

"WE SHOULD NEVER HAVE BEEN IN A CLASSROOM": MISSED LEARNING OPPORTUNITIES FOR GIFTED STUDENTS WITH MINORITISED (KVEN) BACKGROUND

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Abstract

This paper investigates mathematics education in an Indigenous context focusing on missed learning opportunities in mathematics for gifted students. Our study explores stories from students of one minoritised group in Norway, Kven, that themselves say they did not do well in school, yet later became respected, productive leaders and members of their communities. We build on positioning theory and the theory of storylines. Here, we account for one in-depth interview of a representative of these students, now a teacher herself. Our discussion focuses on the following two storylines: (1) storylines about students being misunderstood, and (2) storylines about students perceived as troublemakers.

Keywords: cultural mismatch, minoritised groups, Indigenous, empowerment, position theory, critical thinking, storyline

1. Introduction

In this paper, we invite discussions about missed mathematical learning opportunities for students in an Indigenous context. We report on a study situated in an area of Norway, Finnmark, with relatively low completion rates in upper secondary education (Wirkola & Andersson, 2023), where Norwegians and minority groups like Kven and Sami live together. Due to assimilation processes (approx. 1850–1970), children from both Kven and Sami families were not allowed to use their mother tongue in schools (Huru et al., 2018). Because of this, they were hindered from learning and progressing academically during their schooling. This has affected how these groups view school and schooling, a view that also affects new generations to some degree. Traditional livelihoods are still rather prevalent, and these practices require a strong service industry that draws youth into work-life early. Traditionally, the Sami people had a nomadic lifestyle following the reindeers, and some of them still follow this tradition. The history of assimilation and the relatively strong tradition in the families when it comes to livelihood, makes schooling a lower priority than one might expect, e.g., according to income and their status in these Indigenous communities.

Our study takes as its starting point stories from Kven students who say they did not do well in school. They describe the mathematics classroom as a place where school structures and practices positioned their cultural and academic status as less knowledgeable, unimportant, and even oppositional. Our results show how, because of cultural codes, that the students' communication acts when asking for help and/or expressing motivation and eagerness to learn is misunderstood, perceived by outsiders as critical expressions, attacks, or noise. This creates school situations that end up hindering students' access to learning mathematics. Despite these experiences, however, the story for these students ends well: They become respected citizens of their communities; many of them do well in business and entrepreneurship. We consider this success as an indication of talent and argue that the cultural misunderstandings keep these students from thriving in school and hinder their access to higher education and academia.

2. Theoretical background

We frame our study using positioning theory, which identifies how “not everyone involved in a social episode has equal access to rights and duties to perform particular kinds of meaningful actions at that moment and with those people” (Harré, 2012:193). In any moment/context, people have certain positions available for use as resources in communication acts. Like a dance, communication acts initiate, maintain and negotiate the potential positions, and, reciprocally, the positions taken affect choices in the moment regarding communication acts (Herbel-Eisenmann et al., 2015).

People see and interpret their available positionings in interactions through storylines. For students of minoritised groups, storylines and their related positionings are often deficit based. Simensen et al. (2023) reported that available positions for students from minoritised groups can change when the student-teacher communication is based on trust. Further, in a study of mathematics education in Norwegian news media, Andersson et al. (2022) found storylines positioning minoritised groups as underachievers compared to their peers, with expectations for these groups to act a specific way, such as expressing gratitude. Storylines conflict with each other, and the relationships between storylines are often blurred. Some of the storylines in the study of Andersson and her colleagues (2022) are examples of this, such as the entangled yet conflicting storylines: “the majority language and culture are keys to learning and knowing mathematics” and “mathematics is language- and culture-neutral”.

Our study is of one minoritised group in Norway and of one specific type of cultural expression of that group in a specific area with a local culture influencing the expressions and situations we describe. However, we expect that cultural codes of other minorities and minoritised groups, can be wrongly interpreted by teachers from the majority society, and that giftedness and willingness to work hard with academic achievements may be missed also elsewhere.

Our study is anchored in the following research question: *How can storylines about missed learning opportunities in school inform us about giftedness as an invisible phenomenon in Indigenous and minoritised contexts?*

We will show how specific communication acts are described by Kven students as authentic engagement – asking for help, and expressions of wishes to understand and of motivation. However, the same communication acts position the students as troublemakers – perceived by outsiders as critical expressions, as attacks, and as noise. Central to our study is the question how we, with the help of socio-cultural theory in a socio-political aspect, can understand how opportunities are created or hindered in mathematics.

