



Scaffolded filmmaking in PlayOFF: A playground for worldwide film experiments

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Abstract

How is it possible to make an entire short film in only 48 hours? This task was carried out in the global online film contest, called PlayOFF, held by Odense International Film Festival (OFF) in August 2010 and -11. Contestants came from all over the world – from countries as different as Palestine, China and Romania. I believe this kind of contest to be a fruitful area for research, giving better understanding of how motivation, flow and creative ways of thinking can be initiated through filmmaking. Creative competences, environments, educations, classes etc. are in constant demand. Nevertheless, only a few scholars have actually studied conditions behind these elements, and even fewer have researched them in relation to filmmaking. I will seek to expand knowledge in this field which has hitherto been assigned insufficient priority in media research. How to analyse and experience films is very well described, but when it comes to the process of creating films we find almost no scientifically based research or qualifying designs for stimulating creativity. While other media researchers focus on successful films, I find it crucial to study the idea-making, team work and other conditions behind the productions. This article is based on an empirical study of film processes in PlayOFF 2010 and -11, and I will point out how these findings could be used in developing creativity. Based on my empirical studies I will suggest a learning design for scaffolded filmmaking and propose some ideas of how to transfer this knowledge to an educational context.

Keywords: Creativity, innovation, filmmaking processes, scaffolding, learning processes, film festivals

Research design and questions

My research design used for the empirical study of PlayOFF has been a methodical 'quartet' consisting of a combination of a qualitative and quantitative study supplemented with observations and film analysis. The quantitative part consisted of a questionnaire (which was) distributed to the filmmakers involved in PlayOFF 2010 and -11. During the filmmaking process we also followed some of the individual contestants as they developed their ideas in 2010, whereas in 2011 only a questionnaire survey and analysis of the films were carried out.¹ In 2010, furthermore, we performed quantitative interviews with a selected group of contestants. I regard the quantitative study

as the foundation for the qualitative considerations in which I try to expand on the comments of the respondents. In addition, I saw and evaluated all the finished films from the perspective of the three parameters which, according to creative researcher, Mihaly Csikzentmihalyi (1996), ought to be applicable in a creative product: individual qualities, acknowledgement from experts and something new added to the domain (for instance the domain of stop motion films etc.). I cannot emphasize enough how important I find it to focus on both the processes and the results in analysing creativity. Often media researchers chose to evaluate the films only, whereas the pedagogical field tends to be mainly interested in the processes.

In this article I have chosen to combine these equally important perspectives. In doing so I focus chiefly on the 2010 winners, Louise Wulff Andersen and Astrid Plesner, the runner-up, Igor Rado, and on the two unplaced participants, Jacob Lykke Hansen and Jannik Dahl Pedersen. In this way, both the solo and team process, both winners and 'losers', are considered. The findings of this empirical data naturally cannot be regarded as being representative for filmmakers or learning processes through filmmaking in general but are limited to the present findings from the process of filmmaking during a specific scaffolded contest. At the same time, however, the results are sufficiently fruitful for me to suggest a generic model for creative filmmaking.

The findings from my research will help me address questions like: How did the participants in PlayOFF use and apply so-called divergent and convergent thinking in their filmmaking? What type of conditioning best supports filmmaking processes concerning both internal (intrinsic motivation etc.) and external components (work environment)? Which phases make up a film process based on specific rules? In what ways are the rules met by the participants? How does evaluation from a competent jury influence the motivation for filmmaking? And how can any of my findings (from this research) be transferred into everyday use in classrooms?

In my analysis I use the didactic term 'scaffolding' as suggested by Wood, Bruner and Ross (1976) and elaborated from Vygotsky (1935). I have previously applied the term in relation to learning processes in filmmaking and presented this position in an article for *Seminar.net* (Philipsen 2009).ⁱⁱ For that reason, this is not the central issue of this present article. Instead it can be regarded as a follow up and elaboration on former results. I have previously divided or categorized scaffolding into three types: 1) Individual scaffolding (the support that the filmmaker/student/pupil gives himself), 2) team scaffolding (the support of a group), and 3) institutional scaffolding (rules set by an authority, e.g. OFF or a school, institution) (Philipsen 2009, 2010). The three types of scaffolding are reflected in this present study. Furthermore, I apply the term 'flow' as defined by creativity researcher Czikzentmihalyi (1996) and borrow aspects of his approach to creativity, supplemented by other theoretical views on the subject from Amabile & Mueller (2008).

