project. During the final session, the share of exploratory talk within the on-task talk dropped as low as ca. 8%. Presentational talk presented a different trend. Starting from about 14% of on-task talk in the first session, the relative proportion of presentational talk more than doubled to around 31% in the second session. For sessions 2 to 6, the percentage was rather stable, peaking at about 40% in the fifth session, which was when most groups recorded their podcasts.

Comparing the groups, we find that the relative proportion of on-task presentational talk was virtually the same, ranging from 26% in Group 2 and 3 to 29% in Group 1. The share of exploratory talk varied a little more, from 19% in Group 5 to 29% in Group 6. Despite these similarities, the time spent on exploratory talk may nevertheless be quite different from group to group, as there was variation in the amount of time they spent ‘on-task’.

### ***Excerpts of exploratory talk in two groups***

For the last and more qualitative step of the analysis, we focused on the second session of Group 5 (73 minutes) and the first session of Group 6 (45 minutes). These sessions were selected because they exemplify exploratory talk, as illustrated below.

#### ***Group 5: Students who build and challenge each other’s ideas***

Group 5, consisting of Robert, Sander, Thomas and Charlotte, got along well and often sang or laughed during their sessions. Despite the relaxed atmosphere, they managed to balance the on-task and off-task talk productively. For their second group session, the on-task talk accounted for almost 66% of the time. Despite this being lower than the average on-task talk across all groups, the proportion of exploratory on-task talk in this group session accounted for more than 25% of the on-task talk, which is slightly higher than the average distribution of exploratory talk across all groups (see [Table 1](#)).

In their second session, Group 5 attempted to analyze the poem ‘To Fathers with Daughters’ by Rupi Kaur. In this excerpt from 25 minutes into the session, they are struggling to interpret the poem. They are unsure who the speaker of the poem is, what the underlying theme might be and whether literary devices play an important role in the poem. To resolve the uncertainty, Robert takes the floor:

**Robert:** We need to google the poem, Sander. See if we can find anything.

**Sander:** Oh, darn ... What kind of person do you think wrote this poem? [He searches for the poem on Google.] What the heck! It is a book of 80 pages!

**Robert:** Look here, guys! ‘Sarah C’ writes: ‘This book hit me in the heart, stomach and soul’. Maybe I can say something like that in the podcast? Like ... this poem hit me in the heart, stomach and soul.

This excerpt offers indications of exploratory discourse. Both Sander and Robert ask open-ended questions about what kind of person could have written it and offer concrete suggestions about what to say in their own podcast. Robert’s use of “maybe” suggests that they are indeed trying out their ideas. After searching online for an interpretation, his group finds only a book review of *Milk and Honey* (2014), the poetry collection containing ‘To Fathers with Daughters’. Although Robert initially considers it a good idea

to simply mirror his own analysis after this book review, he eventually realizes that this is a bad solution. This shift is an indication of the exploratory nature of their discussion. Left in despair, Robert then raises his voice: “Shut up, guys! Listen to me as I read the poem. And if you guys feel anything when I read it, please let me know”. Despite his rough tone, he openly invites the others to share their immediate emotional responses, again underscoring an open and exploratory approach. Robert recites the poem and shouts out:

**Robert:** Her dad is... Her dad is abusing her! I've figured it out! I've done it! The father abuses his own daughter! And then the daughter grows up, and she thinks that it's okay. That's why she chases men like him. Guys! I've figured it all out!

**Charlotte:** Are you sure?

**Robert:** I'm pretty sure of that!

**Charlotte:** But are you, though?

**Robert:** I mean, look: 'Every time you tell your daughter, you yell at her'. The father is raising her to believe that ...

In a eureka moment, Robert identifies an interpretation of the poem and is highly engaged, despite showing an earlier lack of interest. It is as if he realizes that his newly acquired insight into the poem can evaporate just as quickly as he has gained it. He therefore continues:

**Robert:** Listen now. The poem is about a father making a daughter believe that it is okay for him to... oh, no. Thomas, now I've forgotten it all.

