TEACHING PUPILS IN A VISUAL DIGITAL WORLD

Research on how educators can use contemporary digital visuals made by students for the development of a critcal attitude in art class.

Maarten de Vugt
PZ MEiA 17/18

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Commonly used 'dog filter' painting by Amy van den Bliek, EM2B Munnikenheide College

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INTRODUCTION

1. Introduction

The world of image creation has adjusted itself to our fast-moving world. Back in the days photographs and films took days to develop and even more days to make public, today it is just a click or swipe on your smart mobile devices to take and catapult it onto the internet to be seen by the world. The constant development of these devices and applications makes it even more accessible for students and teachers to use in and outside of school. This all seems to bring a great amount of possibilities, especially when applied in classroom settings. But with great possibilities come great responsibilities.
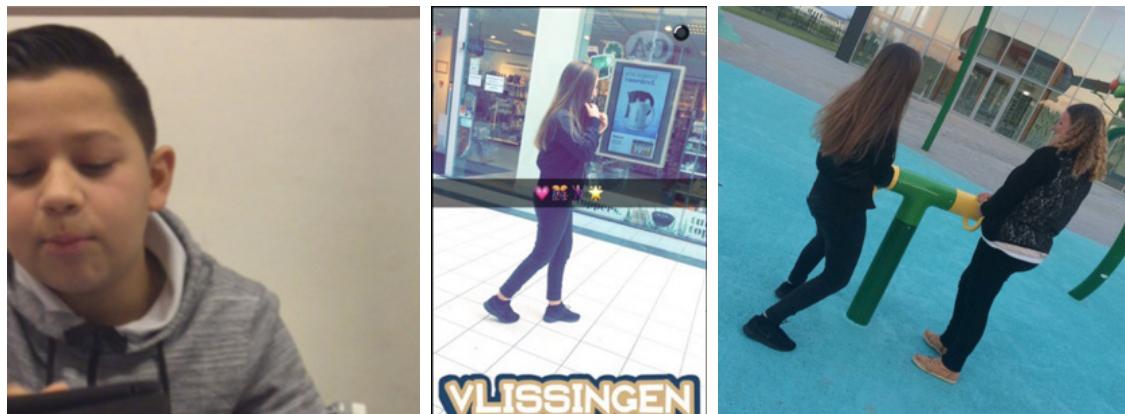
Images produced by students through instagram and Snap

The images produced by students on their smart phones in and outside of school, which I have witnessed, look careless and generic. There is an apparent lack of investment and lack of originality, supposedly due to the use of mainstream applications that are readily available. What is possibly even worse for the students who choose the limited options available to them through various digital applications, is the resulting lack of critical thinking the use of these standard applications brings. Although one can alter the images one produces with instantaneous and automated effects, the ability to express ones' individuality is restricted to the set of commands within the programme. Instagram, it seems, has defined the look of an entire generation (Wendt, 2014). When looking at the visuals of students it seems that they are all creating the same kind of images to fit in a kind of standard. As Kennith Goldsmith (2016) says; "I shoot, therefore I am". Examples of these are the common used filters in Snapchat or Instagram, which have become part of the contemporary visual culture.

The global technological presence of images and objects, the ease and speed with which they can be produced and

reproduced, and the power of their pervasiveness demand serious attention in education. It's part of daily reality and the visual qualities of the imagery are as seductive as they are didactic (Freedman & Stuhr, 2004). A sizeable portion of the app ecology is devoted to supporting artistic production. Even apps that are not ostensibly meant for creative pursuits lend themselves to imaginative uses (Gardner & Davis, 2013). It is not only the applications but also the aims that they are used for. There are a lot of examples of template-based applications that are used in education and everyday life but Instagram, Facebook and, although a little less, Snapchat are commonly used. They push the creative possibilities of the user in a specific framework. What are the options of experimentation with applications in art classes and what can we learn from this visual communication of our students? How can art teachers use these devices and to work on a critical attitude with students?
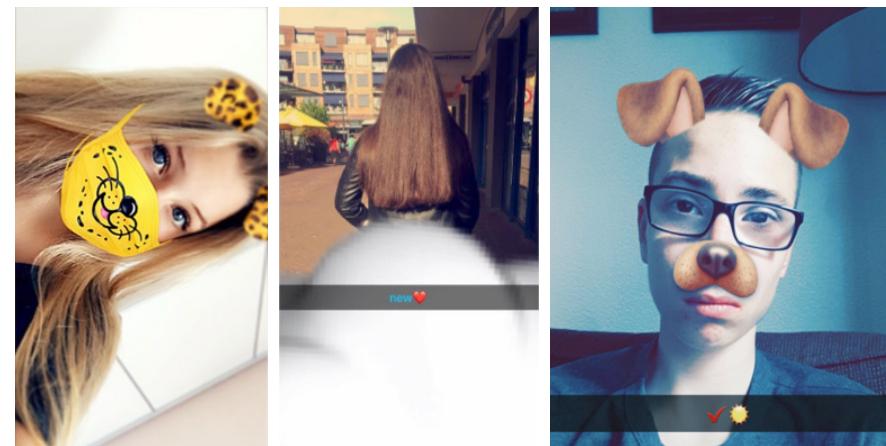
Common use of filters by students on Instagram and Snap

1.1 Problem Statement and Research Question

Everyone who owns a smartphone is able to work with creative applications in a fast way because of the easy use of smartphones and tablets. Processes of globalization and digitalization increase the gap between the way students deal with creative production outside and inside school institutions (Buckingham, 2007). For teachers in art education, globalizing developments present a challenge: they must reconsider the form of education they provide in a changing, mediatized participation society. Because, we live in an increasingly image-saturated world where students spend more time in front of a screen than in front of a teacher (Freedman & Stuhr, 2004). Working with applications offers two fresh opportunities. One is the chance to initiate one's own products. The second opportunity entails the capacity to make use of diverse forms of understanding, knowing, expressing, and critiquing (Gardner & Davis, 2013).

Within this fast-visual world students do not see that they are working as creative producers every day. They use Instagram, Snapchat etc. on a daily basis with which they create their own visual culture but they do hardly utilise the creative possibilities of these applications. Students were explained that probably all of them were working with creative expressions because of their gigantic number of photos and clips they produce online. Students responses included: 'We just do that all the time, everybody does!' to 'That has nothing to do with art!'.

There appear to be options for art education to make a difference. It is about creating a relationship between media production through applications and devices, and art education. It is about popular visual culture and critical reflection on the use of this visual culture.

Therefore, the question raises: How can educaters use visual media created through (social) applications and smart devices by students, for the development of a critical attitude, in art class?

1.2 Relevance of the thesis and project

A lot has been written about the use of technology inside classrooms. Some theories are more philosophical (Serres 2014, Pettman 2016 both not really about the use of technology inside schools but more about technology in general) and some theories are more practical (Buckingham 2003, Burn 2009, Heijnen 2009, Marinelli 2013, Nill 2016). With the increasing use of tablets in education the last couple of years have seen an increase in published research about this topic but it is still somewhat 'new' (Boeke 2015, Verbrugge & Baardewijk 2017). That schools want to evolve their education towards a more suitable practice for the students of today is very clear in various literature (Gude 2007, Thijs 2014). Some of these references include visual literacy but just little or none on the connection between the use of creative digital applications in education and artistic development. Buckingham (2007), Burn (2009) and Heijnen (2015) are all talking about using modern technologies and popular culture to work with. Heijnen is one of the Netherland's leading researchers in the field of art education and the use of (new) media and developed the new design principles for authentic art education (AAE). AAE is education that focuses on the 'world' of the student (more on AAE in the pedagogical frame of the educational project). Within his redefined version of AAE, Heijnen connects this world to popular culture. Despite the fact that he is talking about popular culture he is not mentioning creative applications like Snapchat or Instagram as tools to work with. As I am teaching in a secondary school I like to add my experts in the field: my students. This will perfectly fit in with the idea of authentic education where teachers should acknowledge their students' expertise as important resources for learning. This is also important because the typical VMBO (lower vocational education in the Dutch education system) student gets the label that they are more practically focussed students (based on student profiles at Steunpunt Onderwijs). It is however my opinion that these practical skills orrientated students can be provoked to think critically about how they are working in a creative way every day.

As Woodfield (2014, p.6) states: 'Social media offer a potentially rich vein for visual research and analysis but, to date, the visual aspects of social media remain under-researched / theorized'. This research should be useful to every art teacher that is interested in the use of creative (social) applications to develop a critical attitude among their students. This research is especially useful for those who like to work with tools from contemporary visual culture in art classes and for those who are not afraid of digital technology.

Visuals created by former students

RESEARCH APPROACH

2. Research Approach

2.1 Structure
This chapter will explain how this thesis is structured and how I came to the conclusion that answers the main research question:

How can educators use visual media created through (social) applications and smart devices by students, for the development of a critical attitude, in art class?

This main research question highlights several subjects:

the use of visual media made through (social) applications

the critical attitude of the student

the educational project / the role of the educator

These three subjects have been used as chapters within this thesis. Three sub questions have been derived from these subjects:

How are students using visual media created through (social) applications and mobile smart devices within education?

What is a critical attitude and how can this be stimulated and developed?

What is the role of the educator when working on the development of a critical attitude among students?

2.2 Situation
The subject of this thesis is derived out of my daily work. I am a teacher in art and crafts at the Munnikenheide College, a lower vocational school with 1200 students located in Etten-Leur and Rucphen in the Netherlands. This education is divided in three levels: Basis, Kader and Mavo (from lowest to highest level). Within this research an educational project is used, that I developed for his second year VMBO Basis and Kader students, because I teach mainly second year students for 100 minutes a week.

Five years ago, the Munnikenheide College started to use iPads and by now they can easily say that they are an

'iPad school'. This means that most of the school subjects are not taught using books but are taught using tablets instead. The school encourages teaching staff to use these tablets for educational purposes as much as possible. This is where the art department often seems to fall back into what has always been done. The art department only seems to use them for students to find images they want to use for their drawings and that is it.

2.3 Method
This research does not only include a literature review but, as the outcomes are meant to inform current practices of art educators, it is also informed by an existing educational project.

For this educational project the design principles of AAE are used. Later on, in the thesis an explanation is given why AAE was chosen during the design of the project. This project has tried to establish an interaction between mobile smart devices, students and the world. It connects and encourages them to think about what they do and create in and outside school. More importantly, it provides opportunities for students to develop their critical attitude.

It is this attitude that I searched for during this educational project. To provide a clear view of which parts of this attitude the students work, during the assignments of the educational project, I used thinking dispositions.

These dispositions are introduced by Harvard's Project Zero, which will be explained later on. These dispositions were used within the educational project but also as a tool during the conversations that students had with each other or with me. This means that they were used to ask questions but they are also used as instrument to analyse the conversations.

All of this provided insights as to where and when my students worked towards developing a critical attitude.

VISUAL MEDIA PRODUCED
THROUGH MSD AND APPLICATIONS

3. Visual Media produced through MSD and applications

What are students actually doing on their phones and tablets within school? It is true that most of the boys like to play games on their devices, while the girls like to check their social media accounts. It are these social media applications where the students get a chance to work with visual media. This chapter will outline how my students work with these devices and applications, and how visual media of others influences them.

For this chapter a literature review and interviews with students during and after art lessons were done. These interviews involved questions about the work they made in and outside of school.

Before proceeding, it is important to give a short description of the terms used in this research. Digital smart devices, smartphones and tablets, are referred to as mediums. Within this description laptops are not included. Laptops are only used by some students in their home setting. Everything that a person creates and produces through a digital medium shall be referred to as media or visuals. This could be images, videos, animations, digital drawings or mixed use of these media.

Throughout this thesis the abbreviation MSD will be used regularly. MSD stands for Mobile Smart Device(s). These words have been shortened because of the common use during the writing of this thesis.

At the end of this chapter I answer the sub question: How are students using visual media created through (social) applications and mobile smart devices within education?

3.1 Visual culture and creative applications

Students have much more access to imagery now than in the past, and their creative practices have a bigger impact on visual culture than before. This works both ways. The images students create with their MSD are often influenced by popular visual culture of which these students are not aware. As Freedman (1997) thinks that education should not only focus on the distribution of facts and information, it should also include discussions of the popular visual culture that influences students' knowledge. In order to interpret the image, knowledge about that image is important. Ad Verbrugge (2017) calls this knowledge 'remembering'. Remembering comes after 'perceiving'. While perceiving is about observing with an open mind, remembering is more orientating on this observation into a certain kind of time, place etc. and asking questions like: 'Where does the image come from and to what does it refer?', and 'What is the meaning of it in this time and place?'. These are questions that became present during the interviews with the students.

The huge number of visuals are an element of our contemporary culture. Students may feel more comfortable

interpreting meaning from popular culture images than fine art because they usually have greater experience with the content of the imagery. According to Freedman & Wood (1999) students have seen visual images used for various purposes and then reused in various ways. This rich source of imagery is often not used within the art classroom. It is Freedman (2003) who says that this knowledge should be used to make the artistic production of students meaningful for their daily lives.
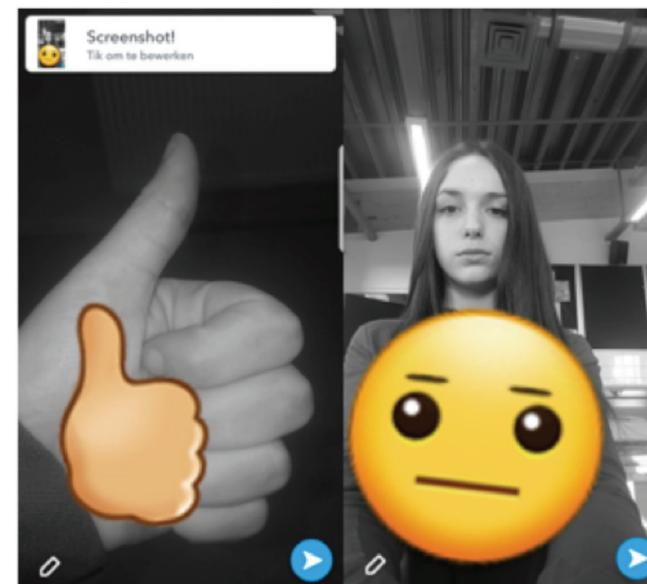
Two works of lesson 4 - Emoticons

When in conversation about their visuals the students mention their use of emoticons, filters, or the way they shoot their visuals as normal; 'Something everybody uses every day and all the time'. However, when asked if they know what other people think about these tokens of visual culture they responded: 'Because everybody uses them so everybody understands or interpret them in the same way'. Freedman (2006, p.26) describes this as: 'Rather being merely the outward expression of an individual, visual culture acts as a circuit of communication: it connects artists to audiences, audience members to each other, and audiences to artists through commonalities of experience in their engagement with images'. Heijnen (2016) calls this the rules of the informal communities. These communities are based upon the same interest and often use unwritten rules in their communication. They often see things as intelligible.

3.2 The settings of digital applications

The visual images the students produce are influenced by several aspects, of which one includes the settings of these applications. These settings seem to have some pro's and con's. The absolute number one advantage is the option of keeping an original image while at the same time changing it several times; it provides the option to try things out. Thereby the development of applications is to produce tools that conduct the easiest way of controlling. This means that applications should be easily understandable, fairly predictable and easy to control. For example, on the question on their use of filters the students replied: 'I search through some filters, which is easy because the possible results are shown immediately on the screen. It does not take long to find out which of the filters are easy to use more often on images'.

This same advantage that comes with the development of these applications and MSD is also one of the biggest disadvantages. They are developed by people who select what functions will be available, how they will work, and how they will look. Lately a shift is noted in the customer review of applications so that developers adapt their applications to the needs and desires of the users. Still, the developers remain in charge of which filters and options there are available. It seems that it is all about money, the questions that come with this issue are perfect for educational use.

When working with MSD to produce art, aesthetic questions arise among students and the teacher, such as: 'What is the work of art?', 'Does it still exist when it leaves the screen or the internet?', 'Who is the artist?', What is the influence of the developers and the applications on this work?', and 'Is it appropriate to change another person's work?'. When in 1993 Freedman addressed the use of computers in education, she emphasised that the formulation of such questions and the debate is an important aspect when teaching about digital imagery.

Some of these questions became part of the interviews. The students did not see a problem in working with what the developers choose to add to their latest update of these applications. One student provided a clear response: 'when working within our art classes we normally get to hear with what we are going to work with. This means one time we work with clay, the other time with paint but by choosing one of these materials a limitation is put upon us. Within this limitation there is enough space to try out several things. It is the same with these applications'.

One other significant response indicates that students see differences in applications that are purely intended for creative purposes and those that are more social based applications. The students indicated: 'The creative applications have far more options for editing visuals and for combining all kinds of media. The only annoying part of the creative applications is that most of them cost money'. Often one has to pay for updates or more content. Of course, there are free creative applications, which do not cost any money, but these applicationss often use commercials during the process of editing or when creating a new image. Here the point of money connected to these applications comes back in. I think that teachers should be aware of these commercials in free applications and discus the presence of these commercials with students. Students appear to not see them as a problem as long as it does not take too much of their time.

MSD at the Munnikenheide College

Some students explained that if they are not satisfied with the visual image produced with one application they tried several other applications. Sometimes they take an edited visual image to another application to keep on editing. This experimenting is something that was not witnessed much among students. It has to be acknowledged that it was done by those who did have the intrinsic motivation of trying out different options among applications. These students did not quit when they experienced the settings of the application to be limiting but instead they kept searching for other possibilities.

3.3 What are the risks?

Working with MSD creates possibilities, especially for visual subjects such as art. But every positive aspect seems to have a negative aspect connected to it. Instead of choosing one of the sides as most researchers and authors do, I have tried to keep in mind both sides. I tried to search and work with the balance between the good and the negative.

The most heard problem of working with MSD is often the fear of distraction. Teachers describe distraction as constantly disobeying what the assignment says. Like playing games instead of reading texts on a website and the constant live streaming by students through their social media channels. of course, I have encountered these same difficulties in my daily work; Students often ask if they can listen to music during their work but in the mean time they often check on status updates on their social media profiles etc. If the students would use their streaming to talk about their work or talk about assignments it would not be so much of a difficulty. At that moment we all could learn a lot from this distraction (Pettman, 2016).

The streaming says a lot about the options of connection. Where there is an Internet connection, there is the possibility of connecting with the world. With the possibility of carrying around their MSD to wherever they want to,

students can produce their works anywhere. They can make their visuals at school, on the streets or back home. They can show their lives, their worlds and their works when and how they want, and to whom they want.