3. Methodology and ethics

We have chosen the qualitative method and a case study involving one participant. We did one in-depth semi-structured interview of a representative of the students, “Emma”. As a former student, she is looking back at her own schooling. Emma was chosen as a representative of the Kven students. She is now teaching at a primary school, and at the

time of the interview, she was a pre-service teacher. These additional features made Emma an ideal candidate for this case study as she could use her experience also in adult life and her later knowledge of teaching and learning in mathematics in her reflections.

We ask questions about social actions in a specific setting and look at what these actions mean for the actors and how it is related to the school system and socio-political/macro and socio-political/micro levels. In sociopolitical research, one is engaged in how power and positions enable or hinder (Gutiérrez, 2013). In these contexts, one must take careful ethical considerations because, in the research process, the relationship between researcher and respondent is mutually influenced (Andersson & le Roux, 2017). Furthermore, we want to uncover the parts of culture and everyday life that become “invisible” or are taken for granted by each of us especially regarding our own culture. The authors have different backgrounds where some are insiders and some are outsiders, and this has enabled alternating and intertwined inside and outside views throughout the process from design of the study and interview guide, analysis, discussion and writing.

4. Results

Our results revolve around the following two storylines: (1) storylines about students’ being misunderstood, and (2) storylines about students perceived as troublemakers. In what follows, we will give examples of excerpts from our in-depth interview with “Emma”. All the excerpts are our translation from Norwegian or Swedish.

4.1 Storylines about students being misunderstood

These storylines became visible in the students’ descriptions of how their actions/attitudes concealed their need for help and of how their expressions of wishes to understand got ignored and motivations to learn, misunderstood. If expressed as a plea from the students, it would be: “See my need for help, not my actions/attitudes”.

“This is how I ask for help”:

Emma explained how her request for help when being a student in lower secondary school could be concealed in behaviours giving the impression of not caring about, engaging in or responding to invitations to learning opportunities:

... yes, this is fourteen-year-old me: “it’s idiotic, I don’t bother with this!” But it didn’t have to mean that we didn’t bother. We just didn’t understand it. It’s just an example. We just needed a better explanation. If we say we don’t bother, no one will help us because we don’t bother.

As Emma explained, a student saying that something is idiotic or stupid might indicate that the student does not understand how to solve the problem. Further, saying that they do not bother or do not care, can be interpreted as lack of motivation. However, it might be the students’ way of expressing a wish or a need for more and different explanations. Emma explained that for students from her local context, even expressing what the struggle was about could be challenging. She explained: “we didn’t even manage to ask the questions”.

The pivotal point made by Emma is that students who lack the language and the (school) culture of the majority, have limited opportunities to ask for help when they do not understand the task or school discourses.

“This is how we express motivation”:

To exemplify how people from her local community express motivation, Emma explained how members of her group continued doing practical work even though they express discouragement:

... I've seen that when we build houses and things like that at home, “yes, this is rubbish, we'll never manage this”, and then you keep on working, right, so that's part of it, right, they end up building that wall.

Building, working with their hands and creating is part of the traditional livelihood and traditions of the Kven people. In this culture, we find the ideal or story of the Kven people as hard-working people, who are surviving, creating, and building (both materialistically and metaphorically) no matter the obstacles. This is a source of pride for Kvens, and a part of the Kven identity. This gives a cultural and historical frame of this type of motivation explained by Emma.

Emma further explains how this type of self-motivation acts in the individual as an inner dialogue that keeps her going:

...yes, or that there are a lot of strong words without doing anything about it. It doesn't mean as much as ... it's more of a motivational thing really. It's like hearing yourself say that you can't do it. Then you have to manage it, then you just keep going. I do not know. It's so weird. It's very weird at least when I have to describe it like that. But I have been aware of it before because I even hear it from my own children. “Oh, now you've learned something you probably shouldn't have learned.”

