

## THE IMPORTANCE AND CHALLENGE OF ACTING FOR ANIMATION STUDENTS

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**Abstract:** *This research aims to investigate the impact of Acting in Animation course and how it helps animation students develop their ability to use movements and facial expressions to tell a story through 3D character animation models. The main focus of this research is to see if animation students can animate 3D character models better after understanding movements and emotions in acting techniques. This research will analyze the influence of body movements, facial expressions, and even vocal expressions on the overall quality of an animated work. The research method involves an in-depth study of acting for animators theories based on 12 animation principles. Through interviews with experienced animators, direct observation of the animation process, and critical analysis of prominent animation works, this research aims to identify the most effective acting strategies and techniques for creating convincing animated characters. The result of this research is expected to provide a deeper insight into the needs of acting for animation production, as well as provide practical guidance for animation students who wants to improve their abilities as animators to create the proper module in Acting in Animation class.*

**Keywords:** *animation; acting; students; animators*

### Introduction

Animators are basically actors. Hooks (2017) mentioned that it is practically impossible to make a non-living thing look alive without understanding body movements and emotions, therefore acting. As stated by Rolf Giesen and Anna Khan (2017), animators are essentially actors. Animation industry in Indonesia is familiar with the need for acting or performance art. However, in the field of education, there are not many classes that implements Acting in Animation for the purpose of animating 3D characters after the students made 3D character models.

The Animation Department at the Indonesian Institute of the Arts Yogyakarta

(ISI Yogyakarta) curriculum does not mention acting or performing art classes or mentioned it is needed in the animation industry. Below is the syllabus or courses obtained through the ISI Yogyakarta's website. Not only at ISI Yogyakarta, but also at one of the Bina Nusantara University (BINUS) study programs, also does not include or mention acting or performing art classes.

Both ISI Yogyakarta and BINUS University have excellent study programs to produce animation graduates who are clearly experts in their field. However, from both of these universities, it can be seen that acting or performing art classes aren't included for some reasons. Yet, there is a need to understand the funda-

mentals of performing art to bring animation models to life. Moreover, with the existence of motion capture technology capable of directly capturing human movements and transforming them into digital animation, where basic knowledge of acting is needed.

Matakuliah/matakuliah yang mengait pada bahan kajian tersebut di atas adalah:

1. **Kajian Animasi:** Prinsip Animasi, Penulisan Cerita dan Skenario, Permodelan 3D 1, Permodelan 3D 2, Animasi 2D, Animasi 3D 1, Animasi 3D 2, Animasi 3D untuk Game 1, Animasi 3D untuk Game 2, Permodelan 3D untuk Game 1, Permodelan 3D untuk Game 2, Proyek Terpadu, Praktek Kerja Lapangan dan Tugas Akhir.
2. **Kajian Seni Perfilman:** Penyutradaraan dan Papan Cerita, Sinematografi, Efek Khusus, Teknik Bekaman dan Editing Suara dan Integrasi.
3. **Kajian Teknologi Komputer:** Animasi Interaktif 1, Animasi Interaktif 2, Game 2D, Game 3D, Mesin Game, Desain Game, dan Kecerdasan Buatan untuk Game.
4. **Kajian Religi, Sosial dan Budaya:** Pendidikan Agama, Pendidikan Pancasila, Pendidikan Kewarganegaraan, Studi dan Desain Karakter, Akadaban Personal dan Antar Personal, dan Etika Profesi.
5. **Kajian Komunikasi:** Komunikasi Visual.
6. **Kajian Visual:** Proses Ide Kreatif, Menggambar, Ilustrasi, Komposisi, Studi Anatomi dan Gerak.
7. **Kajian Sejarah:** Sejarah Seni dan Animasi.

Figure 1. Curriculum at Animation Department of ISI Yogyakarta (Source: <https://isi.ac.id/program/semi-media-rekam/d3-animasi/>)

