Migration narratives in educational digital storytelling: which stories can be told?

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Abstract

This article investigates use of digital storytelling as a learning activity in education about migration. Based on a study in two Norwegian schools and two adult education centers for refugees and migrants, the article analyzes student's digital stories and observations of the process of production. Counter to research on the promise of digital storytelling to promote diverse perspectives, personal experience and creativity, our findings show that digital stories as a learning activity includes powerful standardization drivers. The standardization limits diversity in students' knowledge and experience from coming into view in the final product. The identified standardization drivers are; (1) discursive blueprints of refugee experience, including the narrative about the 'Good Refugee' and idealization of the destination country, (2) challenges with representing traumatic experiences through photographic imagery, and (3) material affordances in the production process such as google algorithms. In conclusion, we argue that critical engagement with the involved modalities and standardization drivers is a condition for using digital stories to foster critical thinking about migration.

Keywords: digital stories, migration, refugee narratives, critical education, digital literacy

Introduction

Digital storytelling is a technology-based innovation praised for its potential to diversify educational learning strategies and content (Robin, 2016; Røkenes, 2016). This article explores experiences with using the format for critical engagement with migration in schools, highlighting how knowledge diversity is confined by the format. Education about migration in Norway has been critiqued for its patriotism and uncritical engagement with the historical and geopolitical aspects of current world migration, as well as race and racism (Eriksen, 2020; Jore, 2018; Svendsen, 2014). The literature on digital storytelling and citizenship education about migration (El-Haj, 2009; Zembylas, 2012) suggests that this learning activity could be promising in addressing central challenges in the field, specifically by anchoring the issue in young refugees' narratives and experiences. Digital storytelling presents an educational resource for critical thinking by facilitating students' knowledge of refugees' perspectives on the issue of migration and giving refugee students an opportunity to bring their experiences to the school setting. However, it also presents other challenges related to the standardization of migration narratives in the education context.

This article is based on a project on migration and education that involved collaboration between students in ordinary basic and secondary education Norwegian schools with recently settled refugees and migrants. In this project, creating digital stories about migration was a central learning activity for the student groups. Prior to making individual digital stories about migration, the students collaborated to map indigenous lands, colonization, and migration patterns worldwide. Based on previous digital storytelling research, which highlights ownership, creativity, and personal expression, we expected to find a range of different narratives. However, upon analyzing the students' digital narratives, we were struck by the similarities and normative elements in the students' digital stories despite their vastly different migration experiences. This made us curious about how educational

digital storytelling shapes migration narratives and which factors drive standardization in the process. Furthermore, the digital stories' script production was experienced very differently for students who narrated their own flight experiences and those who wrote purely based on the educational resources available to them, indicating that the loss of variation was related to digital stories as a format. To shed light on these issues, we investigated how and what digital migration stories were produced, as well as the key factors in the education design that influenced the students' narratives.

The digital stories were produced during a 5-week teaching program run in three Norwegian upper secondary schools and two basic education classes for recently settled refugees and migrants. The project, as a whole, followed a *design-based research* (DBR) approach (Barab and Squire, 2004; Reimann, 2011) that focused on solving educational challenges in collaboration with practitioners. This article is based on material generated while testing the education program 'We Are All Migrants', which highlights pitfalls we have had to address in the revisions of the program, which that are likely to also surface in other settings where digital storytelling is used in for teaching and learning about migration.

Our layered theoretical approach consisting of multimodality, standardization, and the ethics of representation highlighted key aspects of the narration, material standardization, and personal experience representation processes. Critical multimodal discourse analysis as a method enabled us to identify and evaluate the role of the stories' narrative structure and content while considering how the narratives work together with modes such as images, voiceover, and music (Jewitt, 2013; Van Leeuwen, 2014). We investigated the material formatting of digital narratives in Adobe Spark through the lens of standardization (Bowker and Star, 2000), and discussed insights about migration that the stories offer in light of ethical perspectives on recognition and recognizability, as formulated by Butler (2005). The question we examined is how digital storytelling shapes migration narratives in this education context. Further, we discuss the implications our findings have for the use of digital storytelling as a learning activity in education about migration. Before exploring our material with that question in mind, we first outline the research context, methodological conditions, and theoretical approaches our analyses build on.

Digital narratives to foster critical engagement?