She also explains how these are strong words or may be perceived as (too) strong words. We interpret these “strong words” as cultural codes that can be missed by outsiders, and that these strong words in certain situations are simply the push students like Emma need to give themselves, not too strong and not meant to create drama. But we see Emma's worry for her own children in the last sentence of this excerpt which leads us to the next storyline: Storylines about students perceived as troublemakers.

4.2 Storylines about students perceived as troublemakers

These types of storylines became visible in descriptions of how the clash of academic and cultural codes fire conflict instead of learning. These are examples of how both sides, the students and the teacher(s), go into defensive mode, where the teacher(s) seem to defend their lack of success with this group by positioning the students as “troublemakers”.

“When you (the teacher) ask questions, I feel you question me”:

Emma described how what she calls “critical questions” can be used by teachers to get a better explanation or description in an academic context – for example seeking an explanation from a student to get an insight into their mathematical thinking. However, in

her local context, critical questions tend to be taken as something negative. She explained how a teacher encouraging a student to justify an answer might be considered as an attack. She further said that Kven students tend to activate the strategy “attack is the best defence”. Therefore, Emma never asks students from this group to justify their answers:

...like when you move up in academia, you often ask critical questions to get a better explanation, a statement on [something]. A critical question tends to be taken very seriously. [...] for example, “one plus one is two, well how did you arrive at that?” Then it is taken as an attack, and then an attack can come back. But it wasn’t an attack but I know that it is taken as an attack. And I never ask them that. Just this group.”

One of the consequences when students are considered unmotivated and attacking, is that they are perceived as troublemakers and not as a resource:

It’s probably difficult when you don’t know this group of students and the background of the things they do and a lot of it can be perceived as noise, which isn’t really noise, but it is noise, but it’s not meant to be noise, it’s not an opposition ... it is really not to be in opposition to the teacher ...

Emma explained how teachers might misinterpret the students’ noise as troublemaking, as a way of working against the teacher. She emphasised that the students are not behaving this way because they want to make trouble for their peers or the teacher. The teacher’s intention of seeking an explanation may be perceived as an attack because the student is not accustomed to explaining and is already in a position seen as less intelligent. The risk of attempting to explain oneself (even if the student is correct) will feel enormous, and the easiest course of action would be to resist and not answer. If the student does respond and it turns out that what they say is entirely correct, it will also create discomfort because the student has communicated something beyond the position they currently hold in the classroom. This creates an imbalance and discomfort that the student is unlikely to endure. In this way, such a question is perceived negatively, whether one has the opportunity to answer or not. A middle school student may not necessarily be confident enough in themselves to communicate outside of their assigned position in the discourse and will therefore avoid it.

“We should never have been in a classroom”:

From the stories above about classroom communication when the students and the teacher have different expectations, we got insight into how the classroom can be an uncomfortable arena for learning for these students. Therefore, we asked Emma what, in her opinion, would be helpful for students from her local community:

Annica: My favourite question is left. To you Emma, when you become a teacher, imagine you have all the resources/means there are, money or, there are no limitations, think completely freely outside the box. What do you imagine, what would you do to make things better for your students?

Emma: Oh, I don’t think we should ever have been in a classroom! Then we would have learned a lot, then we would have learned and understood why the various mathematical things are, what led them to be discovered. What made us need to

calculate latitudes and how did they manage to find out how far it is around the earth. And measure the shadow in two cities. You see [...] To understand how the mathematicians discovered it and why they came and what triggered it. Maybe we could reproduce something like that. Yes, I think it would have been something like that.

We see how Emma would move out of the classroom completely and be more of a tour guide on an expedition discovering mathematics together with the children. In her description, there is a lot of digging into the “why” of mathematics, then “how” in reinventing the discoveries in the mathematical history together with her students, and finally keeping the “for what” and the applications of mathematics in the modern world and in work life.

In addition to those storylines we have discussed, and the suggestions Emma has given us on how to work with this group of students, she told us how one teacher that understood her and her fellow students acted as a cultural translator.

... it became safer to communicate in a way, she made the classroom a place where you could make mistakes and helped you to argue your point in a way. To... she helped translate the language. And it was very interesting. Also, she ... took us out from the others if the other teachers had something against us, so then she came. We had her on “speed dial” in a way, and then she came running.

They could turn to this teacher, and she would help sort out miscommunications or conflict that occurred because of the storylines and resulting positioning of students by the teacher and/or positioning of the teacher(s) by the students.

