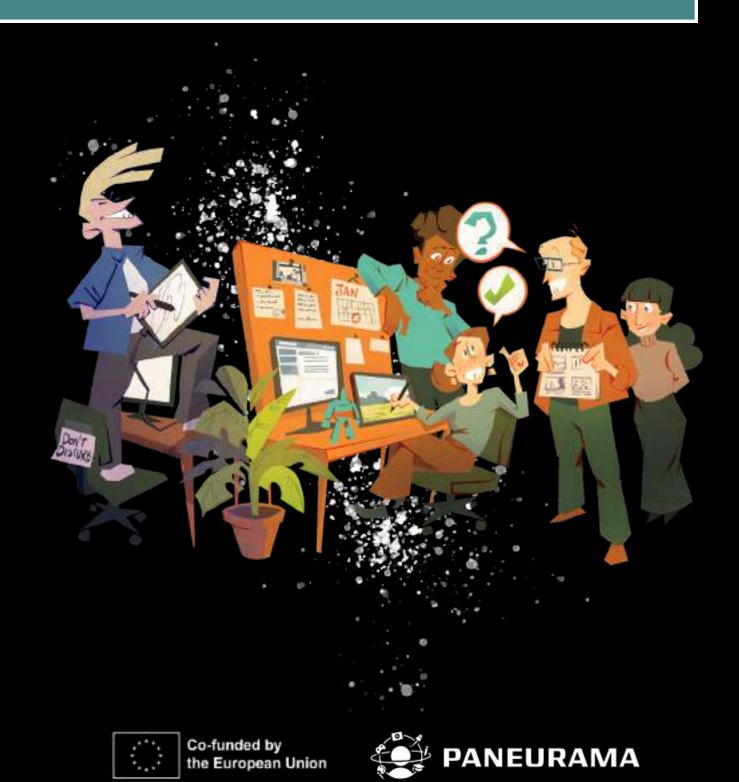
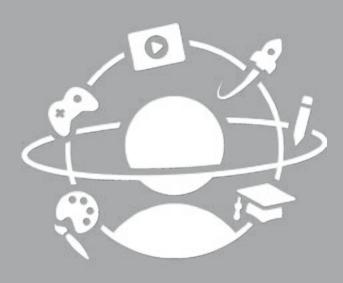
PANEURAMA Report 1

Work Environment Dynamics and Soft Skills in Animation, Games and VFX industries

September 2024





www.paneurama.eu

Meet the PANEURAMA partners and the authors

Authors:

The BUas Creative & Entertainment Games Research Team: Silke Hassreiter, Mata Haggis-Burridge, Tuki Clavero, Lindsey Bouwels.

The team collaborates to explore the dynamic landscape of animation, games, and VFX industries. With diverse expertise in game design, media production, and applied research, our team boasts over 60 years of combined experience in academia and industry. We are driven by a shared passion for bridging higher education with industry demands, initiating dialogues on diversity, ethics, and immersive storytelling. Together, we are committed to empowering young talent with the skills required for future careers and fostering innovation in the ever-evolving digital entertainment realm.





Table of contents

Foreword
Shaping the Future: The Role of the PANEURAMA Project in Creative Industries and Education
Evolution of European creative industries and educational institutions: navigating growth, challenges, and cultural shifts
Who are the participants?
How to navigate this report?
Summary
What did we find?
Industry expectations, the 'ideal employee' and the 'ideal applicant'
The new 'ideal employee' - the adaptable team player
The 10 key dimensions of adaptability of the 'ideal employee' in the games, animation and VFX industry
Variations of core skill set depending on type of employer
Shift towards adaptable teamplayer aligns with growing advocacy for improved working conditions in the industry
'No asshole' hiring policy
Looking for a needle in a haystack – finding 'the ideal fit' in an over-saturated job market
Fast and 'safe' hiring solutions
From pre-selection role of educational institutions to self-distinguishing role of students
Adaptability extending beyond skills needed for day to day work -the 'ideal employee' needs to be first the 'ideal applicant'
Strategy tips from the industry for the 'the ideal student' on how to become the 'ideal employee and applicant'
Strategy tips from the industry for educational institutions on guiding students through industry expectations and market realities
Educational institutions and the 'ideal graduate' - a balancing act between industry expectations, job market realities and educational mandate
Self-inflicted challenges and concerns: oversupply of talents leading to heightened requirements for students and educational institutions
Educational institutions' answers to the balancing act between industry demands, job market reality, and educational mandate
Conclusion



Foreword

Shaping the Future: The Role of the PANEURAMA Project in Creative Industries and Education

Since 2023, the Pan-European Innovation Alliance of Animation, Media Arts & Cultural Creative Industries (PANEURAMA), co-founded by Erasmus+, has brought together leading European games, animation, and VFX companies with leading educational institutions in this area. PANEURAMA aims to unite the diverse voices of industry professionals, educational experts, and students to collaboratively evaluate and shape industry demands and educational models. The goal is to continuously align these demands and models within the realistic possibilities and limitations of both the industry and educational institutions, adapting to the constant changes in both realms.

When PANEURAMA members first came together, they recognised the need for a project that establishes a baseline of the current status quo, as captured by the voices of industry, educational professionals, and students, to foster ongoing and fruitful discussions between the three parties. This baseline is not intended to be exhaustive but a steppingstone for a collaborative platform that will include even more diverse voices and experiences in the future. These ongoing conversations are meant to collaboratively foster new creative solutions to build a sustainable, healthy, resilient, and skilled workforce within this unique, fast-paced, and ever-changing industry.

This industry has long been at the forefront of innovation and creativity, continuously shaped by technological advancements, shifting consumer preferences, and evolving market dynamics. The COVID-19 pandemic has accelerated these transformations, leading to significant changes in work practices, collaboration models, and industry priorities. Technological advancements, such as real-time rendering, motion capture, and AI-driven content creation, have drastically reshaped the industry landscape and methods of working.

Social movements such as #MeToo and the Gamergate harassment campaign have also had a significant influence on the industry. These movements highlighted ongoing issues of discrimination and toxicity, prompting a re-evaluation of workplaces, communities, and creative culture. As a result, there is now a stronger emphasis on creating inclusive, respectful, and supportive work environments and dynamics. Companies are implementing policies and training programs focused on diversity and inclusion, and are actively working to foster a friendlier workplace culture based on accountability and respect.

Next to the traditional players in the industry in the past years also newcomers started establishing themselves in the field and offer new opportunities for professionals. For example, in addition to major studios, streaming services have become significant players in the animation and VFX sectors, commissioning original content and driving demand for high-quality productions. Furthermore, nontraditional sectors such as architecture, healthcare, and education are increasingly utilising games, animation, and VFX for content creation, presenting new opportunities for professionals. At the same time, mass layoffs and cautious investor behaviour have highlighted the industry's vulnerability to economic fluctuations and investor sentiment.



As the industry continues to grow and diversify, professionals and students must navigate a landscape characterised by constant change, adaptation to new trends and demands, and the integration of new technologies. Educational institutions play a critical role in this evolution, as they are tasked with developing (new) talent to meet industry demands. With games, animation, and VFX becoming increasingly popular career choices, growing numbers of educational institutions now offer specialised programs alongside the handful of established games, animation, and VFX programs. This expansion leads to an increasing number of graduates entering the job market, intensifying competition for positions and highlighting the necessity for continuous learning and skill development. As a result, everyone in the field must continuously acquire and adapt to new developments.

The PANEURAMA Project, spanning from 2023 to 2026, has conducted comprehensive research, resulting in three reports that assess the current landscape, challenges, and achievements in the following areas:

- Report 1: Soft skills, work environment, and dynamics (2024)
- Report 2: Innovation and entrepreneurship (2025)
- Report 3: Technological developments (2026)

Insights from these reports are integrated into policy advice, online training communities, master classes, and training camps for students and graduates. Additionally, the project provides practical guidelines for implementing best practices in sustainable professional growth and development.

This first report focuses on soft skills, work environments, and dynamics. It aims to highlight industry demands regarding workforce skills in these areas and the efforts of educational institutions and students to meet these demands. It also examines the daily experiences, successes, challenges, and limitations faced by participants from all involved parties within this context.





Evolution of European creative industries and educational institutions: navigating growth, challenges, and cultural shifts

This chapter outlines some of the major developments in the European games, animation, and VFX industries, along with the corresponding evolution of educational institutions. It highlights how, since the early beginnings of these industries in Europe, there have been significant developments in work environment and dynamics and culture driven by technological advancements, changing consumer preferences, varying reputations of the industries, and a growing awareness of the importance of employee well-being and inclusivity. These shifts, along with accompanying challenges, provide the context for the experiences, insights, and perspectives shared by participants in this report, particularly concerning students' preparedness for the unique work culture of these industries.

With 53% of the European population between the ages of 6 and 64 playing video games, the European gaming sector has seen remarkable expansion since the 1980s[1]. Big companies like Ubisoft in France and Rockstar in the UK are notable success stories[2], but game development is widespread across Europe, with a combined revenue of \in 24.5 billion across five key markets in 2022[3]. Notable contributors to this growth include France, Germany, and Poland, which host renowned studios such as Ubisoft, CD Projekt, and Crytek. Poland, in particular, has experienced rapid growth, attracting talent from neighbouring countries like Russia, Belarus, and Ukraine. Despite the challenges of Brexit, the UK remains a significant hub for game production beyond the EU. By 2023, the industry has created 110,000 jobs in Europe, with France emerging as the largest job market, boasting 20,000 positions[4].



^{[1] 2022} All About Video Games-European Key Facts. (2023). VIDEOGAMES EUROPE.

- [2] The video games industry in Europe: Current situation, issues and prospects. (2023)
 [3] 2022 All About Video Games—European Key Facts. (2023). VIDEOGAMES EUROPE.
- [4] The video games industry in Europe: Current situation, issues and prospects. (2023).

[6] Diversity In The Animation Industry Statistics. (2024)

^[5] Research and Markets (2022). Europe Animation, VFX & Video Games Market Report 2022-2026: Industry is Growing Fast and an Increasing Number of Films Produced have Attracted Global Audiences and are Distributed Worldwide. GlobeNewswire News Room

For decades, the games, animation, and VFX industries have been synonymous with toxic work cultures often marked by harassment, discrimination, and chronic stress[6]. The constant pursuit of tight deadlines, at the expense of work-life balance, has perpetuated an environment where professionals endure high levels of pressure and anxiety. However, recent years have seen a notable shift as awareness of these issues has grown, prompting concerted efforts to foster healthier workplaces. Initiatives aimed at combatting toxicity have gained momentum, with advocacy groups, industry networks, and individual companies taking steps to prioritise employee well-being, mental health, and diversity.

Despite these positive strides towards a more inclusive and supportive work culture, the games, animation, and VFX industries remain demanding and highly competitive arenas. The high pace, coupled with pressure to deliver high-quality work within limited budgets and timelines, exacts a toll on professionals. Sustainability concerns are being made, with half of the professionals leaving the industry latest after 7 years. Moreover, systemic issues such as unfair pay disparities, low wages, and inadequate retirement provisions persist, contributing to financial insecurity and stress among workers[1]. The often still expected unpaid overtime further compounds these challenges, with professionals working excessive hours to meet project demands[2]. Adding to these pressures are waves of layoffs and 'soft layoffs', where individuals are released due to their reluctance or inability to return to the office after remote work arrangements[3]. The fear of burnout and exhaustion has become an integral part of the job, posing significant obstacles to the well-being and longevity of the industry's workforce[4].

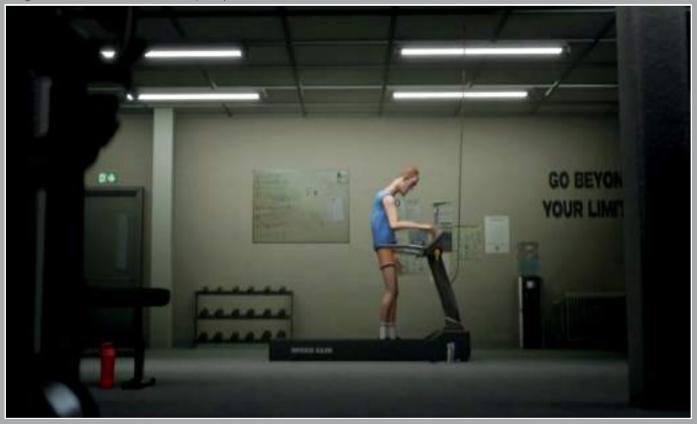


Image credits: PANEURAMA NXT GEN LAB, Group 1

Plant, L. (2023). Exclusive: New Survey Reveals That Many Game Developers Consider Their Career Unsustainable.
 McEvoy, S. (2023). Survey finds more than half of game developers experience crunch.
 Kaur, T. (2024). Return To Office Orders Are A Mistake, But Game Studios Don't Care. TheGamer.
 Plant, L. (2023). Exclusive: New Survey Reveals That Many Game Developers Consider Their Career Unsustainable.



Industry collaboration plays an important role in shaping curriculums and providing students with real-world experiences. Many European institutions maintain close partnerships with animation studios, game development companies, and VFX houses. These collaborations manifest in various forms, including guest lectures, workshops, internships, and industry-led projects. The aim of these collaboration is to stay aligned with industry demands and allow students to build strong networks with industry professionals from an early moment in their education.

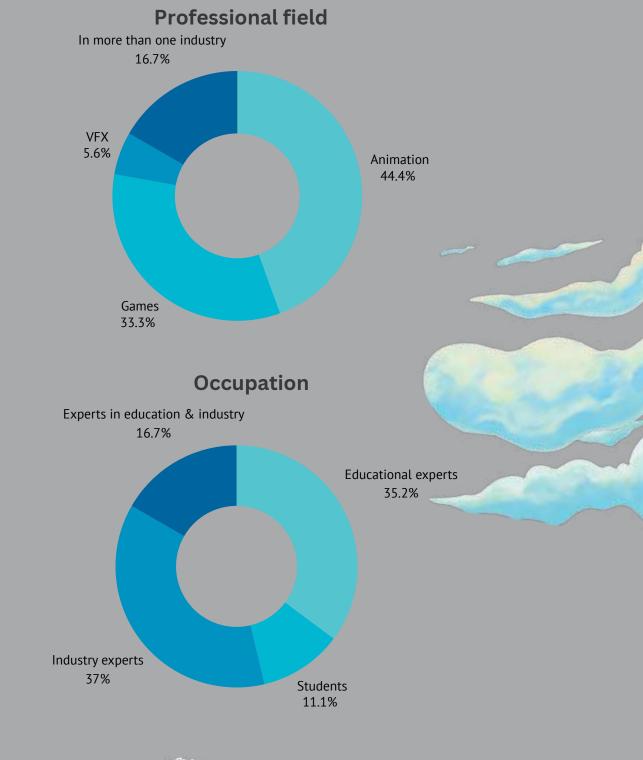


External influences, including governmental regulations, accreditations, financial pressures, and institutional visions, play a significant role in shaping decision-making processes within educational programs. For instance, some countries are adopting a more nationalistic approach to education, advocating for the use of the national language in programs to maintain or reduce the influx of international students, while others are encouraged to internationalise their programs to attract higher-paying foreign students. Moreover, student satisfaction surveys exert considerable influence on decisions related to curriculum, course content, and faculty, as institutions strive to meet the demands and expectations of their student body. The measurement of employability rates has become a crucial factor, with educational institutions establishing dedicated employability teams to track whether students enter and remain in their respective industries. These external factors shape the strategic direction and operational decisions within educational programs, reflecting a complex interplay between institutional goals, regulatory requirements, financial considerations, and student outcomes.

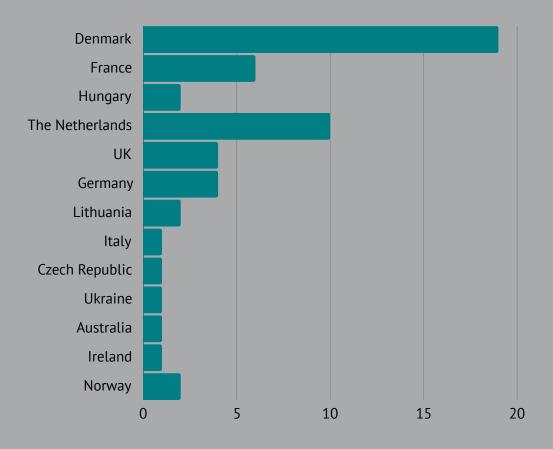


Who are the participants?

Against this backdrop, the study collected the voices of 54 participants from across Europe. The participants were selected using a snowball sampling method, initially drawn from PANEURAMA's partner networks. The participants are evenly split between the education sector and the industry, with some engaging in both domains. While most participants hold senior positions in the industry and educational institutions, input from junior professionals and students was also incorporated, providing valuable insights stemming from their recent transitions from education to industry, thereby offering fresh perspectives on student readiness.



PANEURAMA



Country of employment

The experiences, challenges, and successes shared by the participants were gathered through 60-minute online conversations between them and the research team. The research team itself has a background in the industry and education. The collected data underwent thematic analysis using the software Atlas.ti to systematically identify recurring themes and patterns within the conversations. These findings are presented in detail throughout the subsequent chapters of this report, reflecting the participants' own words and providing a comprehensive understanding of their perspectives.

To ensure the accuracy and depth of the findings, several additional group sessions were organised. In these sessions, fellow researchers and participants engaged in discussions to validate initial findings, explore intermediate outcomes, and provide more nuanced insights into the identified themes. The initial findings from the thematic analysis were shared at conferences held across Europe, such as FMX in Germany and MIFA in France. These conferences provided opportunities for further discussion and development of the findings in panel discussions involving industry professionals, educational experts, and students. This collaborative process helped refine the initial findings and ensured that the insights captured from the data were robust and reflective of the perspectives shared by diverse stakeholders in the industry and educational sectors.



The report does not encompass all possible voices and perspectives, nor does it cover every relevant topic. As noted earlier, it is intended as a foundational stepping stone for further discussions and deeper exploration in the future. Part of the PANEURAMA project is that the ongoing dialogue among industry professionals, educational experts, and students is crucial for continually refining our understanding of the evolving dynamics within the games, animation, and VFX industries and for collectively shaping strategies that align with the needs of all three parties to foster a sustainable and innovative workforce.





How to navigate this report

The different perspectives of the industry, educational professionals, and students are colourcoded in the following report for readability, convenience, and clarity: industry perspectives in blue and educational professional perspectives in green and student perspectives in pink.

Direct quotes from participants have been lightly edited for readability without compromising their original meaning. The length of the quotes presented in this report remained mainly unchanged to preserve the depth of insights provided by the participants. This approach allows readers to grasp the nuances of each viewpoint while navigating the report. However, the report is structured to also facilitate a quick read for those who prefer to skip the direct quotes.

Image credits: Robot Workshop" by Niels Martin Träff





Summary

This report provides an overview of current trends, challenges, and successes regarding work environments and dynamics within the games, animation, and VFX industries, as well as in educational institutions.

The first part of the report: Industry expectations, the 'ideal employee' and the 'ideal applicant' highlights a notable shift in industry preferences from valuing 'rockstar employees' to prioritising humble, adaptable team players who maintain a healthy work-life balance. Participants define adaptability within these industries and discuss why it may not be enough to 'be the ideal employee' when wanting to enter the industry as a graduate. They explore how an oversaturated and competitive job market complicates industry expectations, leading to dual demands of fulfilling both the contradictory skill sets of an 'ideal employee' and an 'ideal applicant,' the latter being a competitive self-promoter with excellent hard skills. The participants provide suggestions for students and educational institutions on how to balance the expectations of individual excellence and strong interpersonal skills.