Sem	Code	Course Name	SKS	T e r p i
1	CHAR6013007	Character Building: Pancasila	2	2
	DSGN6165007	Western Art Review	2	0
	DSGN6646007	Material and Colors in Visual Design	4	0
	DSGN6645007	Eastern Art Review	2	0
	DSGN6643007	Drawing for Design	4	0
	DSGN6659007	Computer Graphic I <sup>a</sup> , **	4	0
	DSGN6962007	Animation Workflow	2	0
	Foreign Language Courses			0
2	CHAR6014007	Character Building: Kewarganegaraan	2	2
	DSGN6682007	Fundamental Drawing for Animation <sup>a</sup>	4	0
	DSGN6798007	Visual Communication Design I <sup>a</sup> **	4	0
	DSGN6234007	Visual Communication Design Review <sup>a</sup>	2	0
	DSGN6660007	Computer Graphic II <sup>a</sup> , **	4	0
	ENTR6509001	Entrepreneurship: Ideation	2	0
	LANS6027007	Indonesian	2	0
Foreign Language Courses			0	0
3	CHAR6015007	Character Building: Agama	2	2
	DSGN6661007	Photography <sup>a</sup>	4	2
	DSGN6683007	Visual Storytelling <sup>a</sup> **	4	0
	DSGN6963007	Visual Style Exploration <sup>a</sup> ***	4	0
	DSGN6964007	Animation Production Study <sup>a</sup> **	4	0
	DSGN6685007	3D Art & Form <sup>a</sup> **	4	0
Foreign Language Courses			0	0
4	DSGN6664007	Visual Communication Design II <sup>a</sup> ***	4	2
	DSGN6664007	Design Methods <sup>a</sup> ****	4	0
	DSGN6965007	Character Design Studies <sup>a</sup> *** **, ****	4	0
	DSGN6657007	Typography <sup>a</sup> ****	4	0
	Minor Program			4
Free Electives			4	0
Foreign Language Courses			0	0

5	DSGN6874007	Creative Design Workshop****	4	1
	DSGN683007	Animation Research****	2	0
	DSGN682007	Character Business Licensing <sup>a</sup> , ****	4	0
	ENTR6511001	Entrepreneurship: Market Validation****	2	0
	Minor Program			6
Free Electives			6	0
6	Enrichment Program I		20	2
7	Enrichment Program II		20	2
8	DSGN6960007	Pre-Thesis	2	6
	DSGN6961007	Thesis	4	0
	DSGN6990007	Thesis	6	0
			Total Credits 146 SCU	

Figure 2. Curriculum at Animation Department of BINUS University (Source: <https://animation.binus.ac.id/curriculum/course-structure/>)

Additionally, with a myriad of things a student needs to adjust to, such as a new environment, new learning methods, a different assessment process, and much more, it is not uncommon to find young adults with social anxiety disorders. In this study, the research process will not only focus on how acting can improve a student's skill in animating 3D character models, but also how acting helps students improve their social and communication skills.

This research seeks answers to the following questions:

1. How does Acting in Animation help students to improve their animation skill in 3D Character Animation class?
2. Can Acting in Animation students produce better quality animations after learning the fundamentals of acting?

## Methodology

This research will focus on a qualitative case study method of Digital Animation Study Program students at the Multimedia Nusantara Polytechnic (MNP), and observation method through the industries that use acting for animation and/or animated video games that use Motion

Capture technology.

Implementation of the research will follow the chosen research method. For example, in this research method, several work stages are carried out, namely:

### **1. Preparation**

The research implementation is carried out by conducting interviews with sources and attending acting class. Sources will also be taken from acting class mentors at Aura Entertainment Acting Class, namely:

- a) Derry Drajat (Actor)
- b) Kusumo Priyono (Storyteller & Public Speaker)
- c) Rama de Ranau (CEO of Aura Entertainment)

### **2. Implementation**

After understanding acting from Aura Entertainment Acting Class, those knowledge will be transferred into Acting in Animation and 3D Character Animation classes.

### **3. Differences and Difficulties**

Gaps between stage acting and screen acting should be shown in Acting in Animation class, where it would lead to making practical modules for Acting and Animation.

## **Result**

After finishing acting class with Aura Entertainment Acting Class, Derry Drajat, who was not only an Indonesian senior actor, but also the mentor of acting class mentioned that acting for animation and theatrical acting are very similar after

understanding the implementation of 12 principles of animation. Similarity shows especially in exaggeration, staging, follow through and overlapping action, and appeal.

For theatrical or stage acting, exaggeration and staging are needed to make sure the audience understands what the actors are doing during the performance, using the whole stage and exaggerating their movements since there will be an audience who sits far from the stage. Follow through and overlapping action is also implemented in theatrical acting where actors need to do extra movements to communicate the story through their body, where in animation it's adding extra frames to add fluidity to the movements. Appeal, just like in animation, is to keep the audience attracted to the character. These similarities show that not only can acting help animators to understand body movements, but also to make animators achieve such movements for 3D character animation by understanding actual body movements, especially in body mechanics.