These worlds are what students choose to show and what not. They also choose who will see it and who will not, at least they think so. Through working with their visual images that they create through their (social) applications, they are asked to open-up the doors to this world for the teacher and some of their classmates. When and in what way, is it a teacher's right to demand them to bring along their visual images of their worlds? Of course, teachers cannot force them to use social media but this refusal can lead to a conversation.

Ethical concerns became part of the conversation, such as the use of images from students. Since early 2018 there is a new law that states that persons younger then 16 years old need the permission from their parents when they want to use social media. This will not cause a problem as long as students, parents and school know who is not allowed to use social media applications. Within this research it did not present any challenges because all of the assignments could also be done using other non-social applications.

Most of the risks of using applications were discussed durin the interviews with the students. The interviews often started with them getting to know how they use their MSD for creating their visual images, but in the course of time the talks touched upon other topics. For example, how much of their time they use their phones and tablets in their daily lives but also about sharing visual images with other people. Students are capable enough to tell stories of moments when MSD and the use of them are becoming a problem. They even dared to call some other students 'addicted'.

By making students aware the risks might seem to be out of sight but they will always remain an easy swipe away. Creating awareness of the riks, regular dialogue, setting rules and finding the balance in our use of MSD can help us to avoid these risks.

3.4 Influence of peers

As explained earlier, the connectivity of the devices makes it easier for students to share their work and lives in a fast way. Students are part of their own informal community and at the same time their friends in this community can be part of other communities as well. Together they share a lot of visual images, in which they often use tokens of popular visual culture.

As Heijnen (2016) also explains it gives students a sense of belonging when they all use the same kind of rules and visual images. With this it seems not to be any kind of different then the visuals that came and belonged to, for example, the punk scene in the past. The only difference now is that they use Internet within their communities.

This makes it far easier to connect, influence or inspire other people and their communities.

During the interviews with students they expressed that they normally work with what they get. This means that if Snapchat or Instagram introduce a new filter they will automatically check if it fits their sense of fun, beauty or other criteria. These reasons are not that broad. Most of the time they search for a filter that makes their image look funnier. Students, shared that they often see new filters appearing when looking at visual images of other people.

It is witnessed that the students like to help each other. They indicated that they find this more helpful then searching for tutorials online. Especially with iPads it is easier to see what others are doing; students keep their iPads in their hands in such a way that the others behind or next to them, can see what he or she is doing. This way of positioning seems to invite other students to pay attention to what the other is doing. Of course, students will copy each other but this is something that also happens when they are working with any other material within the classroom. This is how the classroom becomes a community where students are sharing thoughts and opinions, which can stimulate a critical attitude.

Students shared that they think that every community can inspire different people from other communities. This, combined with what the developers of the applications introduce with an update, is how popular visual images spread across the students.

3.5 Outcomes
How are students using visual media created through (social) applications and devices within education?

The students were all born in a time where MSD made their appearance. Though the student's knowledge about these devices does not relate to the practical use of these devices for educational purposes, as they are not used to this. This might change in the future when more primary schools start to work with MSD.

Within an educational setting teacher need to assist student with their use of MSD. Students are using their MSD really fast. It often takes them a few seconds to swipe and create a new visual image. Where the disadvantages and risks could become a problem in practice they became helpful in conversations. By addressing and talking about the limitation and fastness of apps students were forced or forced themselves to think about these issues. Students share that it is important, that what they want to capture is in the image, no matter how. They create a visual that has the same externality that a lot of their peers are using. This connects them but they hardly see this connection while creating a new image.

It is true that most of them look at what peers and others within their communities create online and when suitable they like to use this in art class. The copying of others seems part of the deal of online work; 'You know who you are sharing it with' (student). This happens through social media applications that have limited creative options, that does not seem to bother the students, but it creates generic works. Only a minority of the students uses more than one application in the creation of a visual image. Students do not think the fastness of applications and their devices is a problem in their works. They take a lot for granted within their production, which emphasizes this research's problem statement even more. Students hardly apply a critical attitude when creating visual images through applications and devices. The description of this attitude will be given in the next chapter.

CRITICAL ATTITUDE

4. Critical Attitude

This chapter will outline what is meant with a critical attitude. It will also explain what thinking dispositions are and why they are used to get insight in the students' thinking. These thinking dispositions are connected to the concept of a critical attitude. This attitude of students is what I worked on during the educational project. For the design of this project AAE has been used. This chapter also provides an explanation of why AAE is a perfect method to work on developing students' critical attitude. At the end of this chapter I will answer the sub question: What is a critical attitude and how can this be stimulated and developed?

4.1 What is a critical attitude?

With a society that is modernizing rapidly our system of education should at least try to keep up with it. It needs to prepare our children for a future where they likely need some specific skills. One of these skills is the ability to think critically. A definition of critical thinking is what Stichting Leerplan Ontwikkeling (SLO) (2014) describes in their report on 21st century skills as; critical thinking is an essential skill for investigating and assessing information, determining positions and making informed decisions. Critical thinking presupposes an open, inquisitive attitude. Education that contributes to the development of critical thinking skills teaches students to think about a topic, question a problem and to analyse this first before an opinion is formed. Students are challenged to assess their own and others' ideas. Thinking skills are certainly important within today's education. But, if we want students;

- to use their skills frequently,
- to transfer their skills to diverse and novel contexts,
- to feel committed to certain patterns of intellectual behavior in certain circumstances (the use of mo bile smart devices for creative works), then simply teaching thinking skills may not be enough (Tishman & Palmer, 2006).

Today, students have experience with creating images and using ideas from other images they see. This is what I notice every day when for example opening one's Instagram account. I often talk to them about what I have seen from them online but they do not show the skill needed to critically reflect on this experience; a skill that is part of a critical attitude. This skill is about placing questions by what is seen and how it is made. Therefore, the definition of SLO on critical thinking describes an education that I like to achieve with the educational project. Duncum (2002) describes this as an education that works on developing an attitude whereby students are encouraged to explore issues for themselves. Therefore, students' artistic production is important because it provides a form for commenting and discussion.

As stated earlier in this thesis, the interviewed students do not see themselves as creative. Despite the fact that they are creating images, videos or mixed media on a daily basis. To them it is normal to use MSD to express and show themselves to an audience that they think they selected. This stresses what Freedman (2003) states which indicates that students should become aware of the impact their work has on others and the ways in which they can influence their peers through visual images. 'It are social media that are perfect to let students see the performance of visuality and the performance of the crowd through the accumulation of images,' (Knochel, 2013, p.21). These images of students can be used to gain an awareness of the place of technology in the production and reproduction of visual images and to make them aware of the perils and possibilities of the virtual world.

While doing this research discussions with students took place about the concept of 'critical attitude'. They themselves explained it very clearly as 'not taking things for granted' and 'always asking questions about almost everything they see'. This description of a critical attitude is almost the same as Dick van der Wateren (2016) uses in his book Verwondering: leren creatief en kritisch denken door vragen te stellen. We should constantly provoke our students to question what they see and start searching for answers to gain knowledge. This attitude does not need to develop a sense of what is right or wrong, true or false, honest and deceptive but it is about questioning and conversing to grasp the bigger picture.

4.2 Thinking dispositions / Thinking routines

Now that a definition is given on this attitude the question remains: How one can stimulate or recognise development of a critical attitude?

To analyse the conversations during the educational project the thinking dispositions as introduced by the Artful Thinking Program were used. Artful Thinking is developed by Harvard's Project Zero, a research center that is connected to Harvard University and founded in 1967 by Nelson Goodman, Howard Gardner and David Perkins. It explores topics in education such as deep thinking, understanding and creativity. Through projects as Artful Thinking, Project Zero is doing research on cognition and therefore they use thinking strategies. The programme focuses on looking at and interpreting art, rather than making art. They share their findings through best practices in education throughout the academic community. Artful Thinking is meant to help teachers create rich connections between works of art and topics they are teaching; and to use the power of art as a force for developing students' thinking dispositions. Along with this it tries to make thinking processes more visible for students and teachers. This project is based upon research done in primary schools but during my research they are used in secondary education.

What are these 'thinking dispositions'? Ryle (1949) discusses dispositional properties, which are properties that manifest themselves only when certain preconditions are met. A disposition is a mental quality that reveals itself

in certain circumstances. For example, there are different ways to explore a work of art once it is shown. For instance, one could start to observe or one could give his opinion through reasoning.

Dispositions could be considered motivations in the rough sense that they help to mobilise action. The general idea of dispositions is that people behave in a more or less informed and appropriate way. This might seem predictable when for instance people with little curiosity could ask more questions. Hidi and Renninger (2006) think that interests that first appear in the context of specific situations can become sustained and stabilise into enduring dispositions.

Artful Thinking uses six thinking dispositions that have special power for exploring works of art and other complex topics in the curriculum. These six dispositions are:

1. **Questioning & Investigating**
   Focusing on asking good questions and finding and exploring problems.
   Questions like: What do you wonder about? What would you like to find out?

2. **Observing & Describing**
   This emphasize careful observation and detailed description.
   Questions like: What do you notice? What are the details?

3. **Reasoning**
   Focusing on using capturing essential evidence and telling well-reasoned stories that explain why things are the way they are.
   Questions like: What is going on? What are your reasons?

4. **Perspective Taking**
   Developing insight by seeing things through different lenses.
   Questions like: What do you think of it? What different ways could you look at it?

5. **Comparing & Connecting**
   Focusing on making comparisons and connections.
   Questions like: What is it like? How does it connect to other things?

6. **Complexity**
   Focusing on revealing layers and exploring parts or purposes.
   Questions like: How is it complicated? What are the different layers or pieces?

These dispositions, or patterns of behaviour, represent forms of thinking that are powerful in terms of exploring and appreciating works of art or visuals made by students themselves inside the classroom and outside of school.

Every disposition has intellectual behaviours associated with it. The philosopher Robert Ennis (1986) attended to dispositions proposing that a number of thinking abilities connect to a number of dispositions. For example: reasoning involves constructing arguments and seeking evidence. The six dispositions combined are synergistic which means they all connect and contribute to eachother.

Perkins and Tishman (2006) state that to recognise a disposition these three points should be present:

- A broad selective tendency in response to opportunity.
- Independent of ability which means that the person has the capability to execute more and less self-disciplined patterns of behavior.
- Fairly consistent within the individual and this means that the person shows similar tendencies over time and context but varying across individuals.

Thinking dispositions are developed through the use of thinking routines – short, easy-to-learn procedures that help students enact thinking-dispositional behaviour in and across the six areas. The image below is an example of a routine as proposed by the Artful Thinking program.

CIRCLE OF VIEWPOINTS ROUTINE
A routine for exploring diverse perspectives

Brainstorm a list of different perspectives and then use this script skeleton to explore each one:

1. I AM THINKING OF …*the topic* … FROM THE POINT OF VIEW OF…*the viewpoint you've chosen*

2. I THINK…*describe the topic from your viewpoint. Be an actor--take on the character of your viewpoint*

3. A QUESTION I HAVE FROM THIS VIEWPOINT IS…*ask a question from this viewpoint*

WRAP UP: *What new ideas do you have about the topic that you didn't have before? What new questions do you have?*

Students can use them solo or in small or large group settings and they can be used with a wide range of topics and works of art. These routines are simple structures, for example a set of questions or a short sequence of steps. It is more than just strategies because they are used over and over again and can become part of the 'culture' of the classroom (Tishman & Palmer, 2006).

Because of their simple nature, the routines do not need to be taught but can simply be used as a means of investigating. We know that sensitivity plays an important role in thinking dispositions and perhaps in all dispositions (Tishman & Palmer, 2006). As mentioned before a critical attitude enhances asking questions and let's students wonder about what they see and make. Hereby sensitivity needs to be present if one wants to develop this even more. The routines are ways of thinking that use this questioning and wondering. With small changes, as I will explain in 5.1.2., they are easily integrated within the educational project. The options of using them in groups or individually makes it even more interesting to use in classrooms, because it is up to the teacher to decide per group what will work out to get to the best results.

4.3 Authentic art education and a critical attitude
Students are able to express their interest through the use of social media platforms. Students follow me and I follow them on social media, like Instagram. By working with students' own visual images that they create through these media, I like to keep it close to their world. That is one of the reasons why authentic learning was chosen for designing the educational project. Authentic learning is described as: 'A process of learning in which the learner acquires meaningful insights for him/herself, primarily departing from intrinsic motivation and building on existing knowledge. Authentic learning takes place in relevant, practical and real-life contexts in which she or he plays an active, constructive and reflective role that includes communication and interaction with others' (Roelofs and Houtveen, 1999, p. 240).

In 2001, Haanstra (2001) introduced AAE by applying the four main design principles that were developed by Roelofs and Houtveen (1999) to the field of art education.

In order to connect more to contemporary society Heijnen (2015) rewrote these design principles.

A. Learning is aimed towards the culture of the student.

B. Learning tasks are derived from activities performed by art professionals.

C. Learning is situated in broad societal contexts.

D. Knowledge is constructed in complete & complex task situations.

E. The class functions as learning community in which different expertise are shared.

The students involved in the project are part of informal visual networks. They find their inspiration in their cultural surroundings of which these informal visual networks are a part. The professional artist is working with their own cultural surroundings as well. They keep a more critical distance to their topics then the informal artist. It is this critical distance of which the students need to be made aware of and form their own critical opinion.

Today's informal and professional artists work with multimedia technology because it can integrate or mix language, image and sound in an easy way. Both informal and professional artists learn practical skills during the creative process. Most of the students are well aware of the (technical) options of MSD but this will be further enhanced when they understand what art is and how they could to use these techniques to develop their artistic ideas.

AAE provokes students to challenges their interests and allows them to make connections to the art world and the world around us. It is situated within a societal context. The societal context for this research and educational project can be seen in the way the students are using their MSD. This situation is also to be challenged and all of this can be done in a class that functions as learning community. These principles are really important for working on development of a critical attitude with the students. It is about knowledge that is based on students' interest, further shaped by the art world and society, all shared and questioned between students and guided by the teacher.

The students in this research are VMBO students. These students are known to benefit from learning in small blocks of theory. AAE seems to provoke teachers and students to work with loosly defined assignments. Working with these complete and complex task situations with the students is the most difficult part of using the authentic art principles because they are not really used to it within their normal education. It provokes them to get insights in their working and thinking process.

Students and art professionals learn from their surroundings. They connect with their surroundings not merely to develop their artistic work, but they also connect through amusement, communication and identification. By making connections with these informal forms of production the students get the chance to find new insights in their visual interests. Through this opportunities arise to develop a critical approach of their everyday visual environment. This connects to what Buckingham (2003) and Groenendijk, Hoekstra & Klatser (2013) say: 'To behold and wonder the unknown and to critically approach what seems familiar'.

Authentic learning says it wants to connect what is learned at school with practices outside of it. Starting point is that education inside the classroom can be seen as a group process within which students share knowledge and expertise, that they learned outside of school, with each other.

AAE enhances everything today's art classes need. It is a challenging and modern way of education. It stimulates thinking about what students do and create in and outside of school. The next chapter will explain how these principles were applied in the design of the educational project.

4.4 Outcomes
What is a critical attitude and how can this be stimulated and developed?

Students see a critical attitude as not taking things for granted and always asking questions about almost everything they see. And, we should constantly provoke our students to question what they see. This attitude does not need to develop a sense of what is right or wrong, true or false, honest and deceptive but it is about questioning and conversing. The design principles of AAE give teachers the opportunity to design lessons where students can work on this attitude especially by working with the culture and social context of the students; their own expertise and the connections to the world around them. It gives students the opportunity to search for what they want to find out through their own visual culture. It provides them with the options to ask questions and to get insights in the ways of working and thinking of others, peer and artist alike.

The use of thinking dispositions should make it possible to analyse the development of a critical attitude. An attitude which can be seen as devided in the six dispositions as proposed by the Artful Thinking program. Even though dispositions should be tracable it is good to keep in mind that they might have a lot of overlap. This could make specifically defining them a bit more difficult then expected. It is more then just working on a critical thinking skill. The use of routines stresses this even more. These routines are designed for primary schools but are easily adapted within secondary education. Because of their simple design they can be altered if one finds that suitable. In the next chapter I will give an overview of the project and the way I analysed the conversations with students to see how we as educators can use AAE and the routines for developing a critical attitude among students.

THE EDUCATIONAL PROJECT

5. The Educational Project

This chapter will explain how the design principles of AAE have been used for the educational project. Followed by a section where the use of the thinking routines, short and easy to learn procedures that help students enact thinking behavior, will be explained. This chapter will also give a brief explanation of the full project and the observations during this project. Followed by how the conversations were analysed, and at the end I will answer the sub question: What is the role of the educator when working on the development of a critical attitude among students?

5.1.1 Pedagogical frame

The characteristics of informal visual networks reflect the present-day informal creative visual world of the student outside the school (Heijnen, 2016). It is this world that I have chosen to work with in the educational project. Their visual images represent a broad number of topics, all connected to what they find interesting and all created through MSD. These devices, as the visual images, are part of students' culture. This is how principle a. Learning is aimed towards the culture of the student, is present within the design of the project.

Teaching art education cannot go without using the works and ideas of artists. Digital drawings are made and shared, and so are videos and photos. The ways of working on these outcomes of technologies whilst at the same time asking questions about them is an approach that can be used for educational purposes. With every theme in the project artists or artworks were introduced during conversations and in presentations. This is where design principle b. Learning tasks are derived from activities performed by art professionals, comes in. Connections were made through the way of working and thinking of the artist. Some of the themes give a perfect opportunity for adding some (art) history as well.

Because art created using MSD is somewhat new, the question arose how other art teachers try to use this within art classes in secondary education. Therefore, an interview (Appendix 9.8) was held with the developers of the Mo-Da (the museum of digital art). This is a project that is developed by MU art space in Eindhoven and aims to give digital art a place within art education at secondary schools. The idea of this Mo-Da is that students create their own museum on devices with the digital art works that are in the database of the project. It is interesting to know how they make the connection between students and these digital works. It appears that the teacher remains to be the most vital part of the project because he/she is there to raise questions or start a conversation with their students about the works. This is in line with what is done with the artworks and artists that are connected to the lessons of the educational project.