**Thomas:** That it's okay to abuse her ...

**Sander:** Yes, to abuse her?

**Thomas:** ... because he is indeed abusing his own daughter.

**Robert:** Yes, that's it!

**Charlotte:** But, at the same time, the poem goes: 'Every time you tell your daughter, you yell at her out of *love*'!

**Robert:** What did you say, Charlotte?

**Charlotte:** That what you just said has got nothing to do with love.

**Robert:** Huh?

**Charlotte:** The poem goes: 'Every time you tell your daughter, you yell at her out of *love*'.

**Robert:** Yeah, but that's because... you've seen movies where it's like ... they scream. But then they'll say: 'I only do this to you because I love you'. They'll hit the girl, but then ... 'it's just because I love you', they'll say.

**Sander:** Which movies are you watching, Robert?!

**Charlotte:** What the heck, Robert!

**Robert:** No, it's not like that! You all know what I mean!

Although Robert is unsure when he speaks, which is characteristic of exploratory talk, the group listens to him. When he is at a loss for words, Thomas builds on his ideas: “That it's okay to abuse...”. This is not a conclusive thought but rather an idea he is trying out. Challenged by Sander (“To abuse?”), Thomas elaborates on his idea (“...because the father is indeed abusing his own daughter”). This ‘open’ approach to the

task, where they ask questions and challenge their viewpoints, is also demonstrated when Charlotte disputes the idea of understanding the way in which the father treats his own daughter as abuse. She points out that the poem states that the father is yelling “out of love”. Robert, who still seems to be organizing his own thoughts, then comes up with an explanation that seems rather strange at first. After a while, Sander seems to understand him better and returns to the idea that the poem thematises a father not treating his own daughter the way that he should:

**Sander:** Oh, so it's like ... The poem is about a bad... sort of... upbringing?

**Robert:** No, it's more about a daughter thinking that it's ... He's raising her to think it's okay to be... aggressive. To be aggressive.

**Thomas:** Abusive.

**Robert:** Yeah, abusive! Sander, are you taking notes of this?

**Sander:** Yes.

**Thomas:** And in the podcast, I can talk about the literary devices being used in the poem.

**Sander:** Yeah, but are you finding any? It's difficult to find any literary devices when Google doesn't tell us.

**Charlotte:** So, the poem is about abuse?

**Robert:** Still, it's not about physical abuse, either. It could be verbally.

**Charlotte:** But it's still about a relationship between a father and his daughter?

**Robert:** It's about psychological violence at home.

This sequence again shows the group's ‘open’ approach to the task. They ask each other useful questions and modify one another's contributions. And since their interpretation of the poem is based on their own thoughts, Robert's question (“Sander, are you taking notes of this?”) is of great importance. The question suggests that the students are truly committed to the assignment.

### *Group 6: a shift in strategy regarding exploratory talk*

In contrast to Group 5, Group 6, which consisted of Elena, Anna, Sebastian and Ingrid, worked more systematically and efficiently. Overall, their group conversations were characterized by on-task talk, amounting to almost 83% of the time. For their first group session, the on-task talk accounted for as much as 98% of the time. Furthermore, Group 5 had the highest share of exploratory on-task talk across all groups, amounting to almost 29% (see [Table 1](#)). For their first group session, the level of exploratory talk was as high as 73% of the time ‘on-task’. This was the highest proportion of exploratory on-task talk across all groups throughout the whole project.

Group 6 started their first group work by reading through the poetry booklet and deciding upon the poem ‘To Fathers with Daughters’ by Rupi

Kaur. In this excerpt, they examine the use of literacy devices in the poem based on a list they received from their teacher a week in advance. Twelve minutes into the session, they wonder whether a part of the poem ('every time you/tell your daughter/you yell at her/out of love') can be interpreted as an allusion and whether it refers to real events and real people. After searching for the term 'allusion' (Encyclopaedia Britannica 2020) on Google<sup>1</sup>, Sebastian opens the discussion:

**Sebastian:** I think this part can be... there is probably an allusion here somewhere. We just have to find it. It could be that ... what is written here may, sort of, have happened. That this ...

**Elena:** But I don't think we can interpret it all as an allusion?

**Sebastian:** Still, ...

**Elena:** Or can we?

**Sebastian:** ... an allusion is 'a reference to another familiar text or event'. Then this must be an ... This is an event.