Kusumo Priyono, one of the acting mentor experts in storytelling and public speaking, also mentioned how acting improves each individual's skill on communication. Therefore, helping to develop their social skills. Other than that, Rama de Ranau mentioned that he made acting classes in order to find raw talents for entertainment industry, but was astonished at the fact that acting classes are also needed for the animation industry, especially animators. This discussion brought him to a discussion where he saw videos of female motion capture actresses on TikTok platform and asked if that's what animation needs to achieve when it comes to the art of acting in animation. After several explanations about acting in animation and the implementation of acting for animation, exaggerating movements for animation characters is one of the crucial

parts of making the character alive, with or without understanding Motion Capture techniques for cinematography. Motion Capture or widely known as Mocap, not only used in cinematic experience. Mocap actors/actresses are very popular in video game industries. A Chinese Mocap Actress known as Sakana, took the internet by storm where she showed her agility and movements skill for video games character, in this case, "Fortnite". Sakana is a Mocap Actress from Chengdu Big Eyes Technology Co., Ltd., shows and shares her Mocap skill on her social media platforms, such as Instagram, TikTok, and YouTube.

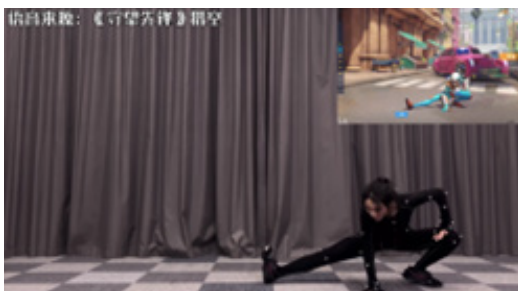


Figure 3. Sakana, Chinese Motion Capture Actress animating a character for "Fortnite" video game (Source: [https://www.youtube.com/watch?v=9OdEqpS8meA&ab\\_channel=%E6%9B%A6%E6%9B%A6%E9%B1%BCSAKANA](https://www.youtube.com/watch?v=9OdEqpS8meA&ab_channel=%E6%9B%A6%E6%9B%A6%E9%B1%BCSAKANA))



Figure 4. Sakana, Chinese Motion Capture Actress animating a character for "Fortnite" video game (Source: [https://www.youtube.com/watch?v=9OdEqpS8meA&ab\\_channel=%E6%9B%A6%E6%9B%A6%E9%B1%BCSAKANA](https://www.youtube.com/watch?v=9OdEqpS8meA&ab_channel=%E6%9B%A6%E6%9B%A6%E9%B1%BCSAKANA))

In cinema, it's widely known even before Sakana the Mocap actress. From *Avatar* (2009), James Cameron already used Mocap technology for all of his Na'vi characters. James Cameron not only maximized Mocap technology but also developed a cutting-edge system to combine motion capture with facial capture technology. With this, Cameron was able to fully record the full range of an actor's performance, including body movements and facial expression, and translate these into a digital environment with remarkable accuracy. Ng (2012) stated that where *Avatar* not only seeing, but "seeing" in a depth where she had never experienced before, where *Avatar* gives such an immersive feeling, from their hyper-realistic visual and movements.



Figure 5. Sam Worthington as Jake Sully in *Avatar* (2009) (Source: <https://images.app.goo.gl/cJkSLXm8jiW-WspFd7>)



Figure 6. Zoe Saldana as Neytiri in *Avatar* (2009) (Source: <https://images.app.goo.gl/GtfCsLy4nHvX-PrDr6>)

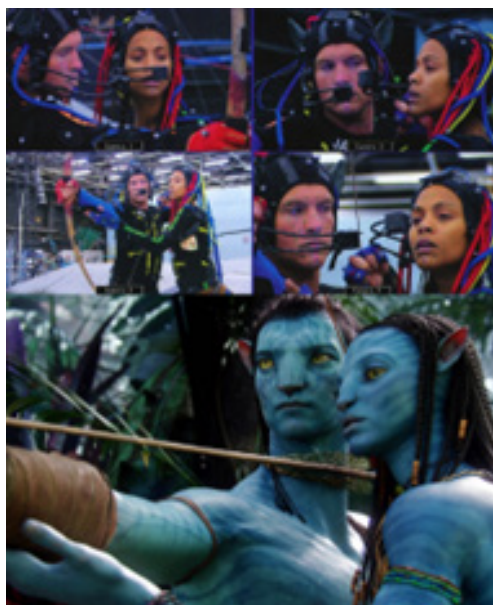


Figure 7. Capturing movements and facial expressions with Mocap in Avatar (2009)  
 (Source: <https://images.app.goo.gl/D7VKCHRbb7G-3G9iM>)

After the emergence of Avatar, it's only a matter of time where film, animation, video games, etc. use Mocap in their production. In 2011, Rockstar Games published a detective-mystery role playing game (RPG), "L.A. Noire", where they used Mocap for their characters. Even though it wasn't as hyper-realistic as Avatar, most video game players were ecstatic for this level of visual in video games.