Czikzentmihalyi, Amabile & Mueller and I agree that creativity is not just a nature-given phenomenon. In order to be creative "The person must learn the rules and the content of the domain, as well as the criteria of selection, the preferences of the field" (Csikzentmihalyi, 1996, p. 47). This approach to creativity dominates my reflections on the results in the present article.ⁱⁱⁱ

Eight different nationalities played with film in 2011

How is it possible to make an entire short film in just 48 hours? This task was carried out in the global online film contest PlayOFF held by OFF in August 2010 and -11, where contestants from all parts of the world—amateurs as well as professionals—competed on creativity. In 2010 this included countries as

different as Australia, Finland, India, USA and Denmark, whereas PlayOFF in 2011 had entrants from eight different nations: Palestine, Germany, Finland, Italy, Romania, Syria, China, and of course Denmark. PlayOFF is the official name of the competition and is a new concept released in 2010, developed by OFF in collaboration with the University of Southern Denmark.^{iv} The name, PlayOFF, establishes the aim: to allow filmmakers from as many nationalities and ages as possible to play in creative ways within the short film medium. The new concept enabled contestants to use a variety of equipment, from mobile phones to video cameras, and to enter the competition from all over the world, since the films have to be uploaded on Youtube. Certain conditions—what I call scaffolding—set the framework for PlayOFF, and every year these conditions are announced on the OFF website (www.filmfestival.dk). In 2010 the compulsory theme was ‘silver’, and, furthermore, ‘a button’ had in one way or the other to be incorporated as a prop. This year in August the announced theme was ‘used’, and ‘ice’ had to be implemented as a prop. Both in 2010 and -11 the short films could only last three minutes and had to be uploaded online on Youtube within 48 hours to comply with the rules and be eligible to collect the honour and prizes. The participants were aware that they would be judged by a domain-competent jury looking for a creative idea and the ability to realize it in film.

As well as being of various nationalities the participants proved very different in terms of age, experience, and educational history. In 2010 the average age (ages ranging from 17-48) was 25. In 2011 (ranging from 20-43) it was 28.

	2010	2011
Age	25	28
Films	19	22
Winners	Louise Andersen & Astrid Plesner	Mads Outzen
Winning film	The lake	Reused

Figure 1: Participants' age, number of films and winners

The winners of PlayOFF 10, Astrid and Louise, both seventeen, were the youngest in 2010. The respondents combined experience in filmmaking ranging from 0–10 years in 2010, and 0–15 years in 2011. Astrid and Louise were the least experienced. Mads Outzen—who won this year with Reused—is 31 years old and an experienced filmmaker. The fact that this competition can be won by two inexperienced 17-year-olds as well as an experienced filmmaker of 31, illustrates that creativity can stem from quite different angles and sources. Later, I will elaborate on whether the winning films can actually be regarded as creative.

48 hours offer a refreshing alternative

When I researched what the contestants felt to be the best part of the PlayOFF experience, their answers were like this: “The limitation regarding time and theme“, “It has been exciting to be given a defined task and to work under the pressure of a deadline“, “To test your ability and skills“, “That everyone is invited to compete“. A Danish contestant from 2011, Casper Joel, elaborated on the positive aspect of the scaffolding by answering:

[..] I do like a short and effective process, which is a refreshing alternative to normally much longer and more complicated productions. [...] One doesn't indulge in something with a lot of doubt along the way. Good fun, a relief, and a good exercise.

Casper highlights the time limit and concludes that it made him focus on the fun part instead of doubts and complications. He is thereby pointing out a fruitful aspect of the OFF constraints. All in all, the participants both in 2010 and -11 regarded the conditions, e.g. the institutional scaffolding, to be the best part of the experience.

When the participants from 2010 were asked to mention the problematic aspects of PlayOFF, the fact that not every film received an evaluation from the jury was considered to be negative. In 2010 only the participants who finished first, second and third were evaluated by the jury, and critique must therefore be acknowledged as an important motivating factor. This, again, can be seen as a form of scaffolding. 'Marking critical features' is a type of scaffolding (type 4, according to Wood, Bruner & Ross, 1976, p. 98).^v In 2011 this concept was changed, which I will elaborate on later.

Finally, a participant in 2010 stated that her own self-criticism and self-applied pressure were negative factors.^{vi} It is well known that performance anxiety often accompanies filmmaking. From the results of the quantitative study, it seems reasonable to conclude that this was also true of the PlayOFF participants. But, as the qualitative study will illustrate, they handled this in different ways. Scaffolding in itself is a way to create focus and reduce negative stress, as in the rules of the competition, but the participants themselves actually added more types of individual- and team scaffolding.

The above-mentioned respondent who saw performance anxiety and self-criticism as a problem worked alone during the full 48 hours of filmmaking, and she chose in the end not to hand in a film. It is remarkable that the majority of the participants who actually submitted a finished product were part of a group. It is reasonable to conclude, as validated by my observations and interviews, that participants in groups are able to support and appreciate each other in a number of ways: 3) Direction maintenance, and 5) Frustration control (representing type 3 and 5 of the 6 types of scaffolding). However, as the following qualitative part of my study illustrates, these types of support may be given by other group members as well as the creative individual him/herself (i.e. individual scaffolding).