5. Results

The research question guiding our discussion is: *How can storylines about missed learning opportunities in school inform us about giftedness as an invisible phenomenon in Indigenous and minoritised contexts?*

We connect our results to the work from other countries about the differential treatment of minoritised students, due to cultural mismatch. In Europe, for example, Lambrev (2015) showed how the traditional education of Roma children was very different from the mainstream values emphasised in Bulgarian schools. In Honduras, Kleyn (2010) shows how the cultural mismatch between Garífuna, an Indigenous, Afro-Latino group, and educators, plays an important role in the creation of an irrelevant education. Furthermore, scholars in the US have shown that cultural mismatch is one reason that racially and ethnically minoritised students are over-represented in special education (e.g., Kramarczuk Voulgarides et al., 2017), rather than being identified as gifted, as a systemic issue related to inequities in education.

As reported by Wirkola and Andersson (2023), students from Finnmark are often portrayed negatively in the media. This group is depicted as less intelligent and unwilling to learn mathematics in school, despite the fact that many of them grow up and pursue education in fields such as mathematics. It appears that the prevailing discourse is precisely that these students are not smart enough. Our concern is that this perception

is carried from their homes. If we assume this to be true, there will also be no arena at home to discuss academic topics, and therefore no place to challenge claims and provide arguments. The culture the students come from does not reference such elements. Hence, it becomes challenging for students from this type of culture to receive a direct question in a classroom setting.

The examples and reflections from Emma highlight some deficiencies in the education these students were offered. Mhlolo and Ntoatsabone (2023:5 of 20) considered the “needs of children with different kinds of high ability or gifted students but who had endured severe cultural deprivation and educational neglect”, and the consequences of not identifying and building upon the giftedness of our students such as limiting their opportunities:

when schools do not actively identify giftedness among young children, then those schools underserve these students who consequently underachieve in relation to their full potential. So, the argument is that if gifted children are denied educational opportunities due to some perceived advantage, then it is the lack of education, and not their differences that limit their opportunities.

Notwithstanding this, and as mentioned in the introduction, the story for these students ends well. They do well in their adult life and many of them do well in business and entrepreneurship (Wirkola & Andersson, 2023).

6. Conclusion

Our research shows how teachers who are “outsiders”, not part of an Indigenous community, often misunderstand student communication acts because of lack of cultural insight. That is, cultural codes affect teachers’ ability to recognise motivation and eagerness to learn, and as we have shown, it might even provoke the teachers. These tensions create situations that end up hindering students’ access to learn mathematics. Despite these experiences, however, the story often ends well for these students and we see success stories in business and entrepreneurship, or in rare cases, as the one with Emma, success in academia. We consider these successes as an indication of giftedness, and we argue that the cultural differences and misconceptions kept these students from thriving in school and hindered their access to higher education and academia.

In Emma’s solution, “We should never have been in a classroom”, local entrepreneurs and the future work life of the students and their dreams for the future is central. When the mathematics classroom becomes an unsafe and foreign place for the students, detachment from mathematics and learning opportunities occurs. Huru et al. (2023) argue for mathematics education to strengthen the students’ identity, attachment to their land and communities and attachment to mathematics. To counter the effect, we may see that “...students detach themselves from mathematics because they find that mathematics seems to require them to detach themselves from people and places to whom they wish to remain attached” (Huru et al., 2023:7). Building on the dreams and strengths of the students is not only beneficial for Kven students. We argue that this is beneficial for all students, as well as the importance of teachers being aware and equipped with tools that enable them to understand and connect with the students and their background.

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Conference Proceedings in Mathematics Education
Band 9

**Editors: Dr Brenton Fredericks &
Prof. Michael Kainose Mhlolo**

Mathematical Creativity and Giftedness in Diverse Educational Settings

Proceedings of the 13th International
Group for Mathematical Creativity and
Giftedness (MCG 13) 2024

20-23 February 2024
Central University of Technology, South Africa



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Published by Mamotale Tsenoli Power House

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ISBN 978-0-7961-8956-1 (print)

ISBN 978-0-7961-8957-8 (e-book)

<https://doi.org/10.36615/9780796189578>

Set in Calibri 10/12 pt

Typesetting and production by Mamotale Tsenoli Power House

Cover design: © Central University of Technology

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