Two of the works from lesson 6 - Mixing

AAE seems to provoke teachers and students to work with less structured and less defined assignments. That is why students only receive the necessary information so that they can try to find their own way of working. This means that they will have to explore and try things out for themselves. MSD are perfect for working independently as they are designed to be used easily and anywhere. The students involved in the project got to choose the application they liked to work with. Design principle d. Knowledge is constructed in complete and complex task situations, is used by giving students a lot of opportunities for exploring and deciding on options along their assignments.

The students may not be used to less structured assignments but they are capable of helping each other. That is where design principle e. The class functions as learning community in which different expertise are shared comes in. Freedman (2004) refers to the advantages of creating digital imagery as it can involve collaboration in all sorts. Students often approach each other while working on their MSD to give unsolicited advice on how to improve their image. At the end of every assignment students had conversations about their works and ideas. Thoughts and expertise were shared between them.

Even though all the themes of the project are also part of a broader societal context, it might happen that students do not get to this in every conversation. This does not need to create a problem because it is a module of six lessons. A lot of conversations, short or long, take place and so it seems there are many opportunities to talk about their work in a broader societal context. Through working with and making them aware of their use of MSD and applications design principle c. Learning is situated in broad societal contexts, is well presented.

Though the project includes the five design principles of AAE it might be possible that some of these lessons will address one or two of these principles in more detail than the others. As Heijnen (2015) mentions that using all five of them at once is hardly possible to achieve in an educational setting. He further states that most of the time one of the principles will have the highest priority.

5.1.2 Thinking dispositions / Thinking routines

In chapter 4 thinking routines were explained. Because of the great number of routines that are introduced by the 'Artful Thinking' programme they were used slightly differently in this project. In practice this means that a 'new' routine was created. This new routine takes the questions that are connected to the thinking dispositions and uses them for conversations. The next overview of the dispositions shows the kind of questions that are connected to them.

1. **Questioning & Investigating**
   Focusing on asking good questions and finding and exploring problems.
   Questions like: What do you wonder about? What would you like to find out?

2. **Observing & Describing**
   This emphasize careful observation and detailed description.
   Questions like: What do you notice? What are the details?

3. **Reasoning**
   Focusing on using capturing essential evidence and telling well-reasoned stories that explain why things are the way they are.
   Questions like: What is going on? What are your reasons?

4. **Perspective Taking**
   Developing insight by seeing things through different lenses.
   Questions like: What do you think of it? What different ways could you look at it?

5. **Comparing & Connecting**
   Focusing on making comparisons and connections.
   Questions like: What is it like? How does it connect to other things?

6. **Complexity**
   Focusing on revealing layers and exploring parts or purposes.
   Questions like: How is it complicated? What are the different layers or pieces?

With this new routine students had conversations after every assignment. With the first three assignments I did not share any information on how to or which questions they could ask. Later on, I changed this and gave them options of questions to ask if they would get lost in their conversation. These questions I proposed would be easy to ask with the specific assignment they were working with (as you will read in chapter 5.3 observations). They just got 5 minutes to talk about one work. This short amount of time made it more aceptible for analysing and students did not get much chance to get lost in their conversations. The student who's work was discussed was only asked to answer questions. It was not her/his role to start the conversation nor was she/he meant to explain the full work without being asked to do so. This approach stimulated others in their questioning.

The conversations were recorded on smartphones and written down to find out where they were interacting with which pattern. In this way I was able to analyse the conversations to see if students will use routines and if they can get to work on one of the dispositions. For the analysing of the conversations I gave every question or answer in the conversations a colour. This colour represents a disposition. For example: every question or answer that is connected to the *Reasoning* disposition is marked blue. The outcomes of these conversations will be explained in 5.3 and 5.4.
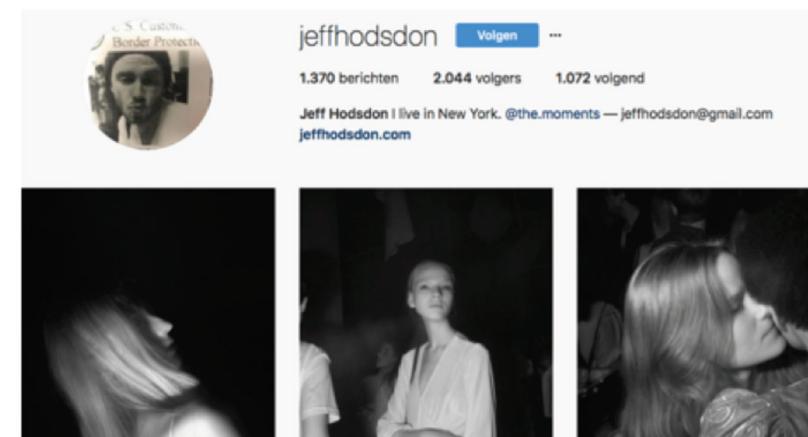
Instagram of artist Jeff Hudsdon

After each conversation I had the chance to work on ways of questioning among my students. By doing so I could guide them a bit more in the process of exploring specific dispositions with the next assignment. It is good to keep in mind that in this research second year VMBO Basis and Kader students who are in the age of 13 and 14 years old have been involved. They often need guidance along their assignments so the thinking patterns had to be selected carefully. Once they know how to work with these thinking routines they can use them more often.

5.2 Educational Project

A series of lessons were used, that together formed a module that was easily integrated in Munnikenheide College's 'free' curriculum. This module has six different lessons (Appendix 9.1 to 9.6). Students and myself developed the themes during conversations that took place during the start of this research. They searched for themes that expressed parts of the temporary visuals produced by students.

This resulted in the following themes:

- Filter
- Text/Time
- Emoticons
- Selfie
- Mixed

I added the sixth lesson that contains the theme of visual aspects of images.

As part of teaching with contemporary visual culture, the project worked with a focus on little didactic instruction and education in order to promote student responsibility. By creating space for students' own initiative combined with guidance from the teacher, they could discover multiple connections, enriched possibilities for creation and critique. The teacher's role, besides the introduction of the assignment, is to suggest ideas, explain further on individual basis, to ask critical questions, to correct if necessary, to structure the activities and to monitor the quality of conversations in the class.

5.3 Observations
Lesson 1 - How to create a photograph & Lesson 2 – Collection/Connection

Though designed as separate lessons, Lesson 1 and 2 were combined into one. Both lessons enhanced short assignments and by combining them more time was left for the other lessons.

This meant that the students brought along images they made with their MSD. These were then shared with three other students and they, as a group, had to place all of the images within certain themes. The first time, they worked with visual aspects such as themes. They learned about these aspects, like colour, light, composition, etc., through a presentation. Within this presentation images of students were also used to show these aspects. It also contained works of Dutch photographers like Anton Corbijn, Erwin Olaf etc. For ideas of collections and connections works of artist like Belinda Bloom, Dina Kelberman, Harm van den Dorpel and Sam Oster were shown and

discussed. The discussion is part of principle B. of AAE. Students talked about their thoughts of the works of the artist introduced. With this first assignment the discussion was mostly about the ideas on the 'why' and 'how' the images were placed and connected to eachother.

Work by Dina Kelberman

The second time they had to place their images within the themes that were used for creating the total of 6 lessons. Students placed their images within themes like filter, text, emoticon, selfie and mix. They could also add their own theme. Using these tokens of contemporary visual culture shows that principle A. of AAE was used in this lesson.

The placing and discussing of their images gives a good example of principle E. where the class becomes a learning community. Students talked and listened to each other. They shared their visions and discussed those of others.

With this lesson and the outcomes, students could work on the development of several dispositions such as Reasoning, Questioning & Investigating, Observing & Describing and Comparing & Connecting.

After the introduction the students proceeded to compare and talk about their own visual images. The conversations they had during the creation of their collections showed that they found it hard to divide their images because they often use multiple aspects in one visual. These initial conversations were relatively superficial; this was the first time they had conversations about their works with each other. The talks went on about what they saw in the images of the others and slightly turned to where to place them within the themes. The most important part is the conversation they had after they placed all their pictures. The idea was that during those conversations I would ask questions to students that would be connected to Comparing & Connecting and Reasoning. Following excerpt will show that students took over the conversation and started to ask questions that were also connected to Questioning & Investigating and Perspective Taking:

(The letter T stands for 'teacher' and S stands for 'student' combined with a number to distinguish the different students and their answers).

T.	Are there any prominent things in the distribution you made?
S1.	Yes, the one that hangs by the theme of Color. Why did you hang it over there?
S2.	Because there is a lot of color in the picture. There is red, yellow, black, etc.
S1.	But if we would compare these pictures why does the other picture, which has as much color as the other, hang at the theme of Structure?
S2.	Well you can see that a Snapchat filter is used so that is why I hung it at Structure. But I get your point because there is another picture that hangs by Structure that also has a filter but way less color.
S1.	S3, I see two pictures hanging which could be having the same theme but they hang separately. Why is that?
S3.	I can explain that. With the first picture I am very dark and the background is very light which gives the idea of a lot of space. That is why I hung it at the theme of Space. The other picture doesn't show much space but rather the light is important in this one.
S2.	But you say it yourself that there is much light in the first picture as well so would you want to hang it underneath the other theme of Light?
S3.	I don't know, maybe Structure would be the best theme to hang it.
S2.	No wait, I should rather hang it under the theme of Shape because both of these pictures are definitely reshaped! Teacher, why do you think I hang this picture at Shape?
T.	Well the shape of the object is pretty intense visible in this picture.

Lesson 3 – Filter

This lesson was designed to see if students are capable enough to make such a distorted image that it would become more of an abstract piece of work. Normally students use filters to make their images more 'beautiful' or 'funnier'. With this assignment they are challenged to do something they normally would not and meanwhile they could question the use of filters. The start was a group conversation about the use of filters. Their own online images were shown and where possible the works of artist like Sophia Al Maria, Stephanie Jung, Raphael Rozendaal etc. were introduced. Principle B. of AAE became present as I used the works and the ways they were created to show how students could distort and create their own filters for their images. They had one week to complete the assignment. After receiving the first creations, there was a conversation with students and with colleagues and the design of the lesson was changed. The huge number of images they produced as in-between steps was very difficult to deal with during conversations, as students sometimes did not seem to have kept the order of the images. This shows that the idea of using principle D. of AAE is one of the difficult ones to use within prevocational education. With the number of options and unclear outcomes it became too abstract and students lost their way. The random picking of filters was to difficult and this made me change the idea of the assignment.


Works of Stephanie Jung and Sophie Al Maria

The adjusted design was more about creating a filter in a much easier way. Together with students and colleagues the idea of the broken screen filter was introduced. Students had to place their self-made broken screen filter on images in a way that it would show fragility. This would not only let them think about the use of filters on images but also about the way most of the students look through broken screens to their images.

With this lesson students could work on the development of the Questioning & Investigating, Observing & Describing and Complexity dispositions.

They had trouble with questioning each other, because they thought most questions were very obvious or had predictable answers. They mainly used questions that started with 'why'. Students expressed that it was easier for them to ask this type of question. As explained before most other questions they thought would lead to logical answers.
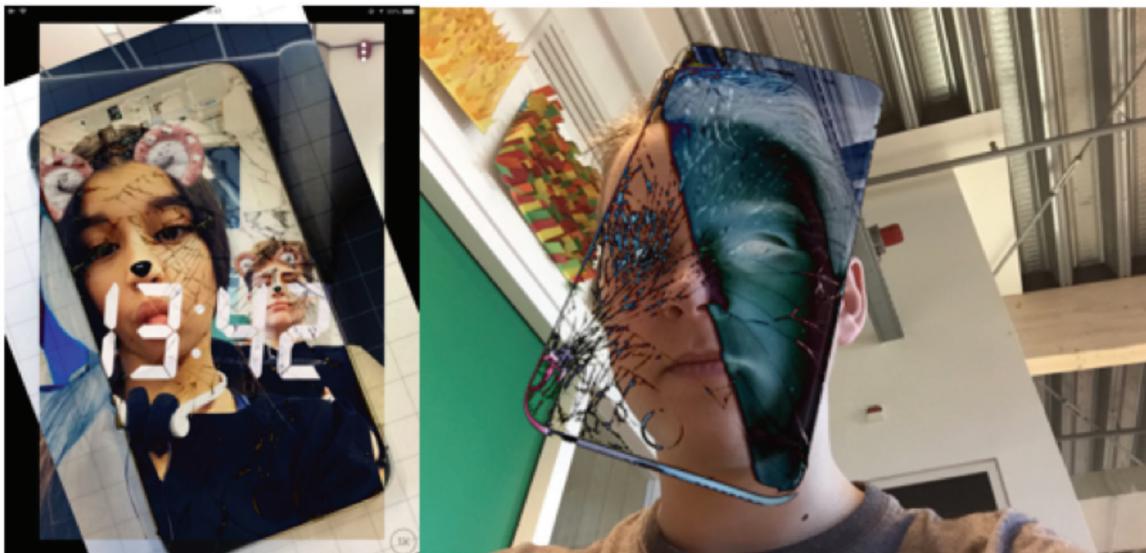
Works of students for lesson 3 - Filter

Of course this is understandable but when looking at the dispositions they did not use most of them and focused solely on *Questioning & Investigating* and *Observing & Describing*. These encourage exploring problems and helps students to question what they see. Although this was a good start to explore questioning, the lack of use of the other dispositions was a bit disappointing because I wanted to see if they would use multiple dispositions. Though not all of them stayed with questions that were only connected to these two routines. Some groups touched upon parts of the *Comparing & Connecting* routines as they placed their visual images next to the ones of their peers. Most of the times they compared to check if they had done the assignment the same way as their peers and there-by had done the assignment as expected as you can read in the following excerpt:

S1.	What do you want to ask about the image I created?
S4.	Why did you place the time in the middle of this picture?
S1.	It is an option in the app to add the time of the moment that you make the picture. It is kind of fun and nice to look back at it. But why this question when you can ask so many others?
S4.	Well it is very prominent in this picture.
S3.	Yeah, right in the middle of your picture. But what about the other pictures you place on top of the other?
S1.	It is a picture of my Iphone which has a broken screen.
S2.	Yes, we can see that but why is it placed like this? And why does it change the color of the other image?
S1.	Well I could have placed it the same way as the other image but by placing it like this our heads fall perfectly inside the screen of the phone which I thought looked nice. I truly don't know why the color around the phone screen changed.
S3.	I guess it is because you used a negative color filter on the photo of the screen.
S1.	Wow, yeah, that should be it. I just tried to get the cracks of the broken screen more visible but that could have changed the colors.
S2.	I bet it did because most of us tried to get those cracks of their screens more visible this way. But why didn't you cut the edges of this picture? I don't like the outer side of the picture.
S1.	I got two things to say about that. It was the easiest way to keep it like this but at the same time I liked the idea of having another square in the picture.
S4.	This gives me the idea that there are three images on top of each other while there are only two.

Lesson 4 – Emoticons/Text/Time

Practically this lesson contains two parts. The first part was a homework assignment whereby students had to re-visualize three emoticons. This was done to make them more aware of what they are actually sending out every day. The outcomes where discussed a week later followed by a presentation on the history and the use of emoticons nowadays. The use of tokens of contemporary visual culture made this assignment drenched in principle A. of AAE. It could emphasise their constant presence in our lives and visuals of students.

Works of students for lesson 4 - Emoticons

The second part was an assignment whereby students, in groups of three, had to add emoticons on works of art. Each member of the group had to add one emoticon and then send the new image to the next person of the group. The added emoticons had to do something with each other and/or with the work of art. These outcomes were then discussed within groups. They had to think about emoticons and how others can react on them. At the same time, they got to discuss if adding emoticon on other people's work is allowed and who will then be the responsible artist afterwards. Emoticons are easy to use in a funny way and so the works of an artist like Nastya Ptichek became helpful as introduction for their assignment. The works show a funny but innovative way to give new meaning to an artwork. This way of working was discussed with students and how they could use it in a similar way. This fits perfectly with principle B. of AAE.

This lesson had options for working on the *Reasoning* and *Comparing & Connecting* dispositions. Students were to explain why they added specific emoticons and they had to review their work next to that of the others of the group.

While introducing the students to the theme they were given several examples of how society uses emoticons. They were asked about the interpretation of emoticons and what happens when they are added to existing visuals and shared through our social creative applications. Students came to the conclusion that they are using emoticons based on the idea that the receiver will perceive it the way as it is meant by them, but that people can misinterpret them as they were intended. They also came to the conclusion that the broad number of emoticons is still growing and the small differences they show can make a whole lot of a difference in interpretation. The talks and the works of the students are part of principle C. of AAE.

Students worked on the assignment in their groups of three on one final visual image. Hereby they had to keep in mind what the others of the group had done with the work. This made them ask questions like: 'For what reason did you use this emoticon?' or 'Can you please explain why you added this smiley while I had added a crying emoticon?'. These questions are connected to the *Reasoning* routines because they wanted to know why people did several things and how they interpreted the work that others had done. This triggered the others to explain their steps and ideas. This shows that they worked with *Comparing & Connecting* as to be seen in the following excerpt from a conversation after the second assignment:

Lesson 5 – Selfie

With this lesson they got to work with the theme of the selfie. The start was a presentation about the selfie, from the first one by Robert Cornelius to paintings of Rene Magritte. It introduced various ways of looking at the theme. The assignment was to cut themselves out of their selfies and replace their own silhouette with a picture of a landscape that they thought would best represent them as person. The works of Roberto Voorbij and Mervo Ozaslan are perfect examples on possible outcomes and ways of thinking with the assignment. Once again principle B. was used, but this time it was not only ment to discuss the way of working of the artist but it was more focused on the outcomes. What are the results of what these artists have done? Would it matter if the images used within the selfie would be replaced by a new image? These are some of the questions students were asked within their groups.
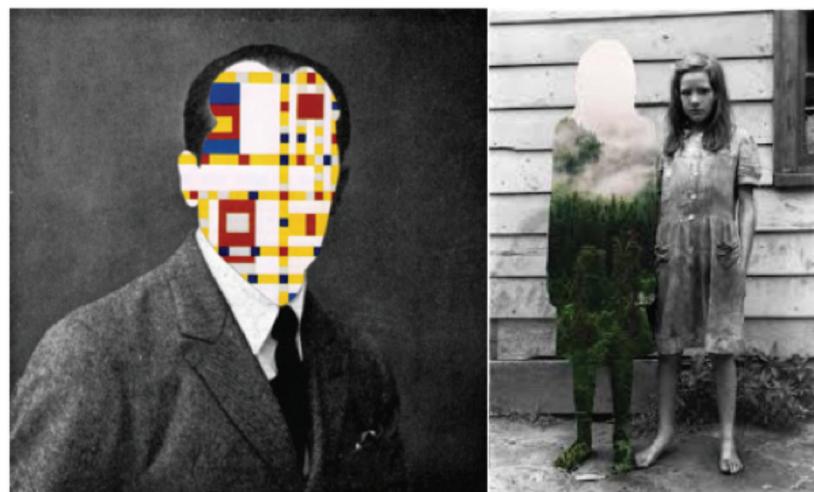

Works of Roberto Voorbij and Mervo Ozaslan

The assignment was mend to give the students ideas on how we use the selfie and how we could make it different while representing a part of us. It also contributes to the discussion if one truly can erase themselves out of a selfie.