Learning more important than winning

I also asked the participants to quantitatively evaluate how satisfied they were with the process of their work, the rules from OFF (i.e. the institutional scaffolding), and their own results (i.e. the films). It turned out like this:

	2010	2011
Process	4.5	5.0
Rules	5.0	5.2
Results	3.8	4.3

Figure 2: Evaluation of process, rules and results

On a scale of 1 to 6 they gave the process 4.5 on average in 2010, compared to 5 in 2011. Both in 2010 and -11 these rankings were accompanied by comments expressing general satisfaction with, especially, the rules from OFF. The process and constraints in both years were ranked higher than the films. It is striking, however, that one respondent, considering the work of his group, wrote: "We already had ideas which we tried to fit in to the concept provided by OFF. In retrospect, we might have been too stuck on those ideas." This is the comment from Jannik in the questionnaire, and his perspective will be explored in the following part of the article, as I incorporate interviews. The ability to discard old ideas and embrace new ones turned out to be crucial in stimulating creative thinking.

A further investigation into the satisfaction of participants regarding the specific rules of the competition as described by OFF showed that respondents awarded the rules 5 out of 6 (on average) in 2010, and 5.2 in 2011. Altogether, a fairly positive evaluation. In the comments, the pressure of a deadline and the specific theme and prop were considered to be inspirational.

A key motivational factor and a flow

Finally, I asked the participants to evaluate their own results. Here, the evaluation was not quite as generous as seen in the evaluation of process and rules. The results scored 3.8 in 2010 and a little higher, 4.3, in 2011. This means that even respondents who did not finish their films before the deadline saw scaffolding as helpful. The process in itself seems to be more successful or valuable than the result. This shows, I think, that contestants primarily participate in order to partake in a process of learning. The majority are quite critical towards their short films, which illustrates their ability to reflect upon what to improve in the next film project. Many participants are repeaters in PlayOFF 11 and still consider it part of an ongoing learning process.

As a summing up of the quantitative part of this study, one can conclude that participants found it stimulating to work with different forms of scaffolding, and that evaluation and appreciation (from other group members and/or jury) turned out to be a key motivational factor in the creative process. In fact, more important than the product itself, this is why the contestants seemed to be more oriented towards learning via the process and eager for feedback. This means, I will argue, that some of the participants experienced so-called 'flow' during their filmmaking process: an experience that made them very positive about the process as such. Similarly, Csikszentmihalyi found and then described flow in the empirical studies (of artists, athletes etc.) he carried out:

This optimal experience is what I have called *flow*, because many of the respondents described the feeling when things were going well as an almost automatic, effortless, yet highly focused state of consciousness (Csikszentmihalyi, 1996, p. 110).

Csikszentmihalyi argues that nine parameters increase the flow situation. I do not agree that all of these nine parameters actually describe what it feels like to be in flow. In my view nos. 1–6 define what kinds of scaffolding are needed to create flow, whereas the last three describe the actual flow feeling (self-consciousness disappears, the sense of time grows distorted, and the activity becomes autotelic). In my interview, based on the scaffolding from some of the first six parameters, the respondents, Louise and Astrid (more below) describe the feeling of being in flow (nos. 7, 8 and 9), stressing that at times during the filmmaking process they forgot about time and the basic needs of eating, drinking and sleeping, and instead worked gladly.

As illustrated above, all of the respondents evaluate the process as being more positive than the results, and this underlines that being in the process seemed more important than the actual result, which also is a criterion for the flow feeling as defined by Csikszentmihalyi.

The majority of the participants in 2011 were—as mentioned—repeaters from 2010. This may serve to underline the point that most of the participants regard these competitions as ongoing learning processes. Many of them also write that they collaborate in many film processes similar to PlayOFF. One of the contestants, Tobias Juhl Nielsen, stresses that receiving feedback from a competent jury makes a huge difference:

[..] then I'm able to find out why I [..] didn't win, and by that way, make a better result next year. This means that you are not just left with an empty feeling, when you thought yourself that it was a good film.

Most participants share this conception of PlayOFF as an exclusive opportunity for improvement, and it seems to be even more exclusive and motivating after it was decided to include jury evaluation of all entries to the competition in 2011. Daniele Caon from Italy actually writes in the questionnaire that this was his main reason for joining PlayOFF 11: "We participated especially for the feedback". And also Nathalie Neuffer from Germany points out that: "The comment from the jury is very important". She underlines the word "very" and her sentence with a smiley to be sure her message gets across, and Caon and Neuffer are not alone in pointing out the importance of feedback from the jury.

My conclusion is that most contestants regard PlayOFF as a valuable learning process. It may well be that some participants competed both in 2010 and -11 as one long learning process. Important to the motivation and process is the need for feedback from a domain-competent jury capable of noting critical features.

A playground to re-use

A 2011 participant from Romania, Matei Filimon, is the director of the short film *Good Ice*.^{vii} Filimon is 32 years old and an experienced filmmaker with an education in (the field of) media. He describes PlayOFF as:

A very exciting opportunity for everyone in the world, professional or amateur filmmaker, to show creativity, to play with creative ideas, in 48 hours, to express themselves freely, outside of the traditional film norms. A chance to taste cinematic freedom, to see and to be seen. Play OFF is a prestigious film festival, a 'playground' in the city of Hans Christian Andersen, open for worldwide film experiments.