Migration is a contested topic in most countries that are net receivers of international migration, including Norway. Across Europe, the political climate is polarized on issues related to migration, producing an uneasy coexistence of anti-immigration sentiment and the ideal of cosmopolitan multiculturalism. In Norway, schools are obliged to foster diverse communities by the education law, which states, 'All forms of discrimination should be counteracted,' and furthermore that students should learn to 'think critically and act ethically' (Kunnskapsdepartementet, 2008). Alongside and counter to this Norwegian state mandate, political representatives are voicing resistance to migration (primarily from non-European countries). Elected politicians are also promoting negative attitudes toward refugees and migrants and actively and successfully pursuing a reduction in the numbers of refugees allowed to settle in Norway. These discourses enter the classroom and produce emotionally challenging learning situations for students and teachers (Arnot, Pinson, and Candappa, 2009; Svendsen, 2014; Svendsen, 2020). In this context, didactic approaches that foster empathy for refugees and migrants have the benefit of creating a safer space for newly settled students, as well as an avenue to critically think about state practices and policies for those who have resided in Norway most or all their lives. Several aspects of digital storytelling as a learning activity suggests that it could contribute to such aims.

Digital stories are short, digital compositions that last 2–4 min and are comprised of a combination of still images, recorded oral narration, background music, sound effects, animated transitions, and videos. These compositions are usually put together using free video editing software and sound-recording applications, such as Adobe Spark, Apple iMovie, and Microsoft Movie Maker (Ohler,

2013; Røkenes, 2016). In the educational context, digital stories are often created following the digital storytelling method, where students, with their teachers, go through several steps in planning, producing, and reflecting on their digital stories. This method usually involves (1) finding the story, (2) developing a manuscript, (3) choosing visuals, (4) recording narration, (5) editing the story, (6) adding sounds, and (7) assessing and reflecting on the stories (Normann, 2012; Røkenes, 2016).

Educational digital storytelling research shows how this method is used at all levels of education to promote deeper subject learning; develop basic skills, including reading, writing, speaking, numeracy, and digital skills; stimulate cross-disciplinary collaboration; and engage students in learning processes (Normann, 2012; Robin, 2016; Røkenes, 2016). A link between personal, multimodal, and empowering aspects are often highlighted (Robin, 2016). Studies on the use of digital stories in migration contexts have emphasized the benefits of digital storytelling as a participatory method where one researches *with* migrants and refugees instead of *about* migrants and refugees (Bansel et al., 2016; Lenette et al., 2019). For example, Alexandra (2008, p. 111) found that digital storytelling workshops with undocumented refugees in Ireland contributed to how refugees 'actively re/situated themselves in relation to their lived experiences.'

Most studies on digital storytelling focus on its potential, and there are few studies that rather emphasize the *challenges* of digital storytelling. This may in part be due to the inherently optimistic ed-tech discourse that educational digital storytelling is situated in (Selwyn, 2016) where 'the digital' is imbued with values of transformation, improvement, newness and untapped potential (a.o) (Burnett and Merchant, 2020). Recent studies and appraisals of the field have highlighted the need to study educational technologies critically, in order to account for messy and failed experiences with digital tools in education (Baker, Bernard, and Dumez-Féroc, 2012; Mertala, 2020) and how ed-tech figures in re/production of inequalities in education (Selwyn et al., 2020). Furthermore, that the integration of digital technologies in the classroom require us to engage with new literacies, like data literacy (Carrington, 2018), and reframe our engagements with (digital) texts to account for the shaping of computational agents (Leander and Burriss, 2020).

Studies that critically engage with digital storytelling have highlighted effects of privileging mainstream mediatized content, while omitting marginal knowledges from the narrative (Valdivia, 2017). Bansel et al. (2016), a study where newly arrived migrants wrote digital stories about settling in Australia, found that none of the participants created stories about racism or discrimination – even when the prompt opened them to do so. Instead, their stories were optimistic, emphasizing their hopes for the future. Another study of multimodal storytelling conducted through mobile devices by 'second-generation immigrant' adolescents criticized the ways in which digital media can emphasize pre-existing technical, social and linguistic inequalities (Ranieri and Bruni, 2013). Migrant storytellers may also, as migration education scholarship has shown, work toward making the content emotionally safe for non-migrant youth and teachers (Zembylas, 2012). Is this the case in our material as well? What drives the similarities in how digital narratives are constructed? In the following sections, we outline our research design that facilitated students' work with digital storytelling.

Methods: identifying problems and designing educational interventions

Our study is part of the interdisciplinary research project LIM: Language, Integration, Media, which is financed by the Research Council of Norway and aims to innovatively promote integration and knowledge about migration. It seeks to address the social and pedagogical challenges of teaching about migration in European countries such as Norway, but also to make use of the possibilities this topic holds for practicing integration and inclusion in schools.