In the second chapter: Educational institutions and the 'ideal graduate' - a balancing act between industry expectations, job market realities and educational mandate, the report presents the experiences, challenges, and achievements of educational institutions and students. Participants identify trends towards fostering healthier work environments, promoting work-life balance and lifelong learning, and adopting collaborative practices aligned with industry expectations.

They highlight how educational institutions respond to the constantly changing needs of the industry with flexible, practice-based, and self-directed educational approaches. However, they also point out that a full industry-led approach could undermine the educational mandate and the ideals of the industry. Additionally, they discuss the persistent challenges in following such a 'nuanced' industry-led approach, including conflicting industry demands, diverse perspectives among educational staff, varying student backgrounds, pressures from a competitive job market, and student and staff insecurities and high workloads.

Overall, this report aims to map out, bring together into one report, and give insight into discussions that are taking place at this moment among industry professionals, educational institutions, and students regarding the matches and mismatches between industry expectations and student readiness.



What did we find

Industry expectations, the 'ideal employee' and the 'ideal applicant'

This chapter explores the perspectives of the games, animation, and VFX industries on their current state and the ideal work environment and dynamics. It highlights a shift from valuing 'rockstar employees' to prioritising humble, adaptable team players, aligning with trends towards healthier workplaces, reduced crunch times, and increased diversity. Participants identified ten key dimensions of adaptability essential for the 'ideal employee', such as teamwork, problemsolving, continuous skill development, and flexibility in managing overtime and living arrangements. They acknowledged the nuanced application of these skills across different employers and contexts.

Challenges hindering industry progress include persistent demands of some companies for long hours, ongoing institutional toxicity, and the mismatched skills demanded by an over-saturated job market compared to those of the 'ideal employee'. To succeed in this competitive environment, 'ideal applicants' must possess strong hard skills, competitiveness, and effective self-promotion and networking abilities.

Industry strategies recommended for students navigating these conflicting demands include mastering both technical and soft skills, and excelling as both standout applicants and collaborative team members, all while maintaining a healthy work-life balance and drawing creative inspiration from hobbies outside of work.

Educational institutions are encouraged to align their curricula with current industry needs, emphasising lifelong learning and preparing students for global career opportunities. Additionally, institutions should advocate for and promote ethical workplace practices, ensuring graduates are equipped to contribute positively to evolving industry dynamics and workplace cultures.



The new 'ideal employee' - the adaptable team player

To set a baseline, industry professionals explored the concept of the 'ideal employee' in the context of fostering and maintaining a friendly, innovative, and sustainable workplace culture amidst rapid industry evolution, global audiences, and various industry challenges. When looking at the most used terms to describe the specific core skill set expected of these 'ideal employees', the following word cloud develops. The bigger the word, the more often it has been used by the participants to describe 'the ideal employee'.



The most commonly used terms to describe the current 'ideal employee' are: humble, adaptable, team player, and perfect fit.

While there has been a history of preferring so-called 'rockstar' employees, characterised by their exceptional work, full dedication to their job, and willingness to work overtime, there is now a significant shift towards a different profile. The participants emphasised that while rockstar employees may deliver exceptional work, they often lack adaptability, which is crucial for thriving in an industry marked by constant (technological) changes and varying client demands. As the industry grows and professionalises, work has increasingly become a team effort, producing collective outcomes rather than relying on the brilliance of a single 'rockstar' or a small group of them. The tone of communication has shifted towards a more professional and friendly manner. According to the participants, rockstars struggle to adapt to these changes, remaining driven by their ego and individualistic work style, which hinders effective collaboration. While some workplaces still explicitly seek rockstar employees for their exceptional skills, according to the participants, there is a clear trend in the industry towards hiring adaptable team players. This trend indicates that employers are not only looking for the 'ideal fit' for the job but also for the team.



People who work hard and you can count on them for like 14, 15, 16 hours per day - those were the best people by then. But that's not the case anymore. A good working culture is key nowadays. [...] It is important to have a good environment. A fun environment. If you're having fun doing your work, you want to be there, you will do more. You will help each other more. You'll sacrifice more time (29).

//

Sometimes there's this Rockstar programmer, they're doing 10 times the work of other people. They're like the cornerstone of the project and the problem is that it sometimes makes sense. Like you might have someone who's really good at taking on massive projects and doing a lot of work and that's great. [...] They're good at their job, but they're also kind of toxic because they often feel like they're better than everyone else. And they maybe have wriggled themselves into a position in which the project depends on them, so they can't really be fired, so they can be an asshole. It feels like 'rockstar programmer' is no longer really a very nice term (81).

I think we hire a lot based on chemistry. When I started my own company [...] I hired people that were not the right fit. But I realised you need to find somebody who fits in your team and you need to worry less about skill. Applicants often think: okay, I get a job because my portfolio is outstanding. That's true, and that helps. But what if you can't work with anyone? So I feel chemistry is the most important thing and I don't care if they [their hard skills] are less good. That can be taught. You can teach them so many things and they will be better in the end than the person who came in and knew everything and didn't fit (23).

I always picked people that I thought were good for the job and I happened to end up with a very diverse team. It just kind of turned out that way and now I am a little bit: if we get someone else on the team, I wanna make sure that they fit. Because I really like that the team is able to work well together and that they can communicate with each other and that they can also vibe with each other outside of just working. Definitely soft skills are very important and that is why you have an interview to some degree as well to make sure that the person you're talking to knows what they're talking about [hard skills], but also that they would be able to fit in with everybody else. Which sounds very much like conformity, but it's more like making sure they would not be an asshole. That they would not just kind of like do their work, clock out, never speak to anyone (81)."

When further exploring the meaning of 'being an adaptable team player' within the industry, the participants recognised that the terms encompass several dimensions depending on the context. They outlined ten key dimensions that collectively define the concept adaptability within the industry. According to them, an 'ideal employee' should embody all these dimensions.



The 10 key dimensions of adaptability of the 'ideal employee' in the games, animation and VFX industry:

These 10 key dimensions of adaptability for the 'ideal employee' in the games, animation, and VFX industry are:

- Team collaboration
- Flexible and pro-active problem-solving
- Continuous and pro-active skill development
- Client orientation
- Receptiveness to feedback
- Cultural competence
- Interdisciplinary, hierarchical and intergenerational communication
- Flexibility in managing overtime and work-life balance
- Creative inspiration from outside of work
- Willingness to relocate and English language proficiency
- The following section explains these dimensions in more detail in the participants' own words.





Team collaboration

The participants emphasised the importance of teamwork and collective responsibility in the games, animation, and VFX industries. The industry requires effective collaboration, as projects often involve multiple specialists working together on different aspects. It is crucial for industry professionals to work closely, adhere to standard procedures, and manage the pressure of relying on each other's contributions to ensure overall quality and efficiency.

"For me, it is very important that they [employees] understand that it is very much a team effort. So if you don't do your best, all the others will feel it. I think this is what I care about a lot: that they are a good colleague, a teammate (39).

There is not only one department working on a production. It is a big team with many different departments. This is a collective project and a collective success with all departments involved. I'm in my team, with my department, but I also need to consider people who are working before me in the pipeline and after so I can understand what they need after I do my job. And from the people before me, I also need to consider what I expect from them to be able to do my job (49).

It's very close collaboration, right. Regardless in which company you are, a lot of disciplines need to work together really tightly. And this is especially the case with remote work, which obviously got more popular since COVID and everything. There's often a need to double check that everyone's really on the same page, because sometimes it's sounds like everybody is on the same page, but then you dig a little deeper and it turns out people are thinking of different things (81).



Image credits: PANEURAMA NXT GEN LAB, Group 1



For me it comes down to really understanding that you're going to work together with other people, and you've gotta be accountable within that team. You gotta work as a team. Show respect. Leave your egos behind. Understand that you're a team, working together on a common goal (29).

The key things which I've learned and which are passed on to my students, because now I also teach game development, is that there's only two real key criteria that studios are potentially looking for: One is, can they technically deliver what I need them to deliver? Can they make what I need them to make and how much support do they need to do that? The second one is: Are they going to be a good fit for my team? Do I wanna sit next to this person in my office 8 hours a day? Are they gonna be constructive? They're gonna be helpful? Are they going to bring value to the studio and the work that the studio does? Those are the two key criteria (69).

Due to significant changes in work ethos in recent years - such as reduced crunch time, increased emphasis on work-life balance, and a greater focus on diversity and inclusion -different generations within the industry reflect varying approaches to working. Therefore, according to the participants, it is crucial for employees to find ways to collaborate effectively with colleagues from different generations and with a different work ethos. Bridging these gaps together as a team is essential to developing a more suitable, healthy, and effective work environment and dynamics for everyone.

It's a young industry with passionate people. And you have to try to find the balance between working with young people from your generation and maybe between 5 to 10 years older than you, and also a bunch of people who are older, who started their career maybe 20 years, more than 20 years ago. Then there were not a lot of schools like now, they are people who were learning by doing in this industry and created this industry with a small budget, small timing, short timing to do a project and just doing it with passion and trying to do their best. And so, when you enter the industry, you need to find a balance to work with these two different people (49).

The participants acknowledged and value that many educational institutions have already recognised the importance of teamwork within the industry and have integrated the development of this skill into their curriculum. This enables students to gain initial work experience in teams and within production pipelines within a supportive environment. The participants emphasised the ongoing importance of cultivating this skill across various contexts and phases of production, including iterations.

I think working in a team is already happening for ages at universities, so I think that's something that needs to be continued and even emphasised as much as possible, because that's becoming the key aspects of being a good employee (33).



You have to really be able to work as a team. You need to learn, to practice that. You have a team of five people [at educational institution] and then suddenly one is doing modelling. The other one is doing maybe lighting. Somebody is doing production things and somebody else's just sitting around because you have that kind of person every time in the project. But in the industry there are 10 modelling artists, so sometimes 11 models are created by different people. So you have to work together.You have to hand over stuff. You have to work with other people's work, which is a totally different pressure because if this person is not good enough, then you look bad as well. Then you need to learn standard procedures for a lot of things that save time and that's something you have to understand and accept (41).

I expect that you [student] have been in the environment where you're in a team, preferably more than four, let's say eight people that is trying to make a game, ideally with a scope of three months or more. Because what happens when you are in a bigger group making a game for a longer time and ideally getting closer to what we would call release instead of alpha or beta, is that you together encounter the stages of development such as iteration or cutting scope, polish, bug fixing, play testing. Those crucial stages are almost never encountered by these people [students at educational institution]. They get stuck in alpha [at educational institution projects], they never progress beyond alpha because either they lose interest or the module has ended. So they've experienced 25% of what game development's about. [...] I've encountered so many people who haven't even encountered game development until an alpha stage. They're basically in the stage where they've opened some YouTube tutorials on game development and they've followed beat for beat the buttons that you're supposed to click on, and now they're like, look, I did it. I made a game and it's like: Yes, you followed a recipe. Great job. But I don't have any confidence that you understand how to do this again, in a new context (60).

[During group work in my educational institution time], what I was really missing is that you don't learn about iteration and that's kind of key in game developments. The constantly iterating, like what I do here now when I make an animation. Yeah, I sometimes change it totally, sometimes drastically, sometimes slightly, but it changes frequently. Depending on the needs of the game design or the experience the player played tests, and that is important. But they don't have that time at school and that kind of sucks (95).

#FailingForward: flexible and pro-active problem-solving

In addition to having strong collaborative skills, participants emphasised the importance of flexible and proactive problem-solving skills. They stressed that ideal professionals in the field should not only excel at problem-solving but also genuinely enjoy it. Having a proactive and positive attitude towards challenges is crucial, with a flexible mindset and a willingness to experiment with different solutions until finding what works best. The participants understand that maintaining this attitude constantly can be challenging, but they expect from employees to demonstrate professionalism within a fast-paced and creative field by constantly making the best out of every situation and persistently seek solutions.



It is important that you have the willingness to solve problems that might come along. They will come along. And you should not be sceptical or saying right away it is not possible. There is the 'no' kind of person and there is the 'yes' kind of person. We need the 'yes' kind of person. It's about the energy, the excitement about the project. I get it, you cannot be it all the time, but then put on some sort of professionalism, and make the best of it. Say, this is what it is and we need to solve it. [...] And I also think it's to be proactive. It's a new field and we always have to be creative on how we do things in the best possible way. So, be proactive [in problem solving (39).

[The employee] got to know how to deal with those problems that come up and wanting to deal with it. [...] That job is problem solving on a very miniscule level actually. Like when a programmer doesn't understand what you mean, you need to make sure that you have an exact vision of it, so that you can show them. That you [together] can find ways to do that. That's kind of like a puzzle. I see game developer working on puzzles. The job is always trying to find the right puzzle pieces and how to align them just to make it work. All those tiny bits and pieces that you're making eventually come together with the other parts. And it just really cool. I really, really like that part (95).

Participants emphasised the critical importance of problem-solving skills in the industry but noted a decline in proficiency among young professionals. They observed a tendency especially among younger professionals to hesitate in independently identifying and addressing issues, often seeking immediate help instead or glossing over mistakes until not possible anymore. According to participants, many young talents find it challenging to make informed decisions about when to resolve a problem independently and when to escalate problems to supervisors. This challenge is believed to stem from a fear of making mistakes. The participants view this as problematic because they consider experimentation, finding innovative solutions, and learning from mistakes integral to the industry's learning process: professionals are expected to embrace setbacks and failures as part of the creative journey. In discussing this concern, participants coined the term '#failingforward' to encapsulate the essential process of boldly identifying, approaching, creatively solving problems, and, if unsuccessful, swiftly learning from the experience and trying again.





I think what is specifically very positive to have is, if there is a problem, bring it up. Don't be hesitant and sit on a problem and like: 'Oh God! No, no, no. I'm stuck.' Rather bring it up, like active communication. Bring it up. Right? This is specifically very valued (63).

I think the industry needs to have creative problem solvers. It's quite common for juniors in the industry, when they come up against a problem that they haven't seen before, to freeze or to not know what to do. Or they panic. Or [they think] if I say I've got a problem, I'm gonna be thought less of or I'll get fired or I'll get in trouble. I don't know what to do. it's better just to put my head in the sand and maybe the problem will go away. Or they ask every two seconds: 'What do I do? How do I do this?' And that's exhausting as well. That's not the answer either. The right answer is to come up with creative solutions. Try things out. I don't know if this is coming from the school curriculum at the moment or if this is something that's happening in the undergrad curriculum, but I know that industry is noticing that the juniors nowadays are less likely to take risks. They're more worried about getting into trouble. They're more worried about not knowing what to do, and they're just freezing. They're not doing anything or asking for permission or questions on every single little step along the way. [...] And in an industry your supervisor or lead doesn't have time to answer a question for a junior every 5 minutes. So they need to know that a junior has gone through at least the fundamentals of that process, so that they've at least try to work it out themselves. Because there's nothing worse than when they face a problem and they just try to get someone else to fix it for them. That's lazy. They're not learning how to solve a problem. I think it's important that it has to be taught: the idea of allowing for mistakes. I think at a company level, there has to be a culture of allowing for mistakes, because then you get the best out of everyone (78).

The participants perceive educational institutions as ideal playgrounds for practicing #failingforward in a safe and supportive environment, guided by experienced educational staff.

I definitely think that there should be more emphasis on problem solving [at educational institutions] than just learning something, because learn something can happen in my studio as well. I don't expect them to be perfect in day one. That's also a learning curve, but troubleshooting is not that easy if you're not used to it from a very young age. For some people it is already a mindset. You can throw anything at them, they are so fast. Like, how do you do that? I mean, that's incredible. And some people don't know what to do about it and they can't solve it because they never worked in that situation before. It takes a certain mindset to not be afraid of it, to stand in front of it and saying: I can do that or if I can't do it, I'll figure out a way (23).





Lifelong Learning: continuous and proactive skill adaptation

Furthermore, participants identified the importance of a commitment to lifelong learning. Staying updated is crucial at all levels of hierarchy, as technical skills can quickly become outdated. Employees are expected to continuously engage in critical self-reflection to realistically align their skill sets with technological developments and industry demands throughout their career. Some companies support this by allocating time within projects for skill development, while others expect their employees to continue learning in their own time.

We are in a field where the things [hard skills] you learnt at educational institution one year ago are outdated a year after. So the people [ideal employees] are people that make sure that they stay updated. I think [Educational institution] gives a good sense about the basics, but it is not enough. They always have to keep themselves updated (39).

Proactiveness is very often talked about as a positive trade. It is something to prepare for. It's a positive trait to be proactive and to be eager to learn. I think it is all about accepting we are not perfect and an openness to receive information. Then there is growth there (63).

Updating your skill sets autonomously is quite key. It's okay to come out [of Educational institution] with an absolutely pristine set of technical skills and go into your first job as an associate or a junior, but if you don't maintain that continuous professional practice and keep up to date with the, I'd say rapidly, exponentially accelerating innovations in technology such as the use of AI, such as the potential implementation of conceptual but possible future work framework such as the Metaverse. How are you going to be able to apply or retain yourself to an employee? So adaptability and dynamism is one of the key things (69).

Things are moving fast and that is a challenge for all the students coming to the industry. The tools and the environments move so fast. I'm an electrical engineer and the things we learned by then at Educational institution, we don't use today, but we learned to adapt to new knowledge and take it in and make it work. I think the best skill you will learn from going to educational institution is 'how to learn'. To fail and stand up and to solve problems and puzzles and everything (26).



Image credits: Meeting the Giantess by Yuliia Silkina



While participants expect educational institutions to teach students a solid foundation of hard skills and knowledge, they also emphasise the importance of teaching students how to stay current with industry and technology changes and trends and proactively update their skills to remain relevant. The participants underscore the significance of continuous proactive self-improvement, particularly given the increasing prevalence of artificial intelligence (AI).

What universities will have to do, is definitely not to scare students about AI. But really, use AI tools and come up with a solution how they can potentially use different AI solutions with their traditional software skills together. Because what I see is that, some artists will lose that job. But it's those who will not have an understanding of AI. Maybe not even the best artists will remain in business if they can't use different AI tools. And not because they could not stand out. Yes, they will still stand out. But then when they go to a company and say: 'Hey, I can do a storyboard, I can do the best storyboard of your life. You're going to love every single pixel of it, but I can only produce that in like 3 weeks'. Then the company will say: 'Okay, we have this other artist who is like, maybe not the best one. He's like 80% of the quality you can produce, but he can actually use AI in his pipeline and can produce 5 variations within two days.' It's not a difficult choice for a producer. So, I think that's also something what they [professionals] have to understand: No, they will not lose their job if they adapt and learn how to use those tools (33).



The current education system is built based on an industrialised model. This was back at a time when people had one career for 40 to 50 years. They trained for that either through an apprenticeship or if they were very affluent, you know, you went and got a degree and your career was set. And unless there was some kind of scandal or misadventure or some kind of personal crisis, you got to retirement and then you went off. But how does it look like now? What if we are changing our job every two to five years? Then lifelong learning suddenly becomes a huge factor. And this is where I think universities do have a role to play, and potentially even maybe up to government level in supporting people enable in order to produce a more dynamic workforce which can change quite rapidly (69).



In addition to individually updating their skill sets and knowledge, the participants expect the 'ideal employee' to actively share their skills and be open to learning from others regardless of hierarchical status. They envision an environment where the 'ideal employee' proactively contributes to and nurtures a collaborative learning atmosphere, prioritising knowledge sharing over competition.