In this Filimon highlights that he considers the competition as an opportunity for playing with creative ideas and expressions. In his own short film it is obvious that he likes to experiment with the conventions for film language (discontinuity in editing etc.). In the perspective of this article, it is quite interesting that he uses the terms "to express themselves freely", and "taste cinematic freedom". One might have expected some of the participants to criticize the PlayOFF rules for being too restrictive and representing the trammels of authority instead of something liberating, but none of them mentions this as a negative limitation. When respondents were consulted on negative elements in PlayOFF 11, one of the few comments given is the fact that the competition starts at 12 o'clock, which means that any participants with an 8-16 job are deprived the possibility of working at the film process for the entire 48 hours.

Furthermore, according to another participant, it can be regarded as negative that in 2011 Greenpeace was both the sponsor and a member of the jury. The winner of 2011 is given the opportunity of making a campaign film for this organization, an association which can cause 'noise' in the process for some of the participants, as highlighted by one of them in the questionnaire. He wonders—understandably—whether to realize the idea he finds creative and is dedicated to himself, or to make a 'green' film that will suit the organization. This underlines the need for a film-competent jury (with no sponsors on it). Amabile and Mueller point out that:

[..] although creativity is difficult for people to define and very difficult to measure objectively in most domains, people who are familiar with a domain can recognize creativity when they see it, and their independent judgements

generally agree as to a level of creativity in a given set of productions (Amabile & Mueller, 2008, p. 38).

From this standpoint one could argue that an organization like Greenpeace belongs to a quite different domain than short film, even though both domains are interested in creative ideas. Both the stated criticism of the jury–sponsor relationship in PlayOFF 11, and the fact that no respondents in 2010 or -11 mention the theme and prop restrictions as negative, are instructive results which could influence the use of filmmaking in the educational system: deadlines, other constraints, and competent evaluation seem crucial.

Marking critical features

As clarified above, some participants in 2010 called for evaluation of *all* the short films instead of only those in the top three, and this can be regarded a search for 'Marking critical features', or scaffolding type 4 according to Wood, Bruner and Ross (1976: 98). With this request in mind I asked OFF to expand the jury's evaluation to all participants in 2011, a suggestion which they welcomed and implemented. All 22 participants who finished a film were given assessment by email. This year's jury consisted of the director and programme chief of OFF, Kaspar Munk, in collaboration with the executive manager from Greenpeace, Mads Christensen. In 2010 the jury had a different composition. As in 2010, Munk and Christensen were seeking to reward the creative idea, and, as Munk articulated it during the evaluation process, the capability to realize their creative idea in a film language and narrative. This year the winner was—as mentioned—Danish Mads Outzen with the short film *Reused*, whereas nos. 2 and 3 were actually the same contestants as the year before: Joonas Makkonen from Finland came second this time, with a film called *The Chair*, and Igor Rado from Denmark once again came third, his contribution this year being the short film *Rotation*. The fact that a completely new jury placed the same no. 2 and 3 as the year before shows that these contributors manage to maintain their production of creative films. Louise Wulff Andersen and Astrid Plesner also delivered an interesting stop motion film this year, but failed to reach the top 3 this time.



Screenshot from the film Rotation by Igor Rado

According to Csikzentmihalyi (1996) a creative product/idea must show individual qualities, get acknowledgement from experts and add something new to the domain. This article would be extremely long if I published analysis of all the finished films from PlayOFF 10 and 11. Moreover I think you, the reader, would do best to watch the films on Youtube and judge for yourself.

Briefly, however, one could argue that the only films which actually fulfil the parameters from Csikzentmihalyi are those made by Igor Rado: *S* (2010) and *Rotation* (2011). They obviously express a quite unique style, and if you watch these two very short films you will immediately recognise the Rado style, which can be regarded as a renewal of the short film domain—a domain which Rado obviously knows very well himself from his more than 10 years of short film experience. It is difficult to decide whether experts other than the PlayOFF juries will acknowledge his films as creative, but the fact is that his films ‘only’ came third twice in this contest. This highlights just *how* important a domain- relevant jury can be to creativity (Amabile & Mueller, 2008, p. 38).