A key aspect of Design Based Research (DBR) is that challenges in education are solved in collaboration with practitioners (The Design-based Research Collective, 2003). Interviews and discussions with stakeholders in the beginning stages of the project identified the following main challenges: (1) a lack of critical engagement with migration in curricula, (2) challenges with using

digital learning platforms, and (3) the social exclusion of migrant students. Consequently, the aim of the jointly designed teaching program on migration and digital storytelling (We Are All Migrants, or WAAM) was to address these challenges. We tested the program in different classroom settings in collaboration with practitioners (Reimann, 2011) to research how an education design that includes digital migration story production can address the identified challenges. Finally, we revised the program before making it available to teachers.

This analysis is based on data generated in the first implementation of the teaching program. The methodological approach for the analysis of the digital stories and participatory observations of the production process is critical multimodal discourse analysis. While multimodal discourse analysis (MDA) directs attention to various modes in discourse, including visual images sound and music, critical discourse analysis (CDA) directs attention to ideological functions of discourse that work towards maintaining power relations or injustice (Van Leeuwen, 2014). In this study, the social practice elements of discourse are central as we have designed the very conditions of production of the digital stories we analyze through the educational design and learning resources. The developed learning resources on migration consisted of a webpage with learning videos, video manuscripts, and links to relevant webpages divided into two parts. The first part was a social studies course about migration, focusing on reasons for migration, colonization, power, conflict, and indigenous peoples and minorities. The second part focused on digital stories, including how to create a manuscript and storyboard and how to put everything together in the tool Adobe Spark (Adobe, 2020).

Sites and data collection

The course was piloted by five classes in four different publicly funded schools: Shortcut Hill Upper Secondary School, Village Upper Secondary School, Village Adult Education, and Brick Wall Upper Secondary School. The participating students were between 16 and 35 years old, most under 20. The aim was to gather data to explore our main research question – How can we harness pedagogical and technological strategies to create innovative learning experiences and new competencies on the challenges of migration? – by studying the reception of the designed social studies and digital storytelling course. The present article is based on data from all the schools save Brick Wall, because this school lacked a partner adult education school.

Shortcut Hill Upper Secondary School is a large urban school in central Norway with about 1000 students. The local basic education classes for recently settled adolescent refugees and migrants had recently been co-localized within the Shortcut Hill Upper Secondary School building. This meant that the young refugees and migrants were now in the same building as the other upper secondary school students but did not have any joint classes. This study followed two classes at Shortcut Hill Upper Secondary School: one mainstream vocational upper secondary class consisting of about the same number of male and female students and one class for newly arrived refugee and migrant students consisting of all male students. In this school, two researchers made observations three days a week, in addition to having weekly meetings with teachers. While the developed program aimed at setting up regular meeting points between the two classes, the students in the two classes only met once at the end of the course to show each other their digital stories.

Village Upper Secondary School is a rural upper secondary school with approximately 500 students. The students at the adjacent Village Adult Education School are newly arrived migrants or refugees who follow a separate basic education curriculum. There are approximately 100 students at Village Adult Education School. The fact that the schools are so close led the teachers to look for ways of getting their students to meet. This made it easy to recruit the two schools for the LIM project. The research team consisted of a researcher, a teacher from Village Upper Secondary, and a teacher from Village Adult Education who all took turns both teaching and observing the two participating classes, one in each school. The Village Upper Secondary class consisted of 17 students, only 2 of whom were girls. The Village Adult Education class consisted of 15 students, with only 1 girl. There was much more interaction between the two Village classes than between the two Shortcut Hill classes. At the

Village schools, the students in the two classes often worked together in groups, with some lessons taking place across schools and others separately. The students created one digital story each but were encouraged to help each other and discuss their work. In addition to meeting regularly throughout the course, the students in the two participating classes met and showed each other their digital stories at the end of the course.

The central assignment was to 'create a digital story about migration' about a real person, fictional person, or situation. The collected data consisted of the students' digital stories, observation data, and, in some cases, the students' manuscripts and other assignments. This article draws upon the digital stories and observation data only. The participant observation data was analyzed by the entire research group (including practitioners), which helped shed light on the processes related to the students' work on their stories. The collective analysis emphasized in depth retelling and sharing of material, mapping and grouping of themes, as well as jointly made outlines and writing processes to foster a creative and critical analysis (Eggebø, 2020).

The digital stories and storyboards students produced were analyzed by the researcher group with specific attention to use of different modalities and discourse identification. In this process we uncovered three tendencies across the material that we wanted to explore further: (a) narrative standardization, (b) content loss in transition from storyboard to digital story, and (c) discord between different modalities in the stories. A selection of the digital stories particularly suited to shed light on these overarching tendencies were transcribed, emphasizing the stories' multimodal elements (Bezemer and Mavers, 2011), and coded based on recurring patterns. They were analyzed using conventions from multimodal analysis, combined with critical discourse analytical perspectives (Van Leeuwen, 2014).