However, remote work environments present challenges to this ideal. Participants noted that while effective ways of learning from each other were established when everyone was in the same office, solutions for remote work are still mostly lacking. This situation is particularly challenging for junior professionals, who require constant guidance from more experienced colleagues or mentors in order to accelerate their growth.

I think the awareness of knowing that you cannot know everything is important and also trying to share your knowledge and provide what you have to others. That is good. (39)

The learning atmosphere or the knowledge sharing part of what we do here is still amazing. In a different industry I worked before in, it was very competitive. Everybody was like: Oh, I know something, I'm not gonna give that to you, because then I get a promotion and more money. And here it's like: If you do that, we save time and we can do something even better or whatsoever. And that's from my point of view very special. Even the people who worked here for 10 years are eager to give input to our interns or to junior artists whatsoever and back in the day it was easy: We put that intern or a junior artists next to a very, very experienced person, because then you can just look at what they do. Sometimes people will just watching the senior artists. Now that we also often work from home and remotely it's a big challenge to recreate that. A junior artist sitting in the middle of nowhere [when they need help or feedback] needs to actually convince themselves to write a message to the supervisor of the show. And the supervisor needs to find time to answer if they only have 5 minutes for the junior. It's a bigger challenge compared to being in the same office. This is actually a real big challenge (41).



Image credits: Giancarlo Gallinoro



Another challenge related to lifelong learning involves the need for patience, humility, and gradual skill development through experience. According to the participants, young talents often have unrealistic expectations about their career progression, expecting rapid promotions and high salaries without fully understanding the time and effort required to gain experience and produce independently high-level output. Students and young professionals frequently overestimate their skills and the quality of their work and overlook the significant investment companies make in their training during the initial months, which may exceed the value they initially contribute.

Patience is definitely something. For example when we are talking about promotions, talking about money. You don't get the highest salary when you joined the company. That takes a few years before actually getting to a point, where after putting a lot of effort into training those guys and putting our best people to train them, they can actually start producing things and really can start earning money. That I think they don't really understand, that in the beginning the company actually is putting a lot of effort and money into training them. And usually I would say the first half a year the companies actually paying more than what that particular person can actually produce. And so it's an investment. It's quite difficult to explain that. Yeah, they think they are sort of like special. Of course, everyone is special and we will understand that they aim for the stars. [...] Some of them [the younger generation] think that after working for three months at a company, they can become a senior and then after 10 months lead and then supervisor and then they're going to be the director of the company within a year. That's not going to happen, especially if they are working at a bigger company. That can be an issue if they don't understand that if you want to become senior, it might take a year or even two. It really depends on the person as well obviously. But at least I rarely see anyone jumping positions within a power failure or something, and that [being patient] sometimes is a bit difficult to get through, especially with younger kids [...] But, really It is so important to make sure that they understand that they are not going to be able to become the new Elon Musk within a month and sometimes it can be harsh because, they are really proactive and they want to reach for the stars. Yes, there's always an outlier who you can point at saying like: Hey, he did that. He managed to become a millionaire by the age of 21. Sure, the chances for that is 0,1 %. So yeah, you can bet on that chance. But if you want to have a bit of a better chance of maybe becoming a millionaire - not overnight, but in a few years - then you really have to understand that the patience, humbleness, kindness are the single most important aspects (33).

There was this interview on the radio with this young influencer who felt like it was unfair that they had to compete with seniors, with experienced people. That she didn't understand why they had to be put into this kind of like long term future realisations scheme of: first you'll be an intern and then you will get a junior job and you will only be doing colouring and then when you've been doing colouring you will maybe get some crowd animation and then you will maybe get an acting shot with the main characters and so on. And that's something that you have to really work your way towards. And she was kind of going like: That's not fair. We should have equal terms. And I'm just sitting back and going like: I mean there is something called experience and skill and you cannot just jump straight from zero to 100. I'm sorry that kind of equality does not make any sense and you know, if you are met with that kind of attitude or philosophy by a young employee, I mean, I don't have the patience to have those kind of discussions. [...] There is some kind of misinterpretation of equality and rights. Somebody that has worked longer is quicker, can produce more. There is just lots of things that tap into experience and you cannot jump from one to 100. Craft needs a lot of practice to be good (36).



There is experience they [experienced professionals] already have. They made the same mistakes you [junior] will make. The difference is: they already learned from it. But you cannot learn from their mistakes. It is good to make those mistakes yourself as well. Like this you just learn faster (95).

The participants expect educational institutions to play a crucial role in educating students about the distinction between entry-level skill sets and the value of years of work experience, irrespective of the initial proficiency level. This education is considered essential in managing the expectations of new talent from the outset, preparing them for a realistic trajectory as juniors, and mitigating potential disappointment. Moreover, participants underscore the importance of clarifying to students that wages are influenced by factors beyond skill set and experience. Offering foundational insights into the economic dynamics of the industry could aid newcomers in comprehending their position within the field and forming realistic expectations.

It certainly has happened where people have unreasonable demands that we just can't match. And that's also part of having a company, the transparency is important because you know, money doesn't grow from trees. And it is our job to help educate people on when you have a client budget that's not all money in our pockets, it has to go to everyone's salaries, the rent. And so that's our responsibility, when they don't understand these things, it's our job to help, help coach them and understand what it is like to work in a company. But it can be a friction point at times (94).





Client orientation

Overall, participants underscore the importance of professionals understanding that any production does not occur in isolation. They emphasise the significance of grasping the broader context of their work, including the roles of clients and intended audiences. Employees should be prepared to set aside their egos and be flexible, prioritising a client-oriented approach and adapting to changes driven by client needs. Meeting strict deadlines, delivering work promptly, and adhering to budget constraints are essential components of their role. This requires understanding the roles of producers and executive-level managers and fostering effective collaboration with them, rather than regarding them as adversaries in managing financial and time considerations.

Students come out of an environment mostly with relaxed deadlines. But in the real environment things have to be delivered Friday at 6:00. This is what you have to learn. This also means you have to learn to finish things and know when things are done. You have to learn how to do things quicker (41).

The idea of a client pulling the strings or changing their mind can be frustrating, but ultimately that is the job that you know we are working for clients (94).



Image credits: UNREAL Engine training course, The Animation Workshop/VIA University College



I think ownership and professionalism and understanding that there is money on the line here [is important]. So that's why you can't take your time with stuff as you did it at school or something (39).

I don't think many young professionals are much aware about the [role of the] production team. And a lot of times the production team are considered to be the 'bad guys'. They are just speaking about time and money. Well, more time than money in front of the artist, but they are not the funny side of the job. And many don't care, they only want to do the artistic side of the job. I am an artist. I'm don't want to consider your planning and your budget. But actually you have to. Most of the people don't know that they have to work with the production team. The production team is on their side. They are working with the artists, but the artists need to understand that their [production team] job is to produce a planning and a budget to be sure that you are able to work (49).

You need to be able to take feedback from your clients. You cannot take your work personally when you're working in a company on somebody's project, even if it's your own IP. There will be a whole army of people that will have opinions about your work. And then you'll have to change that. Because for example we are targeting the French audience and you can maybe do this in a Nordic country, but in the French countries you cannot do that because that will be obscene. And so you have to go back and change it and find solutions and not take it personally. Taking feedback is important. And that does not mean that you say yes to everything, but you need to be positive about feedback and come up with solutions. And then you say: I came up with something, an alternative. And if you still think your first ideas was the best, you have to talk to them about why you think that the first one you did was the best. But you still had to do the work. You can't just say I'm not gonna change it (36).



Image credits: Virtual Production Studio Networks

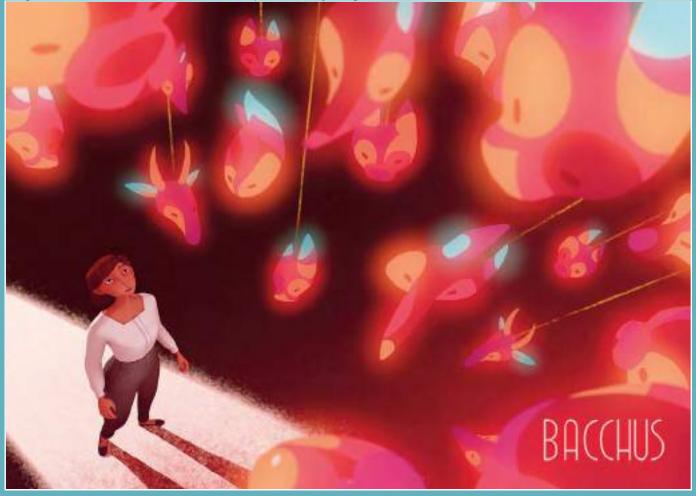


Receptiveness to feedback

The ability to integrate client input and feedback aligns with the broader theme of receiving and working with feedback effectively. Participants stress the importance of being open to feedback and critique from colleagues and supervisors, highlighting it as a fundamental aspect of one's skill set. They emphasise the need to approach feedback in a humble way and with receptiveness, regardless of one's position or the position of the feedback provider. Feedback should always be perceived as constructive rather than personal, and it should be critically assessed and integrated into both production and self-improvement processes.

Feedback is very important. We have a feedback after the first week [for new employees]. We have constant feedback because we have a buddy assigned to all the trainees or a mentor. There is constant feedback. We have a review after one month. After three months, we have one, after six months and we have one after nine months to see how people are progressing. And sometimes it's great to see that this concept of learning works the other way around as well, because we have people working for us for 15 years, they are used to doing things in a certain manner. Then there comes this one person from educational institution. Hey this is how you could actually save time because there's a tool for that. And that is really cool, because otherwise we would not develop. We need external input for improving (41).

Image credits: Bacchus (2018), The Animation Workshop/VIA University College





When they finish the educational institution, then they start the true learning process in the industry and in the outside world. And if they don't have this ability to adopt or to be flexible or to listen to comments and accept other opinion, then they could struggle a little bit (45).

Be humble, guy or lady. You have to learn. Sometimes you 'kiss the floor' [not succeed and others pointing out the gap in your skillset]. I also 'kiss the floor'. But you have to 'kiss the floor' in order to stand up again. Sometimes at work you have to admit: there are things I don't know, but I will take the time to learn them and that makes you a better person. You need to accept that you are not knowing everything. I think it's very important (47).

I think part of that is being open to feedback. It is being able to listen and to communicate. If day one somebody starts off super stubborn and totally unwilling to listen, I'm not sure if you can hammer away at their communication skills enough to get them to a hireable point. I feel like many of the people that I saw in year one [of their education] were already willing to talk to others and were willing to compromise. And were willing to find a solution over just purely their own preference. And while all of us got better at a variety of skills, including communication over the four years [of our education], all of the people that made it into the industry were the ones that from day one on were already good at communicating and receiving feedback (60).

I think the number one thing that every supervisor and lead and director will say is that they will take attitude over talent always. So the most important thing is attitude and it's not just: I'm a nice person. It's someone who wants to be there, willing to listen and has an open mindset. It's so much easier to have juniors on the team who are enthusiastic, happy, have good energy and are open to learn. They're easy for the team. In a creative team as well, having a positive mindset, energy is so important. People review their work and we talk about it. It's called the dailies. And what's so important there is the energy in that room. It needs to be positive energy because it allows people to feel: it's OK to make mistakes. So once they feel comfortable, when it's OK to make mistakes, the communication can flow better. It has such a ripple effect. Having a positive mindset and being open to change and being pleasant to work with can really affect the output at a very large level of the entire team (78).

Understanding this is very important: Listening [to the feedback of the player]. Like it's being able to remove ego from the conversation and really learn what it's like to play your game [during testing]. You give this game to a player's hand and see that they won't make it past the first barrier. At no point was this just the players' fault. We don't make movies. They are one way. We need to work with interactivity. We need to work with what the player experiences. That's only where the art happens. It's when the player touches the controller. Yeah, and that requires really dropping the ego and seeing: Well, they didn't find a button. If that is not feedback enough, I don't know (63).

What I need is you to be able to take feedback, to be humble. Let's say a senior artist and a very young artist and I are working on the same project. I can give the same feedback to both of them, right? The senior artists will just say yes, sure, absolutely. And they'll go right ahead and do it. Whereas the younger artist will go and will try to explain themselves constantly to say why they made that choice. And that's great. We can discuss this, but not nonstop. I'm happy to hear why that person has done the choice they have done, but I also need them to do what I would need them to do for the film. It's a lot about attitude (105).



Cultural competence

Openness to feedback and cultural competence are intricately connected dimensions of adaptability within the global industry context, as noted by the participants. Cultural competence involves not only a willingness to listen, learn, and adapt based on feedback that goes beyond technical aspects but also encompasses broader cultural insights. The 'ideal employee' is expected to provide and receive constructive feedback effectively across diverse cultural settings. They should seamlessly integrate into diverse teams and actively contribute to inclusive workplace environments where diverse perspectives, values, and norms are not only acknowledged but also respected and integrated into collaborative efforts. This ability to navigate and appreciate cultural diversity enhances team cohesion and effectiveness in global industry settings.

You gotta be really open minded. You gotta try to see things from many different perspectives to understand what you are doing together. Well, communication and working together with all kind of different people. It does not help to see it only one way. We got to be open to that really. Being fixated on one thing is not always helpful (95).

If you're working with someone, you check in [with them]. You make sure that you are helping each other, like being aware of how the other one feels. And also the little things, like bringing a cup of coffee to someone if they're a bit stressed. Like checking up on each other. I think that's very much important. Also the energy you bring to the table at a meeting. These kind of things. (39).

When I do my next film, it would be completely different because it's different people. Different cultures involve different ways of doing it. Every film it's like starting all over again, which for some people is a bliss and for some people that's exhausting. I feel you need to have the mindset to be in our industry that is ever changing. People around you are always changing (23). The person [a new hire] must fit the team. We had a situation where we hired someone that was like 20 years older than the rest of the team, and I did sort of have a little bit of like precautions before, like, I had a few thoughts... Umm... Maybe it's not working out. And it turned out that she didn't like to use the pronouns 'they/them' and I had many conversations around like 'Why can't they just... I don't care... Just pick one of the other. OK, I can use it, but then I don't get why the person still have like a boy's name or a girl's name, if they didn't...'. I spent so much effort thinking about that, being confronted with that, and we could do our best to educate... But in the end, there was also other things, but this was like definitely one of the things where I can't fit you in here then. I cannot include you (86).





Interdisciplinary, hierarchical and intergenerational communication

In order to effectively integrate and work within a team, participants emphasised the importance of proper communication across various settings. This includes the ability to remove ego from conversations, respect hierarchy when required, communicate effectively with clients, and engage with different disciplines within the production pipeline. According to the participants, if team members can engage in effective communication, it fosters collaboration, helps manage conflicts, and ensures alignment towards common goals, which is the ultimate objective.

What's absolutely crucial in any team is communication, right? Being able to speak with the people you're with. Communicate, have respect, right? You got to turn up on time. You got to be accountable and you got to be responsible. [...] You gotta do your work, and if they ask you to do something for Friday, you should deliver on Friday or you should communicate why you can't. And you can't be an asshole. You can't have a big ego because those things often clash and create uncomfortable environments where people argue and discuss. That never helps, because in a team setting this will trickle through and makes others upset and worried and just causes more harm than good. So I've seen some of the greatest artists in the world burn their careers because they've had an ego opinion and spoke back to a director or supervisor, which you shouldn't do. You have to understand the team aspect and where you fit in that wheel. If you are a director, then yes, you can have more ego and the higher up you go you can have a little bit more ego, but the lower down you go you have to actually read that and understand that you're in this hierarchy chain of command. Like in an army, where they tell you to do something and you should do it. I know that doesn't sound appealing, but that is because it is a business and we have to get things done on time and to budget. [...] So that's something that we should teach students, to understand where they fit in this wheel and why things are the way they are. Just being realistic (29).

Image credits: The Animation Workshop/VIA University College





I feel like game development lives or dies by the team's ability to communicate. Whenever things break down, it's because people aren't talking to each other enough or they're unable to resolve their differences of opinion. So the problem, especially on larger teams where you have more than 100 people - I've worked on games with like I think 3500 or 4800 - you'll notice that a large portion of the team is dedicated to the production team, purely because their job is not only to keep everybody aligned in terms of what they're working on, but also in terms of where we're trying to go, trying to keep the vision aligned. And what I'm noticing now that I work in a much smaller team, I think we're less than 100 people, is that we are way less aligned than those 4800 people. There it goes to show how much work goes into keeping everybody aligned and keeping everybody focused on the same goal (60).

Communication. For me it's the top one. You can dissect communication into smaller pieces. There is for example something about being alert, being helpful, but knowing your own boundaries, how much can you do. And communicate them. It is difficult for someone else to know this. I see more and more people relying on others to set boundaries. I think that you should be able to do that yourself. That ties in communication if you can speak up for yourself or ask a question. And be honest. Instead of trying to hide that you don't understand the task or you are behind and you hide those things. That is really the worst that you can do in production. So speaking up is super important. [...] And when I'm talking about communication I also mean a practical thing like: we are in the meeting and I expect you to write notes. So that you really know what the meeting was about and that you know what tasks are assigned to you. So when you leave the meeting, then you know exactly what to do and how much time you have to do the task and who you are answering to (36).





What I don't see at the moment is when a company wants to brag about a project, the behind the scene video always shows people working in front of computers and perfectly happy collaborating with each other. And it feels like it's great. Just like so easy and you never see the fights, the meetings where you just start to shout and get out of your mind, you don't see them. So I think it would be important for students to understand that a project is almost always a struggle. There's always going to be days where you don't know how to and what to do next and you don't know how to go to your colleague and tell him that you were offended when he said something. So I think these are the situations students also have to know about when they get out of the educational institution (33).

//

When discussing online communication, the participants observe that especially younger professionals often demonstrate strong teamwork skills in virtual environments compared to older generations. However, they also note a challenge among younger professionals in engaging effectively in face-to-face conversations in the office. According to the participants some may not only have difficulties with in-person interactions, but also not fully grasp its significance and effectiveness within teamwork. The participants highlight the need for educational institutions to place greater emphasis on practicing and developing these interpersonal skills alongside virtual teamwork abilities.

In certain cases young people are really great at working in a team in a computer game, but when it comes to real life conversation, they freeze. And that's actually a major problem, I think at the moment the digital generations are sort of struggling to communicate with the other generations or even with people from the same generation when sitting in the same office and they don't really get the reason why they should actually go over to their colleagues and just have a chat with them, then it is a problem (33).

Working within pipelines involving different professions highlights the importance of strong interdisciplinary communication skills according to the participants. This involves understanding and speaking the specific language of various team members, recognising their roles within the pipeline, and understanding how they relate to one's own work. Participants also noted the growing importance of communicating effectively with experts in non-traditional industries, such as the military, healthcare, and architecture, which increasingly require similar skill sets to those in the games, animation, and VFX sectors. In a competitive job market, the ability to bridge these communication gaps can open up new opportunities for professionals.

I think it's a lot about language and knowing what the process is. And like being able to talk to people [from different disciplines] in the team and use their language. It just helps bridge those gaps. We keep running into the door thing, right. Like doors are very difficult in games and everyone feels that doors are a different thing. Like what an environment artist thinks doors are supposed to be, compared to what the designer thinks a door needs to be. Like towards cinematics, towards animation, all of them have different requirements and just a different understanding. So I'm going to use certain words to describe the door to the one specialist in the team, and other words I would use to talk to a designer (63).