Editing themselves into flow

In the questionnaire from 2011 I studied the flow aspect (singled out by the findings from 2010) by asking the participants: “Did you experience moments in the filmmaking process where you completely forgot about time and place?”^{viii} A Danish participant, Siri Frederiksen, answered: “In the process of editing time just flew. Suddenly 7–8 hours had disappeared, and that was really weird”. Her answer is typical for the participants. What she refers to as a “weird” feeling of time flying in the editing phase doesn’t seem weird at all to me. Possibly, Siri and her team experienced flow in this situation. Without a tight deadline flow might have disappeared, because the filmmakers would have had the chance, or should we call it ‘risk’, to leave the editing room and perhaps find it hard to get back into the process. In the case of PlayOFF the deadline serves as a support that maintains participants’ focus and concentration. A reflection from the famous Danish screen writer, Mogens Rukov, supplements this result, as he points out: “The more time you have [in the process of film production], the more desperate is your need for success, and it pulls you down in the process” (Aggersbjerg 2010: 118, my translation). He gives us the example that for Thomas Vinterberg’s film *The Celebration* (1998) the process was extremely short and joyful, whereas for his next film, *It’s all about love* (2003), the production time was too long and the feeling of making it frustrating. In both cases Rukov was consultant on the screenwriting.

The majority of my respondents agree with PlayOFF participant Siri: in the editing process they forgot about time, and some of them—but only a few—also about the place they were in. One fear was that problems with the editing programmes could have disturbed the flow feeling, but this doesn’t seem to be the case. Explanations for this could be various, but one is that the closer you get to a deadline in a filmmaking process, the more concentrated you get. Another could be that normally you do not leave the room when editing compared to when you are recording. It might be significant, in further research, to study whether a limitation in numbers of locations (as yet another kind of ‘location scaffolding’) would influence the flow feeling, maintain focus from the filmmakers, and perhaps make them think in different (and divergent) ways. This study calls for a qualitative approach as a method and could serve as a new type of rule in future PlayOFF contests.

How to initiate divergent thinking

According to my research into the field of filmmaking processes, scaffolding—as used in PlayOFF both years—initiates flow situations, especially in the editing process. But to elaborate on this I turned to the observations and qualitative interviews done in 2010. With these data as a basis, I seek to further clarify the relationship between flow situations and divergent ways of thinking. In this regard a questionnaire obviously does not provide enough data.

Before I continue to reflect on the process of the participants, I therefore briefly need to introduce the differences between convergent and divergent thinking. Convergent thinking is dominated by a structured and analytical approach when working towards a desired goal. Cooking for example would mostly be dominated by convergent thinking, if you follow a recipe (Hilling, 2003, p. 44). This mode of thinking, which dominates human cognitive behaviour, converges with correct or conventional ideas (Runco, 1991). Divergent thinking does exactly the opposite: it is the non-conventional way of thinking. Cooking could apply to this mode of thinking if the chef felt like adding a new, and in this context unknown, ingredient. So, divergent thinking opens up for new possibilities (Hilling, 2003, p. 44). In the creation of films, both modes of thinking are obviously required. A person who only masters divergent thinking will probably not be able to cope. A convergent thinker could possibly do quite well, but might find it hard to contribute creatively. Everybody uses both ways of thinking to some degree, but one could argue that without divergent thinking no invention or creativity occurs (Hilling, 2003; Runco, 1991; Buhl, 2010). In addition, pedagogic researcher, Feiwel Kupferberg, stresses that, based on research from the Swedish educational system, it is problematic that teachers are reinforcing what he labels 'the right answers pedagogic', as they are looking for and rewarding what—in their eyes or according to curriculum—is the correct answer, instead of sometimes rewarding a novel idea or a creative solution (Kupferberg, 2009, p. 29). In this sense, the educational system in Sweden—and we recognize the same tendency in Denmark—is acknowledging convergent thinking and downsizing what, in relation to creativity, are important divergent cognitive patterns.

When they enter the education system, most children are often naturally little divergent 'goldmines', because we are all born with the cognitive capability to think in divergent ways. Part of the reason is that children—to start with—think spontaneously and do not often question their own ideas. Adults have learned to replace spontaneous thinking with reflection and criticism: why and how, is it too expensive or too unrealistic? In this way we often question our ideas. Children do things quite differently: they play and test things/ideas, and when doing this they focus on process rather than result and will easily enter a state of flow. Research has illustrated that 98% of 3- to 5-year-olds master divergent thinking (Land & Jarman, 1992; Buhl 2010). Among adults (over 18) only 2% could make use of this otherwise natural ability. This research could be wrong, since testing divergent thinking is a difficult field. But if we take the results into consideration, during 9–10 years of education we successfully reduce creative potential significantly, despite our visions for the promotion of creativity (Buhl, 2010). The grading system and various curricula primarily honour and test convergent thinking—and thereby 'the right answers pedagogic'—supported by documentation and argumentation. Not often do exams honour the students' ability to generate original ideas.

Testing children for their specific ability in divergent thinking has for many years been used to measure the potential for creativity. However, there are many unanswered questions concerning divergent thinking, and the methods used to test the potential have been subject to criticism through the years (Runco, 1991). Since convergent thinking is aimed at solving specific types of problems and divergent thinking is more directed towards an opening of a range of possibilities, tests often honour respondents' abilities to come up with as many possible solutions as they can. More solutions equal more divergent thinking. This way of testing can in some cases be criticized as being too quantitative and not evaluating the quality of the divergent thinking.