The students received information about the project both written and orally, and consent was given for participation in the project.[1] The written information was in Norwegian, so translation support was necessary in the adult education classes. We spent about 45 min in class discussing what consent involved and how we would treat the material. We also tried to convey as clearly as possible that participation in the research element of the work was voluntary. The ethical concerns with the material that the students offered in this project do however go beyond questions of consent and control of one's own information.

While the students in the basic education classes had mostly been granted the right to permanent residency in Norway, any information about their flights or how they came to Norway can be used against them by Norwegian authorities. The Norwegian state revokes residency, and even citizenship, from asylum seekers that at a later date have been found to 'lie' in their asylum interviews. This practice produces a permanent threat to asylum seekers' security in Norway, as information about one's flight can be used years, even decades, after arrival. Due to this practice, the data security and anonymization procedures in this project were of critical importance. We talked to the students who shared their flight narratives about the fact that they need to be careful with information that can be traced back to them and told them that they should not offer such information in their narratives for their own security. We also omitted or changed any details that can identify an individual's flight narrative. Any information regarding names, ages, numbers, or countries passed through en route to Norway offered in this article were subject to some alteration. We also made sure to store the data securely and thoroughly anonymized with the participants' risk of future consequences in mind.

Theory: a relational approach to multimodality

Multimodality and discourse analysis

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[1] The project was approved by the Norwegian Centre for Research and Data, clearance number 56814.

As digital stories may consist of a combination of images, video, recorded voiceovers, music, and text, it makes sense to analyze how each of these different elements – or modes – work together to make meaning using a multimodal analysis. According to Jewitt (2013), there are three main assumptions underlying multimodal research. The first is that different modes may contribute to meaning making in equal ways and that we therefore need to study the 'underlying choices available to communicators, the meaning potentials of resources and the purposes for which they are chosen' (251). The second is that all modes have 'been shaped through their cultural, historical and social uses to realize social functions as required by different communities' and that the social context shapes and constrains all communicative acts (251). The third assumption is that 'people orchestrate meaning through their selection and configuration of modes' (251). Studying what modes are chosen by students making digital stories, as well as how they are employed, may grant analytical insights into the discourses present in a digital story (Jewitt, 2006). In this project, looking at the multimodal elements of the digital stories provided insight into how the students drew on different migration discourses.

Appearing for the other

In the WAAM course, digital narratives offered a chance for refugee students to give accounts of themselves and present their experiences to their fellow students. Butler (2005) explained that giving an account of oneself is an act in which 'I' simultaneously appears and is displaced. We come into view for others by relating something of ourselves, and that is how we establish ethical relations to one another, Butler (2005) further notes. Establishing a relation between self and other necessitates *exposure*, or a meeting between people in which they engage with one another. Exposure is risky because appearing to the other is also subjecting oneself to the possibility of violence and the judgement of the other (39). We all bring our primary relations and foundational experiences into this meeting. We also meet with only a partial knowledge of who we are, and can only convey this limited knowledge of our selves by using norms to tell others about ourselves. These norms are ones the self 'do[es] not author' and which 'render me substitutable at the very moment I seek to establish the history of my singularity' (39). We are, in a sense, displaced by the very words we use to account for ourselves. This is intensified, Butler (2005, 39) wrote, by the 'fact that I give an account of myself to someone, so that the narrative structure of my account is superseded by *the structure of address* in which it takes place.' In our analyses, we considered the educational situation broadly and the digital storytelling practice specifically as such structures of address. We examined educational digital storytelling and the conditions of possibility it produces for establishing an ethical relation between participants.

Standardization

To better understand how a seemingly open format produces a high degree of sameness, we considered the concept of standardization. In its simplest form, standardization is the process of reducing variation (unification) to achieve widescale and repeated use (de Vries, 1999). Common examples are found in construction, where established standards make it possible for builders to import tools and resources from around the world and have them fit together. However, standardization may also be understood as a more general process of any agreed-upon rules for how to make objects (text or material). Here, standardization is characterized as a way of doing things that reaches across communities of practice and sites of activity (Bowker and Star, 2000). The standardization process is closely linked to classification work; not all classifications are standards, but there are no standards without classifications (Bowker and Star, 2000). The making of categories (and later, sorting) is a normative process. What is considered inside and outside of a given classification and the work that is put into making categories, and maintaining them, is consequently of great interest. It also directs attention to how standardization is enforced and by whom – both human and non-human. In the case of digital migration stories, the standardization perspective prompted us to ask what the standard entails (what was considered 'correct'), what was left out (what

variation was lost), how this delineation was created and upheld, and what consequences it had for those who cannot adhere to the standard.