There's going to be more jobs out there [in non-traditional industries], because of real time engines being used across not just games, but being kind of democratised across all these industries. Like the way I look at it, is that these silos separating everything are kind of crumbling together now. And if you're creating animation games, you can still create animation over here for these people [in non-traditional industries]. So more opportunity, uh, which is great, of course for students and great for people hiring. But they need to communicate with each other. That is a challenge (29).

Flexible for overtime, but also maintain work-life balance

Another important dimension of adaptability within the context of the industry is being flexible regarding overtime while maintaining a healthy work-life balance. Within the overall trend towards aiming to create a friendlier and healthier work environment and dynamics within the industry, the participants emphasised the importance of the individual working within the industry to critically look at their work hours and stay within healthy working hours. Given the demanding nature of the job, the high quality requirement, and the fast-paced work environment and dynamics, participants report that even a 'normal' work week is hard enough for employees. However, due to hard deadlines in the industry, the participants stated that sometimes employees are required to work overtime, which should ideally be either compensated financially or with time off. While this was discussed by the participants as the ideal situation, it was also talked about that this trend is not universal across all companies. Some companies still expect employees to work long, unpaid overtime without adequate compensation or benefits, which keeps on leading to burnout and eventual layoffs. Participants argue this requires a kind of activist stance of the workforce, to make sure that a regular work week becomes the overall norm.



36

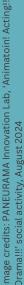
I think it's a reasonable attitude towards your work that's needed. Work is not life or death. A good employee is not the one who stay here until late all the time just because. Only when it of course is required. And, yes it does sometimes. And also yes, we have hard deadlines, but these deadlines can also be negotiated from time to time. So we use that as well and do it because there's a lot of unforeseen things that happen and I think we often have a good relationship to our client. So we can negotiate and make it easier for ourselves in that sense (39).

I think you come to work more refreshed. You come with a better attitude. You're more able to think creatively. You know, in the beginning, building up a company, it was tough. It's always a challenge, but I think in the earlier years I had a harder time switching off and I was working 60 hours and you know, just grinding basically. And I really saw it taking its toll on me. So I think that's why I encourage others to have a health work life balance. I've kind of been there and felt it, when you come with this dark cloud and it's hard to see things optimistically and you start being very pessimistic about everything (94).

Sometimes we also need to explain them [new hires]: This is not a Sprint. This is more like a marathon. You need to take your time, find your cruise rhythm to be able to work for one or two years in the same project. So spare your energy. Don't use all of your energy at the beginning, because in two months you will be out of energy and that's not what we want. We want to keep the team for a long time on the project (49).

We don't want people to work overtime. It can be a good thing. In a project sometimes you have to work overtime. But we now understand that you can make some people work a few weeks overtime. But after 2-3 weeks, it's just going to destroy not just his attitude, but the whole attitude of the team, because these people will start to complain all the time. These people will start to say bad things about the company and that will have an effect not just on the team, but most probably he will or she will talk to his friends, maybe even has friend at a News magazine. And then it starts to sort of like become a very difficult issue. And we also know that if you have a nice time in between work days, you're gonna perform much better than if you are just working and working and working (33).







I think it really depends company to company. Some of them are a lot chiller with it [crunch, stressful work environment and dynamics]. Some of them are not. For some of them it's really mandatory. Some is voluntary, but sometimes it doesn't feel like it is voluntary because of how much you have on your back: OK, I need to get this done. It requires a level of boundary setting on your end: Hey, look, all of this needs to get done. It is not all on me. I did my best. The planning just didn't plan well. You know, usually as it happens. So, it requires a level of boundary setting in the requires a level of being comfortable saying no. But that's not easy. Especially for juniors. I don't expect juniors that just come into the industry to be ready for saying no, because they are not. I wasn't. Even though I thought I was, I was not (62).





Sometimes we make very stupid decisions just to not burn out our people. For example, you have 10 days to spend on something budget wise. Sometimes we spend 15 days instead in reality just for everyone to have an 8 hours day and not a 14 hour day. But if you bid on a project, a normal working day is calculated usually as 10 hours. So there is already a gap.What we try to do is or if we are capable of getting the right people on time, we will always hire one person more. Then you have some room to play around with it. But at the end of the day, looking at our overtime hours and whatsoever, you can see that we are really good 90% of the time. Then there's the crunch time. There's a peak. It's most of the time production and the supervisors that feel it, because they are the people who actually deliver stuff at the end of the day, send it to the client, talk to the client or whatever. So those are the people we most rely upon, are obviously the ones leading the teams. But what we actually do is that they get a guaranteed time off for the overtime after delivering a project. The advice is that you have to take them right after the project to get rid of that. I always say to management that back in the days, 10 years ago, it was like, wow, cool, let's do that and we're gonna stay in the office 14 hours, 15 hours and I don't give a crap. I'm 25. I have no family, nothing. The only thing I wanna do is work on a movie, a Hollywood model movie. Wow. Yeah. And after that go for a beer. Yeah, that's 10, 15 years ago. That's the past. We are not five people sitting in a garage anymore working on a very cool thing like until midnight. We have to adapt to the reality of our employees because that's the at the end of the day, we cannot do any movie as a company without our employees (41).



The participants pointed out that the growing emphasis on healthy work ethics and the push for healthier work environments and dynamics often creates generational tensions, particularly with older generations who have been building the industry. These generations may struggle to adapt to the evolving trends and often hold differing perspectives in discussions about work-life balance and workplace well-being.

I think it's because of the generation change. I was born in 1978, so I was I think most probably the last generation, who thought that if you work hard, you have a fantastic life. And obviously I also had to realise that no, that's actually the opposite. I mean I have to work hard, but only those hours that are required and if I work too hard and too much, then it's gonna have a really bad effect on my health. And I think the generations now they have a completely different sort of like mindset towards working hard. Sometimes this can also lead to conflicts. In certain cases, it is a bit of a struggle to hire the younger generation if they do not understand that from time to time one needs to make sacrifices and that it is normal. If they can't really make these sacrifices, then he's not going to be able to perform for too long (33).

The work environment and dynamics improved from friends that made a video together or game together and spoke in a rough language. You still have them and you hear them talk and they don't understand that leading a company is not leading your friends anymore. You need to talk in a professional way. In a friendly way. There is rules and laws....BUT we should not demonise the old talents. They did not learn better. Teach them the new ways. And it is better and it will be even better because we can now talk about it now (37).



Image credits: The Animation Workshop/VIA University College



Creativity from outside of work activities

Having a healthy work-life balance goes hand in hand with another core skill identified by the participants: gaining creativity from activities and relationships outside of work. Engaging in non-work-related activities and nurturing relationships outside the professional sphere are seen as valuable sources of innovative creativity.

It's important, because if we have someone who has experiences in, I don't know, fire juggling or snowboarding or knitting or whatever, it will have a really good effect on our creative projects. Because in certain cases these life experiences will actually come up in a way. These are the main creative juices. What we are looking for is to have really a variety of skill sets in the team and not just skill sets connected to the actual job. But skills that come from outside of the work. So if we see a person who is like a gamer who has nothing but gaming, we usually have a second thought about hiring him or not. Because he might have an amazing experience in the gaming industry, but that will really narrow his focus on certain solutions and certain problems (33).

If you just learn compositing, you will be a decent compositor. That is good. But we are looking for people who also know what's happening before compositing, know some film theory, know some things around the job. Have diverse interests. We always try to find the people who have that small little extra bonus (41).

I think especially for writing, but actually for any part of game development it's very useful if people have skills and hobbies and experiences and whatever outside of games that they can bring in, that they can enrich the world's with (81).

I say to them, if a director in the studio [to interns] always says: Make sure you have your notebook for drawing in the evening, then I say: No. They should be doing their laundry or going to the gym or having a life. If you want them to draw socially, build it into your working day, give them an hour off every afternoon. They are: Oh no, no, no, we can't do that. Well, that's the difference. You know what I mean? Because animation or a lot of these creative practices are people that invest so much of their being in it, I think at times it can be manipulated and kind of almost exploited. Maybe not intentionally, but it is definitely in terms of the amount of work being asked from them, like: Keep drawing in the evenings. The last thing anyone should be doing would be drawing in the evenings in my opinion (52).

The participants repeatedly emphasised the importance of gaining experiences and engaging in activities outside the 'professional bubble.' They believe this skill, and an understanding of its strong impact, should be fostered during education. Students should be given opportunities to attend sessions in other disciplines, such as philosophy or medical courses, to enrich their artistic practice. Furthermore, the participants believe that, while students should be supported in turning their hobbies into professions, they should also be strongly encouraged by educational staff to discover new interests for their personal time. Students should be even given time to create new hobbies and form friendships outside the 'professional bubble' in order to bring fresh perspectives into their creative work.





The freedom to explore of an educational institution, is important, is what you need in your development to at the end of the day, to reach your potential as an artist. If someone just tells you click that button you will be a monkey. You will do tricks. But if you start thinking about what you do, you will see that you can improve thing, you start innovating. You can have different perspective on your work and I think that's important and that's what we look for (41). And it's very important to meet people that are not in animation. When I was in an art school in France, my friends came from textile embroidery or they came from scenography, or they came from engraving and I was doing animation. These links with other realities and other arts can be very inspiring for your art (47).

The educational institution should be an eye opener, should show things to students that they would not usually seek themselves. So in that sense, they should take a little bit more risk. You [Universities] are doing all these evaluations of how well are they [students] doing and how happy are the students. They should maybe take 15% away from that and say we don't need them to be super happy all the time. Sometimes they will not know what they need until later. I mean, it goes without saying that learning the tools, the pipelines, the workflows, the whole kind of production processes by doing, is for animation vital. But in order to tap into the curiosity, the students need to have a place where they can experiment and do things that are not seen outside, because this will be the only time in their lives where they will have that possibility perhaps. I think that you are helping them create original voices. Cause if you're trying to just give them this, you know specific boxes to fit into, we're not gonna see anything new coming out of students in universities. We're gonna see the same Disney film that we've seen for 30 years already (36).



Image credits: The Animation Workshop/VIA University College



Open to relocation, and speaking English

Another dimension of adaptability is being flexible in one's living situation. Within the highly saturated and competitive yet relatively small video game, animation, and VFX industry participants stress the significance of two key factors: being willing to move for job opportunities and possessing proficiency in English. Being willing to move enhances one's prospects of securing employment, as opportunities may be dispersed geographically. Additionally, proficiency in English is essential for collaborating effectively within international companies and teams. English proficiency is, according to the participants, not only vital for individuals seeking employment but also a business necessity, because the majority of products are developed and marketed in English for a global audience. While the international aspect offers advantages, such as broadening market reach and enhancing the chances for employment of professionals in the field, it also presents challenges, including integrating national content into creative products and coping with high staff turnover as professionals move from company to company.

Very few countries have a big enough market for you to enter in, that you can rely on staying in your country for the rest of your life. In Denmark, you will have to be open for moving your family outside of the country. In America, you have to be open to moving from state to state. Sweden, easier, because you have the big companies having small offices in Sweden. Norway, same thing. Like right now, when I've been applying for jobs like none of this is in [my home country] and I don't expect that there is a future for me [in my home country] (86).

Image credits: The Animation Workshop/VIA University College





I read an article of someone with a really great career, great games, really great at the job and never spent more than three years in a studio. And always moving, changing city. And they are couple that work in the same industry and they didn't know if they can have kids because it's so unstable (20).

//

We now have a traineeship program to bridge the gap between educational institution and industry, which we implemented 2 years ago and obviously if you want the people to stay longterm the challenge is that this is a very global and international industry. So a lot of people actually wanna go to Canada, to Australia, Somewhere. If people decide to leave, you have to make sure that they know they can come back. And it's about how you leave and then you can come back for us as a company. Obviously we wanna make sure that we have a lot of people that actually stay from the get go because whenever you join a new work environment and dynamics, you have to learn things. You have to learn our the technical stuff, the hard skills. And obviously learning takes time and if we invest that time into somebody learning that, obviously we want the person to stay as long as possible. But this is an international industry – people come and go all the time (41).

Essentially one of the things to get employment in a highly competitive industry is: you have to be the perfect fit and speaking English is part of being the perfect fit [...]. This is a very mobile industry, particularly when you're a younger graduate. You're likely to move jobs and move studios faster than when perhaps you're more senior. So that flexibility, that knowledge of English and the international nature of the work is intrinsic to the video game industry. Not just for the students, but also for the nature of the business itself, which is highly international. It's incredibly rare to see a game released in a language that doesn't at least include English as an option, and typically all video games are released with English as the default option. So even if you weren't talking English every day in the studio, which you probably will be, you will certainly be translating your game into English, and it needs to be fluent. [...] We need the content of video games to be in English to reach the largest market. So this isn't just a bit of a convenience, it's also a business necessity. From working in the game development team through to the content that we push to players, English is the default and it is an absolutely necessary skill for all games developers to have. English is the lingua franca. It is the expected default to the point that you see it written in job adverts. [...] When you have business-to-business meetings, nobody is inviting you to those business-to-business meetings in anything other than English. It is the absolute standard. This is by the nature of it, because this is a very mobile industry. So a person who graduates in Germany or Denmark could easily, within the next 5 years, be living in two or three different countries. And it would not be expected by the employer that the employee becomes fluent in the native language of that country as long as they have sufficient English skills. The only perhaps exception I've seen this is France, where French is often expected, but otherwise I would say in every single other country I've experienced around the world, English is a must. And even in France it is expected you can speak English as well (51).



The industry's demand for employees to be fluent in English, ready to work in international and intercultural teams, and willing to relocate at any time contradicts according to the participants the growing trend in some European countries to revert to using the national language in higher education and minimise English-taught programs. The participants stated that driven by nationalistic policies, economic considerations, and a desire to preserve cultural and linguistic heritage, these measures aim to prioritise domestic students. They stated this shift is also motivated by concerns about the integration of international students, the impact on social cohesion, and maintaining the quality of education amidst resource constraints. Participants state countries like Denmark, the Netherlands, and Finland have been exploring or implementing policies to restrict English-taught programs and non-EU student admissions, reflecting a broader emphasis on national interests in higher education.

English all the way... like all the games are in English. Why any other language. The industry is English, why would I teach anything else (95)?

Yeah, I mean I am very sympathetic towards that. I do see that preservation of culture is an important aspect. You know, as part of the European Union is to respect different cultures, to work in harmony with each other. And I do see that there is a challenge there, particularly I think at higher education where there may be more pressure to reflect the national culture. But then it comes down to priorities. Are we training people for a reality we would like? Or are we training people for the reality that is actually there? And the reality of this is that it's an international industry. The reality of this is that video games, and I believe films and animation, are very largely developed in English and if we only train our students to work with these technologies and to work in these cultural creative industries in a language which is not so internationally accepted, then we'll be doing a disservice to them for their careers and their career prospects (51).



Image credits: Backwater Gospel (2011), The Animation Workshop/VIA University College



To sum up: the core skillset of the 'ideal employee'

In summary, when exploring the concept of the 'ideal employee' within the game, animation, and VFX industry, participants emphasised the importance of fostering a friendly, innovative, and sustainable workplace culture amidst rapid industry evolution. The 'ideal employee' is described using terms such as humble, adaptable, team player, and perfect fit for job AND team, highlighting a shift away from the rockstar employee archetype towards more collaborative and adaptable team players.

Being nice to work with has been one of the top skills named repeatedly by the participants. In addition to being a team player, being flexible and proactive in problem-solving, and actually enjoying it, emerged as crucial attributes of the 'ideal employee'. Another essential skill is working in a client-oriented manner within deadlines and budgets, responding effectively to the wishes of international clients. This involves listening to the client's needs and being receptive to feedback from leads, supervisors, and colleagues at any point in one's career, regardless of the hierarchical level of the feedback giver. Cultural competence is another critical attribute, as the 'ideal employee' contributes to a supportive work environment and dynamics by showing empathy, embracing diverse perspectives, and adapting to multicultural teams. Effective communication, including respecting hierarchy when necessary, engaging clients, and collaborating across disciplines, is also essential. Furthermore, participants emphasised the importance of maintaining a healthy work-life balance, recognising the demanding nature of the job. This is also deemed to be necessary to engage in activities and relationships outside of work, which is seen as beneficial for gaining innovative creativity. Additionally, being open to relocation and possessing proficiency in English are vital for enhancing employment prospects in the international and competitive industry.





Variations of core skill set depending on type of employer

While the participants agreed that the core skill set is indispensable for industry professionals, they also mentioned that its application isn't as clear-cut and straightforward as one might wish, because it isn't universal. Variations within the core skill set depend on various factors, such as different countries, industry sectors, or companies, turning the core skill set into a variety of 'tailored' core skill sets depending on the specific context of the workplace.

Especially because I'm a little company, I really need people that are more versatile and more open minded to also try out things that they are not necessarily educated in. So what they expect from me on day one fits easier in a bigger company where everything is more structured. I think, that is something that they – looking for jobs – should be looking into as well. What kind of working environment is this? Would I even fit? Figure out, do they have fixed working hours, do they have more freedom, more responsibility and a more versatile daily life. Basically, figuring out what can that specific production company or workplace offer. That is important, because you can't expect that every workspace can accommodate every working workflow basically. ['…] I mean the company cannot change because you are in the wrong place, but you need to find a job that fits your style. And sometimes if you just need a job urgently and you don't have a choice, you need to be able to say to yourself: 'Okay, this is not the perfect job for me, but I need the money right now and I'll take it and I'll start looking for something else'. But you still need to do fit in (36).

For example communication is not communication. If you've been working remotely or working for a big company, that's a completely different experience than sitting with 20 people in one office. Or if you work with four other people over a year, or with many more. And then the next question is how did you like it? I want to know what kind of team worker you are and if that fits my company (36).

Taking the core skill of communication as an example, its application varies across different environments:

- In small studios, communication tends to be informal and frequent, with an open-door policy encouraging cross-training between colleagues and brainstorming ideas.
- In contrast, big studios typically require more structured and formal communication within larger teams, relying on formalised documentation and hierarchical communication channels.

The situation becomes even more complex as industry sectors, companies, and job roles continue to evolve and the job market transitions. The traditional industry already exhibits different variations of the core skill set. Additionally, the entry of non-traditional industries like simulation, training, VR, AR, museums, architecture, and healthcare into the market adds more layers to the complexity.

• In non-traditional industries, communication often involves different stakeholders and subject matter experts, necessitating the use of industry-specific terminology.

Each of these traditional and new sectors, including different companies, demand specific nuances of the core skill set, further emphasising the need for adaptability and continuous learning among professionals.



Shift towards adaptable teamplayer aligns with growing advocacy for improved working conditions in the industry

The participants stated they welcome this shift away from the rockstar archetype towards the adaptable team player. According to them, it aligns well with the broader transition they experience in the industry towards creating friendlier, healthier, more diverse, inclusive and collaborative workplace cultures.

Yeah, it's a hell of a change, but there's also... My God, how sexist was it? It's incredible that there were any women in the games industry at all, really. When you look at the lack of representation women had in the content of video games and the marketing of video games. So when I say, I think there's significant improvement and not just saying this based on a gut instinct. I'm saying this with data behind me. Unpublished at this time. But there is data behind me to significantly support that certainly representation in the games content has improved, and if we look at kind of the GDC reports as well, there does seem to be a small improvement in the number of women working in video game companies as well. [...] Now, within video games, historically, there's been a lot of this idea that it's nerds and geeks, and it's not the jocks. It's not the popular kids who are getting into video games, so to some extent, there's always been a little bit of an embrace of a nerd culture, but that has actually been quite a precise aspect of nerd culture. This kind of geek culture kind is considered more positive than nerd. So let's use geek culture, but it was often a very much white cis gender, heterosexual man version of this. However, I think we see in the last 5 to 10 years more acceptance of neurodiversity. There's more inclusion. There's more consciousness that perhaps women have not been treated well in video game teams and also in the content of games. And I do think there's been significant progress there. So before entirely dumping on things, I just want to say that I think it's better and it's getting better. But there's a lot of progress to be done (51).

