

PILOT STUDY REPORT

**Research Title: Impact of AI on Creative Media
(Filmmaking) Education and Production/Practice**

**Doctor of Education Creative and Media
Bournemouth University**

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ABSTRACT

AI has global impact and significance even since the early days of Starkey. (Britannica.com). In the arena of education, research has shown that AI has been utilised for over 30 years undergoing several iterations and paradigm shifts with an objective of offering more adaptive, personalised learning opportunities. (Roll and Wylie, 2016; Guan, Mou and Jiang, 2020).

With AI's proliferation in education as an industry worth over \$1billion, comes issues of risk and bias with just as many voices drawing attention to its dangers and apparently unforeseen consequences. (Holmes et al., 2022; Department of Education, 2023; Tobin, 2023).

The results of research from users within education, creative or filmmaking education and filmmaking production indicate that the uses of AI tools in practice have many benefits with the result of increased productivity and innovation. (Frohlick, 2020, Khosh, 2017, Yang et al, 2023; Bender 2023; Zhou and Ali, 2024: Hennekeuser et al., 2024; Chaudhary, 2023).

This study intends to take the research further to respond to research gaps regarding the psychological, social and cultural impact of the use of AI in filmmaking education and production.

Bad AI?

Good AI?

What's Next AI?

INTRODUCTION

This presentation presents the context, methodology and results of the pilot study undertaken to respond to the question of the impact of AI on filmmaking education and production.

The Pilot Study was conducted over two days. The first day was the control where filmmaking training and production following the traditional system of filmmaking training. Participants learned about developing ideas, writing scripts using the camera and editing using Adobe premiere pro.

On the second day of the filmmaking training the entire process except editing was automated by AI with the use of human prompts.

Here I present the results of this study, discussing the themes that arise from the study and also looking at some of the conflicts that arise and observing the study's limitations.

The presentation also discusses my reflections and concludes with a discussion of the findings and presents recommendations for how these would influence the main study.

Study

Results

Reflections

Next



PROBLEM

Missing from the literature and called for by the Council of Europe, (2022), Yang et al., (2023), Department of Education, (2023), and others is the lack of any data which provides evidence or analysis of the impact of the use of AI on the socio cultural and psychological fabric of users, learners and consumers. Zhou et al., (2024), mentions one of the consequences of using AI is the proliferation of homogeneous content but no research or data exists on how society will be impacted by this new way of seeing and receiving content.

This research thus sought answers to the following questions:

- 1. How can the positive impacts of Artificial Intelligence be harnessed for film education?**
- 2. How much does using AI to teach filmmaking take into account the social and cultural background of the learners?**
- 3. What does a film education intervention reveal about the ways in which practitioners and learners can "own" AI's potential?**

PARADIGM

- Grounded Theory lends itself effectively to this research as within the interpretivist paradigm it allows for various reiterations to develop a theory, (Creswell, 1998, p. 73-88). The process is the objective within the interpretive research design, (Mario Luis Small, 2011).
- Although as a hermeneutic methodology within an interpretivist paradigm, Grounded Theory allows for an abductive methodology incorporating and developing the subjective responses of participants to develop a Theory or Theories. (reference) This methodology lends itself to both abductive reasoning and deductive reasoning.
- To do this I think the opportunity to iterate findings and information we discover through deductive reasoning is crucial. Within the interpretivist paradigm, it also lends itself to other aspects found in phenomenology and ethnography such as meaning making and the immersion of the researcher in the research space.
- The methodology for this study will therefore be Grounded Theory. This is because I want my research to not just discover knowledge but create a framework or theory through which we look at AI in filmmaking education and production.
- Additionally Grounded Theory makes space for the use of post positivism methodology by incorporating the analysis of cause-and-effect factors. (Mario Luis Small, 2011),

Grounded Theory

- **Develop new theory**
- **Interpretive**
- **Process is the objective**
- **Subjective responses to develop theory**
- **Abductive (making sense, best explanation)**
- **Meaning making**
- **Immersion**

With an interpretivist approach the expectation of response from participants

is not fixed, there is rather an understanding that people respond differently due to subjectivity and being willing to accept this and interpret the responses accordingly. The responses, whatever they may be, is what is of interest in this research.