Analyses: standardizing migration journeys

In the following sections, we outline three key analytic topics: the content and structure of the digital stories, the problem of representing traumatic experiences and the effects of the digital storytelling format and software. In doing so, we address the following questions: How does educational digital storytelling shape narratives about migration? What stories about migration are produced and how? How do stories of migration become standardized, and how does this influence the possibility of building ethical relations between students and teachers with vastly different experiences?

The refugee's journey: standardizing the 'Good Refugee'

A focus on the narratives in this project's digital stories revealed that every story followed a standard three-part structure, covering pre-flight life, the refugee journey, and post-flight phases. In each of these phases, we found standard storylines that draw on dominant media, policy, and cultural discourses.

In the pre-flight phase, we noted a contrast between the storyline *escaping the apocalypse* and *my good life before the flight*. Many students who have not experienced taking refuge abroad themselves wrote about recent wars and crises, and their storylines were framed as a forced *escape from the apocalypse*. Their digital stories opened with catastrophic circumstances of war. The apocalyptic images featured included dramatic pictures of burning streets engulfed in flames and bombed-out skeletons of high-rise buildings. Such images established taking refuge as propelled by, and implicitly justified by, catastrophe. Furthermore, it coupled refugee identity with victimhood, as in Sarah's story: 'Sarah's house was ruined. She and her family were no longer safe. They had to flee from their home.' Both text and images drew on mediatized projections of the refugee as victim, and on international policy discourses concerning what are considered legitimate reasons to flee in accordance with the United Nations Refugee Convention (UNHCR, 1951). By contrast, in some stories created by refugee students, there were examples of counter-stories to this depiction of the refugee as victim only. This is the case in 'the story of a person,' which foregrounds the refugee's *good life before the flight* as setting the scene for the refugee's journey. Rather than producing a refugee-victim coupling, these stories introduced the refugee as a 'normal person' by determining apparently banal aspects of their pre-flight life, such as having a regular job and having 'mates'. As the narrator of 'of one student's digital story relates: 'When he was in his country, he had friends.'

When it comes to describing the journey phase, the students' experiences with refuge and migration again come into play. Most non-refugee students drew heavily on standard mediatized discourses of refugees as mass victims, referring to the geographical locations commonly featured in the media. In these generic accounts, the journeys were often reduced to vague cliched expressions, such as, 'The journey was like a nightmare.' In a similar vein, the visuals evoked standard mediatized images of crowded rubber boats and overflowing migrant camps. The students who wrote from personal experience tended to depict the 'journey' in much more detail in their manuscripts. Alya, for instance, gave a comprehensive description of her journey, writing about what happened to her, her mother, her grandmother, and other people whom she traveled with. In these detailed storylines, refugee students recorded experiences of hunger, thirst, danger, and fear, as well as encounters with traffickers, police, and border guards.

In the post-flight phase of their stories, both students with and without refugee experience featured the model refugee as a hard-working citizen who contributes to the Norwegian welfare state. The voiceovers made clear that a lot of work is expected from refugees to achieve this status. As one

student put it, 'I tried my hardest to become well-integrated in Norway. I have learned the language, the culture, I attend school, have gotten an education, to support my family and contribute to society.' These endings universally draw on the dominant narrative of *The Good Refugee* based on migration policy discourses that construct desirable new citizens as assimilated workers with individual responsibility for their integration (Thorud, 2019). All the stories were then rounded off with happy endings, familiar from fictional and mediatized *Good Refugee* narratives. The closing images conjured up a picture-perfect tourist Norway, with suitably matching text: 'Rajin is very happy he chose to flee to Norway.' As such, the stories reproduced the dominant narrative of *The Good Norway,* based on cultural discourses around Norway as the best country to live in, a bastion of equality, and a generous welfare state. Storylines that criticized Norwegian culture or emphasized longing for another home country – experiences that surely must be common – were absent.

It is perhaps not surprising that students who are told to create a digital story about migration using a process related to filmmaking (script writing, storyboarding) draw on narrative conventions that they are familiar with, perhaps even perceiving this as *expected* from their stories. Given that the students were also meeting the expectations of a school assignment, it is also perhaps not surprising that the stories' contents appear to be crafted to meet what could be perceived both literally and symbolically as 'the master's concerns' (Lorde, 1984, p. 112; Valdivia, 2017). However, if the object of the storytelling assignment is to stimulate critical reflection on migration, the format's marginalizing effect on minority knowledges is a major concern.

The personal in digital narratives: standardization and representation

In this section, we engage with the relationship between personal accounts of flight and the digital narratives as a product. While the students without refugee experience often reduced the journey account to a list of cities or countries traveled through, those writing personalized accounts of their own or their friends' journeys sanitized their narrations, omitting or minimizing the most horrific aspects of their experiences from the final product, even if they included them in their manuscripts. In a student digital story named 'The Story of a Person,' for instance, the main character encounters human traffickers dealing in body parts. The personal and abject dimension of this part of the story was downplayed by the student. He focused exclusively on the financial aspects of the transactions, which had the effect of producing the traumatic encounter with criminals as an offhand aside. This aspect of digital storytelling points to important aspects of the work concerning how students represent traumatic experiences.