This lesson gives the students opportunities to work on the development of the *Reasoning*, *Perspective Taking*, *Questioning & Investigating* and *Observing & Describing* dispositions.

Works of students for lesson 5 - Selfie

While preparing this lesson some problems about the use of applications became present. The most used applications of my students seemed to have limitations that were very unwelcome for this assignment. If it does not fit to what they want to achieve with the assignment they will take a step back in their process or just move to a different application. Then they really start asking each other questions about what they see and how they done things and start making connections and placing these bits and parts in the puzzle. This shows questions and aspects of *Comparing & Connecting*. For example, one girl said 'with the sea placed inside the silhouette it looks like a holiday picture' and further on she says: 'But your intentions were the same as mine. Thinking about lovely moments during our holiday.' They see parts within a picture of someone else and compare them to their own.
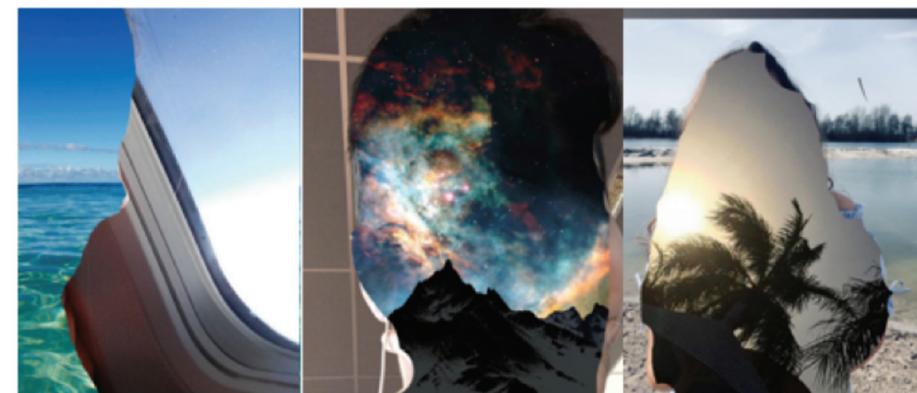
Works of students for lesson 5 - Selfie

By showing the options within one specific application they could decide if they wanted to use that application or just go to a different application that they were convinced of could do the same. As with all the other lessons the students used questions that are connected to the *Reasoning* routines as to be seen in the next excerpt:

S1. Ah, the palm trees!

S2. Ha-ha, yes palm trees.

S1. I know you would place one of those pictures within your selfie.

S3. Why? What do you like about palm trees and why place them inside your selfie?

S1. They remind her of the vacations to Turkey.

S2. Yes, that's true. Every time I see pictures of palm trees they remind me of warm countries and nice days and it was nice to place palm trees within a selfie that was made at the waterside. But do you have the same reasons to put in the beautiful sea into your selfie?

S3. It looks like the selfie was taken inside an airplane and with the sea placed within your selfie this looks like a holiday picture.

S1. It's kind of weird now to look at this picture. It is indeed a selfie from within a plane but with the see next to it, it might look like I am inside a boat as well. I like the colors of the sea and the idea of swimming or floating within the water.

S2. But your intentions where the same as mine right? Thinking about lovely moments during vacations.

S1. Yeah but your selfie is totally different with that space like picture, right?

S3. It is indeed a picture of space.

S2. Why placing a picture of space? You are not such a dreamer, are you?

S3. No, I might not be a dreamer but I like the idea of space as huge and beautiful with different colors and stars.

S1. But isn't there a mountain like shape at the bottom of the selfie? At least it looks like a mountain.

S3. Yes, the picture of the galaxy wasn't big enough to fill up my whole selfie so I thought it would be nice to add something nice. The black and white in the mountain seemed to fit the beautiful colors of the stars above.

S2. It's like the mountain is pointing at the stars.

S1. Yeah, it's funny that you say that because I just thought the same.

Lesson 6 – Mixing

This last lesson is the one students had the chance to choose their own theme to work with. This could be one of the themes we already used in the other lessons but could also be something totally different. The only restriction was that they had to use multiple aspects of the other lessons within their last work and at the end they had to discuss their works. This assignment provided a broad amount of opportunities for the students to work with but was defined enough. Students often started to help eachother when they thought they had great ideas but did not know how to get to the end result they wanted. This once more emphasises that the class functions as learning community in which different expertise are shared, principle E of AAE.

This lesson gives the students opportunities to work on the development of the *Reasoning*, *Perspective Taking*, *Questioning & Investigating* and *Observing & Describing* dispositions.

Works of students for lesson 6 - Mixing

Though the outcomes were very divers the students mainly used questions and answers that can be connected to *Observing & Describing* and touch upon *Comparing & Connecting*. It seems that students often want to explain why and how they took the steps for creating these visuals. This following excerpt shows one of those conversations:

S1.	What have you done? There is nothing left of the original picture!
S2.	Yes, there is.
S1.	No, you replaced everything with other images.
S3.	He kept the silhouette as it was but replaced it with other images. My bet is you found several of these images online.
S2.	I did, but what do you guys think I did?
S3.	I think you cut yourself out of the selfie replaced it with the army kind of creature thing.
S1.	You eventually changed the background as well.
S3.	Maybe you even added those letters on the image.
S1.	Wait that background is mirrored?
S2.	Now that you say so I didn't do that on purpose.
S1.	Well it makes me wonder that it says when it is mirrored the right way.
S3.	By using that red background and the kind of animated silhouette it looks like a comic book image.
S1.	Especially with a face like that. It looks like a monster.
S2.	If I wanted to make a beautiful I wouldn't have done it like this, but when we were asked to created an image we likes I decided to create a kind of monster. As you might know I like to watch and read about weird creatures and monsters, but I tried to add some things out of our daily lives to make it wouldn't be to comic like.

5.4 Outcomes of the educational project

With the project I entered a world of the students they normally would not use for educational purposes. The three classes that were involved all had to find their way within the lessons. The fact that every lesson could be improved for use with the next class was very helpful. When the outcomes would be different than the ones expected or when the conversations kept circling around with the same questions this could be altered with the next class. It is possible to rearrange the order of the lessons when one finds that more suitable. Because of the time needed for these assignments they can be done right after each other but they could also be spread throughout a year.

After lesson three it became clear that the use of one editing application made the assignments for students easier and made it also very useful to give general instructions on how to edit their images. Of course, students were still free to use any other application but most of them followed the instructions that were done with PicsArt, an application that mainly is developed for creative purposes. For the teacher this meant that the focus could be placed on the conversations. The students often need guidance along their conversations because they were not used to it.

Lesson 1, 2 and 3 were done with some guidance form the teacher. Throughout lesson three the students took control over the conversations. Students themselves came to the conclusion that they were only asking predictable questions that enhance working on the *Questioning & Investigating* and *Describing* dispositions. By only asking questions that are connected to these dispositions the conversations did not get much depth. While with a slight change in the type of questions they could work on other dispositions as well.

By the time students went on with lesson 4, 5 and 6 they got some information on how they could ask their questions. This meant they could still ask the predictable questions but in the meantime get information through the answers that enabled them to prompt further questions. This instead of just asking one question and accepting the answer. This is what a critical attitude enhances.

Lesson 1 and 4 had a group assignment. These seemed to be perfect to work on the *Reasoning* disposition. Though with most of the lessons the students could work on the *Reasoning* disposition this lesson made students ask each other about 'why' and 'how' they had done their part in the work of the group. With an instance they were also explaining what they thought of the additions of others. This also made them work on the *Comparing and Connecting* disposition. They see that several filters or emoticons are connected to certain applications. So, by using these they already know how the visual was made. They see the bits and parts but it becomes more interesting when students use several applications or images for the creation of one visual.

This is what happened during lesson 5 and 6. Where they got the chance to use several images and applications. Students explained that the conversations about the outcomes of these lessons were different because the outcomes were so divers. This is where it becomes easier to work with questions that could be connected to the *Comparing & Connecting* and the *Complexity* routines.

With this project it became clear that these students found it difficult to ask questions about the works of others. Once they did have several conversations they were capable enough to explain their difficulties and with some guidance they started to ask questions that went deeper than the once the used before. The lessons gave opportunities to work on several dispositions that would develop a critical attitude. After a few lessons they got more

and more used to the conversations. Asking specific questions in the specific moment of the conversations was something that made it difficult for the students. There is a short attention span that most of the VMBO students are facing while in conversations or mostly while listening to others. Asking good questions also requires good listening skills. For a teacher this can be very difficult. Maintaining an overview on the conversations while at the same time keeping everybody focused on their conversations and work. This is why the conversations took place in smaller groups so the focus within each group would be better to maintain. There are multiple options for discussing the works of the students but especially these VMBO students found the conversations a nice way of discussing. They did not like writing about it, mostly because they do that all day long, and larger group discussions were often seen as difficult for everybody to participate equally. Within smaller groups it was easier for everybody to get involved.

By explaining the students what kind of questions they could ask for deepening the conversations I was confronted with an issue that could cause the difficulty of asking questions among students. Some students explained that they did not seem to find any problem or issue they wanted to find answers on in the works presented by others or by themselves. Perkins and Tishman (2006) have seen this same difficulty and explain it in multiple ways. One is that students may not take the learning process seriously. Another explanation is that students may learn well enough in one context but are not able to transfer their knowledge to new contexts. By convincing them to try different questions or keep on asking more questions during a conversation the students found topics or parts of images that they could talk about. Though I understand my students when they say they cannot find a problem or topic to ask questions about but I am also convinced that exactly that is one of the issues that creates the lack of a critical attitude among students. The idea that they do not need to question what they see and what they create.

5.5 Conclusion
What is the role of the educator when working on the development of a critical attitude among students?

The role of the teacher is definitely changing when you want to use MSD inside the classroom. The idea of the teacher as all-knowing and pure lecturing is not sufficient anymore. The speed with which technology develops and the way students work with them makes this idea hardly possible. As teacher you need to take a position of openness for students to come up with their ideas and expertise. Use their knowledge for designing lessons. As Heijnen (2015) mentions it is important that ideas, knowledge, and skills pupils bring to the class are incorporated into the lessons.

During the lessons it is important not to fall back to only creating 'beautiful' images but students and teachers need to keep asking questions. The thinking routines contain a lot of questions. It is up to the teacher to decide

whether he thinks he could use the routines the way they are or that it is better to create a new routine for better implementation within a specific group. Working with conversations as 'new' routine is just one way. When using this it is good to take time. Do not be afraid that the conversations will touch upon many subjects and issues, as long as questions are being asked. During these conversations it is up to us as teachers to stimulate, provoke and to manage the students in their talks and discussions. This will also mean that we as teachers need to enhance a critical attitude and get to know the dispositions. Asking questions that will lead to more questions that eventually can lead to knowledge. As mentioned before asking good questions involves good listening skills. Tishman and Perkins (2001) stated this with their three-point way to recognise dispositions. This can be difficult and it is definitely something different within educational systems where the main focus is on the end product. Within lower vocational education this might seem to be difficult, but this thesis shows the first steps within this process. This process will take time and time is a difficult aspect in education. Therefore it is important that this way of working is enhanced by more colleagues and through more year levels of schools.

CONCLUSION

6. Conclusion

The following is in response to the questions I posed and answered during this thesis and comes as a combination of my educational project and my theoretical findings. This means that practice and theory led to the answers on the sub-questions that inform the answer on the main research question:

'How can educators use visual media created through (social) applications & smart devices by students, for the development of a critical attitude, in art class?'

Using applications and devices in art class comes with advantages and disadvantages, but as with a lot of things in life it is good to find a balance in this. Students learn from each other and what is out there. They have a certain kind of expertise; one that educators should not deny but embrace. Students shared this expertise during their conversations but even more so during the assignments. This is very natural to them because this happens all the time online at their social media accounts.
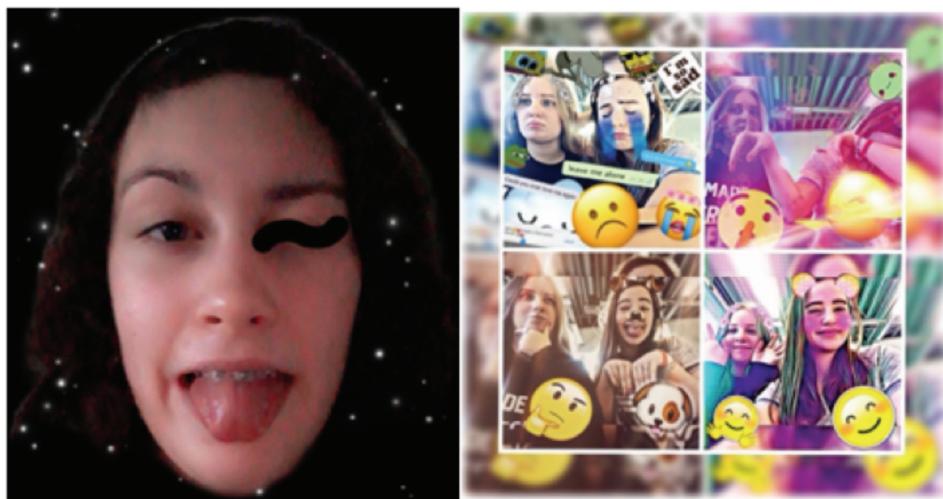
Works of students for lesson 4 - Emoticons

Before starting with using students' visuals it is necessary to define what a critical attitude is. This can be slightly different depending on the level of the students. For my second year vocational students a critical attitude means asking questions and not taking everything for granted.

This definition is quite broad and so it is good to specify it. By using thinking dispositions, as proposed by the Artful Thinking program, this definition is specified. They create not only the option to work on the development of such an attitude but it also gives you the opportunity to analyse this development. Though there are much more dispositions to be found, these were specificily designed for reviewing and working with art. They also connected routines to these dispositions. One can use these routines within art class but as this research shows one can also create their own routine. This can be done with the specific group of students in mind. Using the original routines as guideline for your own routine and specified by the needs of a certain class or group can make implemantion even easier.

This implemantion needs to be done within lessons. For the educational project the design principles of AAE were used. These principles enhance a way of working wich connects the world, art and the lives of students. As this research is all about the visuals of students it connects really well. The principles let you search for connections of these visuals with artists and their works as well as with contemporary society. The newly created routine was all about conversations. Within these conversations the topics that the design principles of AAE bring along were discussed. This shows that AAE and working with thinking routines can be combined. Of course the AAE principles were of importance within the design of the project but at the same time I found it necassery to see what students wanted to work with from their visuals. With just a few conversations it became clear which elements they found interesting to work with.

These elements of contemporary visuals are perfect for smaller assignments. Working with these elements and the visuals that students create through their devices provides the opportunity to work differently. It is faster and it makes it easier to re-do parts of the work. The options and openness of these devices help to start conversations. The options and the risks are having a prominent role within contemporary digital art and are therefore perfect to discuss with students. These conversations will take some time. This is where the real difference takes place. Creating visuals will take less time than asking questions about these same visuals. The combination of creating and asking questions makes students aware of what they are doing. When deeper questions are asked they really get to challenge what they see. This is where they start to work on a critical attitude.

Though the assignments can be short, which is perfect when working with secondary vocational students, the development of a critical attitude takes time. The use of thinking dispositions and routines is definitely helpful to get insights but takes time to develop. Routines mean a regular course of procedure.

The educational project used conversations as a 'new' routine. Students made clear that they liked this way of exploring and reviewing works instead of writing or plenary class discussions. The smaller groups made provided an opportunity for everybody to get involved. The conversations and the different questions need a proper intro-

duction when working with this for the first time. It is necessary to explain to students that deeper questioning is needed to enable them to unlock any answers to their deeper questions of the work.

By doing so, teachers can tell their students to search for specific questions though this is not exactly what AAE enhances. With specific questioning it is easier to control students working on a specific disposition. As with everything while working with MSD this needs to be in balance with enough room for the intrinsic motivations of students to find their own questions and issues within the works. The thinking dispositions and routines were used for working on a critical attitude during the educational project in art class, but this attitude should be present throughout all school subjects and not only through the theme of MSD.

It is good to keep in mind that thinking dispositions do have a lot of overlap. This makes defining and analysing difficult. Of course, all of them help students and teachers to get insights in their thinking, but they make it hard to define with which of the dispositions students are working. With this research there was an opportunity of transcribing the conversations after recording them. This made it easier to see connections and to define the questions and answers students were working with. Still it remains difficult and in everyday practice this seems hardly possible to achieve.

As teachers we can learn from asking questions as well. When in conversation with students we can ask them what they created, what we see and most of all how they created it. We can learn from them so that we can keep on altering our lessons on the basis of students' contemporary culture. This keeps our subjects up to date and makes our students even more prepared for the dynamic future. It keeps us alert and look with a critical view as well as it will help us to teach art with and through modern tools. Whether we like it or not, these devices are here to stay. They are part of our lives and it would be a big mistake to neglect them in our education.

BIBLIOGRAPHY

7. Bibliography

Buckingham, D. (ed.) (2003) *Media Education: Literacy, Learning and Contemporary Culture*. p. 219.
Cambridge: Polity Press.

Buckingham, D. (2007). *Beyond Technology*. Children's learning in the age of digital culture.
Cambridge: Polity Press.

Burn, A. (2009). *Making New Media: Creative Productions and Digital Literacies*.
New York, Peter Lang Publishing Inc.

Duncum, P. (2002). *Clarifying Visual Culture Art Education. Art Education*, p.6-11

Ennis, R. H. (1986). *A Taxonomy of Critical Thinking Dispositions and Abilities*.
Teaching Thinking Skills: Theory and Practice. p.9-26. New York: W. H. Freeman.