METHODOLOGY

- Based on the paradigm of Critical Realism an interpretivist philosophy using qualitative methodology will lead the design, implementation and analysis of this study whilst aspects of positivist philosophy using quantitative methodology are also present, placing this under the category of a mixed methods study, (Mario Luis Small, 2011, p. 58).
- **One is willing to open the circle of enquiry as new information comes to light in the process of inquiry and that is an idea which works well with this study. (Schwartz-Shea, Peregrine, and Yano, 2011, p.10, 51).**

Interpretivist

- Additionally, there will be the use of a post positivist paradigm as defined by Mario Luis Small, (2011) who believes traditional definitions of positivism in the current climate is outdated because positivism now opens itself up to include other aspects of interpretive research methodology.
- **In view of this, the research is interested in cause and effect of the use of AI as an input. The research seeks to determine if the use of AI makes a difference to learning and production.**

Post-Positivist

METHOD RESEARCH DESIGN AND TOOLS

The Plan:

- Two film camps run sequentially, Small (2011, p. 67),
- Use of questionnaires pre and post each camp
- Use of video diaries (Romanov, Wavering)
- 'crossed-over mixed analysis' which involve the use of analysis from both qualitative and quantitative analytical methods to compare and consolidate results. Onwuegbuzie and Combs (2009)
- Analysis using AI, (Wei Yang, 2023)

The Reality

- Original idea was to run a two week film club but only one female filmmaker enrolled, then the camp was reduced to a week of filmmaking but only the same female enrolled. Finally the camp was run over two days with only 2, participants both male, black, 17-19 years, one experienced, the other a novice
- Only used questionnaires
- Use of ChatGPT to analyse responses as data pool was small. Easy to triangulate own reading with results provided

ETHICAL CONSIDERATIONS

Above the Line

All forms signed by parents and participant

One participant over 18 years

No photography allowed or video

No video diaries--since only 2 --not required



Below the Line

Role as owner, teacher, researcher, participant

Looked to me to lead to teach. They were more engrossed in activity and less pressured that it was a research document. (Definitely need to keep this feeling)

I had to stop myself being as excited about the AI output to prevent skewing the results

Not just about being there but being nearby like Paula Callus, (2024), said

Like Tricia Le Gallais, (2008), says i am the outsider and the insider

I didn't feel the participants were conflicted.

I did not feel conflicted-safe space

RESULTS

BEFORE START OF CONTROL FILM CAMP



Summary of Themes;

Interest in Film Creation: Both participants are motivated by the idea of producing a film, even though their levels of experience differ.

Openness to Learning: Despite varied backgrounds, both are receptive to learning new things.

Creative Drive: Creativity and storytelling emerge as underlying motivations.

Uncertainty or Neutrality: There's some ambivalence about formal training—especially from Toby—but also a willingness to participate and see what unfolds.

THE STUDY

(CONTROL FILM)

Two case studies were implemented sequentially. Based on Mario Luis Small, (Small, M.L. (2011), ideas on sequential study and the fact the research is looking at the results of cause and effect where there is new stimuli introduced into a specific context, the research was run as a sequential study.

Thus, the same group underwent the traditional filmmaking training: This process involves idea development, scriptwriting, learning about cameras, pre-production, shooting their film, editing their film and having a premiere of the film to family and friends.

Since they only had a day to produce the film the filmmakers decided to produce a two minute trailer for a sci-fi thriller as their project.



Link to film on YouTube: <https://youtu.be/Ro2CVWPJesU>

NB:

- Use of internet footage
- No voice overs-did not complete film
- Rushed

RESULTS

END OF CONTROL FILM CAMP



Summary of Themes;

- Shared Success: Both achieved their filmmaking goals and appreciated the final product and tutor support although Allan felt rushed
- Varied Learning Experiences: Allan valued new learning (Adobe Pro) and would have liked more time with it, while Toby, with more experience, found little novelty.
- Different Engagement Drivers: Allan's engagement was driven by learning and collaboration; Toby's by responsibility and experience.
- Ownership and Satisfaction Divergence: Toby's comprehensive role led to higher ownership and satisfaction, while Allan's supporting role resulted in moderate ownership.



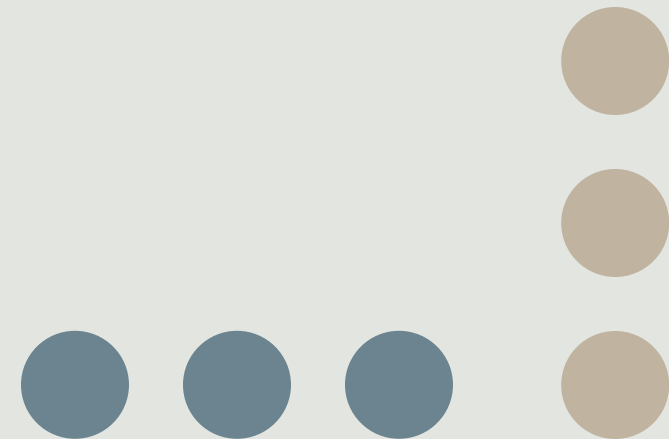
RESULTS

BEFORE START OF AI IN FILMMAKING PROGRAMME



Summary of Themes

- Common Ground: Both participants are new to or have limited experience with AI in filmmaking, share a willingness to learn, and have positive expectations of the programme.
- Conflict: Toby focuses on enhancing existing editing skills and efficiency, while Allan is seeking a broad introduction to AI in filmmaking.