**Elena:** We can ask Elizabeth [their teacher] afterwards.

**Anna:** But it's not a well-known event, then. Or at least, not an event that we know.

**Sebastian:** Hmm ... Yeah?

**Ingrid:** It doesn't have to refer to a well-known event, does it?

**Sebastian:** No, but there needs to be a reference to another familiar text or event. It can be to a... hmm, ok. In that case, this can be a ...

**Elena:** But we'll just ask Elizabeth [the teacher], Sebastian.

**Ingrid:** If it's just an everyday event, it still could be that people have noticed it ...

**Anna:** Yes, exactly.

This group's discourse is clearly exploratory, with several open questions. Further, the language is tentative rather than assertive (e.g. 'probably', 'it could be', 'I think', 'hmm'). This excerpt features an interesting development, starting with Sebastian approaching the poem with an open mind, stating that 'there is probably an allusion here somewhere'. This seems like an invitation for the rest of the group to discuss further. Conversely, Elena seems convinced that the poem should not be interpreted as an allusion and suggests that the group should await an answer from their teacher ("We can ask Elizabeth afterwards"). She is, to some extent, closing a further discussion in the group; nonetheless, Anna and Ingrid return to the initial statement from Sebastian. This leads to a conversation where Ingrid tries out a new idea ("It doesn't have to refer to a well-known event, does it?"), and Sebastian further elaborates on his own ("It can be that to a ... hmm, ok. In that case, this can be ..."). Even though he is hesitant and shares incomplete information, Sebastian is willing to work with the text long enough to construct meaning. His

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<sup>1</sup>According to Encyclopaedia Britannica, an allusion is "an implied or indirect reference to a person, event, or thing or to a part of another text" (2020).

'half-baked' ideas are of great importance in fostering exploratory talk in the group.

Although the students have different interpretations regarding literary devices, they take an 'open' approach when they are discussing the overall meaning of the poem:

**Sebastian:** Do we understand what the poem is trying to tell us? Because it's about ...

**Elena:** It's about ...

**Sebastian:** ... it's about one learning that ... I mean if you teach a person to ...

**Elena:** If a father yells a lot and uses a loud voice and stuff like that, then you'll teach your daughter that 'oh, that's just the way it is.' Then you accept that your daughter gets... gets ...

**Anna:** ... shouted at. And so...

**Elena:** ... you agree that she gets shouted at by men. And that they might use physical violence as well, right?

**Anna:** Yes. And then this will happen in the future, as well, when she's having other relationships.

**Ingrid:** She will not react to it.

**Anna:** Yes.

**Elena:** Or psychological violence?

**Sebastian:** And when she grows up ...

**Elena:** ... then she'll think that it's okay.

**Sebastian:** Then she'll trust men who hurt her.

**Elena:** Because the father must understand ...

**Sebastian:** Her father is so much alike them. That was the way he was.

This sequence shows a group that is working well together. The students are using an open approach to the task ("Do we understand what the poem is trying to tell us?"), asking each other questions ("And that they might use physical violence as well, right?") and building on each other's contributions by extending and modifying them ("Yes. And then it will happen later when she's having other relationships"). They are pooling ideas and brainstorming together to create a common understanding of the poem.

Such an open approach to the task is clearly productive, which may have influenced Elena to change her approach toward disagreements. Whereas she initially wanted to seek help from her teacher, she later deals with disagreements through open discussions. In the following sequence, Elena again disagrees with Sebastian, who is convinced that the earlier stanzas ('every time you/tell your daughter/you yell at her/out of love') might be interpreted as a symbol of how *much* the father loves his own daughter. Elena argues that it might be interpreted as a metaphor for misunderstood love.

**Elena:** She [the author] says: 'Every time you tell your daughter, you yell at her'. But that's probably not true. I mean, the father is probably not shouting at her every time he talks to her. But it's like, he does it often.