Fisser, P., Thijs, A. & van der Hoeven, M. (2014). *21e Eeuwse Vaardigheden in het Curriculum van het Funderend Onderwijs*. Enschede: Nationaal Expertisecentrum Leerplanontwikkeling.

Freedman, K. (1997). *Critiquing the Media: Art Knowledge inside and outside of School.* Art Education, vol. 50, No.4. p.46-51.

Freedman, K. (1997). *Visual Art/Virtual Art: Teaching Technology for Meaning*. Art Education, Vol. 50, No.4. Literacy, Media, and Meaning. p.6-12.

Freedman, K. (2003). *The Importance of Student Artistic Production to Teaching Visual Culture*. Art Education, Vol. 56, No.2, Why Not Visual Culture? p.38-43.

Freedman, K. (2006). *Adolescents, Identity and Visual Community*. Visual Arts Research, Vol. 32, No2. p.26-27

Freedman, K. & Stuhr, P. (2004). *Curriulum Change for the 21st Century: Visual Culture in Art Education*.
Handbook of Research and Policy in Art Education. p.815-828. Reston: NAEA.

Freedman, K. & Wood, P. (1999) *Reconsidering Critical Response: Students Judgments of Purpose, Interpretation and Relationships in Visual Culture*. Studies in Art Education, Vol. 40, No.2 1999. p.128-142.

Gardner, H, and others. (2006). *Artful Thinking, Stronger thinking and learning through the power of art*. Final Report. Cambridge, Harvard Graduate School of Education.

Gardner, H., Davis, K. (2013). *The App Generation*: How today's youth navigate identity, intimacy, and imagination in a digital world. London, Yale University Press.

GFK. *Onderzoek naar Smartphone Gebruik in de Klas*. Gepubliceerd op 05.10.2016 www.gfk.com (accesed 04-06-2018).

Goldsmith, K. (2016). *Wasting Time on the Internet*. New York, HarperCollins Publishers.

Groenendijk, T., Hoekstra, M. & Klatser, R. (2013). *Altermoderne Kunsteducatie: Theorie en Praktijk*.
Amsterdam: HKA.

Gude, O. (2007). *Principles of Possibility: Considerations for a 21st-Century Art & Culture Curriculum*.
Art Education, p.6-17

Haanstra, F. (2001). *De Hollandse Schoolkunst*. Mogelijkheden en beperkingen van authentieke kunsteducatie.
Utrecht: Cultuurnetwerk Nederland.

Haanstra F. (2011). *Authentieke Kunsteducatie: Een Stand van Zaken*. Cultuur + Educatie, 11, p.8-31.

Heijnen, E. (ed.) (2009). *Media-educatie als verrijking van beeldend onderwijs. Media+Kunst+Educatie: internationale ontwikkelingen in media- en kunsteducatie*. Utrecht: Cultuurnetwerk Nederland.

Heijnen, E. (2015). *Remixing the Art Curriculum*. How contemporary Visual Practices Inspire Authentic Art Education. (Doctoral Dissertation) Radboud Universiteit Nijmegen.

Hidi, S. & Renninger, K. A. (2006). *The Four-Phase Model of Interest Development*. Educational Pshychologist, 41, p. 111-127.

Knochel, A. (2013). *Assembling Visuality: Social Media, Everyday Imaging, and Critical Thinking in Digital Visual Culture*. Visual Arts Research, Vol. 39, No.2. p.13-27.

Landwehr, D., Nill, K., Tanner, E., Banteli, F., Bodmer, M., Rösch, E. and Röll, F. (2016). *Digital Kids*. Basel, Swiss:

Cristoph Merian Verlag.

Marinelli, D (2013). *Catching Up to Kids: How Technology is Remaking Arts Education*. [Accessed 18-11-16].

Available from: https://www.youtube.com/watch?v=XGS91E0AGWc

Mo-Da (Museum of Digital Art): https://mo-da.nl/schools (accesed 04-06-2018).

Pettman, D. (2016). *Infinite Distraction*. Cambridge, Polity Press.

Perkins, D. N. & Tishman, S. (2001). *Dispositional Aspects of Intelligence*. Intelligence and Personality: Bridging the Gap in Theory and Measurement. p, 233-257. Maweh: Erlbaum.

PO-Raad – *new privacy law* https://www.poraad.nl/themas/ict-in-het-onderwijs/privacy (accesed 04-06-2018).

Project Zero Harvard www.pzharvard.edu (accesed 04-06-2018).

Roelofs, E.C. & Houtveen, A.A.M. (1999). *Didactiek van authentiek leren in de Basisvorming*. Stand van zaken bij docenten Nederlands en wiskunde. Pedagogische Studiën, 76(4), p.237-257.

Ryle, G. (1949) *The Concept of Mind,* Londen: Hutchinson.

Serres, M. (ed.) (2014). *De wereld onder de duim*. Amsterdam: Uitgeverij Boom.

SLO: 21st Century Skills: http://curriculumvandetoekomst.slo.nl/21e-eeuwse-vaardigheden (accessed 04-06-2018).

Steunpunt Onderwijs https://www.steunpuntonderwijsenjongeren.nl (accesed 04-06-2018).

Tavin, K. (2001). *Teaching in and through visual culture*. Journal of Multicultural and Cross-Cultural Research in Art Education. 18. 37-40.

Tishman, S. & Palmer, P. (2006). *Artful Thinking: Final Report*.

Van Baardewijk, J., Verbrugge, A. (ed.) (2017). *Onderwijs in tijden van digitalisering*. Wie weet hier de weg.

Amsterdam: Uitgeverij Boom.

Van der Wateren, D. (2016). *Verwondering: Leren Creatief en Kritisch Denken door Vragen te Stellen*. Meppel: Ten Brink Uitgevers.

Wendt, B. (2014). *The Allure of the Selfie*. Instagram and the New Self-Portrait. Amsteram: Institute of Network Cultures.

Woodfield, K. (ed.) (2014) *Social Media in Social Research: Blogs on Blurring the Boundaries.* National Centre for Social Research/Sage
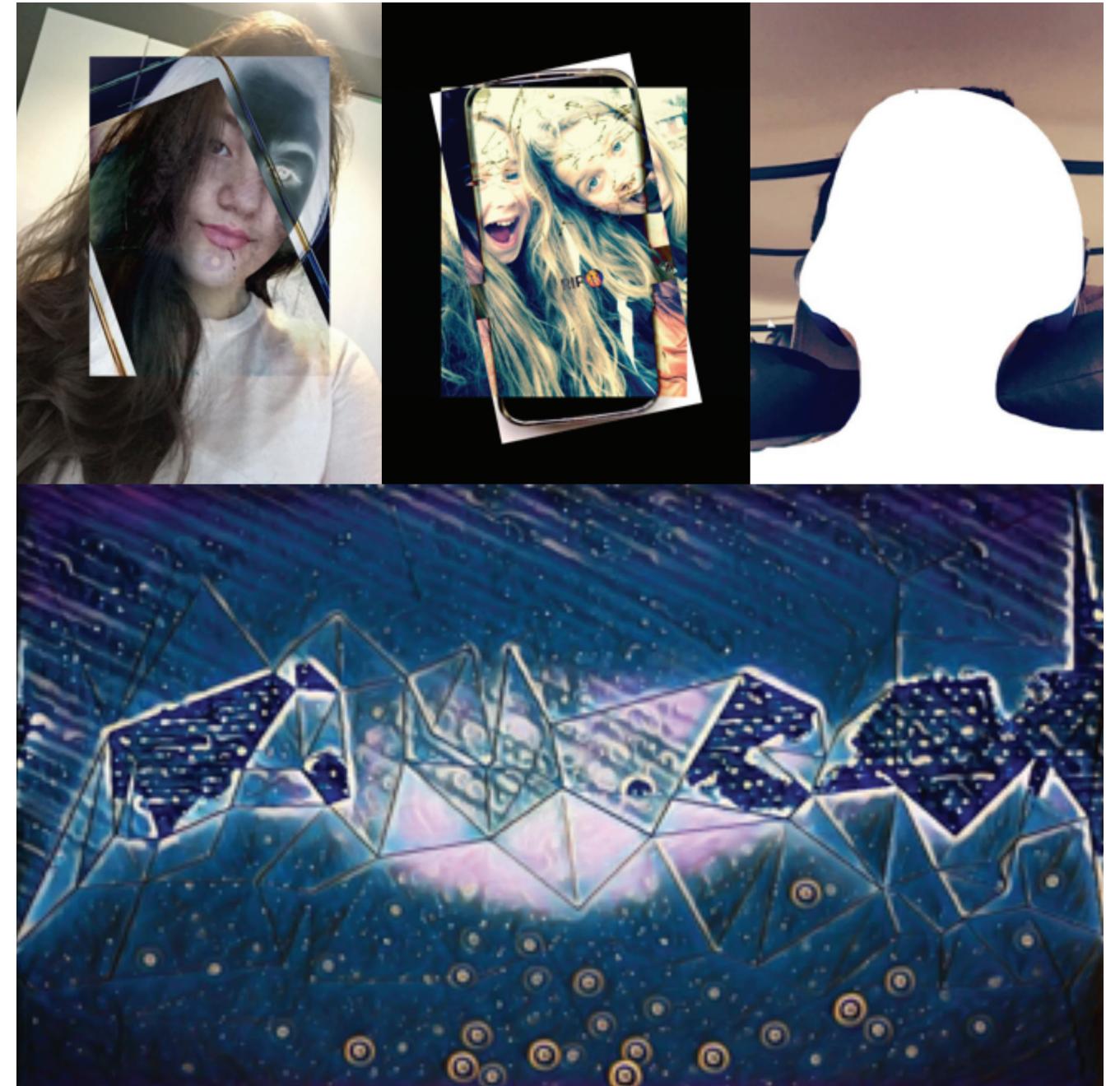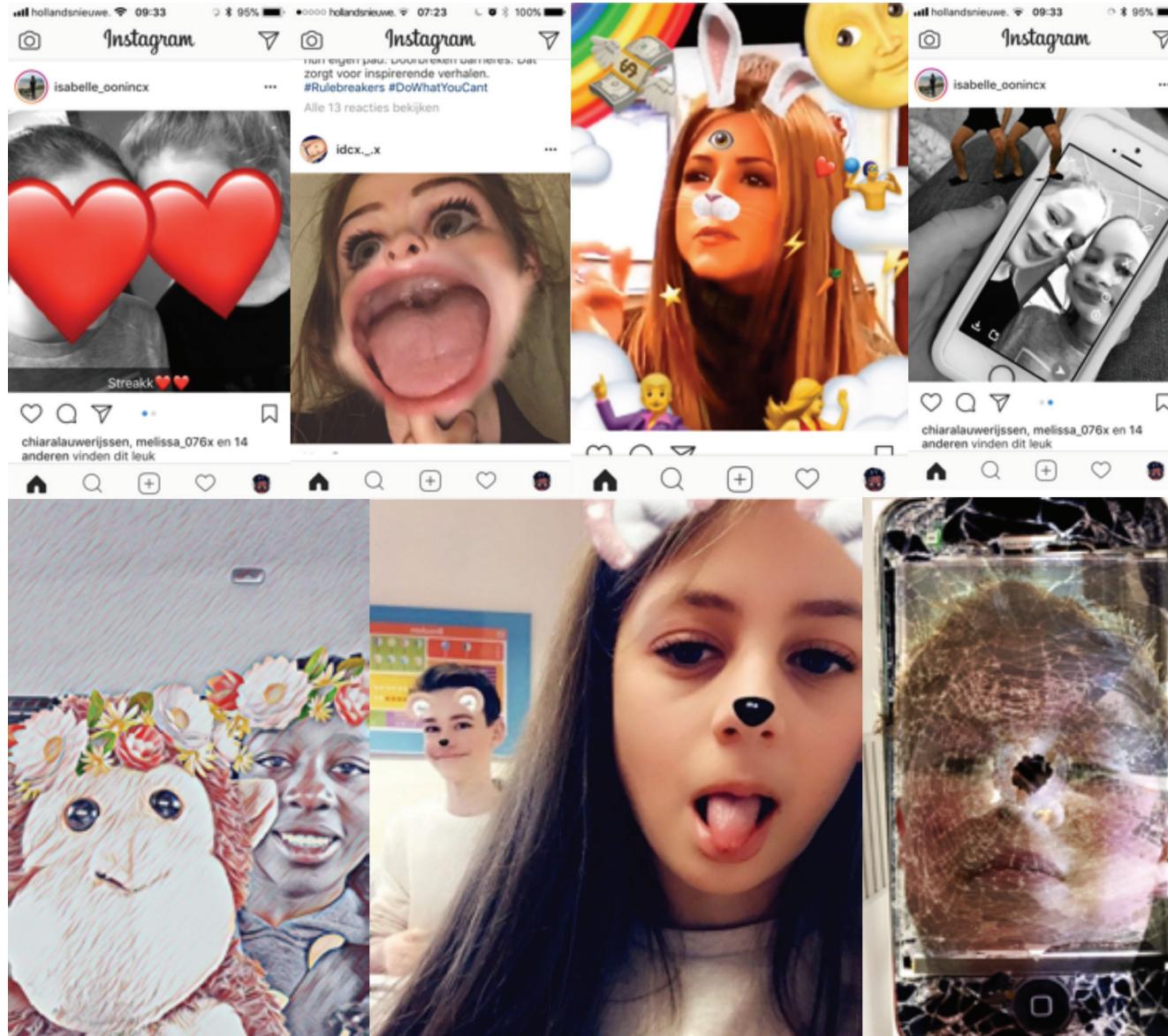
Creative (social) apps:
- Instagram
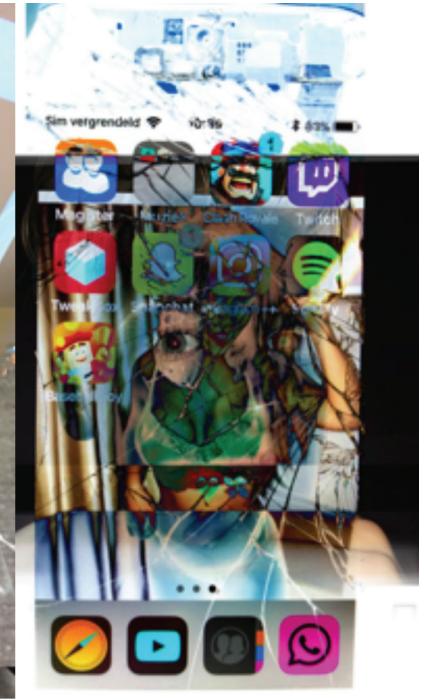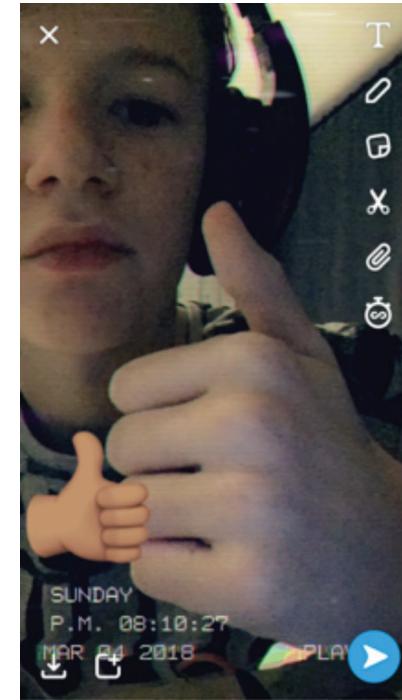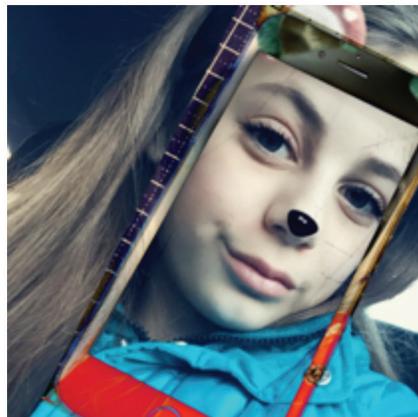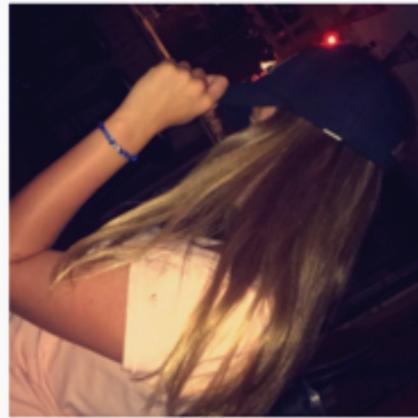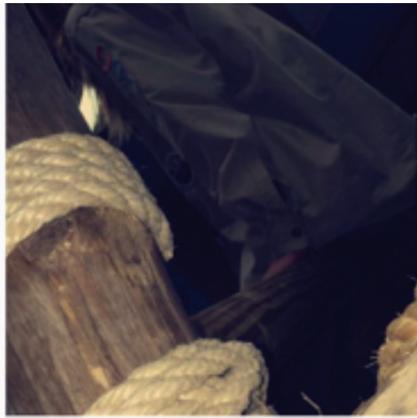- Facebook
- Picsart
- Snapchat
- Snapseed

VISUALS

8. Visuals

A small number of visuals created by students.

APPENDIX

9. Appendix

9.1 Lesson 1 – How to create a photograph – artist: any photographer or filmmaker.

Normally our students gt lesson in photography in year three within the curriculum of CKV. As we are working with visuals within this educational project it seems to me rather important to talk about the visual aspects like composition, light etc. of photography and how they can play with it. Normally such an assignment will result in a collection of photos. Most of today's cameras on mobile smart devices have the options to focus more on these aspects.

Note from my small group of students: 'This seems a good idea. We will actually learn the basics. These basics could help us make better photographs within just small steps and changes in our routines'.

Amenities:

- beamer to show the presentation of the basics.
- Ipads & Smartphones (students own).
- Apps (student's choice) examples could be shown by the use their photo app on every device.
- Images (student's choice).

What will I do?

This is a lesson I've done some times before, so I know what normally happens. I start of by giving this presentation on the basics of photography whereby I use images of contemporary photographers. After this presentation, I will be there to guide the students through some little exercises with which they get to work on these basics.

What will they do?

The first part of this lesson they will get the introduction to the basics of photography and these basics will be used in the second part of this lesson. They get to work on a few short exercises where they will use these basics to good use.

With what purpose and how to control?