In the students' work representing their own flight experiences, the transition from storyboard to digital story proved to be challenging. A case in point is Kidane, who worked very hard on his storyboard. His language skills did not allow an easy transmission from thought to text. More importantly, it seemed difficult for him to put the content of his memories onto paper. His body language signaled that he was struggling. At one point, he was sitting with his head in his hands staring down at the keyboard. We asked if he was doing okay and if he needed help. He said no in a low voice. After a few minutes, he asked us to look at what he had written. The initial text he had written included fragmented descriptions of violence and murder. We had watched him write and delete sentences at several points. He asked for help to formulate the story. There were two points in the story that were particularly difficult for him to write: the flight through the Sahara Desert and the boat trip across the Mediterranean. In his storyboard, he wrote:

He was on the road with 12 people in a car. The travel was very difficult. Because of water, food, and sun—they did not have enough water. There is no water or food because it is the Sahara. After a very long way, they came to North Africa. They were treated badly, by those who lived in there. They did what they wanted with people from other African countries, especially from East Africa.

This textual representation highlighted the difficult journey conditions but omitted the traumatic experiences of violence and death. The excerpt can be read as an account of the narratable aspects of the hardship Kidane experienced. He gives the reader the chance to imagine his hardship by saying it

was 'very difficult' without sharing the exact traumatic experiences involved. The issue of violence inflicted by others was conveyed, however, when he recounted his traumatic experience: 'They did what they wanted with people from other African countries.' Here, racism seems to offer an interpretative frame for traumatic experiences that was not available for the experiences at earlier points in the flight. Narrating the subsequent boat trip to Europe and the collateral violence that smugglers subject refugees to was also addressed. Kidane wrote that 'the smugglers built a bad boat for them. That's how they wanted to kill them. […] Luckily, they reached Europe.'

The process of writing a storyboard made Kidane revisit traumatic experiences from his flight and find ways to represent what had happened to him in a coherent narrative. Working through how to narrate these experiences, he was able to take control of his own narrative in a textual format. He did not shy away from violence and trauma, but rather learned how to omit, include, and illume, which gave him control over the story he told about his own hardship. The storyboard can thus be seen as a processing tool that gives refugee students a chance to work toward a narratable self through which they can appear in some way for their teachers and the other students.

Kidane's digital story ended up featuring three images; two of pick-ups and one of a desert, with a few added words. The narrative he constructed in the storyboard was lost when it was reformatted as a digital story. The storyboard and its textual mode seemed to provide the necessary distance and abstraction to say what happened, while allowing maintained ownership of the memory of the traumatic event. In the digital story format, however, these accounts appeared difficult for the students to visualize. This loss of content can easily be misread as a problem with refugee student's digital literacy. This is at best a partial explanation, however, as it downplays the formatting power of visual imagery. In the following, we discuss material conditions for this troublesome transition.

Materializing narratives: standardization through material means

In the final section of our analysis, we turn our attention to the non-human actors in digital storytelling. Digital technologies have been hailed as tools for 'greater civic and social participation' (Golden, 2017, p. 374) in educational discourses, presuming that technology is a neutral actor that provides equal opportunities for all students. By addressing how visualization and audio use is shaped by material preferences and limitations we will show how this is not the case, and that the technology itself may be a driver for both standardization of expression and inequality between students.

Visualizing one's story is a key element of digital narratives, and most students selected their images from Google searches. Consequently, Google's image search algorithm, based on its ranking of webpages where established and highly trafficked sites are given priority, came into play. While the search algorithms gave access to vast quantities of relevant imagery, this selection was highly biased. Top results for keywords like 'war,' 'conflict,' 'community,' or 'journey' were from stock photo sites, news agencies, and other professional webhosts that have the required established reputation and traffic to make their images discoverable by the algorithm. Google's image algorithm's bias has been well-established and is illustrated in examples like automatic tagging of a black person by the algorithm as 'gorilla' (Wachter-Boettcher, 2017). The algorithm tends to reinforce stereotypical and discriminatory imagery, which explains why so many images depicting conflict and refugees were similar and in line with dominant discourses. This is further complicated by how the production of search results are hidden under opaque platform design- and politics where results are also increasingly shaped by how platform owners and online advertizers (primarily Google Ads) categorize users, and in turn directs individual users towards certain content (Leander and Burriss, 2020).