Figure 8. Mocap in video game "LA Noire" (2011)  
 (Source: <https://images.app.goo.gl/njPPcM4Pqupz-p5ET9>)

In 2012, Naughty Dog released an action-adventure RPG called "The Last of

Us", behind the scene, voice acting, and overall the making of Spiderverse. In their Instagram account @spiderversemovie, their animators share their acting in skill in order to show audience how animators



Figure 9. Mocap in video game "The Last of Us" (2012)  
 (Source: <https://images.app.goo.gl/fbXJ7wZgxNzka-sA78>)

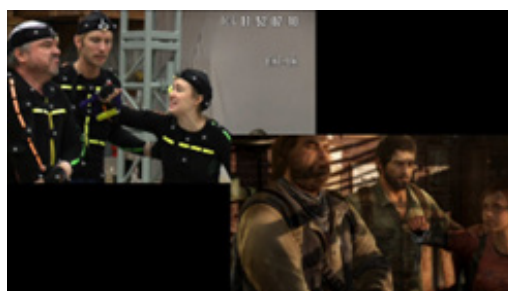


Figure 10. Mocap in video game "The Last of Us" (2012)  
 (Source: <https://images.app.goo.gl/LfhtPXi6S-raxykuH6>)

Us", where hyper-realistic movements were achieved. Like James Cameron, Naughty Dog also combined Mocap with facial expressions, achieving hyper-realistic movements for players.

In 2018, Sony Pictures Animation showed their breakthrough with "Spiderman: Into the Spiderverse", or widely known as Spiderverse. Spiderverse give such breathtaking visual, where they combined comic book style into animation film. Continuing their huge success with the first Spiderverse animation film, Sony released Spiderverse sequel called "Spiderman: Across the Spiderverse". Sony Pictures Animation also released

works. Daniel Ceballos, a Puerto Rican animator shares his work when he animated certain scene in “Spiderverse: Across the Spiderverse”. As an animator, performer, and artist, he showed a magnificent skill of acting for animating a scene, where the protagonist Miles Morales caught in a situation between his counselor and his parents. Ceballos showed his acting where he acted as Miles, Miles’ mother, and Miles’ father, where he used his own life experience to act for these three characters. Ceballos stated his mother was a Spanish teacher that has a habit on snapping her fingers, and his father is a hardworking man who shown to be strong and masculine. He implemented his life environment and experience to bring Miles Morales, Rio Morales, and Jefferson Davis characters into life with such unique characteristic.

Ceballos showed even as a senior animator, it is necessary to have a decent amount of acting skill where he implemented his mother and father personality into Rio Morales and Jefferson Davis characters.



Figure 11. Daniel Ceballos acting for Spiderverse (2023)  
(Source: <https://www.instagram.com/p/C3tC-Moeuohl/>)

Implementing experiences from Aura Entertainment Acting Class to Acting in Animations is a bit tricky. The majority of Animation Study Program students have social difficulties; they tend to be shy, timid, and passive in Acting in Animation class. Therefore, the materials from Aura Entertainment needs to be carefully implemented because students are expected to have the skill to understand scripts already while young animation students don’t have that skill developed just yet. Acting in Animation class started from the basics, such as understanding silent acting, Stanislavsky’s method, and situations and script analysis. These are the basics actors need to understand before they know what and how to act, like animators.

Animation students are given the opportunity to understand the differences between voice acting and voice over, where voice acting gives such appealing characteristics through voice and voice over doesn’t need such characteristics and appeal to make listeners understand the whole scope of information they need to give. They learned how to correctly produce sound; understanding clarity, different types of intonations, and speed and pause. Aura Entertainment Acting Class taught voice acting for recording and theater and those experience can be implemented in Acting in Animation class, where all sounds in animations are recorded. Unfortunately, MNP doesn’t have a recording room. Therefore, the voice acting recording subject only focused on simple recording devices like smartphones and clip-ons.

Slowly, after understanding the basics, animation students are challenged by performance assignments and it is absolutely necessary for amateur actors to understand themselves physically to execute exaggerations and staging to avoid injuries. Before class, the lecturer leads the students to do basic stretches, warm

ups, and simple workouts such as basic hip-hop dance moves to build up stamina and be comfortable to move with the audience around. It is also to boost the confidence of animation students.