With this assignment, my students will get to understand the basics of photography. I think this will always be a good lesson to teach and especially now when I want to work with them on images they create with their cameras on their devices. With these simple basics they will gain confidence with the image making through their tablets and I can see how they work.

9.2 Lesson 2 – Collection/Connection – artist: Belinda Bloom, Sam Oster, others.

Pupils are obligated to be part of a group of four. This group will send each other images. Every person sends one specific image for every other person in the group. This means that everybody receives three pictures. They will have to react on this image by sending an image back to the person they got it from. The picture they send back to the other person should be connected to the other image they had received. This could be by color, shape etc. but also by what is shown.

This will eventually lead to a collection of images that will show that and how we connect and communicate with each other through images.

Amenities:

- beamer to show examples of photographic collections.
- Ipads & Smartphones (students own).
- Apps (student's choice) examples could be shown by the use of Instagram or their photo app on every device.
- Images (student's choice).

What will I do?

With this lesson, I am mend to be more of guidance then actually the teacher. I have to guide the groups of students with the collections they are making. I will show them what collections can be and I will explain a little about how they can make them but it is their choice in the end. It will be up to me to decide how many times they will keep sending these images around to expand the collections.

What will they do?

They will get to work a lot of the time. Making pictures for their collections but also talking and discussing the images they made.

With what purpose and how to control?

With this assignment, my students will get to understand what a collection is or can be and that they are making collections on their phones and tablets. By working in groups, they get to work with other images then they normally would do and they get to react on what others have made. They also get to discuss and maybe have to explain what they did. The difficult part is how I will record the conversations about the outcomes because I can't be working with every group at the same time.
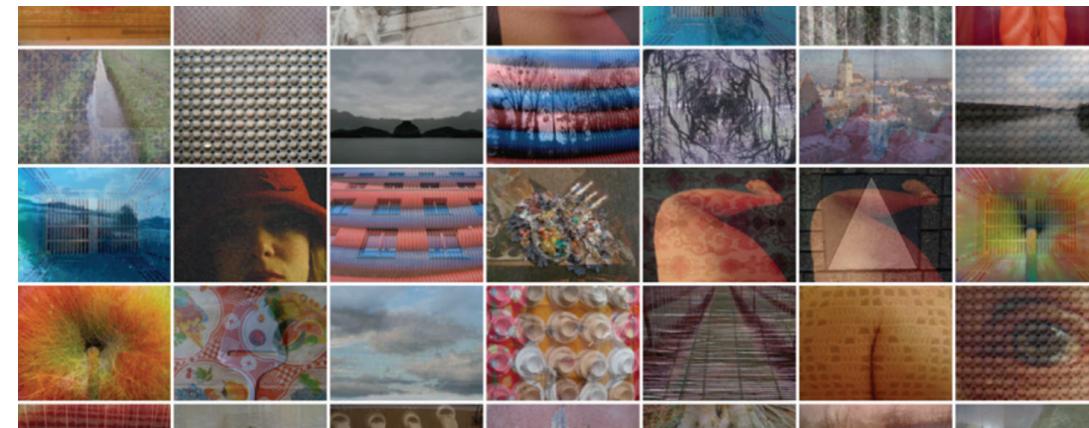
9.3 Lesson 3 – Filter – artist: Sophia Al Maria, Stephanie Jung, others.

The devices and apps my students are working with seem to attain a great number of filters. With these filters students want to create a pretty or beautiful picture. But what if we add more than one filter?

This is a practical activity aimed at creating a personal filter. Within this exercise my students will get to search on how far they can go with applying multiple filters on their self-created visuals. During the placing of the filters my students need to keep track on what happens with the image and how many filters they apply. Conversations will arise about how far they will go with making these abstract or obscure versions of their images. Let's see if we can provoke them to go a bit further with these filters then they would normally do.

Amenities:

- beamer to show images with filters.
- Ipads & Smartphones (students own).
- Apps (student's choice) examples could be shown by the use of Instagram & Snapchat.
- Images (student's choice).

What will I do?

First of all, I will ask some students before class if they will share some pictures they made with filters placed over the image. I will show these pictures as fuel for the conversation I want to have with the classroom about filters. I will close this conversation with artworks that use these filters to somehow blur or distort the original picture instead of making it nicer and explain why they would do that. After this I will explain how the assignment is supposed to go but I will also explain that they will have control over the outcomes and how far they will take it.

What will they do?

Most of the time we will use images of themselves or artist to talk about the use of filters and what happens to images if we use them in a certain kind of way. When they start using the filters themselves they will have to keep track of what happens and they will have to document this written and by images. They will get a set of images that will follow up to each other.

With what purpose and how to control?

The purpose of this lesson will be to discuss the use of filters in our everyday photography. By laying more than one filter on one picture something new will arise and with this we can keep the conversation going. By discussing their works with all of them or in small groups the students can add commentary of others to their step by step explanation of what happens with the picture. There will be a kind of logbook of images and written commentary by every image. The difficult part is whether my students will be able to do this exercise on their own and with that I mean if they are able to get to a more abstract version of the original image. Something says me that they will just add two or three filters and that's it. So I got some motivating to within this assignment.

Overlay multiple photos from slightly different angles, like these experimental photographs by Stephanie Jung:

Take unfocused shots and create semi-abstract photographs, like those by Bill Armstrong:

9.4 Lesson 4 – Emoticons/Text/Time – artist: Nastya Ptichek.

This is an exercise whereby the students will get to research the power of the emoticon and text within visuals but also to question the use of them in contemporary visuals. As part of this lesson I would like my students to picture themselves as emoticons by using the facial expressions as seen in many of their visuals and messages they send out each day. What does an emoticon tell us and why and when do they work?

After that I would love to have them work in pairs. These pairs will send each other images that the other one will add text or emoticons to.

This will eventually lead to another set of images and next to this set they will write a reflection on the other persons work. They will get to answer questions like: How did the addition of the text or emoticon influence your original image or idea? Do you think your class mate made the right decisions? Does the addition of the photo make it better or worse?

Note from my small group of students: 'FUN! Working with emoticons seems fun. It's something we use almost every day and with this assignment we can learn more about them and use them even within art class'.

Amenities:

- Beamer and presentation about the emoticon.
- Ipads & Smartphones (students own).
- Apps (student's choice) examples could be shown by the use of Instagram & Snapchat.
- Images (student's choice)

What will I do?

I will introduce my students to the theme of emoticons. I will lead the conversation or discussion among my students and myself during the presentation.

Second, I will guide them while they are making pictures of the emotions from the emoticon they choose. I will gather them and make a collage of all of them to be shown the next lesson and do a little conversation about the outcomes.

Third, I will explain them the idea of working in pairs on the last assignment of this lesson and I will show them

some of the works (as seen below). After that I will be there for guidance along the lesson.

What will they do?

The first part they will listen to the introduction and hopefully they start to enter the conversation about these emoticons.

Second, they will get the chance to make photographs with their Ipads or smartphones that will look like the emotions of emoticons. These photographs will be discussed the next lesson.

Third, they get the instructions for the final assignment of this lesson and they get to choose their partner and get to work. They need to write a short paragraph within which they will be asked to answer some questions about the choices made by the other and how it influenced the images.

With what purpose and how to control?

The purposes of this lesson are to share knowledge and background about emoticons and to look to the way we use them these days. I hope to start a discussion about what these emoticons can do to our images. By working in pairs and reflecting on each other's work they get to work on critical reviewing and discussing. By the written reflections I document their view on the works and it is perfect in combination with their visual works. Some of these works will be discussed during the next moment we are together.

9.5 Lesson 5 – Selfie – artist: Roberto Voorbij, Merve Ozaslan, Monique Cornelisse, Petra Brnadic, Rene Magritte, others.

The theme selfie is really huge and my students are using this type of photography a lot through their online channels. It is necessary to take just a small part of the selfie to work on. I would like to see if I can provoke them to think differently on the selfie. Within this lesson I like to take my students through the history of the selfie in art. Eventually I would like them to make a selfie whereby the picture won't show them but represents them or something of them. This means that they will make images where they will cut themselves out of the background and add other visuals in the blank space.

Note from my small group of students: 'The best idea for a lesson. It seems fun to work with different kind of images which we can mix in a way that the front and background are of importance. The end results are important and visible which makes this assignment much easier to understand'.

Amenities:

- Beamer and presentation about the selfie in art.
- Ipads (students own).
- Apps (student's choice) but I will give them examples with the PicsArt app.
- Images (student's choice).

What will I do?

I will introduce my students to the theme of the selfie in art. Show them different works in art history that ultimately will lead to images as the ones below. These will be used as references for the possible works of my students. I will lead the conversation or discussion among my students and myself during the presentation. I will help one of my students who is skillful enough with this app to show the rest of the class how they can use the app with just some basics.

I will guide the class during the practical part of my lesson.

What will they do?

The first part they will listen and try to keep in mind which works they like and why so that they can refer to that when they can work on their own.

Second, they will get the chance to make suggestions when one of my students is showing them the basics of the app.

Third, they get to work on their own work and they need to write a short paragraph on why they did choose the specific images to combine in their work.

With what purpose and how to control?

The purposes of this lesson are to share knowledge about the selfie in art history and to get my students to think on the shape of their own selfies. To talk about what they normally do with the making of a selfie. To work on new forms of a selfie with which they can represent themselves or something.

By talking with them through discussions about what is made in the art world and what they make themselves I hope to trigger their consciousness about what they see and do. With the image, they create and the written paragraph they can show how they think they can make a different selfie. These images will also show me how far some of them dare to go with the use of different images and why.

In the meantime, they get to know and get the chance to work with the skills that are necessary for working with this or other apps.

9.6 Lesson 6 – Mixing.

Depending on time and options I will work with my students on a final set of images. These images will all be new images. They can combine ideas from the previous themes we've worked on or they will find their own new theme as long as they use a critical mindset on the chosen theme. They can choose to literally mix different options of apps within their images. With this last exercise, they show that they can make well considered decisions on their own in their image creating. This will also be complemented with an explanation on the why and how of their work. I have the intension to show these works on and offline in school and through our school's digital channels.

Note from my small group of students: 'This is also a nice lesson idea because we get to work with material and themes of our own choosing. It will be a good way to see if we understand what and still know what we did in all the lessons before all of these'.

Amenities:

- Beamer to show the results and to show examples of the other lessons as a start.
- Ipads or smartphones (students own).
- Apps (student's choice) but I want to know which they are planning to use.
- Images (student's choice).

What will I do?

I will shortly tell them what this last and final assignment will be like. I will guide them through what we did in all the lessons before. I will also explain them that they need to work on a visual that somehow criticizes or question the theme they choose to work with. The rest of the assignment I will need to be there for guidance. At the end, I will have to make sure to gather all the works. Together with a few students I intend to exhibit the works in school and online.

What will they do?

They get the chance to look at what they've done in all the lessons so far and then see what they want to make with this last assignment. They will get to work on this for as long as I think most of them need the time (this is something I can decide on the spot). Again, they get to give feedback on their choices. This could be written or be a kind of presentation. A few of my students will then be asked to help to arrange this exhibition or place to

hang our works as well to work on a proper digital version of the exhibition.

With what purpose and how to control?

With this lesson, my students get to choose their own end assignment. The only thing I ask them to do is to give a critical look or to question the theme they choose to work with. They also get to explain again what and why they did it. I favor the idea of a presentation kind of explanation because they didn't have this in the lessons before and so they learn how to express their ideas by speaking instead of writing.

There is one thing that can become problematic. The idea that they get to choose their own apps to work with can become a problem. What if they all choose a different kind of app? Will, I be able to manage this or will they find the ways themselves?

The exhibition will be a nice ending of the lessons cycles and the final result will hopefully show their growth within the overall theme.

9.7 Survey about MSD use among my students

Denk je dat je creatief bent? Ja of Nee

Kruis aan welke van de volgende apps je gebruikt:
- Snapchat
- Instagram
- Facebook
- Whatsapp
- Youtube
- LinkedIn
- Twitter
- Geen!

Welke apps gebruik je om foto's of filmpjes te bewerken (kan een andere zijn dan die van de vorige vraag maar deze dan wel even vermelden)?

Gebruik je ook wel eens meerdere apps om een foto of filmpje te bewerken?

Gebruik je deze apps ook bij lessen en als dat zo is welke lessen?

Denk je dat deze apps handig zijn bij de creatieve vakken (Beeldende Vorming) en waarom?

Zou ik foto's van jouw Instagram of Snapchat mogen gebruiken voor mijn onderzoek?

Denk jij dat je een origineel kunstwerk zou kunnen maken met behulp van een app? Zou je dit ook uit kunnen leggen hoe je dat zou doen?

9.8 Online interview with MU about the Museum of Digital Art (6-3-2018)

Hoe kunnen we leerlingen bewuster maken en een kritische houding laten aan nemen t.o.v. het gebruik maken van hun mobiele smart apparaten (zoals telefoons & tablets)? Middels mijn onderzoek ben ik opzoek naar een lesmethode of gerelateerde manieren om te werken met beelden die leerlingen zelf maken.

O.a. deze 'kritische houding' halen jullie ook aan in jullie doelen. Vandaar heb ik over jullie gehele project een aantal vragen, die mij wellicht verder kunnen helpen:

Jullie geven zelf aan dat het Mo-Da o.a. bedoeld is om leerlingen kritisch te laten nadenken over de rol van technologie. Kunnen jullie hiervoor een of meerdere voorbeelden noemen hoe jullie dit bereiken met het Mo-Da?

We refereren hierin ook met name aan de technologie binnen de belevingswereld van de leerlingen, zoals de filter bubble op social media. We bespreken of ze zich daarvan bewust zijn, wat hun mening erover is en kijken naar hoe kunstenaars op dit soort fenomenen reageren. Met een bepaalde speculatieve houding reageren kunstenaars vaak anders op dit soort dingen en dat kan inspirerend zijn voor de houding van de leerlingen en misschien zelfs als eye opener dienen.

Welke didactische en pedagogische aspecten waren voor jullie belangrijk gedurende de ontwikkeling van het M0-Da? (Zelf probeer ik zoveel mogelijk de ontwerpprincipes van authentieke kunsteducatie te gebruiken in het ontwikkelen van lessen m.b.t. mijn onderzoek).

Het reflecterend vermogen is erg belangrijk, zowel ten opzichte van de kunstwerken als ten opzichte van zichzelf. Daarnaast is het voor leerlingen erg belangrijk en waardevol om te weten waarom ze iets doen en waarom ze ergens naar kijken.

Zijn er in de collectie ook werken te vinden die met mobiele smart apparaten gemaakt zijn of die daar betrekking op hebben?

Ja er zijn een aantal kunstenaars die werken maken mbv apps op bijvoorbeeld de smartphone. En er zijn uiteraard werken die dieper ingaan op het huidige gebruik van het internet, dat met name plaatsvind op smartphones, dus bijvoorbeeld in apps als Google maps.

In hoeverre is een goede dialoog (verbaal of digitaal?) tussen docent/leerling of leerling/leerling van belang bij het gebruik van het Mo-Da? En waarom?

Heel belangrijk, voor de docent is er uiteraard de rol om betekenis te geven aan het lespakket en de tentoonstelling, waarom kijkt een leerling hiernaar maar ook om de koppeling te maken naar de belevingswereld. Leerlingen onderling communiceren met elkaar over de werken, het bekijken en bespreken van de werken gebeurt als groep.

Hebben jullie de resultaten van de pilot scholen kunnen meten? Zo ja, op welke wijze hebben jullie dit gedaan en wellicht hebben jullie nog tips?

Op dit moment hebben twee pilotscholen Mo-Da afgerond en de derde school gaat er later mee aan de slag. Wij meten dit met name door observatie en evaluatie en hebben regelmatig contact met de docenten. Dat werkt naar onze ervaring beter dan het invullen van formulieren etc. omdat we dan ook kunnen doorvragen.

Verder nog een praktische vraag:

Is het Mo-Da ook geschikt voor tablets? Zodat we niet per se een computer nodig hebben.

Ja in principe wel, het is een tentoonstelling van internet kunst die je opbouwt binnen de school. Het scherm waarop je de werken laat zien is in principe vrij. Wel is het zo dat een groter scherm zich beter leent voor het bekijken van de werken in een groep. De catalogus met daarin meer info over elk werk en elke kunstenaar, is ook gemakkelijk te openen op een telefoon of tablet.

9.9 Conversations with & among students

For analyzing the conversations, I use the thinking dispositions and so I gave every disposition a color.

1. questioning & investigating
2. observing & describing
3. reasoning
4. exploring viewpoints
5. comparing & connecting
6. finding complexity

Conversation after lesson 4 emoticon/text/time:

1e schilderij.

Lucas: Ik ben begonnen te kijken naar welke emotie het beste bij de kunstwerken paste en daarna gezocht naar de juiste emoticon.

Geert: Ik ben vooral gaan kijken naar of het passend was met de achtergrond. Flatgebouwen associeer ik eerder met geld en bedrijven dus vandaar de geld emoticon.

Geert: Ik had zelf graag een andere emoticon gezien die ook meer aansluit bij het thema van de kunstwerken. Iets duisterder enz.

Job: Ik wilde graag wat meer kleur toevoegen aan het donkere kunstwerk en stiekem leken de bloemen toch ook wel op een grafboeket.

Lucas: Die toevoeging vind ik dan wel weer heel erg leuk omdat er gezocht is naar de juiste plek op het kunstwerk en de grote is heel gemakkelijk aangepast aan het werk. Dit levert een beter beeld op.

Geert: Het maak het werk zeker wat vrolijker.

Job: Het trekt wel gelijk de aandacht door de kleur.

Groep: We hebben bij beide kunstwerken totaal geen rekening gehouden met elkaar. We hebben echt gewoon ons eigen emoticon toegevoegd zonder rekening te houden met wat de anderen al hadden toegevoegd.

2e schilderij

Job: Ik heb de bleoemen ook hier toegevoegd.

Geert: Ik heb hier het aapje toegevoegd.

Lucas: Ik vind dat de toevoeging van de bloemetjes beter is dan die van het aapje. Het is ook beter te volgen waarom ze de bloemetjes gekozen heeft vanwege de kleuren die overeenstemmen met het schilderij. Het aapje is wel grappig maar past verder niet bij het kunstwerk. Wat wel weer goed is gedaan is de verwerking van het aapje in het werk.

Job: Ik heb de bloemen toegevoegd niet alleen vanwege de kleur maar ook vanwege de bloem die al in het werk verwerkt zat.