For the students who often use their second or third language in school, navigating the algorithm's results was challenging. One digital story produced a harrowing contrast between a deeply personal and traumatic refugee story and accompanying visualizations communicating privilege, safety and affluence. For example, when the student described a perilous journey across the Mediterranean in an

overcrowded boat with an inexperienced captain, the story was illustrated by a promotional photo of a luxury yacht. When the student searched for the Norwegian phrases for 'boat,' the algorithm answered with images of fancy boats, as those were seen by the algorithm as most relevant to users in Norway. Similarly, when the narration expressed the student's intense fear while hiding in trees at night to avoid wild animals, the complementing image was of a white child climbing carefree in a pine tree (presumably from searches like 'children climbing tree'). While the composition was impactful, we do not believe the contrast between story and visualization was intended. And while the student was proud of his production, the limited choices he had for visualizing through google image search highlights how search algorithms privileges affluent white and western life experiences and perspectives by making these more accessible. Other students circumvented the image algorithm altogether. Some used their own photos. One group drew illustrations on a whiteboard while recording the drawing process, while others chose more general or symbolic imagery to visualize their stories. Consequently, we should not think of the google algorithm as determining how the digital stories were told. However, the image search function was used in some way by the majority of students and became a material actor that influenced both process and products.

We observed a similar process of materially driven standardization in the use of music, where availability and standard settings in the chosen software determined the final creative expression. The students were recommended the video editing program Adobe Spark because it had a free trial version, could be used on most platforms, and was considered relatively easy to use. However, in the free version available to the students, there were only a small number of available audio tracks, all geared toward promotional material with categories like 'happy,' 'refreshing,' 'uplifting,' and 'warm.' These soundtracks were frequently used and often stood in stark contrast to the dark themes and traumatic experiences in the narration and imagery. Finding music outside the standard selection would have required the students to either download or make digital CD copies, both requiring specialized software for torrenting and a ripping practice generally not approved by schools. This is a reminder that technologies are never neutral and have built in preferences for use. Even seemingly generic tools like a popular video editing software from a reputable developer is embedded with values, that if not explicitly addressed, will reproduce and even enhance inequalities. Winters et al. (2020) proposes the term 'digital structural violence' to capture how AI in educational settings may reproduce discriminating social structures, and our research indicates that this effect is also present with other digital technologies – not only AI.

In digital stories, where visualizations and audio are required, students were working with a complex and inaccessible system of classifications and standards that had already deemed certain images and sounds as 'relevant/not relevant' as well as 'normal/not normal.' Navigating these algorithms and software standards required a specific set of information literacy skills and data literacy. These challenges can not be addressed simply by promoting students' digital literacy. As Nichols and Johnston (2020) found in a related study, these material affordances 'specifically impacts students whose racial, sexual, gender, and class identities diverge from the dominant norms of white heteropatriarchy' and raises 'critical questions about justice and equity in multimodal literacy education' (p. 267).

Results: standardization drivers in digital stories about migration

In this article, we explored how educational digital storytelling shapes migration narratives. In doing so, we have outlined how discursive and material standardization shapes digital storytelling as a learning activity in profound ways when used in education about migration. In the learning activities prior to the digital storytelling assignment, we experienced richer diversity in student perspectives on migration as a social phenomenon than in their digital stories. Initially, this realization produced some disappointment in the research group. Digital storytelling did not seem to promote the diversity of experience and perspective that is often credited with its facilitation. On the contrary, our analysis showed how digital storytelling introduces powerful standardization forces that seem to shrink the

possible frame of representation and expression. In cases where the students were able to overcome the challenges of the format, however, they could convey something about their understanding of migration and their own lives in a format that could easily be shared across the student groups. This was especially the case with a digital story made by a Syrian refugee student, who used his own photos for his personal account of before and after he had to flee Syria with his family. In these rare cases, the digital stories became a platform for sharing diverse experiences and knowledge, as we admittedly had hoped for. In this process, the potential in digital storytelling to represent one's experiences, knowledge, and feelings became evident. For most students, this promise of giving an account of oneself (Butler, 2005), was lost in the process of production, however.

In our discussion, the potential of digital stories for personal representation and fostering ethical relations has been overshadowed by our experiences with the standardization drivers that make this outcome difficult for students to achieve. In the following paragraphs, we summarize the standardization drivers we identified in digital storytelling in education about migration and comment on their implications.

First, we show how the narrative aspects of the digital stories became standardized. The stories can be read as a patchwork of dominant discourses about flight and migration, where most students stayed within the discursive blueprints of the media, state, and cultural products. They drew on mediatized discourses and images of refugees' experiences and on standard policy-inspired assumptions of what a good migrant is. The standardization was most marked at the end of the digital narratives, which all drew heavily on dominant idealized narratives of Norway as a model host nation, where issues of race and racism are conspicuously absent.