Even after understanding acting theories, materials, exercises, and assignments, animation students still struggled to act in front of the camera, which they needed to do to make a reference video for 3D Character Animation class. Even though they now have more confidence to perform with the audience and on stage, they do not exactly act the same way in front of the camera. Apparently, there is a gap between getting used to acting with the audience and acting in front of the camera. Animation students revert back to their shyness, timidity, even passiveness when they make reference videos. It shows that Acting in Animation and 3D Character Animation classes need to teach students on acting for camera or screen acting.

## Discussion

After the explanation above, it appears that while taking Acting in Animation class, some students were experiencing stage fright and anxiety. It's not uncommon for amateur actors to experience stage fright. Steptoe (1995) also mentioned that the present study predicted that student actors tend to have thoughts related to panic and fear of collapse would be associated with heightened performance anxiety. Steptoe also mentioned age and inexperience, technical aspects, health-related problems and maladaptive cognitions can cause stage fright or even anxiety. Hence, it would help to have regular exercise to minimize all those factors.

Moeller (2019) mentioned that young adults, especially college students, tend to have problems with their social skills, which heightened their anxiety. Fauzzi-

yah (2018) also mentioned that the same thing happened with college students in Yogyakarta. Although, young adults with social anxiety have the tendency to be able to overcome those issues. Yin (2017) mentioned that college students presented a more and more obvious social openness. This was shown where animation students that began as shy and timid, can overcome their stage fright after a few training and practices to accomplish what was expected from them in Acting in Animation class.

Nevertheless, having an understanding of basic acting is shown to be needed for animation students, whether they become an animator or even Mocap actor/actress. Having knowledge of acting, not only develop soft skills, in this matter social skills, for young adults, especially animations students, but also take them far for their hard skill for their animation skill.

After animation students finish Acting in Animation course, animation students in the 4th semester need to repeat the Body Mechanics subject from the previous course, because students didn't achieve the attainment of this subject in 3D Character Animation 1. Since 3D Character Animation 2 is a course attended after the Acting in Animation course, a lot of students achieved the required skill to understand Body Mechanics subject. The result can be seen over 50% students listed in "11 Second Club", in the March 2024 Competition. The 11 Second Club hosts a monthly character animation contest where animators worldwide create animations based on a given line of dialogue. Participants share and critique each other's work throughout the month. At the end of the month, they vote on the best submission. This competition aims to provide animators with a fun and challenging way to hone their skills.



Figure 12. 11 Second Club  
(Source: <https://www.11secondclub.com/>)

The goal of this competition is to enter the top 150 and there are several students who went above and beyond and achieved ranks 78, 79, and 100.

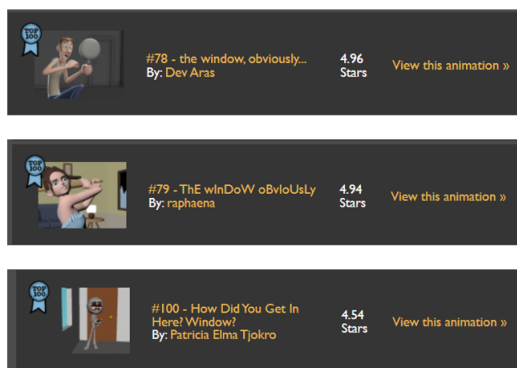


Figure 13. MNP Animation Students in 11 Second Club, March 2024 Competition  
(Source: <https://www.11secondclub.com/competitions/march24>)

Students have shown to improve their hard skills in animating after having basic understanding of acting in Acting in Animation course. Since the Acting in Animation course is in the 3rd semester with the 3D Character Animation 1 course, both modules of the courses need adjustment in order for the Body Mechanics subject to be achieved in the 3rd semester, and 3D Character Animation 2 no longer needs to focus on Body Mechanics anymore.

## Conclusion

This research examines the psycho-

logical state of students in the animation industry and the lack of acting classes in animation education. This study aims to understand how acting can improve students' animation skills, as animators and Mocap actors/actresses, and their social and communication abilities. This research finds that acting principles and techniques can be applied to animation, helping animators understand body movements and create more realistic character animations. Since 12 principles of animation are also applied for theatrical acting, it is also applied for animation students to have an understanding and basic skill of acting to improve their hard skills, in this context, animating.

Acting classes are also beneficial to the students' soft skill, in this context, their communication and social skills. However, implementing acting techniques in animation classes can be challenging due to the students' shyness and lack of script understanding. Additionally, animation students are struggling with acting in front of a camera, indicating a need for instruction or even training on screen acting in animation classes. The study highlights the common issues of stage fright and social anxiety among college students and suggests further research in this area. Overall, this research highlights the importance of acting training for animators and suggests the need for further research in this area.

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