The question is what conditions make some people—in our case, filmmakers/learners—capable of thinking more divergently than others? Runco's book *Divergent Thinking* (1991) shows a variety of studies investigating the influence of heredity and environment.^{ix} All in all it seems

reasonable to conclude that the possibilities for divergent thinking are influenced by both genetics and culture. Moreover, this kind of thinking only represents a part of the creative process. Even though you are able to think in a divergent way, you might not be able to master all aspects of the process. You might not, for example, be able to translate your divergent ideas into a finished creative product.

Emphasis on the Pre-phase

On the basis of the data from PlayOFF 10—the study I have qualitative data from—I find it necessary and valuable to distinguish between different phases in the creative process. The PlayOFF contestants apparently went through three such phases. We could name them: the Pre-phase, the Main phase, and the Result. My research shows that the Pre-phase, the phase before the actual process of filmmaking, is highly important when it comes to either stimulating or inhibiting divergent thinking. If the participants are set on too many elements originating from before the Main phase, it is hard for them to cast aside those ideas and start thinking in new ways. My data shows that the Pre-phase tends to have a decisive influence on the Main phase and the Result. This is not unexpected: from an early age we have been taught that preparation is important. But if we want to encourage divergent thinking—for instance in the educational system—it seems preparation does exactly the opposite.

The participants Jannik and Jacob in 2010 answered when asked about their preparations in the Pre-phase:

Jannik: We talked about it a lot, before and during the summer vacation.

Jacob: Yes, regarding the basic ideas. That is also why we had so many already on the day the conditions were made public. So we talked a lot about what we would like to do.

So, Jannik and Jacob discussed, in their Pre-phase, specific stories for the competition—notably without knowing the conditions. If you want to look at this kind of approach from the perspective of the cooking imagery used earlier on, they had already chosen the dishes they wanted to make, without knowing all the ingredients they would be required to use. The winners of the 2010 competition, Astrid and Louise used a very different method in their Pre-phase. They had already decided to make a stop-motion film, and also had the following reflections:

Louise: First we had this idea that we would do something like in *Dogville*. Or to draw something as it went along.

Astrid: Yes, this was something we talked...

Louise: ...about early on. It was an experiment we wanted to do anyway, so we thought it could be a possibility. Then we would be able to paint some boards or pieces of wood. In this sense we prepared. But other than that, we just thought...

Astrid: ...let us try it out.

In their Pre-phase the girls used inspiration from Lars von Triers film *Dogville* (2003). This way of generating ideas is what creativity- and practitioner researcher, Donald Schön, defines as 'seeing as' and/or 'doing-as' in a creative process (Schön, 2001, p. 162). In this case the participants use the *Dogville* reference to shape an idea for the visual style of their film. They use it moreover to communicate to each other what kind of, let's call it, production design they are aiming for in the stop-motion film. And in the result, *The Lake*, this idea and design are recognized (<http://filmfestival.dk/en/s%C3%B8en/>).

Like Jannik and Jacob they prepared something specific that they wanted to incorporate. The difference is that the girls only chose a visual element or design, not a finished storyline. The visual inspiration seems to have

influenced the creative process and the end result in a positive way for the girls, whereas the boys got themselves stuck, trying to follow the finished storyline. But, as highlighted previously, this participation in a filmmaking contest, is most of all regarded as a learning process.^x

Searching for confidence in preparations

The respondents Jannik and Jacob had a recipe, Astrid and Louise had just a visual component, while Igor seemed to be preparing mentally. Igor knew himself well in this phase of the creative process (from 10 years of experience in filmmaking) and knew what made him feel confident. According to my findings from these empirical data, this is a method one can use in a creative process to handle performance anxiety. But, presumably, this method is very individual and requires you to know yourself well and to have a certain degree of filmmaking experience; all these qualities characterize Igor. Jannik and Jacob's approach was more confined. In order to establish their comfort zone in relation to their performance, they had already created a storyline before the beginning of the competition, and thereby to some extent 'disenfranchised' the context of the competition. In contrast, Louise and Astrid remained open in relation to creating a storyline:

Louise: We did make some preparations in advance..., the thing with the board. It was like..., we could go home, and then it was really only a matter of making up the story and crafting some things for it.

In relation to performance, it seems there is a significantly light-hearted and unpretentious attitude in their approach. The wording: "[...] and then it was really all a matter of making up the story" illustrates that the respondents in this case managed to limit the pressure of performing by not expecting too much of themselves and their product. The quotation above, along with answers from other respondents, provide further evidence that participants regarded both process and product as a joint effort with shared responsibility. During the interview the pronoun "we" is used more often than "I". I will argue that the way the respondents handled the Pre-phase in a demanding creative process corresponds to team scaffolding, where responsibilities in the assignment are shared in relation to conflicts, consequences and joys. Relieving performance anxiety by sharing consequences in order to summon the courage to experiment is a proven method.