THE STUDY

The same group carried out the same activity but using a fully AI supported curriculum and tools. It is anticipated that the process of ideation, scriptwriting, production and post-production were all implemented in collaboration with AI.

Their film was also to be a two minute trailer for a sci-fi thriller.

The following tools were used:

- ChatGPT to develop the idea for the trailer, create the script and the scenes for the film
- Imagine Art AI and Kling AI to create the images and videos for the film using text to image and video. They tried using Sora and Gen 3 Runway to start but found it slow and general dissatisfaction with video output
- 11 Labs was used for Voice overs
- Tem Polar AI was used for royalty free music
- They edited the film using Adobe premiere which was the same used the week prior.



Link to film on YouTube: <https://youtu.be/EZBdPOxNXQ8>

NB:

- All AI generated content
- Lots of waiting time for images to generate
- Provision of choice
- Writing prompts is a skill
- Your creativity counts to prompt effectively
- Paid activity which could be a barrier for young filmmakers

RESULTS

AFTER AI IN FILMMAKING PROGRAMME

Summary

- Common Ground: Both enjoyed the experience, appreciated AI's potential, felt ownership of their films, and valued the training.
- Conflict: Allan embraced AI as a tool for efficiency but prefers manual involvement in the future mainly around editing. Toby, while impressed by AI's potential, felt displaced creatively and expressed boredom and dissatisfaction with the simplicity of the AI process.
- Learning Styles: Allan appears more adaptive and focused on balancing creativity with efficiency, while Toby values creative control and process, feeling unsure about AI's ability to automate tasks he previously enjoyed.



DISCUSSION

Observations

- The time available during the use of AI. There was a lot of waiting for the AI tools to generate the films. So this meant other parts of the production like generating sound or editing could take place. This meant they completed the film within the day which they could not do with the traditional filmmaking where production felt rushed.
- No intention originally to use two people from the same sex or feature a range of filmmaking experience or individual dynamics but this took place and worked well for the results produced. It allowed for varied approaches to the project, varied, experiences and learning outcomes.
- Some trepidation with the experienced filmmaker but still open to learning, less concern from the inexperienced filmmaking and more ready to embrace AI.
- Excited as they watched the content provided by AI in response to their instructions
- More settled and calm during the control filmmaking camp because they know output is based on input.

REFLECTION

- I originally didn't plan to teach but finances forced me to. It actually worked as that reduced variables.
- Very much an ethnographic researcher as I became part of the project doing the filming. Was reluctant but no choice. Directed and led by filmmakers
- In the control session I was a teacher especially to the less experienced filmmaker.
- In the experiment session I was more of a guide. I provided the tools. I showed them where to go to create what they needed. I watched on the sidelines whilst they created. I waited with them, (Manu, 2024). I was as fascinated with their creations as they were.
- More constructivist learning as the teacher is more an observer. Needed to guide the process.
- Prompting is a skill. Developed with practice and especially with a knowledge of film. (Eric Zhou, Dokyun Lee, 2024) I understand the power dynamics that may arise when working as an owner/teacher/participant but I don't think these skewed the results of the data.
- I was just happy they came back for the second day.
- Exciting for everyone--revelatory
- My findings very much align with the data analysed by ChatGPT (Objectivity)



CONCLUSION/WHAT'S NEXT

This research thus sought answers to the following questions: Did we answer them?

1. How can the positive impacts of Artificial Intelligence be harnessed for film education?
2. How much does using AI to teach filmmaking take into account the social and cultural background of the learners?
3. What does a film education intervention reveal about the ways in which practitioners and learners can "own" AI's potential?

1. Students are curious, they are open, they are excited, so yes definitely room to harness AI's capabilities in film education and production. Increased productivity. Filmmaking education allows for a bigger demand on AI output, (Zhou, Lee, 2024, Bender, 2023) The earlier the use of AI is introduced in filmmaking education the less suspicious or threatened by AI they are.

2. A bigger study is required to respond to question involving participants from differing socio-economic backgrounds. In this context it did not seem to matter. As long as participants had access to the the tools the response was the same. AI is not biased. (bender 2023, Manu 2024)

3. Close theories but inadequate

- Constructivism
- Social Constructivism
- Connectivism

New paradigm required to respond to number 3. This is where Grounded Theory will come into play as we seek to define this.

Watching your idea, thought come to life. (Manu, 2024).

How do we define this connection. Where you still own it. And it is collaborative. (Zhou, Lee, 2024)

'Feel like a cheat but it is still mine'. (Toby)

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Thank You

For your attention