Second, we suggest that the visual mode in digital storytelling inhibited many of the refugee students' ability to fully relate their experiences. The photographic element seemed to present a hurdle for students when relating their flight experiences. Many of them could work through and represent these experiences in language, but when they translated them from idea to storyboard to digital story, this resulted in many of their personal experiences being omitted. The monomodal textual format of the script provided richer accounts than the digital story format, which made certain experiences impossible to relate. It was as if the power of point of view and emotional content shattered the format, making the task of producing the digital story impossible. One possible reason for this is the relationship between photographic imagery and reality. Many students took a long time to find the 'right picture,' suggesting that they wanted the photos to match their inner vision of what had happened. However, the traumatic experiences became impossible to visualize because they could not be represented identically. Some abstraction seems necessary, which the available photographs failed to provide. Moving from textual narrative to visual elements, the traumatic experiences were muted by pictures that spoke so much less than words and made the sayable unshowable.

Third, we address how standardization happened through material actors. The digital narratives were shaped by the options afforded to the students through Google's image search algorithm, as well as by the limited choices in Adobe Spark's free trial. In both cases, dominant discourses about migration were enhanced through design as choices regarding visual and audio expression were based on an already limited and even biased selection – even if some students found ways of circumventing these limitations. That material actors encourage standardized expression to this degree is particularly interesting given that the format (digital narratives) is frequently imbued with material affordances that support qualities like empowerment, personalization, and creativity.

In our analyses, the migration topic highlighted several factors that direct digital narratives toward standardized expressions: established narratives about migration, the need to tell stories that are safe to tell and familiar enough to be recognized, and the use of technologies that limit expression.

Conclusion: countering standardization to foster critical engagement

The aim of the migration course in this study, including the making of digital narratives, was to foster critical engagement with migration as a social phenomenon. We understand critical engagement as the careful scrutiny of a phenomenon, including consideration of how it could be seen otherwise (Butler, 2002). While it is common that educational technology is praised for the possibilities it brings (Selwyn, 2011, 2016), our analysis sheds light on the challenges and shortcomings of using digital storytelling in classrooms as a method to promote critical engagement with migration as a topic. Our above analyses highlight the factors that direct digital stories toward standardized expressions. We consider these standardizing forces to be present across student populations, and although difference in proximity to refugee experiences as well as differences in digital literacy did shape the digital stories, we found standardized elements in all stories. As noted above, however, there is also great potential for students to share experiences and knowledge through digital stories if they are able to work with this format's standardizing elements. Consequently, in our closing argument, we wish to address some means of countering standardizing forces.

If digital storytelling is to be used in ways that enhance critical engagement with migration rather than reinforce existing narratives about, for instance, *The Good Refugee*, the process of making digital narratives needs to include prompts and discussions that actively engage with standardizing factors. Dominant discourse and narratives about migration, such as *The Good Refugee*, can be critically discussed before and during the making of digital stories. To counter the material standardization through Google's image search algorithms, students can be encouraged to undertake tasks that highlight the algorithm's logic and make more use of self-made visualizations, like drawings, artwork, or personal photos. Normative aspects of narrative structure that promote light and happy content can be critically addressed by examining the given software's audio options, and students can be offered a selection of other audio tracks that do not require personal downloading or ripping.

Educators need to have a clear idea of why they are using digital storytelling (Frazel, 2010), but also of how digital stories frame the knowledge that is produced. This requires small interventions in the prompts on and work with digital storytelling. Ample time can also be set aside for learning activities that allow for critical engagement with digital storytelling itself. Critical engagement with the learning activity appears to be a condition for using it in learning that fosters critical thinking on other topics, such as migration. A key aspect of such critical engagement with digital storytelling is to work with it as a process, not a product. Instead of letting the making of a digital story be the journey's end, followed by some shared viewing and discussion, the digital stories and customary shared viewing session can be a midpoint that allows for subsequent critical engagement with the stories the students tell. While some of these critical aspects were fronted in the initial course material and classroom discussions, our analyses suggest that the critical engagement with the *format* was not deep enough to allow for the critical engagement with *migration* that we wanted to foster.

That critical engagement with the modes and structures of representation is crucial for fostering critical thinking about social phenomena is neither tied to nor limited to digital storytelling. As Butler (2005) argued, every account we try to give of ourselves or the world as we see it is superseded by the structure of address and the norms that govern what expressions can be understood by others or not. The multimodal aspect of digital storytelling makes the work of highlighting such norms and structures demanding because every mode at play in the representation needs critical engagement for students to learn how they can use it for their own expression. Education designs that afford time and space for this critical engagement with multiple modes can fulfil some of the promises of digital storytelling as a learning activity – even when used in relation to politically contested topics, such as migration.

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