As opposed to Igor, the girls in 2010 had very little experience in filmmaking as prior to that time they had only made one stop-motion film. This may also help to explain their easygoing approach to the process. Jannik and Jacob have a few years of experience in filmmaking and they seem to be more focused on result and less on the process. This, presumably, hindered divergent thinking significantly as far as I can judge from my empirical data. When trying to reach their goal, they sought confidence in their prefabricated stories. Such influential pseudo-preparations exhibit the filmmakers' need to feel well prepared when they know they need to perform and enter into a creative process.

Design for a scaffolded filmmaking process

The three case studies, one could conclude, all show different ways of preparing and the use of various methods in the process of filmmaking which help create comfort zones via scaffolding. The conclusion is that Pre-phase, judging by what one can learn from this study, has a significant influence on the main process and the result. So far, theories of creativity have chiefly focused on the main process, while media science has primarily focused on the result—without showing any interest in the prior processes at all.^{xi} I would like to promote a way of thinking, based on research, which combines these

approaches. Drawing on my research and influenced by the model of creativity scholar, Teresa Amabile, (1996/2008), I suggest the following design for a scaffolded filmmaking process with focus on shaping new ways of thinking which may lead to creative results:

Scaffolding → Flow → Divergent balanced with convergent thinking (→ Creative outcomes)
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Figure 3: Didactic design for creative filmmaking

This figure of course needs to be tested and improved through further research in different educational contexts. According to my study, and as implemented in figure 3, divergent thinking is not a resource maintained by the selected few but a way of thinking which can be nursed, improved, and triggered by different kinds of scaffolding (themes, deadlines, constructive feedback etc.) and balanced with convergent thinking, since both cognitive abilities are significant to creative processes and results. I will also clarify that types of scaffolding are not only necessary as a starter in a process in order to reduce the anxiety in the pre-phase. My research also demonstrates the need for participants in filmmaking to use team and individual scaffolding *along the way*, and moreover the importance of constructive feedback on the results in order to be acknowledged and brought to the next level of learning. Scaffolding is therefore both valuable as a starter and necessary as follow-up and for maintaining motivation.

In addition, my results illustrate that filmmaking processes are of course influenced by the individuals within them and their intrinsic motivation and levels of experience within media, or what Amabile would call “domain-relevant skills” (Amabile & Mueller, 2008, p. 36). My respondents from the qualitative study, Louise, Astrid, Igor, Jannik and Jacob, all represent different needs for scaffolding and they react differently to the various phases of the processes. Too much time in the Pre-phase seems like an obstacle to some of them, whereas others are better at handling this. As Amabile has stated, a creative process and outcome are both influenced by individual intrinsic motivation, by the ability to handle creative processes, by domain-relevant skills, and by what she refers to as “the work environment” (Amabile & Mueller 2008: 36), which in this article I have considered as conditions for creativity.

Both internal components (motivation, skills etc.) and external (work environment etc.) influence the creative process/outcome. In this article I have mostly outlined the external components by focusing on the institutional scaffolding from OFF as a starter (theme, prop, length and deadline) and a finisher (feedback from a competent jury) and offered examples of how these components are met differently by individuals, but all in one evaluated as helpful to triggering their motivation, inspiration, and ability to create a short film.

Filmmaking in the educational system

Concepts like PlayOFF show merit in estimating how to create helpful work environments capable of developing creative competences (e.g. idea generation, team play, developing an idea into something useful etc.) and sometimes creative outcomes. From these experiences it is fruitful to try to implement/introduce/transfer elements from this into the educational system, which unfortunately sometimes seems concerned to constrain creativity and the development of creative competences. Such competences require both divergent and convergent ways of thinking, and often the first is downsized. Children are good at performing divergent thinking by themselves. However, as soon as we recognize the behavioural cognitive capabilities of children, the parental and educational system seem to ‘rob’ the children of those very

qualities. How do we address the dilemma or paradox that we remove a cognitive property, which at the same time we *need* in the creative process, and in a larger perspective: in the educational system? Part of the answer could be: by using scaffolded filmmaking processes. Based on the findings from my study I have suggested a learning design which could be applied to the educational system in order to initiate creativity.

Give greater priority to film production

A report from the Danish Film Institute illustrates that, compared to music, television, computer games, surfing and chatting on the Internet, and reading books and magazines, film is actually the preferred medium among children and youngsters, i.e. 5-18 years old (DFI, 2009, p. 4). This could underline the need for a closer integration of film in school curricula.

In a new book about didactics in teaching through filmmaking, *Læring med levende billeder* (Rose & Christiansen, 2010), it is pointed out that in the Danish educational system, filmmaking processes are unfortunately downplayed because emphasis is put on film analysis and experiences. These elements are already quite well integrated parts of the curriculum, whereas filmmaking is 'forgotten'. Some of the main reasons seem to be that it has not yet been fully documented which competences filmmaking can initiate, there is not yet a developed language in which to teach and communicate these processes, and, finally, the majority of the teachers do not believe that they possess the required skills and for that reason they feel uncomfortable to be teaching filmmaking.