**Sebastian:** Yes.

**Elena:** That's got to be some sort of literary device?

**Sebastian:** Yes, it is ... it is ...

**Elena:** A metaphor...?

**Sebastian:** Yes, I mean ... 'Every time you tell your daughter, you yell at her out of love'... The whole sentence is, in a way, a symbol of... You want... As a daughter, you want to express how you want things to be, in a way. But I'm not sure.

**Elena:** I do not think it's a symbol. It's more a metaphor... No, it's not a metaphor. Or maybe it is? Maybe. I don't know.

**Sebastian:** This part 'you yell at her out of love', I think that's a metaphor, indeed. But ...

**Elena:** But 'every time you tell your daughter, you yell at her' ... hmm.

**Sebastian:** I still think it's a symbol of him wanting to show his daughter how often ... how often he feels love for her daughter. Not that he's showing this affection all the time. It's more of an expression.

**Elena:** Still, I don't think it's a symbol.

Again, the discussion is characterized by exploration and attempts to make meaning. The students explicitly label their own uncertainty by saying "I don't know", "I'm not sure" or "maybe". Following a discussion about another aspect of the poem, Elena returns to this topic and tries to resolve the earlier disagreement through an open discussion in the group. This time, she addresses Anna and Ingrid directly to clarify the differences in opinion.

**Elena:** What... what do you think, Anna?

**Anna:** About ...?

**Elena:** You haven't said anything, Ingrid.

**Ingrid:** About what? About the symbol?

**Elena:** Yes, with regard to 'every time you tell your daughter, you yell at her of love'

By addressing Anna and Ingrid directly, Elena invites the others into exploratory talk, which marks a clear shift in strategy from Elena's side. Whereas she previously would have waited and asked her teacher for help, she is now addressing her classmates directly. She is no longer bothered by any disagreements between them. In fact, she is keen to highlight their disagreements. This is a typical characteristic of exploratory talk.

## Discussion

In this study, we explored how high school students talked to each other when planning and producing a podcast over four weeks. We investigated to what degree their on-task discourse could be characterized as presentational or exploratory, and provided examples of exploratory talk in a literary podcast project. While the DBR method makes this a qualitative

and exploratory study that is not representative of typical teaching, we want to highlight two important findings worth discussing further.

First, the students engaged in both exploratory and presentational talk about contemporary poems while they worked together on the podcasts, with relatively more exploratory talk in the beginning and more presentational talk toward the end of the process. We argue that a potential benefit of making podcasts in educational settings is that it entails a clear transition from the preparation to the actual presentation. In the preparation phase, the students engaged in exploratory talk, in which they openly negotiated the meanings of the poems. Toward the end of the project, the students planned the practical aspects of the podcast, divided the roles and recorded the actual episode. The moment students pressed record, they knew they were presenting. Before that point, their talk was more tentative, involving more exploration, more negotiation and, thus, more exploratory talk.

While we argue that exploratory talk is valuable in itself, it may be crucial when trying to analyze complex literature, like the students do in this study. Literary education is often critiqued either for being reductionist and focusing on technical literary devices or for being too loosely connected to the actual literary text and just mirroring students' emotional responses (Rødnes, 2014). We believe podcasts provide a new educational opportunity to find a middle ground between these positions, as exploratory talk is a prerequisite for going beyond identifying and labeling concrete literary devices to actively discussing them and connecting them to personal interpretations. Prior research has suggested that students can find it difficult in literary discussions to move beyond the initial interpretation, and that students can be swift in moving on from one task to the next when trying to make meaning and reason about interpretations (Tengberg et al., 2022). The shift from more exploratory to more presentational talk identified in this study suggests that the students first 'stayed with the trouble' prior to landing on their final product. We also recognized this in the excerpts provided in this study.

Second, the excerpts of exploratory talk show how students negotiated and explored meaning when discussing poems, which can be valuable for researchers and practitioners alike. Previous studies have associated exploratory talk with the development of reasoning skills and recognizing the importance of one's own voice (Rojas-Drummond & Zapata, 2004; Wegerif, 2013). In this study, too, we found that a student, Elena, shifted from wanting ready-made answers from her teacher to actually discussing and interpreting the poem with her peers, actively exploring in-group disagreements while doing so. This shift shows how students in groups that engage in exploratory talk develop their reasoning skills collaboratively instead of just 'finding the answers' by talking to a teacher or searching online. The

examples of exploratory talk in this study feature students showing uncertainty, trying out potential interpretations, sharing ideas, and asking each other open-ended questions. These characteristics reflect aspects of exploratory talk, such as the tentative exploration of ideas, collaborative reasoning, and actual discussion between students (Barnes, 1992, 2008; Mercer & Dawes, 2008; Mercer & Littleton, 2007).