The industry is moving from extremely toxic to slightly less toxic. Slowly. It is an industry built on hobbyists that over the last 20 years have built entire empires of massive game production machines that were never trained as CEOs. That were never trained as professional leaders. That were never trained to be vision holders. They just became these because they were the first and it was already a boys club and has continued to be a boys club and that is now a massive debate within the game development communities on: Hey, this is an unhealthy practice. A lot of companies are in danger zones because of this. [...] And that's popping up left, right and centre of all these major companies with sexual harassment situations, with abuse of work practices. Burnout, crunch alike. So that is a massive storm of things happening at the moment. [...] It's an industry that grew too quickly for its own good from a very male dominated IT sector that got so incredibly successful that it justified their behaviour and we made millions, therefore we must be doing it correctly (6).



When I came into the animation industry and I came in when there was no games and it was all done by artists; it was a passion thing and there was no such thing as work hours, really, because there was something that belonged over in with the normal people in the normal, boring jobs. You know, we were musicians and artists and we did not ever count hours. We were just working out of passion and then it slowly became obvious when you had film productions that were much more than just the little short film that you did with some friends in a passionate group. When you had to work for the first feature film, it became obvious that there was two kinds of studios.

There were those who did not have the idea about what work environment and dynamics and work ethics was, and there were those who had, and they were typically left wing studios. They had this activist point of view, but when the whole game business started in the beginning of the zeros it was the same thing in the gaming industry. Not only were people expected to work like crazy to get their foot in the door and to stay in there. Probably because the leaders got their job like this. Like me, I had to work like that. So now I'm the boss for some other people and they're complaining that they can't go home. [...] And they are used to locker room language; it was much a boys' club of people who learn many of their manners sitting in front of computers. That put a mark on them in the way they formulated their dialogue and the way they talked to other people. [...] I think it took around 15 years before we had the first kind of revolution.

I think companies that have more than 100 employees, they will have a section on their website where they describe their work ethics and values. But one thing is declaring the values to attract the talents and another thing is do you actually live and practice them. I think we are now getting into a period where it's a lot better than before. I think we still have a way to go but people can talk now about change: I think we deserve a 15 minutes longer lunch break because they have that at the other companies and we think 25 minutes is too little and we also need to go to the bathroom or whatever it is. You don't get ousted. You don't get harpooned. The boss would not see you as a bad evil (37).

The industry's been changing and it is now more: 'Maybe crunch is a bad thing?' Even though still many big companies are doing it. I feel that has changed when I was in education [2018], the promoting of a healthy work life balance and trying to figure out how to do a lot of really great work without having the people crunch all the time is getting stronger in the industry (81).

It's in rare cases where I have to work long hours. I have few projects where up to deadline I had to stay late and there were only a few days like this. But really, it's not a normal thing any more to work overtime. It's rather a irregularity, I would say. Mostly people and myself go home at 5 and close the computer and I don't have anything more after that (39).





Even though there is still much room for improvement, according to the participants, there is a clear trend towards fostering healthier work environments and dynamics. Companies are actively working to reduce excessive crunch periods, promote sustainable employment practices, and offer compensation for overtime, whether through financial remuneration or time off. Also, the integration of family and work responsibilities have received widespread appreciation, enabling employees to effectively manage both personal and professional aspects of their lives.

I have a kid as well. So I was not very eager to be the dad that my little one only knows from the pictures. So I'm trying to leave at least twice a week at 4:00 to pick him up from kindergarten. Nowadays I just go pick up my little one. Have some daddy time and make up for it later, or the next day. And the same goes for artists. Nowadays they can work remotely, which obviously makes a few things easier. We have people here for 15 years. We actually try to treat every employee as a 'the one employee' and not like the number on the payroll. Yeah, and sounds cliche, but we try and we have to adapt to our employees because without them we are nothing (41).

The participants emphasised the crucial role that increased diversity within the industry plays in driving positive changes. They highlighted how diverse perspectives from new entrants into the field foster an environment of mutual respect and understanding. The emergence of more diverse teams, leaders, and role models has been instrumental in shaping these advancements.

I think something that I really love about the industry, is that it's inclusive to the point where every single game developer conference will have a minorities conversation or a panel, or like people that are outside of the straight group. Like the LGBTQ mafia, as I like to call them. There's a place where these people are allowed to be who they are. And that makes me love this industry a lot more because I know I can just be who I am without being judged (62).



Image credits: Monkey Movie (2024), The Animation Workshop/VIA University College



Many participants have also noted significant improvements in workplace safety, particularly benefiting young female employees. Additionally, enhancements in the physical work environment have contributed to creating a more comfortable and productive workspace overall. Furthermore, the participants recognised the nascent efforts at unionising within the industry as another positive contributor. These efforts empower employees to collectively address workplace issues and advocate for improved conditions, thereby further supporting the shift towards healthier and more equitable workplace cultures.

There's a lot of good things happening. In general, we talk about unionising. Would not recommend that for small regions. Industry unions in small countries can get maximum around 11,000 members. That is not enough money to hire full time people to advise on all the legal stuff and everything. You can see in smaller countries, Denmark or Holland is a good example as well, that the movie animation, game specific unions have a very hard time actually living up to the service that people paid for. So I don't see that as of now a solution in Denmark to have our own games industry union, but hopefully one of the bigger unions which specialises in games



Image credits: Virtual Production Studio Network, The Animation Workshop/VIA University College

While discussing this ongoing shift in work environments and dynamics, the participants explored also the concept of 'creative leadership' within the games, animation, and VFX industries. They observed that creative leadership is being redefined and evolving beyond only technical oversight.

According to the participants, creative leaders are increasingly viewed as coaches and mentors who address both professional and personal challenges faced by their teams. This transformation shows the importance of soft skills and emotional intelligence also in leadership in order to help cultivate friendly, supportive, and inclusive workplaces. Building trust-based relationships and offering emotional support are cited as essential practices of creative leadership.



In the past, participants report, many leadership and management positions were awarded to individuals who excelled in hard skills but were never properly trained or prepared for leadership roles. They stated this often resulted in perpetuating a leadership style that fit the 'old way of working' rather than emphasising change and adapting to 'new ways of working'. Participants stressed the necessity of providing specific and comprehensive management training to equip current and future supervisors with the skills required to effectively manage creative teams. They emphasised that such training should focus not only on technical and project management skills but also on developing emotional intelligence, empathy, and effective communication strategies to support and inspire their teams.

Most of the people who are on the management side, lead or supervisor or director, are in that position because of their experience in this industry in this typical kind of department. And it was a natural carrier pass and some of them really like to manage. But they were not trained to be a manager, how to manage your team, how to manage different kind of personalities. As a manager you need to work with the production team. Yes, you have the artistical and technological side, but you also need to consider the planning and the budget. Even if it's not part of your job to do this planning and budget, but you have to work closely with the production team. And many are not feeling comfortable because they are not trained to be a manager. We therefore recently proposed a management training for the team. But it was a little too late. We should have done this a few years before. And we need to do this automatically as soon as someone becomes a new manager. I think this is our [HR] responsibility to give them the skills to be able to be a good manager. And a lot of other studios say the same: we need to find a management training for my our team manager, this is urgent (49).

I think a producer now is not just the producer, but a coach almost like a father figure. [...] You know, you spend 8 maybe sometimes 10 hours with these people. So sometimes you don't even spend 8 hours with your girlfriend or boyfriend, so they actually become your friend in a way, and it's really important not to just talk about business and work, but also to understand their struggle. Because what we noticed a few times that we had a few guys who were great and then from one day to another they started to miss meetings or get some delays and not do that job on time. And if you immediately start to punish these guys that will have a really bad effect not just on him, but on the other guys who potentially know that particular person has a personal problem at home. So now I'm almost like a coach, a father figure, or even like a psychologist at the company. I think if I would need to say a percentage: producing is 30% and 70% is the personal touch and that's how it is. Like if you're only concentrating on the project, you're really missing the point (33).



People with companies told me, they have people back talking to the leader or the boss or something because they think their decisions are wrong and then I usually ask why. Why did you promote them as a leader. Because they were good at something. Yes, you can be good at something like, excellent in law. Excellent. But that doesn't necessarily make you a great leader. I think leadership is found within a person. It is about soft skills. I talked with my friend, and he told me about an incompetent leader who made really bad decisions because he never thought about the group. He thought only about the best ones and would only care about them, he didn't care about the rest. And I think that's not good leadership because you need to take care of all of them. You need to create good teamwork. It's like in football. You cannot play with one player only, you need all of them and you need them all to function to be consistently winning (23).

Image credits: The Wanderer (2015), The Animation Workshop/VIA University College





I think I have a good relationship with my supervisor where I can be like: hey, what you said wasn't cool and he'll be like alright, my bad. And this goes two ways. You know, where he can be to me like: Hey, don't say things. Things like that. And I'll be like: OK, my bad. An example over here is: I was quite frustrated about work and my supervisor said something and I was like: That's a dumb idea, you know? That's not the way you should go about saying these types of things. You should be like: Hey, I don't think that's a good idea because XY&Z. But I was so frustrated at that moment. I was like: That's a dumb idea. And he was like: Hey, that was not cool. Don't say that again. To me you can say it. You know, I'll let you off the hook, but other developers do not. And I was like: You know what? You're right, my apologies. I think that really helps to have this relationship with your supervisor [on a human level as well]. I have a colleague who doesn't have the same relationship I have with my supervisor. She is a junior and she doesn't get her monthly one on ones with her lead and her lead is not supportive emotionally as well. When work gets a bit bad, when it gets really stressful, I can vent to my lead and my lead will listen and my lead will be like: Hey, what can I do to make it a bit better for you and she [my colleague] doesn't have that. I think that's a big issue there. I think when juniors do come in, they need leads that are not just leads but also able to take care of them emotionally. Understand that this is really frustrating. I think that is really important. [...] We're in a creative field. This is not just a field where you turn off your brain at the end of the day and you're done. It's something that you take with you and it connects back to that identity part of you. It's like we are game developers, we're very proud. And that's why I think it's important to have a lead or seniors that understand and care about you on that emotional level that is very specific for our job. I think it's genuinely a red flag if you don't get that safety to talk and to explain how you feel and about the issues that are going on in your job and try to find solutions to these issues (62).





Navigating the Challenges of an Industry in Transition

While there are many positive developments to report, the process is not always easy and straightforward. According to the participants, there are significant struggles with generational issues, balancing idealistic and realistic expectations, and addressing work imbalances between employees and management. They noted that an increasing number of employers have been experimenting and discussing their experiences with offering benefits, like flexible schedules, extensive vacation time, or accommodating various personal requests of their employees. While these changes can lead to improved work environments and dynamics, participants also highlighted difficulties that still need to be overcome. These include blurred boundaries, an unsustainable workload for leaders, and a disconnection where employees enjoy significant benefits while leadership faces increased stress and workload without similar privileges.

They [older and younger generations] have some tension sometimes, because of old habits. Then the older generations say: But when I was young, I was here. I was with the directors until 3:00 in the morning and we work really hard to deliver the project on time... They are trying to understand that things change and they have to adapt because the youngest one won't approve that. That is in the past, they say, it's not what I want to do anymore. For us, HR, that's a tricky side. I think that they [older generation] don't really have the choice anymore because the youngest ones are the majority in the studio. And you need to refresh your team, you need to find new talents every time, so you have to consider that and learn from each other: Ok, I completely understand that you need to find a balance and it is really healthy and as a company we have to improve the work environment and dynamics. But you also have to understand that we want from you to give your best during your work time. At 6 or 7 o'clock, go. Let's go home. That's fine. Thank you for your work today. But when you are here, you have to be really focused on what you do (49).

I've had experiences with newly graduated people on day one and they say: I can only do this, I can only do that. And that is great that you know that, but there are ways to say that. I am like: Wait we haven't even started and I don't even know yet what the job is like exactly and how this will pan out and you are already having expectations towards me as the employer. Way bigger expectations than what I would have the other way around (36).





We were 'too people first'. We had six weeks of vacation and we were very flexible. If people like didn't tell us in advance. They were like: oh I forgot I have to ask for vacation three months beforehand... But we would make it work, and then they want to change something with the hours and then we would make it work. Then they spent all of the child care days and then they needed more and we make it work... People, would just ask and ask and ask for more. But I didn't manage to set like clear expectations and boundaries and be like 'hey, but this is something you have to solve yourself.' Like 'it's not my problem.' [...] It becomes very, very personal suddenly because you thought that this boss, this leader was able to always carry you somehow because of the very personal approach and people first approach. I speak a lot with other colleagues on the leadership side that try to do 'people first companies' and all of us are taking a little step back in our approach, because we can see that it comes with no limits on what they [employees] can ask for and what they [employers] are expected to do. And I spoke with one of my friends the other day and he was just like: I could just feel myself being just done. I'm just done with listening to someone missing one vacation day because they spend all the vacation when I haven't had a vacation for 10 years, because of the people first approach. It also means your employees work 4 days a week, I never had a four day work week, I never had a maternity leave. I never got a baby stroller like everybody else that had maternity leave, because that is what it takes to build a company where you can offer these things. That is a lot of work, so it becomes very uneven. And all employees, they are just there to work. They are not there to actually understand how much stuff is going on behind the scene in the studio. So it becomes uneven

But I mean it's a fine line [to ask too much from your employer]. It can also be annoying. You don't wanna end up as an employer in a situation where you feel like you have to be nursing your staff. So it's a balance. I think I mean, I've never been very structured if it is about these things. I just think I need to talk to this person and I would say: Hey, why don't we go for a walk or have lunch together or something and then I would kind of say: Ok, how's it going? But that is easy, because I have so little people around me [small company]. It's a lot the same people I work with, people that I can say to: Listen, there are things that are going wrong. We need to have a chat and or I feel like the communication has not been good. Being able to have those talks is really important and maybe I won't see it every time. So as an employee you also need to be able to ask for that meeting if you need it (36).



We have two programmers. One is very part time, the other one is now full time and they are very reliable people. They're just very good, you know? They're doing their job, excellent. That's good for me because I have other projects and so I cannot deal with someone who is like writing me an essay every morning about why they can't do their work. [I had one employee and she was pregnant and had mental health issues]. And she would write me these essays every morning about why she couldn't come to work.[...] And it was just like, it's OK, just say you can't come to work. And I mean and we would have so many talks about her mental health and her thing. And then her boyfriend broke up with her. And then there was that drama. [...] So, I've felt like I was spending a lot of my energy just being this motherly/fatherly figure for these people and trying to get into their minds and their life and it was just a very unproductive period (46).

I don't wanna sound like an old guy, but maybe I think, especially younger people take mental health so seriously. I didn't really know about it when I was younger and I'm happy that everyone talks about it. I think it's critically important, but I hope that we don't tip the focus too much on that, because, you know, at the end of the day it is a job and you're trying to make money so you can have your own life. I don't know what the right balance is, because at the end of the day, you're just trying to make a healthy living so you can live your life and your career is a big part of your identity. I think it's learning how do I benefit myself first and foremost and see the employer as a good part of that. But demanding certain improvements is really healthy with every young generation. I think my generation, when I was younger, I was doing that as well and I was proud of it. And I'm also proud of what the new generation is doing as well, but it's important of having perspective as well. I'm not a huge fan of capitalism, but at the end of the day, we're living in a capitalistic world and we gotta do a week. Life goes by quickly, so I think it is that young mindset; it is so important to be idealistic. But it's also a harsh reality as well (94).

According to the participants, the industry has just started exploring its own distinctive version of healthier, friendlier, and more collaborative work environments and dynamics for employees. It is important to continue exploring, building, and negotiating between employers and employees, because these efforts are crucial in shaping the future of a more friendly and sustainable work environments and dynamics in the industry.





Persistent Challenges of an Industry in Transition

While some employers in the industry are making efforts to move in a healthier and more sustainable direction, the participants noted that this trend is not embraced everywhere. Alongside positive experiences in improved work settings, they shared 'survival stories' from their own or their colleagues' experiences in more toxic work environments and dynamics. According to the participants, many companies still expect employees to work long hours without compensation and prioritise individual achievement over teamwork.

A significant issue highlighted by the participants is the persistence of institutionalised toxicity, especially in larger studios. This problem is exacerbated by an over-saturated job market and recent layoffs, where the supply of highly skilled and qualified (senior) candidates surpasses the demand.

In my opinion, they [some bigger studios] are just draining people and since with the education system we provide, you know juniors with a really big ambition and they want to go to big studios. But the big studios doesn't care. It's like, yeah, we can trash you. We have 100 people waiting outside in lines, so we will take one of them, crush them in six months, a year, two years, trash it away, put another one there and it's like a cycle (20).

Yeah, because there is really high standard to get in. So first you need to have the hard skill set, then you will need to have the other skills, like to promote yourself, go to parties, go to wherever you know, grow your network, whatever. Like: 'Hey, I'm the guy, you need me.' And then you get in and shut the fuck up, do your job and adapt to the situation and it's like: What, I thought I was the rockstar? No, you're not. There are 500 people outside so shut the fuck up and do your job. And if you're not happy with that, we'll kick you out (20).



Image credits: PANEURAMA NXT GEN LAB, Group 2



To be honest, there's a lot of studios where crunch is a thing. And there's a lot of discussion about good crunch versus bad crunch. Crunch that is voluntary versus crunch, which is mandated at some level, whether that's by team culture or by externally set deadlines or by economic necessity. Whether there's actually such a thing as good crunch or just like, no, I really wanna do this, I'm passionate... Because the standard of your work drops immediately after 40 hours anyways (51).

2021 to here, it was a rough couple of years and people are just tired and they don't want that type of industry. It's the whole industry, it's not just the environment. The job is cool, people are great, but it's the deadlines. It's distressing, if I don't deliver, maybe I will have a pay cut. Maybe I will be laid off, or maybe I do my job just well and there is a random guy, you know, tuxedo from the company above me. And when he says, hey, we're closing this place down. So yeah, it's tough for people (20).





One specifically controversial and complex issue within the industry's transition in workplace dynamics is inclusion and diversity. Participants, particularly those with a background in the gaming industry, highlighted the ongoing challenge of fostering inclusive teams and creating inclusive content. This challenge is compounded by persistent online attacks, accusations of tokenism, and the added responsibility placed on diverse professionals to not only fulfil their job roles but also educate colleagues and cultivate an inclusive team culture. Participants noted some progress over the past 5 to 10 years in terms of inclusivity and a growing acceptance of neurodiversity. However, they emphasised that diversity within the industry remains inadequate, often giving preference to demographics that predominantly skew masculine, heterosexual, white, and cisgender. Participants say this demographic bias continues to influence who feels welcome and capable of entering the field.



I definitely find it difficult to share online what I am working on [diverse content], because what if I share something and it will get this kind of negative traction, right. I think one topic where this is a big thing is diversity and inclusivity. That sort of aspect, which I think is super important because a lot of people making games were of a similar demographic and they made what they wanted to see. And that is logical, but also it's logical that this leads to most of the characters being white guys. So I think it's really good that was addressed. But I think because of this discourse being very intense, whenever you make something that is more diverse, it's always kind of weird to talk about it and have it on the Internet, if that makes sense (81).