Rose and Christiansen (2010) suggest part of a language and a didactic, and it is argued that filmmaking processes both serve to develop children's social competences and offer them analytical and critical tools (storytelling etc.). In addition, I would argue, such processes also preserve children's motivation and their ability to think in divergent directions and suggest fruitful activities sometimes leading to creative results. But in order to carry out more filmmaking processes we have to look for ways to offer both children *and teachers* different kinds of scaffolding. They have to feel safe, supported and able to communicate about the processes. And finally, teachers will need to be able to consider themselves the institutional scaffolding (giving pupils/students directions, defining groups, setting deadlines, arranging juries to give feedback etc.), and depend on their capability to use team and individual scaffolding, especially concerning those parts of the processes which are difficult for the teachers to fully master (technical skills are difficult to maintain in a dynamic development of media technology).

Scaffolded filmmaking could be integrated in both primary schools and other parts of the educational system through concepts that have some similarities with PlayOFF. Naturally, aspects of the contest are impossible to reconcile with ordinary school timetables which do not allow 48 hours to be dedicated to film production. Teachers also have to work across school subjects, but this is already everyday practice in most schools. Nothing prevents teachers from asking their pupils or students to make a film on the theme of for instance 'war' as part of the history and social studies curriculum. As we have already discovered from my research, a theme constraint, combined with time constraints etc., can be very useful and motivating. And nothing prevents teachers from keeping the tasks at very low-tech levels (using mobile phones etc.).^{xii}

What can be productive to take into account when thinking of using filmmaking as a tool for learning is to remember how motivating and inspirational constraints and evaluation from competent people can be in combination with recording and editing. In addition, how filmmaking can help

students to reach for higher levels of reflection and learning methods, and to be competent team players and (sometimes creative) idea makers. If it is possible in an easy way to turn PlayOFF into a playground in the city of H.C. Andersen open for worldwide film experiments, as described by Romanian participant Filimon, it must certainly be possible to learn from this concept and transfer some of this knowledge into school curricula.

In Denmark we already have several concepts of media production/digital storytelling, besides PlayOFF, that fulfil the need for both (scaffolding, constructive feedback) and can be integrated in the formal educational system (some of them already are): www.skolefilmfestival.dk, www.lommefilm.dk, and www.edit24.dk. These concepts moreover offer both students/pupils and teachers fruitful instructions on how to use the editing programmes.

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Links

www.filmfestival.dk

www.skolefilmfestival.dk

www.lommefilm.dk

www.edit24.dk

ⁱ Part of the data was collected with help from instructor Trine Lai, to whom I am most thankful.

ⁱⁱhttp://seminar.net/images/stories/vol5-issue1/philipsen_-_constraints_in_film_making_processes.pdf

ⁱⁱⁱ I could have elaborated more on the theoretical approaches to creativity as well. Stokes (2006), Kupferberg (2006), Schön (1983) or others would have been fruitful to think with. But this is integrated already in my previous research (for instance Philipsen 2010), and is not the aim in this present article.

^{iv} In earlier years (2006 and 2007) OFF headed a competition named Video Clip Cup, where contestants had to be physically present. The theme was announced on the opening day of the Festival, and the material had to be recorded on DV-tape. The film then had to be edited in-house using AVID, a rather complicated program for editing films.

^v Wood, Bruner & Ross mention six types of scaffolding: 1) Recruitment, 2) reduction in degrees of freedom, 3), direction maintenance, 4) marking critical features, 5) frustration control, 6) demonstration (Wood, Bruner and Ross 1976: 98).

^{vi} As the only respondent I am keeping her anonymous since she chose not to finish PlayOFF10 and hand in a film.

^{vii} It is possible to watch all of the films from PlayOFF 11 at: <http://www.youtube.com/user/PlayOFFmoviecontest?feature=mhee>

^{viii} I am aware that such a question might guide the participant in a certain direction, and would have preferred to have had the time to make observations during PlayOFF 11 as I did in 2010. This would probably have given my findings more validity and nuances concerning the difficult flow aspect.

^{ix} Studies have shown that being a big sister or younger brother reflects directly on a person's ability to think in a divergent and creative way (Eisenmann 1964, Staffieri 1970) Part of the argumentation is that the oldest sibling will be more structured and analytical than the younger brothers and sisters because he/she will have a bigger responsibility than the younger siblings.

^x Jannik (as a director) competed in another film festival (called The Golden Egg) in April 2011 and received an award from the audience; he was not however, awarded one from the jury. Jannik and Jacob also participated with another film at this festival and won one of the categories selected by the jury. They therefore seem to keep on going through learning processes and improving.

^{xi} It is fair to mention a few exceptions like Redvall (2010), Macdonald (2008), and Caldwell (2008).

^{xii} I have written an article called "En stimuleringsindsprøjtning for det kreative" in *Magasinet Skolen* Aug/Sep. 2011, no. 5, volume 17, in which I elaborate on specific ideas for teachers use of filmmaking.