Geert: Ik wilde bewust wat anders doen dan verwacht want het werk was al zo opvallend.

Conversation after lesson 3 Filter:

Kun je in het programma ook het contrast hoger zetten?
Ja dat kan en dat is helemaal niet zo moeilijk.
W: Ja het komt ook door de foto zelf. Deze is veel feller en kleurrijker.
D: ik heb hem bijgesneden.
M: stel we doen dit met heel de klas?
R: dan moeten ze de app beter leren kennen.
M: Filtertje?
D: Nee ik maak hem doorzichtiger.
M: Je gaat al nadenken over wat je ziet. Ik snap je keuze voor je foto.
M: stel we doen dit met de klas. Willen jullie de uitleg doen. Stap voor stap?
D en R: Ja dat willen we doen. We kunnen ook een andere foto pakken als het nodig is.
M: we kunnen hem real time voor doen.
D en R: ja vinden we leuk.
M: Nu heb je hem zo bijgesneden dat je de details niet meer ziet.
R: het zijn de details
D: heb je facebook?
R: is veel fijner want dan kunnen we alles via messenger sturen.
D: als we op onze Ipad werken is dat makkelijker dan dat we alles moeten kopiëren of sturen via de mail. Whatsapp enz. gebruiken we niet op onze iPad.
W en R: We gebruiken eigenlijk alleen messenger en geen facebook.
M: de opdracht na de emoticons. Hebben meerdere groepen ingeleverd. Het is grappig om te zien dat jullie allemaal verschillende apps gebruiken om het te maken.
D: Wij gebruiken altijd picsart omdat het veel opties heeft.
M: sommige doen het met Word
D: ik zou sowieso allemaal met dezelfde app gaan werken
R: Snapseed is ook heel erg goed.
M: van tevoren weten is beter
D: je had ook niet verteld dat het niet in Word mocht.
R: Je kunt er een hoop van leren.
M: vertel?
R: we leren over hoe en wat we communiceren. Welke apps we gebruiken en wat we er mee kunnen.
M: jullie kunnen prima uitleg geven over jullie proces. En daarmee werk je aan een kritische houding. Wat heb je nu eigenlijk gemaakt?

D: een foto van een hond.

M: Je hebt een filter gebruikt van een hondenpak maar zou jij je als hond verkleden in het echte leven?

D: wellicht alleen voor carnaval. Dus nee niet in het echte leven.

M: Jullie gaven de vorige keer al aan dat jullie niet naar iedereen zomaar iets versturen.

R: Je kunt er zoveel mee doen. Ook in negatieve zin dus nee we sturen niet zomaar iets door.

D: weet je wat het wel is met Picsart. Je kent de app eigenlijk nog maar voor de helft.
Wil je meer kunnen uitvoeren dan moet je betalen om de app volledig of stukken te ontgrendelen.
Je kunt lettertypes, stickers, achtergronden enz. zelf ontgrendelen.
Je kunt dus ook afbeeldingen van anderen gebruiken. Omdat Picsart zelf een database aanlegt met af
beeldingen die mensen importeren.

M: In hoeverre vind jij het werk wat je maakt of de werkzaamheden die je doet met deze app creatief?

D: ik vind wel dat het best creatief is. Het maken van nieuwe afbeeldingen of het aanpassen is voor mij al
creatief. Ik gebruik filters, snij afbeeldingen bij en voeg nieuwe onderdelen toe!

M: Om nu kritisch te worden. Damiano waarom heb je nu voor dit lettertype gekozen?

D: ik vond het er goed bij passen omdat het een dun lettertype is. Neemt niet te veel ruimte in beslag.

M: Moet dat spotify logootje er per se op?

D: Nee hoeft niet maar dan weet je wel gelijk wat je aanklikt.

M: Maar besef je wel wat je daarmee gelijk communiceert?

D: Ja, het is bedoeld voor een spotify playlist en daarom het logo. Dan verwijst het gelijk ook naar Spotify waar
je het op kunt vinden.

M: Waarom dan de tekst?

D: omdat de afspeellijst zo heet en duidelijk de boodschap verteld van de lijst.

M: Waarom het cirkeltje? Is het irritant?

D: Nee ik snap het wel. Maar dit is gewoon praktisch want het paste niet in een vierkant.
Maar ik zal het je laten zien!!!!

M: Het is dus een filter. Maar hier leg je jezelf een grens op. Want hij is alleen beschikbaar als rondje.

D: Met de ronding was ik wel blij want vierkant was sowieso niet mijn bedoeling.

M: Ik vind het wel mooi dat je jezelf nu zit te verdedigen.

D: Ja, maar dat doe ik nu automatisch.

R: Waarom die playknop?

D: omdat het over muziek gaat.

M: heel erg goed dat jullie nu zelf vragen gaan stellen! Zo zou het eigenlijk zo met elke afbeelding die jullie zien
van elkaar moeten gaan. Ook als je zelf beelden maakt!

D: Dat heb ik dus ook gedaan tijdens het maken en dat blijkt nu ook wel want ik beantwoord jullie vragen
gewoon vrij gemakkelijk.

M: Als we zoiets nog eens zouden doen. Het praten over jullie werk.

R: Dat is juist heel erg leuk.

M: natuurlijk, maar je hoeft je zelf niet te gaan zitten verdedigen. De redenen voor je werk moet je niet terplekke
gaan bedenken maar probeer gewoon te vertellen hoe je de keuzes hebt gemaakt.

M: Wanneer is een afbeelding af? (opdracht van de filters)

W: Ik kijk eerst of een filter past bij de afbeelding. Dan plaats ik hem.
Ik stop pas als er te veel filters over komen.

M: wat is te veel?

W: als je de originele afbeelding niet meer kan zien zou ik stoppen.

M: Stel dat je nu zelf een filter kunt maken door er meerdere over elkaar heen te leggen zou je dat dan vaker
gaan doen en hoever zou je dat doortrekken?

W: dan zou ik juist graag willen dat je de originele foto helemaal niet meer ziet.

M: In hoeverre heeft elke filter invloed gehad op je werk? Je kunt mooi zien wat je gedaan hebt maar heeft het
elke keer invloed gehad op de volgende stap?

R: nee ik heb mijn best gedaan om erover te denken welke kant ik het op wilde laten gaan. De laatste foto's zie
je haast geen verschil meer en dat geeft eigenlijk wel aan waar ik heen wilde met mijn werk.
Er zit bij sommige foto's nauwelijks verschil.

D: Je zou eigenlijk nog beter een soort van blur erover kunnen gooien.

R: Daar dacht ik dan dus niet bij na.

M: wat is er gebeurd met je foto dankzij de filters?

R: het licht is anders maar ook de uitstraling is veranderd. Het lijkt veel meer een schilderij.

D: kleuren, licht en de achtergrond zijn veranderd. Robin komt naar voren. Omdat daar nu alle aandacht naar
toe gaat door het kleurgebruik.

M: wat gebeurt er met de vorm?

R: Ik zie het niet.

D: het lijkt alsof de vorm er ingeplakt is. Hij lijkt ook wel meer getekend dan gefotografeerd.

R: Het lijkt alsof ik twee kanten heb. Donker en licht, negatief en positieve kant. Ik zie het aan mijn ogen.

M: je hebt heel duidelijke harde filters gebruikt. Je kunt heel goed zien wat er gebeurd en wat er veranderd.
Maar wat zie je nog terug van je eerste filter in de laatste foto?

D: Je ziet nauwelijks iets terug. Ik wilde gewoon met elke filter een compleet nieuwe afbeelding creëren.

M: Maar heb je dan alle dertien stappen nodig om tot een werk te komen?

D: Eigenlijk kan het ook met minder stappen. Ik wilde gewoon heel veel filters gebruiken om de afbeelding te
laten verdwijnen maar tegelijkertijd wilde ik ook experimenteren met de filters.

M: Hoe vonden jullie dat experimenteren met die filters?

DRW: leuk en interessant en onbewust doe je creatieve dingen. Deze dingen vallen pas op met de bespreking. Tijdens het werk ben je zo gefocust op wat je aan het doen bent en op het resultaat dat je soms vergeet de stappen die je al gedaan hebt terug te pakken. Je vergeet dan vaak ook de originele afbeelding. Meer tijd nemen zou kunnen helpen. Objectiever kijken.

M: is andermans inbreng van belang?

D: eerst al de stappen doen en dan pas erover spreken en de eind afbeelding eigenlijk alleen bespreken.

R: het is wel fijn om bewust te zijn van wat je maakt en hoe je dat doet maar wij zijn ook fanatiek met experimenteren.

M: hoe zien jullie dat?

D: we vragen ons misschien wel te weinig af gedurende ons werk. Dus misschien experimenteren we wel niet zo veel als we denken.

Conversation after lesson 1 & 2:

Groep 1

M: waar let je op als je bij Insta een foto plaatst?

S: dat je er goed opstaat.

M: oké open jullie foto's maar even. Waarom hebben jullie verschillende accounts?

S1: bij een spamaccount plaats je gewoon heel erg veel foto's.

M: dus bij zo'n account maakt het ook niet uit wat je erop zet.

S: nee kijk maar. Het maakt niet uit. Op je normale account plaats je de beste foto's.

S1: hier plaats je juist ook de onzin foto's.

M: waar halen jullie dan je inspiratie vandaan?

S1: ik kijk daar eigenlijk altijd wel naar. Hoe maken andere mensen hun foto's.

S: ja via Snap inderdaad.

S2: soms inderdaad.

S1: vooral bij vrienden.

S: op Insta zie je dat ook heel snel.

M: jullie gebruiken filters?

S: Ik heb er eentje met filter.

S2: niet altijd maar meestal.

S1: ik eigenlijk altijd wel ja.

M: waarom kies je voor een bepaalde filter?

S: dat je er nog gewoon mooier uit ziet.

S1: mooier qua kleur.

M: gebruiken jullie foto's alleen via Insta of meerdere apps?

S: Ik bewerk ze al voor via de foto app van de telefoon zelf.

S1: ik juist bij Insta.

S2: soms met een andere app maar meestal niet hoor.

M: probeer eens in ongeveer 3 tot 5 minuten vragen te stellen over de foto's die jullie van elkaar zien.

S: waarom zit je haar zo op de foto?

S2: vond het er wel mooi uitzien.

M: waarom kies je voor de filter?

S2: als ik hem niet in de vierkantjes zou zetten past hij niet helemaal dus dit helpt met de verhouding van de foto.

S1: waarom staan er eenden op de foto?

S2: omdat we die tegen kwamen en ze zijn schattig.

M: wat voor filter zou je er nog op willen plaatsen of zou je hem nog willen bewerken?

S2: nee ik ben er wel tevreden over.

S: waarom een filmpje van je oog? Vind het overigens wel gemeen om dit allemaal te vragen.

S1: er zitten zelfs glitters rond je oog.

S2: kan er niet gelijk zo antwoord opgeven.

S2: op deze andere foto staan ijsjes.

M: waarom staan er dan hartjes op?

S2: aan te geven dat de ijsjes lekker zijn.

M: waarom sta je er dan schuin op? Moeilijke vragen?

S1: ja niet normaal joh al die vragen.

S2: ik had er ook niet zo heel erg goed over nagedacht.

S1: waarom deze foto van een paddenstoel?

S2: geen idee.

M: Zou jij deze foto ook anders kunnen nemen?

S2: ja ik had hem ook recht kunnen fotograferen.

M: Ik hoor jullie heel de tijd zeggen dat het moeilijk, gemeen en irritant is om zoveel vragen te stellen. Hoezo?

S: omdat het zo gemeen klinkt als je heel de tijd vraagt waarom.

M: Maar jullie worden zo wel kritisch op wat je ziet en wat S2 dus gedaan heeft.

M: misschien is het makkelijker als jullie mijn account openen? Dus stel vragen.

S1: Waarom de foto van de pruiken?

M: foto van een feestje en het werd een grappige foto vonden wij.

S1: wat is hier gebeurd?

M: Ik heb een foto van bloedgeven gemaakt.

S2: waarom deze foto?

M: omdat ik graag gebruik maak van voorwerpen om me heen om de wereld een stukje gekker te maken. Leuker ook vooral.

M: ik vind ook dat er te veel dezelfde afbeeldingen online komen dus vandaar dat ik af en toe wat gekkere foto's online zet om die foto's te doorbreken.

M: Oké terug naar het account van S, probeer over 1 foto minimaal 3 vragen te stellen.

S1: waarom een foto van een pop?

S: omdat de pop een vreemd beeld geeft.

M: S kun je ook even je normale account openen.

S1: deze foto's zijn mooier en interessanter.

M: wat is er dan mooier aan?

S1: deze zijn serieuzer.

M: waarom?

S2: ze staat er zelf leuker op.

S2: op de meeste foto's zitten overigens filters.

S2: ze staat ook op alle foto's zelf.

M: op dat andere account staat ze niet of wel?

S1: nee hier staan inderdaad andere dingen op.

M: waarom zet je er andere dingen op?

S: op mijn normale account wil ik graag normale afbeeldingen. Op je spamaccount komen alleen je echte vrienden en de minder bekende op je normale account.

M: dus jij bepaalt wie wat te zien krijgt?

S: ja klopt.

M: we gaan verder met het account van S1. Dus stel maar vragen.

S: het lijken oudere foto's van vroeger. Waarom?

S1: lastige vraag. Op mijn spamaccount heb ik minder volgers dus dan is het minder erg om er schandalige of gekke foto's op te zetten. Op mijn normale account heb ik best wel veel volgers en dan zou ik dat niet zomaar doen.

M: waarom zijn sommige foto's dan zo ongemakkelijk en waarom maak je dat soort foto's dan toch?

S1: ja dat weet ik eigenlijk echt niet.

M: waarom laten jullie niet alles van jullie zelf zien op jullie gewone account want een deel laat je alleen maar zien op dat spamaccount. Dan zien mensen toch alleen maar de saaie kant van jullie?

S: dan moeten ze ons spamaccount gaan volgen.

M: maar is 1 account dan niet veel handiger?

S: nee want bij een spamaccount plaats je vaak heel veel foto's en sommige mensen worden daar gek van en dat wil je ook weer niet.

M: dus je houdt echt wel rekening met de mensen die jullie volgen?

S1: ja, je wilt ook niet irritant zijn voor andere.

M: Hoe vonden jullie dit gesprek?

S: ja, eigenlijk best wel spannend omdat ik niet wist wat je ging vragen.

S1: ja, de vragen waren ook best wel lastig dus dan is het ook best spannend.

Groep 2

M: wat vonden jullie van de opdracht met de emoticons?

S: ja leuk om te doen.

S1: een grappige opdracht.

M: wat vond je er grappig aan?

S: gewoon dat je moet uitbeelden wat je dagelijks gebruikt.

M: ben je er anders tegen aan gaan kijken?

S1: nee, niet anders want het was gewoon een leuke opdracht.

S2: een beetje wel.

M: maar als je nu berichten naar iemand stuurt denk je niet na over welke emoticon je mee stuurt?

S1: jawel het ligt er echt aan naar wie je een bericht stuurt. Naar goede vrienden kun je meer sturen dan naar wat minder bekende mensen.

M: kunnen jullie vragen stellen over wat jullie opvalt of wat je ziet aan het account van S?

S: succes

S2: veel voetbal te zien. Waarom zoveel?

S: omdat voetbal leuk is en anders weet ik ook niet zo goed wat ik er op moet gaan zetten. Alleen foto's van feestjes.

S1: hij staat ook op de foto. Waarom sta je er zelf zoveel op?

S: het is toch mijn account. Als ik er andere voetballers op ga zetten begint het op een fan account te lijken. Het is tenslotte toch privé dus dan kun je er toch dingen van jezelf op zetten.

M: dat klopt. Er is geen goed of fout. We pakker er even een andere foto bij. Wat is er anders aan dit account dan aan jouw account?

S: hij zet er duidelijk andere foto's op.

M: welke foto's zijn er allemaal bewerkt?

S1: eentje denk ik. Filters zijn er wellicht meer.

M: zien jullie nog wat wel of geen filter heeft?

S1 en S: nee dat zien we eigenlijk niet nee. Sommige camera's zijn ook gewoon donkerder.

M: we pakken er nog even een ander account bij. Kunnen jullie een aantal vragen bedenken voor S2?

S: waarom staan wij op jouw account?

S2: dat vind ik grappig om wat afwisseling op mijn account te hebben. Gewoon omdat je niet alleen maar dezelfde foto's hebt.

S1: hij staat er zelf maar drie keer op en bijna op alle foto's staat eten. Waarom pak je een wazige foto om online te zetten?

S2: ja het was een grappige foto en omdat die persoon toen jarig was en dan vinden wij het leuk om allerlei foto's van die persoon online te zetten en te feliciteren.

S: niet veel foto's zijn er bewerkt.

S1: Eentje maar. Waarom heb je die zo bewerkt?

S2: Ja ik vond het wel mooi eigenlijk. Ik vond het zo gewoon vetter om te maken.

M: We pakken nog even een account van S1 erbij. Wat valt jullie op?

S2: heel veel filters en teksten.

S2: waarom zoveel filters?

S1: dat vind ik mooier.

S2: waarom vind je die filters dan zo mooi?

S1: dat voegt iets toe aan de foto.

M: waarom gebruik je eigenlijk tekst in je foto's?

S: voor meer likes zeker.

S1: ik vind dat het bij sommige foto's er wel bij hoort.

M: kunnen we nu alle accounts bij elkaar leggen? Welke van jullie accounts geeft iemand weer die meer nadenkt over zijn afbeeldingen?

S1: die van S.

M: waarom?

S1: omdat die de minste foto's heeft.

S1: S2 omdat die er zelf niet zo heel vaak op staat.

S1: het klopt ook wel dat ik wellicht wat meer foto's heb dan de andere en ook heel veel filters enz. gebruik.

M: kun je dit vergelijken met je werk wat je doet in de les?

S1: ja wellicht maak ik wel meer en sneller dan de andere tijdens de lessen en dus ook iets minder bewust of doordacht.

M: S1 weet jij nog wat je als tweede online hebt gezet op je account? Want je hebt 41 zaken geüpload en ik vraag me dan ook af of je nu nog weet wat je als een van de eerste dingen online hebt gezet?

S1: ja ik weet nog wel wat het is. Het is een filmpje.

M: waarom gebruik jij allemaal dezelfde filter als merendeel van de andere leerlingen?

S1: omdat ik ze mooi of leuk vind.