It's an industry where diversity is not as good as it should be by a significant margin. And there's a little bit of a chicken and egg thing here. Many of the big budget games are targeted at demographics that skew masculine, skew heterosexual, skew cisgender. That may influence the people who want to make games because... You know, if you look at films. We go back 20 to 30 years, if we look at every single film and kind of go: This appears to be created within the perspective of the male gaze. It's men looking at the world and it may be men looking at women as a woman's story, but it's a man looking at a woman's story. That's how the director has framed it. Of course that is going to inspire people to want to be one of the men creating that. And if you're not a man, you're not necessarily gonna feel like there's a place for you. [...] And there's also another very big challenge for the games industry: not just getting [diverse] people in the door, but it's staff retention as well, because it's all very well that you start hiring diversely. But if all the diverse candidates leave within a two or three year period, or one year or six month period, just because the culture in the industry is still very hyper competitive, masculine, exclusionary, with a lack of understanding for the needs of people who are within the kind of that mainstream bulk of the community. The general impression that we get is that there are staff retention problems within the games industry (51).

Almost every single figure in leadership positions is a man typically white with some very few exceptions. They have mindsets on game content that are very 'I-methodology' - as in, I like this, we like this, therefore, that market exists. Therefore, we make this product because we like playing this and there are people like us. Trying to change anything in that process is often met with extreme hostility. I mean the amount of accounts that are now going public is ridiculous, like the entire 'me too' situation was incredibly visible in games industry as well. The amount of women voicing their experiences within game companies was horrendous. And it's still going on and still every day there is an account somewhere if you follow women in games and their organisation. The amount of accounts that are being reported on is still staggering. And it doesn't seem to be slowing down much (18).







Image credits: The Wanderer (2015), The Animation Workshop/VIA University College

Another significant challenge highlighted by participants is not only attracting diverse talent but also retaining it. Many marginalised professionals leave due to the industry's highly competitive and often exclusionary culture, which frequently fails to accommodate their needs. This retention issue underscores the ongoing struggle to create a truly inclusive and supportive environment within the gaming and related industries.

There's a lot of young women in education who have a dream to be all the things they want to be, and then they find themselves in a life situation where they have to compromise. So we [women in the industry] have to compromise so much, whether it's on their career or whether it's their ambitions to have a family or whether it's on their physical and emotional wellbeing. And it's very rare to find someone [woman] survived [in the industry] into their mid-career/middle age and manage to hold on because of all these aspects together. It's often you find women who are artists and creatives end up in production positions because that tends to pay the bills more and that path is a little bit more straightforward. The risk involved in being a creative artist and entrepreneur is very big and it's not so freely offered to women. And if they choose to have a baby and when they want to come back into the industry it is really very challenging. There's not a very good support system for that. There are a lot of programs that cater to retrain, but these are mainly tailored towards young people and there could be a cutoff age around 35. So also the opportunity to retrain or to enter the industry taking another path is limited. And networking in the industry also doesn't happen at baby yoga. It happens when you go to the festivals and there's a lot of travelling and that often is contradictory to the position that many women, mothers, people with a uterus find themselves in. I was always in a luck position, even when I took a step back, the projects never suffered, because my partner and I share responsibilities equally. We do come not only from the same industry and we do have the same set of ambitions in terms of where we see ourselves. It allows us to be aligned as a family. And there's mutual support because we are on the same path. We used to go to festivals and conferences, always with babies, and sometimes I do a presentation or a keynote speech, breastfeeding a small child, and I would address the women in the room and I'd say: Look, people, that's possible. You can also achieve your career dreams. I look back at that and I think that might not have been the most holistic advice. I think that I fell into a trap of high achieving. I think those expectations are really unfair. There aren't many things I regret, but I think that presentation is something that I should have not participated in, or at least not made it seem so easy, because it's really not. It was not fair and it's not realistic (2).



I think, women and minorities feel they have to work extra hard to prove that they belong there. And they're not just an inclusive hire, you know. A lot of the time I look at my fellow level designers. I'm the only female level designer in my team and all of the other ones are male. And I don't see them struggling with feelings of not being good enough. They're just doing their job. Then I have a conversation with senior female developers that have gone through all this shit and that can talk to me about it. That has been lovely, that has been wonderful. Anyone should have this. It's really wonderful to be able to go to the senior narrative designer who has been in the industry for 10 years, to go to her and be like: I feel like this. And she's like: Yeah, I know you feel like that. You'll get over it. It's not because you're not good enough. It's great to have someone that has been in the industry for long and that is someone I identify with, telling you: Hey, your feelings are good. You're OK. You're not exaggerating. You don't have to work as hard to prove that you belong here. You do belong here (62).

What you're seeing right now, this year and entirety of last year: let me ask you: Who gets fired among the 12,000 people? It's not me, you know, white male, relatively healthy, a heteronormative whatever. Like I'll get fired if they've already run out of diversity to let go, right? Like, I'll get kicked out because: He doesn't have enough years of experience and we have people with more experience. Then they'll kick me out. But before that, usually you'll see a bunch of the people who don't look like me get kicked out, and a lot of the time they're the ones who need the money to be able to stay in the place where they're living. They're maybe struggling a little bit more to find financial security. So that's the thing that really gets to me. When I keep looking on Twitter and every time I see somebody talking about: I got fired, I'm looking for a new job. I'm like: Well, well. Look who they fired... (60).

Discussing these challenges, the participants emphasised over and over that significant progress is still needed. But overall they remained optimistic about the positive changes currently taking place.





To sum up: significant shift from toxic to less toxic, but much room for improvement

Overall, participants have noted a significant shift in work environments and dynamics from toxic to less toxic, accompanied by initial efforts to adopt "people-first" company practices. There is a growing preference for staff who contribute to fostering and maintaining friendlier, healthier, and more collaborative work environments and dynamics. This includes expectations for new hires, but also for existing staff and management. There is a recognised need to redefine leadership within this evolving context, with a growing call for specific creative leadership training for both current and future industry leaders.

While acknowledging positive changes in the industry regarding work environments and dynamics, the participants also emphasise that considerable room for improvement remains, particularly concerning issues such as overtime, wage disparities, work-life balance, inclusivity, diversity of team members, and content representation. Participants caution that a highly competitive job market, coupled with a surplus of graduates and senior professionals following layoffs, still enables companies to perpetuate toxic work environments and dynamics.



Image credits: Open Workshop, The Animation Workshop/VIA University College

All these ongoing challenges, according to the participants, underscore the necessity for sustained efforts and systemic changes within the games, animation, and VFX industries. This includes contributions from all parties involved, including educational institutions preparing new talent for the industry. However, participants noted that the primary focus for activism remains on the established workforce. Younger professionals and recent graduates encounter persistent challenges entering and sustaining careers in these fields, which currently limits their capacity to advocate for change compared to their more established counterparts.



'No asshole' hiring policy

After discussing current trends in work environments and dynamics within the industry, including the increasing demand for soft skills, the participants elaborated on their typical approach to sourcing staff in a competitive and over-saturated job market. They emphasised that, in line with industry trends, they prioritise candidates based on their interpersonal skills and ability to collaborate effectively over those with exceptional hard skills who may be less adaptable and more difficult to work with.

They summarised this strategy as a 'no asshole hiring policy.'

What is important for me? I mean, at the end of the day, whenever I onboard someone to my HR team, I always make sure to tell them: Let's make sure we don't hire assholes. I'm not willing to say the curse word again, but sometimes there are people who are really good hard skill wise, but lack the soft skill part and I'm always trying to find people who don't lack the soft skill part. It doesn't matter if you are the best person doing XYZ. If you cannot work within the team or communicate whatever, that's the end (41).

Basically the single most important aspect is you have to be a nice person. That's what it is like, to be honest. And it's been like this for a while, but now it's getting to a point where it's the number one priority where we hire someone. That person has to be nice, has to be kind, has to be able to work in a team. [...] So if you can't sort of be a nice person and talk to the other team members in a way that is collaborative and positive, you're gonna be out very quickly. Like to be honest at the moment, as soon as we feel that someone is not approaching an issue or a problem in an open and productive way, usually we immediately let that person go because you can learn the hard skills, the software tools and everything, but you can't really change the attitude of person, especially if he's like 30, 40 years old. That's just not gonna happen. And in certain cases, to be honest, we even let certain people go who are super great. [...] If you have someone in the team which is an asshole right from the very beginning, that will make the whole project a big failure. So, we rather not have the best technical team together right from the very beginning because technical skills can be learned. We can put in some training, but we can't solve someone who is coming with an attitude and just basically going against the way the team works (33).



It doesn't matter if your skills are like bit lower. Gotta be nice to work with because that will make the game nicer. This will make the vibe in the office nice. Like if you have one person that is an extremely not nice person. It brings the mood down, it brings collaboration down, it brings communication down and that just influences the production and everything around it. So, just be nice (95).

It feels like, if you're in a hiring position then you should much rather hire someone who is mediocre but has good soft skills than someone who is amazing but does not know how to communicate with other people, because it just creates a very toxic environment. And it creates an environment where it's kind of like them [Rockstars] versus the rest (81).

Having a well-defined core skill-set and a clear hiring policy, along with the ability to attract top applicants from a highly saturated market, might seem straightforward. However, participants noted that they increasingly struggle to find candidates who are the ideal fit, both for the job requirements and the team dynamics.





Looking for a needle in a haystack – finding 'the ideal fit' in an oversaturated job market

Despite the abundance of applicants, participants talk about their struggle in finding suitable new talents. The core skill set requirements and its variations and nuances make it difficult to find 'the ideal fit' for the job and the team even within an over-saturated job market. Additionally, time constraints exacerbate this challenge as HR departments and hiring committees are overwhelmed by the sheer volume of applications, making it difficult to thoroughly evaluate each candidate within the available time frame. Also, the growing number of educational institutions named in applications leads to a loss of overview for hiring teams. According to the participants, it becomes increasingly challenging to discern which educational institutions reliably produce suitable candidates, making it difficult to identify potential fits based on their education background. The participants pointed out that applications of graduates showcase a wide range of skill sets and varying levels of quality, further complicating the hiring process and making it harder to effectively assess candidates.

There is too many schools teaching video games. And there is also game art, game development, game design, whatever. There is too many students released in the wild each year, there is not enough studios. The balance is not right (20).

And that's the part that gets even trickier as we speak, because there are a lot of private universities who advertise the career of a visual effects artist. And they show them the software packages. How to use them. And they create show reels for them. Like, this is a good show reel, look, this is good. And they try to teach them a little bit about project work whatsoever, but at the end of the day, those 'Universities' do not really teach them what is important. I am not happy with that and those universities. They advertise that they get you industry-ready within 12 months, I think that's the fastest I saw, 12 or even 6 months. That's bullshit, I am sorry (41).



Image credits: UNREAL Engine training course, The Animation Workshop/VIA University College



On top of this, what makes it more difficult to find suitable new talent for a job and one's company is, according to the participants, an increasing lack of differentiation in job applications. Many candidates submit generic resumes and cover letters that fail to distinguish their qualifications or do not articulate why they are well-suited for the specific role or company. This generic approach makes it challenging for hiring teams to discern which applicants genuinely align with the job, the team, and the company's values and mission.

When people apply, and show their reels and everything looks the same, especially if they all come from the same educational institution, they all worked on the same project. I swear to God... Things I see 50 times a day... All the same. But then sometimes you see that people and their stuff looks different. They played around outside of the educational institution environment, outside of whatever environment just played around with stuff. Or there are people who do painting outside, something, anything outside of Educational institution. They are the good ones. The ones with a life outside of their work. What I'm trying to tell people is get input from outside of the industry because we are not the only people working in the world, live in the offline world and create something different (41).

It's important to show something unique when you have to sell yourself. Maybe I see 20 reels from the same school, then I've seen 20 reels with the same 6 assignments. But if I can see that one of them spent their summer vacation working on a shot and they only put that shot in, that will stand out right there. Just by doing something else than what the school assignments were. It shows commitment; these are people that will spend their summer holiday working on becoming better, but also making a reel that stands out (36).

You need to stand out. For example, I as a level designer have never worked on a first-person shooter game and most of the industry, when you're working as a level designer, you're designing first-person shooter type of maps on a lot of the bigger projects. That is where a lot of students also get the idea from that in their portfolios they need to show a bunch of these maps. And if that is what you're going for, then that is exactly what you need. But if that's not really what you're interested in, then just like me, you can have a bunch of other stuff and then that might actually make you stand out because in the particular projects that I worked on, being able to make a first-person shooter level is not necessarily the most important skill. If you have a very particular goal, like: I want to work at this studio then just very, very much look at what they're doing, look at what they need, look at where you might fit in there. And then that's probably what you should focus on in your work and your portfolio (81).

You gotta be a bit more unique in there. Don't be a default robot that shows everywhere the same letter. Got to put in some character because that's the first thing they'll see. You gotta make sure the presentation about your work is good and solid and feels strong and mighty. That's the thing they will see first. And then when you got the interview in my experience, well, then you can show them who you are, show your character, show what you got (95).



When I [game designer] first went for an interview with [studio], they were like: So what have you played recently? And I said, well, I've been playing this and this and this, which are all games made by that studio. And the guy interviewing me, he said, oh, it's great to hear. So what did you think of that and that? And then after our conversation, he said: You know, it's funny. Lots of people have come into here today and said: I've never actually played your games. And I don't know why they even bothered to interview, because if you're not gonna play the games of the studio, you're not passionate about these kind of games, why do you want to work here? And I got that job and I know that there were hundreds of applicants for that job. Before you even got to demonstrate your skills, you had to show you cared about the games that studio was making. You cared and enjoyed and could think critically about the stuff that they've done before. So in a very direct way, if you're not a player who plays these things, you're probably not gonna be working on it as a designer. If you're a visual artist, you just need to put the work in the style of that game. If you've got no anime or some manga in your portfolio, you're probably never going to get it. But if you have done like realist stuff, you've done hyper-Disney cartoon and you've done anime and you've shown the anime is to a good standard. Yeah, you'll probably be hired. It doesn't have to be your number one thing, but you have to be able to do what the studio is expecting of you to do later on in your job (51).

I've seen portfolios from very, very talented people with a huge technical skill, but I've seen always the same stuff: the army with weapons, people with weapons, strange hats, uh, people with elves in cyber punk. Always the same thing and without reason for me. Like there's no game about future and this guy wearing this hat. So I would like to see why this character is made, only then I can appreciate the drawing, the technique, the rendering. But I would like to understand why are you showing me this?Because without this information I will never know if you are a person that thinks about what they are doing or you just do nice drawings. They teach them this, to add connotations to this. If I see a portfolio with just polished drawings, I don't have enough information. I would choose an artist for the sketches and not for their drawings. Because if you can sketch well, there's where the thinking part is happening (70).

One of the things you can do for standing out is: Know your stuff. Be like the company that you're applying for. Name the reasons for why you actually wanna work there. This is the company that you would love to work at, not just because you want to be an animator or because you wanna be an illustrator. Be knowledgeable about why you're applying to that particular job. Because reading a letter that basically states that you've been a fan since you were a kid and that you started studying animation because of this. It's not necessarily guaranteed that you're gonna get a job, but it does help you stand out a little bit because then they're like, oh, you actually want to work here and not just in the same sort of environment, but here. And that's nice (83).



Fast and 'safe' hiring solutions

To navigate the challenges of finding the 'new ideal employee' in today's over-saturated job market, participants have identified several common strategies employed by the industry. These strategies aim to help identify suitable candidates amidst the growing number of applications that often showcase diverse skill sets, varying quality levels, and generic content that may not convey how well an applicant fits with the company and team.

To streamline recruitment processes, employers have increasingly turned to quick and 'safe' hiring procedures, including:

- leveraging AI-enhanced HR software to screen applications
- relying on recommendations from trusted educational institution networks or current staff
- organising 'meet & greet' sessions, portfolio reviews, or skill-sharing sessions with students
- preferring 'out of the box' applications that demonstrate creativity from the outset
- focusing on proactive, creative, and persistent networkers
- scanning applications for exceptional showreels and portfolios

These approaches, according to the participants, help employers manage the volume of applications while ensuring they identify candidates who not only meet the technical requirements but also align well with the company culture and team dynamics. The following section elaborates on these identified strategies:

Al-enhanced HR software:

When responding to online job ads, participants stated that precision of applicants when filling in online forms and uploading documents is important. To streamline the hiring process, companies often use AI-enhanced HR software that filters out applications lacking the correct key terms, deeming them unsuitable. Therefore, it's crucial for applicants to tailor their resumes and cover letters to include relevant keywords that match the job description.

We have a website where we post all of our vacancies and there's also an open application form [...]. And then we have a backend system behind all that, that sorts all of the applications based on the skills. So it's really important that the resume that you're putting in actually contains the skills that are relevant for the position that you're applying for. Otherwise, the system is kind of just gonna put you somewhere else. It's gonna basically disqualify you instantly, because you don't have the skills that are necessary for that particular job. So we don't have the time to actually review that resume. So it's really important that the resume is good. And let's say we're not looking for an animator, but you're skilled in animation, you can put in an open application and then you will be added to the system. So in the future, when we are looking for an animator, we can put in animator and then all of the animators will show up and then we can go through them. And that's basically the first point of interest. Like the first step and then from there we go through and read through the applications. Like a cover letter might be important because we want to know who you are (83).



It's an HR check that you have a degree. Doesn't matter what that degree is about, you just have to have a degree. And that's a problem with some of senior industry members who are selftaught, who are now unfortunately unemployed due to recent wave of layoffs, that they are being denied opportunities even to be employed as juniors at different companies because they do not have any official qualification. It's morally wrong and it shouldn't be the case, but it is the case you need a degree in something (66).

While such software can assist HR teams in minimising the number of applications to screen, some participants expressed concerns about these methods, particularly regarding self-taught professionals. These filtering systems often rely on requirements set by the HR team, such as an educational institution degree or formal education in the field, which can result in highly skilled and experienced self-taught professionals being automatically excluded from consideration. While there are claims that these AI-assisted systems increase efficiency, such issues reduce the credibility and trustworthiness of them: they are not efficient if their filters exclude highly experienced and suitable candidates. These problems are likely to reduce in the future, but only if companies feel the effort is sufficiently justified.



Image credits: The Reward (2013), The Animation Workshop/VIA University College



Recommendations from trusted educational institution networks and current staff

Another frequent strategy for streamlining the selection process and perform an initial screening, according to the participants, is seeking recommendations from trusted sources. These sources typically include educational institutions, current employees, and interns. Especially young talents are often called upon to recommend fellow students or recent graduates who they believe would be well-suited for the team and the job. The participants emphasised that this strategy makes peer networks from educational institutions highly valuable for individuals aiming to enter the industry.

We are looking for a 'good feeling', for 'personality' when we interview people. We have close collaborations with the [Educational institution] here. They recommend us students or something like that, where they think they could fit (39).

People are thinking, because I go to [Educational institution], I'll get a degree, I'll get a job. It's like no, [...] that degree needs to be done at respective provider that has certain reputation and the course is known, someone may recognise the name and based purely just on that may shortlist you to the interview stage if nothing else. It puts you on the top of the pile. It doesn't mean you get the job, it just means they have certain trust that what you say on paper has been verified by someone they trust. So you are a more certain candidate (66).