In the introduction, we explored how educational podcasting has expanded into the K–12 setting in recent years (see Bolden, 2013; Cain, 2020). However, few previous studies have investigated how students plan and develop podcasts in detail or how they spend their time when creating them. This study into the students' processes of developing podcasts about contemporary poems demonstrates that such activities may accommodate exploratory talk in literary education, just like picture books and novels do in primary schools as shown by Pierce and Gilles (2008). Together with the master thesis by Horpestad (2021), which finds features of exploratory talk in podcasts produced by 14-year-old students, this study, among 16-year-olds, indicates that exploratory talk occurs both during the process of podcast production and in the end result. In line with Swan and Hofer (2011), this study shows that podcast production can give students opportunities to express themselves and their ideas, build on one another's thoughts and promote open discussions in a K-12 setting.

Of course, it may be debated to what extent the prevalence of exploratory talk found in this study can be explained by the podcast assignment in itself. A range of contextual factors may have affected the results of this study. Rather than arguing that making podcasts always generates exploratory talk, we suggest that the podcast assignment and the broad pedagogical approach taken in this project were important drivers for exploratory talk in this setting. The students needed to read texts that required active interpretation rather than transmission of others' knowledge and the teacher provided students with ground rules for exploratory talk and continually reminded them about the norms of exploratory discourse. Previous research has highlighted the importance of explicit attention to ground rules for exploratory talk (Barnes, 2008; Mercer & Dawes, 2008), having seen that raising awareness of such talk increases its frequency. In settings where students are challenged with texts that have multiple meanings, as was the case with the poems in this project, it is valuable to provide them with guidance on what exploratory talk entails.

Although this study focused on on-task exploratory and presentational talk during the process of producing podcasts, teachers may also take other aspects of such assignments into account. One may, for example, consider the literary competences that students express in the podcasts they produce (Dversnes, 2022). Dversnes (2022) shows that the

16-year-old students involved in this project expressed a wide range of literary competences, including knowledge of text and context, sharing their own perception of the poem with their audience. Several master theses also assess different aspects of podcast assignments, such as the students' understanding of their own learning (Theiste-Bratli, 2022), their development of action competences with regards to sustainable development (Aanonsen & Skutle, 2021) and teacher and student experiences of podcasting as a teaching and learning tool (Dypedal, 2021).

Besides providing opportunities for educational dialogue, the podcast technology also provides other benefits for teaching and learning. An important affordance of the podcast technology is the possibility for teachers to listen to preliminary versions of the students' podcasts, provide concrete feedback and then support the students in their continued work on their product. In Norway, students are supposed to receive formative feedback on their oral skills, both from each other and the teacher, but we know from prior studies that formative feedback on oral discourse is rare (Svenkerud et al., 2012). Further educational research could analyze these affordances for feedback and evaluation in more detail. We believe educational podcasting can provide both teachers and students with opportunities to discuss something more durable and accessible than traditional presentations in whole-class settings.

## Conclusion

Drawing on a design-based research project, this article has shown that educational podcasting in a combination with broad pedagogical approaches can promote exploratory talk about literature in a K–12 setting. Over a period of four weeks, students learned about exploratory talk using ground rules and developed podcasts collaboratively. They tried out and modified their own thoughts and built on each other's ideas. In doing so, the podcast assignment fostered exploratory talk amongst the students, of which this study shows two examples. Exploratory talk was particularly prevalent during the first group work sessions of the project and decreased over time, making room for more presentational talk as the students approached recording their final products. We hope this project inspires other teachers to conduct similar projects with their students and we are interested in learning whether the same trends can be observed in other contexts.

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No potential conflict of interest was reported by the authors.

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