M: wat nou als iemand anders jouw foto van internet plukt en er beroemd mee kan worden?

S1: dan wil ik een deel van het geld.

S2: nee ik zou dan wel graag willen dat ze toestemming vragen.

S2: mensen moeten bij een privé account altijd vragen of ze je mogen volgen.

S1: met Snap is het wel makkelijker want je krijgt een melding als iemand een screenshot maakt van je afbeeldingen. Je bepaalt ook zelf naar wie je het toestuurt.

M: wat zijn nu erge foto's?

S2 beschamende foto's.

S: mij maakt het allemaal niet uit hoor.

M: Stel eens een vraag over mijn foto's?

S1: waarom staan er allemaal mensen op de foto's?

M: wellicht wil ik laten zien dat ik best veel met mensen om ga.

S2: waarom allemaal van die gekke foto's?

M: ik hou wel van wat gekheid op het internet omdat er al genoeg serieuze dingen online komen.

S1: als wij dat doen denk ik dat mensen ons heel erg gek of raar vinden.

M: maar jullie houden dus wel rekening met andere mensen als je iets online zet?

S1: ja natuurlijk.

S: mij boeit dat dus echt niet zoveel.

M: je moet toch jezelf kunnen zijn op je online account?

S: ik had eerst een open account en dan gaan mensen je volgen die je niet kent. Dus privé is wat makkelijker en veiliger.

S1: op een bepaald moment ging mijn oom het ook gebruiken en toen ben ik wel gaan nadenken van ga ik hem accepteren als vriend online of wat ga ik posten.

M: dus je bent wel bang dat iemand je controleert?

S1: meer van als je op een verjaardag bent en hij er ineens over begint.

M: maar waarom laat je mij wel toe?

S: omdat je mijn ouders toch niet zo goed kent.

M: maar ik kan toch hetzelfde gesprek voeren met jou als je ouders.

S1: ja dat klopt maar wij gaan er eigenlijk vanuit dat u dat niet doet.

Groep 3

M: waar halen jullie inspiratie vandaan?

S: soms andere mensen die je niet kent en soms vrienden

M: leuke dingen?

S: soms maak ik ze anders dan andere mensen.

S1: nee

S: soms zelf dingen bedenken.

M: hoeveel accounts

S2: 1 account

S3: 2 accounts, 1 spam en 1 serieus

S: 4 accounts

S1: 1 account

M: waarom een spamaccount

S2: grappig

S: veel meer foto's daar dan op je normale account

S3: serieuzere foto's op je je gewone account

M: Wat maakt nou voor jou dat dit serieuzere foto's zijn?

S: de manier van hoe je op de foto staat. Op je spam account doe je je anders gedragen

S3: hetzelfde

M: in hoeverre denken jullie dat die foto's ook van jullie zijn?

S2: ik weet niet hoe je dit bedoeld. (Twijfel) Ik heb de foto's wel en iemand anders toch niet.

S; je hebt ze zelf gemaakt dus je bent de eigenaar. Maar als mensen een screenshot maken hebben zij hem ook.

M: is hij nog steeds de maker?

S3: nee want hij heeft een filter gebruikt.

M: Dus wie zijn er dan nog meer eigenaar volgens jullie?

S: Instagram en snapchat omdat die dus die filter hebben gemaakt.

M: stel dat dit een kunstwerk wordt komt er dan jouw naam onder?

S1: ik denk dat die van hun er ook bij komen.

S: já want die oren enz. van die filter hebben de makers bedacht. Die zijn van hun.

M: In hoeverre zijn jouw serieuze foto's bewerkt en daardoor niet meer van jou?

S: ik maak ze niet nep ik maar ze alleen scherper of kleur. Maar ja dat doet wel de app ja.

M: deze foto lijkt toch heel erg veel op die van jou qua kleur.

S: ja heel veel mensen gebruiken dezelfde filters.

M: is het dan nog jouw werk of is het dan niet van alleen van snapchat.

S: allebei. Ik heb hem gemaakt maar zei hebben de filters gedaan.

M: hoelang denken jullie na voordat jullie een foto online zetten?

S: lang

S2 5 minuten

S: soms begin ik met het bewerken van een foto en kom ik er na een tijdje achter dat ik hem toch niet zo mooi vind worden en dan gooi ik hem weg en start ik overnieuw met een andere foto.

S3: Ik heb vaak eerst overleg met vriendinnen. Zeker als deze ook op de foto staan.

M: waarom zet je dan toch niet alle foto's op 1 account als je toch om toestemming vraagt? Mogen ze niet zien dat jullie gek doen in het leven?

S: iedereen volgt eigenlijk beide accounts. Maar mijn serieuze account ziet er veel mooier uit.

M: wat is mooi dan voor jou?

S: het heeft allemaal een beetje dezelfde kleur en ook de onderwerpen van de fotos horen bij elkaar.

S1 Ik zou niet weten hoelang ik nadenk.

M: Stel zoveel mogelijk vragen in een paar minuten over de foto die jullie uitkiezen.

S. Ben jij dat op de foto?

M: nee

S2: waarom heeft u die foto gemaakt bij de wc?

M: antwoord

S: waarom heeft u hem gepost?

M: antwoord

S2 wanneer heeft u hem geplaatst?

M: antwoord

S3: heeft u hem bewerkt?

M: nee alleen als de foto er beter van wordt

S: kent u de persoon op de foto?

M: ja

S1: waarom staat u zelf niet op de foto?

M: antwoord

S: waarom staat de persoon er zo raar op?

M: het hoort bij een groter verhaal

M: Jullie hebben allemaal vragen gesteld over het onderwerp in plaats van wat je nu ziet of hoe het gemaakt is. We pakken er een nieuwe foto bij.

M: wat voor vragen kunnen we hier over stellen

S2: is de foto bewerkt?

S3: nee

M: is dit de originele foto of is hij afgesneden?

S3: afgesneden want het origineel is langer.

S: dus is hij eigenlijk toch bewerkt. Maar dat doet Instagram zelf.

M: maar dan moet je daar dus wel rekening mee houden.

M: waarom staan jullie er maar half op?

S3: dit vonden we wel grappig.

M: zou je de foto nog een keer zo maken?

S3: ja hoor

M: wat valt jou op als je naar deze foto kijkt S1

S1: het is een donkere foto

S2: het is een beetje wazig en waarom?

S3: snel gemaakt en het was er donker.

M: mij valt een detail op van de foto. Vooral het haar. Welk gezicht valt er op?

S1: rechts valt het meeste op

S2: links valt juist op vanwege haar grote ogen

S: links ook want die lijkt er nog snel op de foto bij geplaatst.

M: weinig bewerkt dus wellicht lastiger voor jullie om vragen over te stellen. Toch goed gedaan.
We gaan er nog eentje doen van S1.

S3: waarom een foto van schoenen?

S1: omdat ik wilde laten zien dat ik nieuwe had.

M: waarom geen andere foto van schoenen?

S1: dit was op dat moment de enige die ik had gemaakt

M: zou je de foto wellicht anders maken?

S1: nee

S: Waarom staan ze op een trap?

S1: geen betere plek en makkelijk en snel

M: vallen de schoenen er bewust vanaf?

S1: de foto was eigenlijk groter maar niet bewust gedaan.

S2: waarom twee schoenen in plaats van 1 want dan had het wellicht ook gepast.

S1: geen idee.

M: geeft niet maar doordat je aangeeft dat je niet altijd weet waarom je bepaalde dingen doet in of met je foto
geef je ook gelijk aan dat je niet heel bewust er mee bezig bent.

S: ik zou dat echt niet kunnen. Ik denk er toch wel echt over na voor ik iets online zet.
Meestal denk ik er lang over.

S1: gelukkig is deze foto niet heel erg

M: er is ook geen goed of fout maar ik probeer jullie alleen maar bewuster te maken van wat jullie
maken en online delen.

The following conversations were done after the filter assignment with class EK2D. The works that they are discussing are mostly works that they made during this assignment but some of the students didn't attend the specific lesson so they had to bring one visual they made themselves through the use of MSD. The conversations were done in groups of three and accompanied by three of my students that were asked to lead the conversations. We, the students and me, decided which questions they could use during the conversations and wrote these down. With the first two conversations they strictly used these questions. After these two conversations they came to me and asked if they could ask other questions as well because they thought that most of the questions yield logic answers and feld very predictable. The last two conversations they started to ask questions to deepen the answers which was the result I was looking for.

LL – groep 1

Wie denken jullie dat de foto gemaakt heeft?

De leerling

Wat heeft hij of zij gemaakt?

Een zelfportret

Wat is er te zien?

Een arm. Een deur. Een rooster. Een muur. Witte muur.

Waarom is deze foto gemaakt?

Waarschijnlijk omdat het een opdracht was.

Waar is de foto te zien?

Op de iPad in zijn galerij. Privé.

Wanneer is deze foto gemaakt?

Zojuist. Dat hebben we ook gezien aan zijn kleren.

Waarom is de foto gemaakt?

Voor de opdracht

Is de foto bewerkt?

Nee

Wie heeft de foto gemaakt?

De fotograaf

Hoe kan je dat zien?

Omdat het wit is in de achtegrond. Hij kijkt ook gewoon recht naar voren.

Wat is er te zien?

De leerling zelf.
Wanneer is deze foto gemaakt?
Toen de fotograaf er was.
Waarom is de foto gemaakt?
Omdat iedereen op de foto moest.
Hoe is deze foto gemaakt?
Hij is recht gemaakt en van voren.
Is de foto bewerkt?
Ja en nee. Want hij staat nu in een rondje en daardoor is hij dus bewerkt.
Alleen de achtergrond lijkt niet bewerkt.
Ik vind toch dat hij bewerkt is.

Wie heeft deze foto gemaakt?
De leerling
Wat is er te zien?
Plafond, lamp.
Waar is deze foto gemaakt?
In het lokaal en vorige week gemaakt
Waarom?
Voor een opdracht voor school
Is deze foto bewerkt?
Ja bewerkt met een snorretje. Getekend met een app.
Wat is er nu eigenlijk te zien?
Remco die een historisch persoon na probeert te doen.

LL - Groep 2
Wie heeft deze foto gemaakt?
Max zelf
Wat heeft hij gemaakt?
Foto van zichzelf denk ik.
Wat is er te zien op deze foto?
Zijn hoofd.
Waar is de foto gemaakt?
Op school
Waar is de foto te zien?

Is hij gedeeld ergens?
Ja hij staat op zijn insta.
Waarom is deze foto gemaakt?
Voor drama. Een opdracht voor school
Is deze foto bewerkt?
Nee
Wat is er nu eigenlijk te zien?
Papier, muur, brandalarm, het dak, de deur, zijn hoofd, ramen, haar.

Wie heeft deze foto gemaakt denken jullie?
Zijn vriendin. Zijn moeder. Hij zelf in de spiegel?
Wanneer is deze foto gemaakt?
Met kerst denk ik.
Waarom denk je dat?
Omdat het sneeuwt.
Is deze foto bewerkt?
Ja
Waarom?
Hij is zwart wit.
Wat is er op de achtergrond te zien?
Je ziet, raam, deur, trainingspak, buiten.

Wie heeft deze foto gemaakt?
Zijn vriendin.
Wat is er te zien?
Luuk op een tractor
Waar is deze gemaakt?
Op een kinderboerderij want hij zit op een trekker.
Wanneer is deze foto gemaakt?
In de herfst.
Waarom?
Omdat het een donkere foto is.
Maar wat nu als de foto in een schuur is genomen?
Ja, maar hij heeft kleding aan die wat warmer is dan voor de zomer dus herfst of winter.
Waarom is deze foto gemaakt?

Voor de lol.

LL - Groep 3
Wat is er op de foto te zien?
Leerling in het klaslokaal.
Tekeningen zijn er te zien.
Wat voor tekeningen?
Papier werk. Bloemetjes.
Waarom zitten die bloemetjes daar?
Waarom hangen ze daar?
Omdat het werk is van leerlingen.
Waar is deze foto gemaakt?
In het lokaal
Waarom is die daar gemaakt?
Wat had de leerling bedacht?
Ik denk voor een opdracht
Waar is de foto te zien?
Hij staat op zijn ipad en heeft hem nooit door gestuurd.
Op de iPad van de meneer omdat die hem ook ontvangen heeft.
Hij wil zich liever zelf niet op de foto hebben.
Wie heeft het gemaakt?
De leerling staat zelf op de foto dus het lijkt op een selfie.
Wanneer is de foto gemaakt?
Vorige week.
Waaraan kun je dat zien dan?
Wacht je kan het ook zien.
Waarom kan het niet eerder zijn geweest dan vorige week?
De foto is in kleur. Oude foto's zijn zwart wit.
Het gebouw en de achtergrond.
Waarom is de foto of video gemaakt?
Voor een opdracht van school
Hoe is de foto gemaakt?
De foto is meer van onder gemaakt.
Waarom denk je dat?
Omdat je de kin van de leerling ziet.

Is de foto bewerkt? En waarom denk je dat?
Het ziet er gewoon normaal uit dus hij zla niet bewerkt zijn. Erg scherpe foto.
Wat is er nu te zien?
De achtergrond is het lokaal.

Waarom is deze foto gemaakt?
Voor de lol. Als een herinnering.
Omdat ze bekend zijn?
Ja.
Wie heeft het gemaakt?
De ouders van de leerling hebben het gemaakt.
Waarom denk je dat of kun je dat zien?
De mensen van de foto kunnen het niet zijn geweest want die staan helemaal op de foto.
Dus het moet iemand anders zijn geweest.
Wat is er te zien?
De leerling met achtergrond van vissen of zoiets.
Een aantal andere mensen.
Hoe is de foto gemaakt?
De foto is staand gemaakt.
Hoe is de foto bewerkt
Niet
Hoe kun je dat dan zien?
Ja je ziet niets vreemds aan de foto
Waar is de foto gemaakt en waar is hij te zien?
Bij een ontmoeting.
Waaraan kun je dat zien?
De reclames op de achtergrond
Waar is de foto te zien?
Ik denk op Instagram want er staat een logo op.
Wat is er nu eigenlijk echt te zien.
Twee bekende mensen met jongens bij een meeting.
Wie heeft het gemaakt?
Iemand die mee is gegaan met hun.
Wanneer is hij gemaakt?
Bij die meeting

Maar wanneer ongeveer denk je?

25 juli 2017 want het staat er gewoon onder.

Wanneer is de foto gemaakt?

Vorige week tijdens de les

Waaraan kun je dat zien?

Door wat er op de foto staat want dat hoorde bij de opdracht

Wie heeft het gemaakt?

Ik denk hijzelf want het lijkt ook hier weer op een selfie.

Waarvoor is de foto gemaakt

Voor een opdracht van school

Wat heeft hij gemaakt en wat is er te zien?

Twee foto's op elkaar geplakt. Je ziet het scherm van zijn telefoon nog want dat zie je heel goed op de voorgrond.

Hoe is de foto gemaakt?

Beetje van onder.

Hoe is hij bewerkt?

Doormiddel van twee foto's op elkaar te leggen.

Waar is de foto gemaakt?

Waarschijnlijk weer in het lokaal want je ziet herkenbare punten zoals het plafond etc.

Waar is de foto te zien?

Waarschijnlijk op zijn ipad

Wat is er nu eigenlijk echt te zien?

De leerling met een kapot scherm over zijn hoofd geplaatst.

LL - Groep 4

Wie heeft het gemaakt?

Kyra zelf

Waaraan kun je dat zien?

Selfie, snapchat

Wat heeft hij of zij gemaakt?

Een foto

Wat is er te zien?

Haar hoofd en hartjes. Is het in de douche. Is dit bij je sport. Tegeltjes muur. Kleedkamer.

Wat is er nu eigenlijk echt te zien?

Wat denk je dan dat er echt te zien is?

Ze wil knapper lijken en het dan naar haar vriendin sturen.

Je ziet dat ze blij is.

Waar is de foto gemaakt?

Badkamer

Hoezo weet je dat?

Meestal zijn de kleedkamers zo. Ze heeft ook een trui aan en dat heeft ze niet bij sport.

Waar is de foto te zien?

Op insta

Hoe is deze bewerkt of gemaakt?

Filter?

Snapchat. Schuin gemaakt.

Hoe kun je dit zien?

Aan de kleur en aan de hartjes.

Waarom is de foto gemaakt?

Voor de lol. Omdat het leuk is om te maken.

Wanneer is deze foto gemaakt denk je?

Een paar maanden geleden want ze ziet er niet veel anders uit dan nu dus het moet niet lang geleden zijn geweest.

Wat heeft hij of zij gemaakt?

Wat is er te zien?

Foto. Er is water te zien. Platteland. Adidas, bos haar, sierraden.

Wanneer is de foto gemaakt?

Begin dit jaar of eind vorig jaar.

Waarom?

Nee nee ze draagt hier een T-shirt dus dat kan niet. Moet halverwege het jaar zijn geweest

Wie heeft het gemaakt?

Liv.

Waar is de foto gemaakt en waar is hij te zien?

Op het platteland. Ik denk in Rijsbergen. En hij staat op Facebook.

Wat is eigenlijk echt te zien?

Meisje, Adidas, een brug, water.

Waarom is hij gemaakt?

Fotoshoot met vriendin.

Hoe is de foto gemaakt of bewerkt?

Met een iPhone want die vriendin heeft zo'n telefoon en die maakt de achtergrond gelijk wazig als je dat wilt en
ook gelijk mooi zwart wit.

Wie heeft het gemaakt?

Ouders

Waarom denk je dat?

Broers en zussen moeten toen nog te jong zijn geweest om foto's te maken.

Waarom is deze foto gemaakt?

Omdat ze er schattig uit zag en aan het spelen was denk ik.

Wanneer is deze foto gemaakt?

Moeilijk want dan moet je weten wanneer ze geboren is. De leerlingen gaan terugrekenen.

Hoe is de foto gemaakt?

Iemand heeft hem gewoon gemaakt zonder te bewerken en omdat het zo lang geleden is zit er nog geen filter
op want dat kon toen niet.

Wat is er nu eigenlijk echt te zien?

Een meisje. Ze is blij.

Wat zie je er omheen?

Gras. Een parkje, het ziet er leuk uit.
Een stenen iets om op te spelen.
Het lijkt op een glijbaan.

Is dat een glijbaan?

Nee het lijkt niet op een steen

Waar is de foto gemaakt?

In een speeltuin en in de zon.