We have a good relationship with the [name of] educational institution. And then there's another school, a private school. That's undergrad, where you learn 3D art, and we can take interns from there as well. We know one of the professors, who is the head of the programme, who we've known since we started the company and we just asked her: 'Can you recommend any good students who you think would be a good fit for us?' And that's also a huge help because she knows us and what we stand for, what kind of work we do, and she knows her students as well. And so she's, in a way, helping recruit, because it's in her interest to give her students an opportunity for an internship (94).



Image credits: Tsunami (2015), The Animation Workshop/VIA University College



The animation school is right there next to us. It feels somehow safer to use people who's been at the school because we know they speak the same language, in the lack of a better word. We sort of have this same lingo. We've worked with a lot of people from abroad as well. And there's a bit of a barrier in the beginning. It's just easier when there are any people from that school that are looking for jobs. But obviously the level is the most important thing, but it also helps if they live in town. So you can just drop by, that makes it a lot easier (55).

We don't actually spend that much time on watching portfolios as I want to, because when you're busy on a project. Which we always are. There is not that much time left. I have a person who actually can do that [look through the applications] for our studio, but they are also busy. Also, when I worked for [big studio] we also never looked at portfolios. I think this is a good example: at one point we were looking for I think a layout artist and instead of looking through the applications, somebody just asked in the room. Do you know a great layout artist? And then one said yes. I had that person coming in and that's how she got the job. Because it's all about who you know, because we need fast decisions (23).

There's usually a job posting on different forums, on LinkedIn and social media. But it's ideal if someone has someone on their network, it could be our employee's network. It's just really nice to have that personal recommendation as a starting point, because it is something long term we want to build up. It's always hard to know people just from an interview. Everyone's putting on their most perfect version of themselves, including ourselves. And we also recruit through internships, which is a way to really feel that out. We have a good track record of having 3D interns, programming interns for three to six months (94)

Oh, reference letters is also great. I applied at a couple of studios who want references from other bosses. I was happy that I had gathered letters. I have a lot of references from my bosses. You can ask every boss, if they maybe write a few lines about you. So you get like a little reference letter. I asked that every time I ended a job: 'Can I please have a reference letter or a letter of reference?' So that's really good to have in your bag as well. I would definitely recommend if people can get a letter from any employer. If they worked as a baker in a bakery or store or anything (48).

Image credits: Desert (2019), The Animation Workshop/VIA University College





Meet and greet sessions on campus

In addition to personal recommendations from young talents and educational staff, companies are increasingly visiting educational institutions to engage directly with students. According to the participants, this direct interaction allows companies to reverse the typical process of first assessing portfolios and then getting to know the person behind the work. They prefer to prioritise evaluating personal compatibility and team fit with potential candidates before checking their work. This approach, they noted, works effectively in environments where they trust that students meet the necessary level of hard skills.

These sessions also serve as platforms for companies to educate students about their specific requirements and the diverse work environments and dynamics available within the industry. Participants aim to assist students in identifying companies that closely align with their skills, interests, and values, encouraging them to apply for roles that genuinely suit them. The goal is to help students craft applications that are more personalised and compelling, moving away from generic submissions.

On graduation month we invite a lot of key position holders from the industry from the country, but also from abroad and they come here during the two weeks. They come, they present their studios, they talk about processes and current things that are going on in productions and in the industry and these talks are open for the new graduates and also for the final year. By the end of it the people that come also hold sessions of reviewing portfolios. So that's an opportunity for both: the new graduates to get some feedback on the portfolios and see where they [students] stand in terms of the real level [of their hard skills] within the industry and they get to understand if they are there or not (43).

We [company] have recruitment meetings with new students every year. [...] They sign up to have meetings with us, and then we try to have a feeling with what's going on that year and it's pretty easy to pick out the five good ones in class, you know. That helps a lot (55).

We always do it like this: the students introduce themselves to the industry with their resume and their work and their interests. They present themselves. Beforehand, they give outbooklets with photos. The industry then sits in the room and listens. But they can also find out in advance who is presenting. And after the presentations there is a get together where they get to know each other. Often people from the industry come to us already before the presentations and say, I need someone who can do this and that. Who should I talk to? (35)



Image credits: Fibers (2015), The Animation Workshop/VIA University College



Creative, proactive, and persistent networking

In addition to being discovered through recommendations and referrals from peers, colleagues, or educational staff, professionals are increasingly expected to take a proactive approach in their careers. According to the participants, this involves actively seeking out key figures in their desired field, engaging with them creatively, and maintaining meaningful connections. Networking, described as an art by the participants, plays a crucial role in gaining insider information about sector-specific demands and industry trends. This approach not only helps applicants enhance their skills to meet current needs of the sector they want to apply to, but also positions them ahead of the curve for potential job opportunities within their professional networks.

Look on the webpage, try to find out who's responsible for HR, someone like that and send a personalised email to whoever seems relevant. If it's HR, if it's the head of studio, someone like that, and just keep it simple and just write: Hi. My name is. I'm really interested in animation. I just completed my studies in this place blah blah blah. You can choose to attach your resume, but you don't have to. Just be like: If I wanna look for an internship or if I just wanna send in an open resume in case you need me in the future, where would I send it? Just ask the question, just start the relation and be patient because people have a lot to do and also be understanding. Like if they say, look, we're sorry, we don't have any openings right now, but we can keep your resume or even if they say look, you're not experienced enough be understanding, don't be rude. I've actually had a few emails of people that, when I try to guide them into suggesting maybe what they should be doing, they just get angry at me and then I'm making a mental note of: OK, they need to grow, they need to grow up. Just be patient. Be respectful, be professional. This is a professional environment and the more professional you are, the more you will be respected because they're already trying to figure out whether or not they wanna work with you. Because working with someone is often years long relationships, so it's really important that you can see that this is a person I actually want to work with. This is the person that I can get along with. They're understanding, they are professional, they know their stuff, they're skilled, friendly, all of that. It really does shine through, even just from an email (83).





I remember in another job, I remember there was this person coming and knocking on the door, actually the old fashioned way. And we were shocked because no, you send it by email, but he probably was tired of not getting answered. And they said hi, I'm applying for this job. Can I get 15 minutes of your time? And then they pitched and that actually worked. That was a shot and I think that was really brave, but it also paid off. So I feel like the presence matter because now we have a relationship and I could go down and and look at these portfolios again, but I don't want to. I just talked to this guy and he was great. So you see, there's that thing where it convinced you to take someone in because they actually knocked on your door and said: Hi, here I am. Most people would never to that right? Because it might seem scary (23).

Just show your face to people. Hey, this is me, I draw. I want to get into the industry. Look at my stuff and that again and again. And again and again. We have once a month, we have a party at a bar, which is for that [industry networking event]. So it's not private. There is an association doing that, but you don't have to be in the association to go there. Grab, I don't know, a beer, a cola, whatever. And the bar is full of game devs from [the big studios]. Come to that party and talk to people. Come back next month and next month and next month and show people your stuff and eventually you'll get there (20).

A lot of people think networking is reaching out to a CEO of a company to try to get a job. Networking is horizontal. It's talking to your peers as being friends with them, and then when they land the company that you want to go to, you can be like: 'Hey, can you refer me?' And that's a lot easier than just starting somewhere (62).



Image credits: PANEURAMA partner meeting, 2023



It's all in the preparation. When you are trying to make connection with the people at the studio before a job offer would be published, you need to build a personal connection with someone in the company before. In order to do that you really have to personalise your email or your LinkedIn message. To me, this is not a copy paste message that you send to any studio. You need to show that you are really wanting to work with us because you like this type of work. And you contact us even if we don't have any job position at this moment. But get in touch. Ask our 2D artist for some feedback on your portfolio. What do you think? How can I improve my portfolio to be able to have more chance to come to your team? And just keep this network alive. Send a message every four or five months. So trying to have this contact it's good because as soon as we have a job position, we will remember. Ah, I talked for several months with this girl. She's really passionate. She's motivated. She has been connected to the manager. We contact here and sometimes we don't even need to publish a job position because we already have some contacts and now all the signs are aligned, so let's talk about the job position together (49).

I applied to this company and they work with the very, very advanced professionals in the field and my art is completely different style than theirs. But I applied for the job and they didn't reply to me. And I waited and waited. When we saw each other again I asked why she didn't reply. She, the owner of the company, asks me: How many emails have you sent? And I'm like: One. She said: Oh sorry, I have so many emails a day. When I don't get to respond immediately, I sometimes forget. So I was so surprised because I coming from being very organised in terms of emails. I don't skip an email. It's not my way of communicating, but it is maybe for others. I say this to give a perspective for students that other people are maybe busy, or the email could have ended up in Spam. So if you want to talk to a person, send an email. Find them on LinkedIn, inbox them. Remind them in a friendly way. Don't be pushy, but persistent. Let's be honest, especially if you're a company where you have a lot of applicants and stuff, you might overlook communication (28).





Strong, exceptional showreels and portfolios

Ultimately, the participants reaffirmed the unwavering importance of a strong portfolio or showreel in showcasing one's work effectively. They emphasised that regularly updating and tailoring these showcases to align with the specific sector, company, and job requirements is crucial. Furthermore, they highlighted the significance of understanding the unwritten rules of communication through portfolios and reels, which are essential for professionals to effectively present themselves and their work. These insights underscored the participants' belief that a well-crafted portfolio or reel remains a cornerstone for professionals aiming to make a compelling impression in their preferred sector of the industry.

Portfolio is extremely key to it. Like you can be the best person in the world, but if your portfolio sucks and it's the level of a 2 year old, then no, that's not gonna happen (95).

Your show reel is quite important. So it's very, very interesting for us to see what you've done before, regardless of whether it's working with other companies like an actual paid job or if it's something that you've done on your own. But you really wanna showcase what you can do and what you have been doing. So through school, if you wanna do self studies, if you want to go and just make some videos yourself, just to show what you can actually do. That's really valuable to us because as big as we are, we are also small and we do not have as much time as we would like to commit to training and teaching. So we're heavily reliant on you already having the skills, like the hard skills. [...] You need to at least understand the programs that you're working in and have some knowledge. Preferably a lot. We do understand that if you're straight out of school, of course you don't have hundreds of credentials, and but then you can still show your skill like your finals, like your exam film. I think everybody who studies, for instance animation has to do an animation or a final film. And then very important, clearly state what you've actually done in the film because sometimes you [hiring team] don't know [what exactly the applicant did in this film] and there's usually a team. So you might have directed that one. You might have animated that one and make sure that for your show reel, that it's relevant for the job that you are applying for (83).

I think there are ways you can express who you are in a portfolio. These people are creatives. They can put that up on a website in a fun, creative way. Like almost like a comic. How do you draw yourself? You can draw yourself as somebody who can juggle balls, right? So it's finding creative ways of showing who you are. I mean you have to sit down and think about that and you have to also know who you are in order to know how to portray yourself. Like every single information can be helpful when you are looking through these reels of applicants (36).



From pre-selection role of educational institutions to selfdistinguishing role of students

When discussing the current preferred selection and hiring methods, the participants made it clear that they recognise the high expectations placed on applicants to stand out in a highly competitive and over-saturated job market. They particularly noted the daunting experience for young talents seeking entry into the industry.

The people working in the industry, they've had an incredibly insane journey to get there and they've been working their ass off and they've been in very uncertain environments for many years struggling and you know. OK, it is a nice job, but it's a hell of a journey to get there (46).

I feel like it's a war. It is tough, I know many people in the community that got laid off recently and now they don't have a job, so they're getting out the same time as students. So what I usually tell students right now, I'm really sorry about you. You are in a really bad time frame, because you're coming out when a lot of people lost their jobs. So now you're fighting with people who are very established. It is the hardest to get a job. Now you are up against these people. But it will change again, because I don't want to sound too negative. I also wanna have a positive head on. It goes like this, so there will be a time where people will wrap up again, but at the moment this is what I experienced here that we have a lot of people looking for job (23).

I know it's hard when you [graduate] are out there [job market], because your network is small and that's why people who were laid off are benefitting, they have a great network. So that it's really tough right now, so you need to be active within your network because you never know. Maybe writing to 17 people, right? Just be active and then one person will need one at one point and maybe you were just lucky to be at the right space at the right time before they took somebody else and you got it. So you need to be proactive (23).

Seeing that conference, that [famous company] booth with thousands of students in a queue to stand there and show their portfolio to maybe, maybe, maybe get an interview. And like these kids are standing in a row for hours to work for this one company that they want to work for. And I can guarantee you 99.9% of them are not even getting an interview, but they all believe this is how they're going to get the thing they want. So there is a marketing media machine and a passion that is driving them that is so completely unrealistic and unattainable. Or a career that pays like shit, has no benefits, has no unions (18).



The participants pointed out that, in the past, a few established educational institutions played a crucial role in pre-selecting promising talent for specific industry sectors and preparing students to meet those sectors' specific needs. However, with the increasing number of educational institutions and graduates with varying skill sets and quality levels as well as a growing and diversifying industry, the participants now perceive this role to be diminishing.

Coupled with the reduced time hiring teams have to thoroughly review applications, this places increased pressure on students from the outset of their education. According to the participants students must independently research and understand industry expectations, carve out their niche, and effectively differentiate themselves in a competitive job market.

It's very, very difficult and I really, really feel for them. Even the job ads saying we want to an entry level position with two years' experience. How do you find that person? It's ridiculous you don't. I would hate to be a junior in this industry at this time because you have to be confident, yet humble. You have to be kind of willing to learn and open to new ideas, but also come with an understanding and knowledge base and experience. You have to be kind of willing to do anything but also have your own strong style. It's so tricky. Yeah, it's very difficult. The only way that I can see that being combated really is not on the student side, but on the other side. To be fair. All the recruiters I know are the nicest people in the world. They can see this and I think that education has to go out to the leads and the supervisors to make them understand [...] that maybe there's a misunderstanding or a disconnect of what a junior is. I even now get calls and emails from people saying we want a junior with these skill sets and: Well that's not a junior that's a mid-level artist and I think that people have almost forgotten what it is to be a junior and the skill level of a junior. It really should be an entry level position to get into the industry and we have people in industry complaining there's not enough juniors. Where's the juniors? They're all here. You've just set the bar too high. It's an unfortunate kind of situation I think (78).

Yes, I am completely aware that it's hard for the candidates to do this with every studio [create tailormade applications], but I think that this is work that can really pay off. You need to be different than your colleagues in every way. Because year after year there are more and more and more students in this industry and we don't have enough projects to be able to recruit all of these people. So you have to be better than your colleagues. You don't have to have a completely competitive mindset and say, I don't care about other people and only think about yourself and how to become the best. But you have to prove and show others that you have a place in this industry. You need to claim it. And if you don't do this kind of work, people are doing this and they have more chance to be recruited. This is not so fair, but true (49).



Adaptability extending beyond skills needed for day to day work - the 'ideal employee' needs to be first the 'ideal applicant'

When discussing the exceedingly challenging job market for students, graduates, and young professionals, participants realised an additional dimension of 'adaptability' beyond the core skill set they had identified: an 'adaptability' that extends beyond the expected core soft skill set identified earlier on in the report.

The detailed industry expectations for employees, coupled with the extreme challenges of an over-saturated and highly competitive job market for applicants, asks for the ability to navigate different phases of the application and hiring process, each demanding distinct skill sets.

- 1. In the phase of standing out in an over-saturated and competitive market, professionals must become 'ideal applicants'. They need to showcase their strengths effectively amidst a sea of candidates, highlighting their unique qualities and skills that align with the job requirements.
- 2. Once noticed and invited for an interview, these 'ideal applicants' must seamlessly transition into 'the ideal employee', which requires a completely different skill set than that of the 'ideal applicant'. During the interview, they need to demonstrate humility, adaptability, and strong teamwork skills - qualities that reflect their ability to integrate into the company culture and contribute effectively to the team.

The following wordcloud depicts the contrasting skill sets required from professionals in the industry when seeking a new job. In blue, one sees the skill set for the 'ideal employee', while in green, one sees the skill set for 'the ideal applicant'.





This dual requirement demands that professionals embody two seemingly opposing personalities: the assertive and standout applicant, and the humble and collaborative team player. Mastering this balance is, according to the participants, crucial for success in the industry's competitive landscape.

Strategy tips from the industry for the 'the ideal student' on how to become the 'ideal employee and applicant'

The participants pondered over the implications of these dual expectations for students aiming to enter and thrive in the industry. The reality is clear to them: students must strike a delicate balance. On one hand, they need to excel individually to secure entry into the industry - mastering technical skills, becoming networking wizards and crafting standout portfolios. On the other hand, they must also cultivate robust soft skills for collaborative work environments and dynamics, which is crucial for sustained success within the industry. Amidst these demands, students are expected to align with industry trends that emphasise well-being and prioritise maintaining a healthy work-life balance starting from their educational institution years.

If you really think you're gonna stand a chance and have a chance for a career [in the industry]... and that's a hard thing to say to people who are young and bright and ambitious, but I think it's important that they know: If you want to do this, you can't just sit back and demand the world from everyone else. You gotta demand it from yourself foremost. [You need to work hard.] And then of course, take care of yourself along the way (94).

To sum up, the 'ideal student' becomes the 'ideal employee' as well as the 'ideal applicant' and can seemingly transition from one to the other.

How to become the 'ideal applicant' in today's competitive industry

Participants advise students to engage in strategic career planning:

- 'Reality Check'
- Personal Branding
- Strong, tailored portfolios/reels
- Proactive, persistent and focused networking

The participants advise students to begin their academic journey by conducting a thorough and critical self-assessment, which they term a 'reality check'. This process starts ideally as early as year 1 and involves critically evaluating their strengths, weaknesses, health, and career aspirations while comparing and contrasting them with job market possibilities to find a realistic match. According to the participants, this can enable students to realistically adjust their often initially unrealistic and overly ambitious career goals based on their personal abilities and the current job market landscape. By identifying a suitable sector within the industry early on, students can direct their skill development from the beginning on towards meeting the specific demands of that sector.



This dual requirement demands that professionals embody two seemingly opposing personalities: the assertive and standout applicant, and the humble and collaborative team player. Mastering this balance is, according to the participants, crucial for success in the industry's competitive landscape.

This strategic focus not only helps them become an 'ideal fit' but also allows them to early on communicate their suitability to potential employers through personal branding and strong, tailored portfolios and reels. The participants encourage students to also start early on with proactive networking and emphasise the value of cultivating and maintaining meaningful connections with influential figures in their chosen industry sector. Remaining adaptable to changes within their chosen sector and being open to shifting career paths if necessary are also highlighted as essential strategies.

Overall, the emphasis of the participants is on strategic career planning, continuous skill development, and effective communication of their fit for the industry sector they aim to join, preparing them to navigate and succeed in a competitive job market from the onset.

Image credits: Vermin (2018), The Animation Workshop/VIA University





How to become the 'ideal employee' in today's collaborative work environment and dynamics

Participants encourage students to discover and enhance their interpersonal and collaborative skills within different contexts, such as:

- Interdisciplinary projects with diverse teams (also outside educational contexts)
- Projects with teams outside of the games, animation, and VFX industry
- Peer reviews and other feedback sessions
- And find a new hobby and friends outside of the 'work bubble'

Students are encouraged to train and improve their soft skills in the context of interdisciplinary projects (also outside the traditional industry), participate in peer reviews for constructive feedback, and pursue continuous self-improvement through workshops and additional skill development initiatives. Additionally, the participants emphasise the importance of gaining insights into various roles within their field, seeking inspiration from diverse hobbies, and attending lectures from different disciplines to enrich their perspectives and their creative input, as well as broaden their knowledge base.

To sum up: how to become the 'ideal graduate'

Ultimately, the 'ideal graduate' combines excellent hard skills and soft skills, is focused yet flexible, and demonstrates proactive and persistent networking abilities, while maintaining a respectful and humble approach. And all of this while having a healthy work-life balance.





Strategy tips from the industry for educational institutions on guiding students through industry expectations and market realities

Overall, industry experts acknowledge and value the proactive steps taken by certain educational institutions to continuously adapt their curricula to meet the evolving demands of the industry. There is a strong commitment among stakeholders to engage in open dialogue, aiming to enhance the preparation of graduates who are well-equipped to contribute effectively to a sustainable workforce.

Based on insights gathered from the PANEURAMA project, the following section summarises briefly the key recommendations of the participants to further enhance educational programs. The industry anticipates that educational institutions will:

- Prepare students effectively for both roles: as adaptable team players and competitive selfpromoters with strong portfolios, seamlessly switching between these roles.
- Foster a mindset of lifelong learning, teaching students to independently stay updated on industry needs and engage in self-improvement.
- Create a safe learning environment where students can experiment, find innovative solutions, and learn from mistakes (#FailingForward).
- Instil confidence in students' work quality while emphasising humility and the value of experience for career progression and realistic wage expectations.
- Teach students the broader context of their work within production teams, client roles, and audience considerations, encouraging openness to constructive feedback and collaborative problem-solving.
- Enhance students' intercultural, interdisciplinary and intergenerational communication skills across diverse international teams and industries beyond traditional sectors.
- Encourage students to explore interests outside their 'professional bubble' to foster personal growth and diverse perspectives.
- Prepare students for global opportunities by emphasising relocation readiness and English proficiency.
- Promote a healthy work-life balance and effective management of overtime, advocating for fair compensation and fostering an activist mindset for industry improvement (including discerning when activism is appropriate and strategically beneficial).
- Initiate discussions on creating friendly, healthy, and sustainable work environments and dynamics, addressing diversity, inclusion, and industry ethics.

Overall, educational institutions are asked to educate young talents with a strong foundation in hard and soft skills, humility, and a collaborative spirit to contribute positively to industry dynamics and workplace culture.



Educational institutions and the 'ideal graduate' - a balancing act between industry expectations, job market realities and educational mandate

Building upon the industry's demands and suggestions discussed in the first chapter, this chapter concentrates and elaborates on the perspectives, experiences, and challenges of the participants with a background in educational institutions (henceforth 'teaching participants') and students ('student participants').

Participants from both groups appreciate the industry's shift towards healthier, friendlier work environments and dynamics, and a preference for adaptable team players. According to teaching participants many educational institutions have aligned with these trends by adopting more practice-based, collaborative and self-directed educational approaches and by promoting a healthy-work life balance, preparing students to work effectively within pipelines and with real clients, while developing a solid foundation of soft and hard skills. Teaching participants noted that these attempts to mimic industry situations within a safe environment are designed to give students their first work experiences and allow them to experiment and learn from mistakes. Furthermore, educational institutions concentrate on creating lifelong learners by coaching them in self-directed and independent learning of new skills.

However, the application of these new educational approaches faces several practical challenges, driven by both internal and external factors, making it difficult for educational institutions to create a coherent curriculum that adequately prepares students for their future careers. According to teaching participants, these challenges include: industry's often contradictory demands, diverse voices among educational staff, distinct student backgrounds, the realities of an oversaturated and highly competitive job market, and the pressures on often overworked and overwhelmed students and staff. Additionally, non-disclosure agreement restrictions on industry guests, and the rapid growth of the educational sector further contribute to the complexity.

Also, student participants describe challenges with the new educational approaches. They acknowledge the necessity of these approaches to increase their employment possibilities, but find the multiple, and often contradictory, demands from the industry, job market, and educational institutions stressful. Balancing these demands while taking ownership of their own academic path, networking, and maintaining a healthy work-life balance, including hobbies outside of the work bubble, adds to the pressure. This situation leads some students to reassess their initially high career ambitions based on their skills, abilities, industry demands, and the job market, alongside the realistic level of work needed to compete with their peers. An increasing number of students opt for a healthy work-life balance over working long hours and weekends to reach their initial goals, adjusting their ambitions accordingly. Educational staff have expressed concern about this trend, fearing that the current strong focus on work-life balance in educational institutions might lead students to self-limit and choose different career paths too early, potentially missing opportunities to achieve their career potential.

The following chapter maps out the above-mentioned attempts, experiences, and challenges in more detail. First, it explores the perspective of teaching participants, followed by the perspective of student participants.



Self-inflicted challenges and concerns: oversupply of talents leading to heightened requirements for students and educational institutions

Teaching participants discussed the impact of the significant rise in educational offerings and student enrolment in games, animation, and VFX. They noted this expansion has been driven by the industry's enhanced reputation and increased interest among young people eager to pursue careers in these creative sectors.

There is actually over 130 higher education or further education institutions that have at least one game orientated course in the country. Let's for sake of argument say 125. And each course graduates, let's say 10 people. That's 1250. So, let's say on average there are two courses, so 2 1/2 thousand. Every year across all the fields in the games industry in the country are less than 25,000 people. So every year we are training 10% of potential workforce that wants to work in industry. But there's no need for that many people. Yearly, there's less than 215 internships across all of country, so there might be employment for 10% of the students and this obviously will be the best 10%. And that's the problem (66).

I mean this is more political, but I think we are forced to take more and more students every year [...] The number of students, that's the money that we get from the government on each student. And that means that the classes are getting more crowded and there's less individual attention for each student and so on. Also the question is raised: do we really need 50 graduates every year to put into an industry that is so unstable? So I would say if we could have taken less students, that would be nice (43).

The teaching participants pointed out that this rapid expansion has brought several challenges for them and their students. The increased number of graduates entering an already saturated job market has intensified competition among graduates and institutions. Additionally, this growth has affected the skill sets and overall quality of graduates, as well as the transparency of some educational providers regarding content, aims, and quality, making it more difficult for students to choose between institutions and assess the quality of programs.





Concerns over transparency of educational offerings

In a high-demand, competitive industry with an over-saturated job market, teaching participants express concerns about the challenges prospective students face in navigating the multitude of educational offerings. They find it difficult for aspiring students to discern which program aligns with their individual aspirations while also providing realistic preparation for the industry.

A lot of educational institutions offer game development courses. Many of them offer multiple game development courses of a variety of different specialisms, and they're all offered at varying degrees of quality and outcomes. I think the first takeaway I took away from that was that it's actually quite confusing for a student to know where they're gonna end up when they're looking at short-listing educational institutions. Who are they going to learn from, what skills are they going to learn, what proportion of graduates actually get out into an industry job when they graduate within a reasonable period of time. And I think that certainly some institutions are quite a bit disingenuous in saying that 90% of our graduates secure a role within three months of graduating. But they are a little bit vague on the detail. What role? How secure is that role? I learned quite early on in my own bachelor's degree that it is a hugely competitive market for educational institution graduates (69).

There is too many schools that are teaching video game across the globe and there is not enough studios. So I tell that to the students. I had a problem with school by saying that. But I also have a problem with schools lying regarding the information that they were giving to shelve students. Because they are saying 'We are providing workers for AAA games.' No! You had just one class out of the school, and there're just two people working in the industry and none of them is working on a AAA game, so... Basically I told them either way you change that or I'm out. End of the story. I was out. Because they didn't change anything (20).

It's a kind of an interesting crisis point at the moment for a lot of educational institutions who are selling those courses. The courses sell very well because students would love to work in film and make games and a lot of parents suggest that their children should go into that because that's what they can see: Oh well, you know James enjoys playing the PlayStation, so he should just go and do the games degree because that's a good idea. That's a difficult one, because it's very difficult for universities on the one hand make promises that: yes, James can work in the games industry and he just has to come and do this course and it would be wonderful. And it will definitely be a success and then have to break it to James that you have to be really good at coding and you have to do an awful lot of actually very, very tough, painstaking, exhausting work where you have to be good at numbers and if you're not, then you're probably not gonna enjoy those jobs very much... It's very difficult (67).

Teaching participants have underscored that transparency is necessary for potential students to make informed decisions, but is often obscured by marketing strategies. These strategies, they argue, may not accurately portray the true course content, quality of education, and realistic job prospects associated with different programs. This lack of transparency is particularly troubling to teaching participants as it can lead to students being misled and adversely affect the overall reputation of the educational sector.



Concerns over job market saturation and graduates with diverse quality levels

In addition to this lack of transparency, teaching participants, much like their industry counterparts, express concerns about the unclear skill sets and levels of the increasing number of graduates entering the job market. They worry that this adds even more complexity to the hiring processes, and even well-prepared students from renowned educational institutions may find it increasingly challenging to stand out and attract potential employers amidst this flood of applicants.

There's several other programs around the country in different institutes because the demand is there for animation. But there's a difference in the levels of these programs. There is a difference in the recruitment of new students and the graduates going out. We have students spend a couple of years even developing their portfolio to get into our course. So it's not just straight after school. They can do portfolio courses or further education. That kind of increases the quality of the students, but also the competitiveness of it is horrible, because the system is out of our control and you know a lot of students who are suitable don't get places (52).

The amount of games students going to market every year, the amount of graduates is insane because there are so many game schools popping up left, right, and centre. And the quality is all over the place. I think there are currently 11 different programs in [the country] teaching game development to some extent. At least six of those, I can guarantee you those students will never have a job. Ever. They will never work in the games industry. They lack all forms of technical skill. They lack industry experience and knowledge to even get to the interview stage. And that highlights the problem, right? Because we've created a situation where we need to deliver them to this level of ready-to-work factory mindset to even be hired. And if they then have a rebellious undertone of: We need to change this. This is not OK. Then they're not going to get through the probation time (18).

In general, I would say, and I hate saying this, many students are so unready that they get angry with you when you tell them that they're not ready. [...] The classic example is somebody who has completed an education in game design, and often it'll be a short one. It'll be like two years or one year education and then they have no portfolio. They'll have some courses that they followed. They might have one or two courses that they've uploaded as kind of: 'Hey, these are my projects and I made this physical board game' or 'I wrote this article on games'. There's another 10 million of you. We're not even looking at your portfolio because you're so far off the list. [...] So it really pisses me off, because it's not the student's fault, it's the fault of the education that shouldn't exist (60).



Concerns over profit-driven education

Teaching participants expressed concerns that certain educational institutions within the industry may become profit-driven entities, rather than focusing on providing genuine educational value and adequately preparing students for their careers. They worry that some institutions might exploit the high demand for study places and other advantages when offering these courses.

There is government funding for professional development and kind of training and things like that, responding to industry in terms of bridging what they perceive to be gaps. So there's a lot of money invested in that, and there's a lot of short courses and opportunities as well in that for education, but also micro credentials and kind of short form programs as well as some master's programs that we're developing here. And again, I have some concerns around the ethos behind some of the programs (52).

Image credits:



We have a free education system in [the country] and most of the video game programmes are provided in private schools. So kids are in a country where they can have an education for almost free and then you have kids, they want to learn video games. Either way they go, I think there is 3 free programmes in [the country] that teach video game and two of them you have to have a bachelor, it's just the master. Or they can have a full programme from bachelor to master. So five years, but it will be 1000 Euros and more a year in a country where school is free. So that's also a problem for me. And at the end of that you know how to make games basically, but there is no job for you. Sorry. I met a student that I had a few years ago and they are working on web design, cybersecurity, whatever. They just paid the degree for nothing. I met a girl like 2 days ago and now she works at a bookshop. She is happy though. But it's like, you paid €20,000 and now you work at the library. We don't need people to pay this much money for that job. And the fact that most of the educational institutions here are free. It blew my mind that we have to pay to be a game designer but becoming a doctor is free (20).



Concerns about intensifying competition on students and faculty

The teaching participants pointed out that this expansion and changes within the educational landscape have intensified competition among institutions. In the past, a few renowned institutions were well known for their quality of education and industry standing, enabling them to handpick outstanding talent and maintain close contact with key figures in the industry. However, educational institutions now need to actively promote themselves to attract potential students and maintain a high standing in the industry. This has led institutions to focus on 'producing' and highlighting successful student and alumni stories in marketing efforts in order to continuously attract highly promising students and stay relevant for industry contacts. While acknowledging that competition can foster educational program improvements, teaching participants caution that it also imposes significant additional pressure on both faculty and students.

Image credits: The Drawing Academy, The Animation Workshop/VIA University College



To sum up, participants urge educational institutions to balance industry demands, student well-being, and transparency

Teaching participants emphasise the critical need to address these concerns. They stress that educational institutions must ensure they prepare students for future careers in the industry while maintaining transparency in their educational offerings and outcomes. Furthermore, teaching participants advocate for fostering healthy competition while prioritising student wellbeing and effective education without adding undue additional stress on students and faculty.



Educational institutions' answers to the balancing act between industry demands, job market reality, and educational mandate

While teaching participants express their concerns about the proliferation of educational offerings with varying exit levels, skill sets, and intentions, they find encouragement in the substantial efforts of many institutions to produce high-quality and relevant programmes. These efforts focus on aligning programs not only with current industry and job market demands, but also with the educational mandate of promoting personal and social development, critical thinking, and innovation to provide students with meaningful educational experiences.

Currently, to achieve this goal, many educational institutions have been transitioning from traditional, modular, and theory-focused approaches to a combination of collaborative, projectbased, and self-directed learning. In interdisciplinary and multicultural group projects, students are given the opportunity to train their teamwork and soft skills while applying their technical expertise. According to teaching participants, these projects aim to provide students with their first work experience in a supportive learning environment, collaborating with real-life clients under the guidance of both educational and industry professionals. This approach also allows students to choose and apply their individual learning paths throughout their academic careers.

Recognising that students regularly face time management challenges while balancing group projects with individual skill development to build strong portfolios and reels for the competitive job market, some institutions have recently started dedicating specific time for these activities. Additionally, mirroring industry trends, educational institutions are actively promoting a healthy work-life balance.



Image credits: Judgement (2024), The Animation Workshop/VIA University College



Evolution of Europe's games, animation, and VFX education: from elite academies to nuanced industry-led approach

When describing and discussing the current situation of the European educational sector in games, animation, and VFX, teaching participants emphasised the importance of reflecting on its historical context to understand the sector's evolution and the rationale behind recent changes. They outlined the sector's origins, where a few small academies initially focused on nurturing a small number of exceptional talents through rigorous selection and demanding coursework. This approach produced highly skilled, multidisciplinary graduates with a distinctive 'attitude,' making them readily employable but sometimes challenging to work with. While the industry valued these students' excellent skills and work ethic, their attitude often posed obstacles to collaboration.

When I joined [our Educational institution] the approach was a course modular system. So you'd have a course about basics of level design or 2D level design or 3D level design. You had all these little things and they might be 1 or 4 ECTs or something like that. People had to pass all these individual courses and then you were a game developer. Off you go, make games. The vast majority of those courses didn't really require teamwork. [...] We had a few different problems with that curriculum. One of them was - to take an example from visual artists: a visual artist might be excellent at making characters that look like real human beings, but they were terrible at making environments. I think they just didn't have any eye for that, but they could make people look amazing. The trouble was because you had a course about making people and one about making environments. And if you fail the environments constantly, you could never get a job making people because you weren't gonna graduate. So we had this problem that the people with immense expertise would be employable within the games industry, but they weren't able to graduate. [...] That just didn't seem right. So we had problems with the levels of graduation within the modular system, which didn't reflect the needs of the industry. [...] We're training people to make games. They're gonna have to work in teams to make games. Why don't we make all of the assessment about making games with teams? And we didn't know at the time that we had problems with the soft skills of our graduates, that they would be walking into these companies kind of going:' I've just come through this elite education where I'm told I'm gonna be the best of the best. I've learned all these incredible systems. You're doing it differently. You're doing it wrong. Listen to me now.' And they were basically arseholes to work with. Which was a bit of a problem. It was a bit of a reputational problem for us. [...] Or they didn't stay in the games industry, cause nobody wanted to hire them or keep them on after their probation period. It was a problem. They were incredibly skilled, don't get me wrong. In that old curriculum if you could pass that, you were amazing, but a lot of people didn't pass it and that was a problem. Because they for sure could do the job, but they just could not get through all the modules. So, we decided: let's make everything about making games, and build the assessments into that. So, by taking this approach we have embedded teamwork as a necessity to get through the course. So, you're going to have to be able to work with direction, with leads. You're gonna have to be able to do group decision making. You're gonna have to give feedback in a respectful way. That doesn't get you fired from the team that you're working with. [...] So if you can't work with teams, you have trouble graduating from our course. Ensuring that there is a little bit more of a sense of teamwork, responsibility, cooperation, feedback, mutual respect, within the the structure of the courses. [...] There is a sense from some of the industry that perhaps the overall general quality has perhaps dropped, but they [students] are a bit easier to work with. So yeah, pluses and minuses there. I think it's a healthier thing, a healthier situation to be in (51).



In response to these issues and the evolving industry landscape, many educational institutions, according to teaching participants, are focusing on educating T-shaped professionals with a robust foundation in both hard skills and soft skills. Ideally, these graduates possess an excellent portfolio in one expertise area and some experience in complementary disciplines. They gain initial work experience and strong soft skills from group projects, with extensive industry exposure.

I think this is very clear to young designers that they have to be T-shaped. You have to be very vertical on your own, but you have to be able to speak the programmer language, the artist language because you are like the centre of the operation (70).

T-shaped is the what we go for. T-shaped experts have a broad experience and a very specific focus on a very particular thing. When I was at [Educational institution] I tried to get experience from art, from programming, from design, from sound and other different things. And then I focused on being a level designer. I went really deep into not just level design, but like multiplayer level design of this and that, this and that. And then if you have that very particular focus, but you're also pretty broad in terms of your general skills, then yeah, I think that makes you more employable. Obviously, if that particular thing you're focused on is something that is being looked for at the moment and then also obviously very much depends if you wanna go into indie or you wanna go into AAA. Because for AAA you need more focus. You need a very specific standout thing that you can do and that you are kind of better at, or at least have more experience in than a lot of other people. And you definitely need a very broad set of experience as well (81).

So we have made sure that at our school there are much more seminars where the departments work together. Before, we had a lot of seminars where the departments worked separately with their own students, like production or direction or editing. And we are putting them more and more together. We have many seminars where there are both directors and scriptwriters and editors and VFX people. And also the camera people are more and more together. They have to work together. This is how the industry works. That has to be practiced. And it is important that you understand the job of the other person in the pipeline. For example you need to understand what makes a good script? How do you get there? Or what makes a good collaboration with the director and how do you get there? Or how do you lead a team or how do you handle conflicts? How do you deal with yourself? (35)



Teaching participants further emphasised the importance of training students to continuously, independently, and proactively research industry needs and engage in self-directed learning to update their skill sets regularly, fostering a lifelong learning approach.

That's also a conversation we have with them. The needs [of the industry] five years from now might be different. So if we tell you this is what is important right now, maybe it is not any more in a few years. We also might be wrong as well as a university or even the professionals that we bring in to have a conversation with you. They might not be right in five years from now, things will change. So it's up to you to stay awake, really keep analyzing the needs of the industry and reach out to people. Have a conversation about what is needed. And know when it is time to change with the new needs (56).

As a concrete example, mastering software packages was highlighted. Educational institutions are shifting away from solely focusing on mastering individual software towards promoting a broader understanding of software functionality. This shift aims to empower students to quickly adapt to various industry tools and emerging technologies.

Image credits: Saga of Biorn (2011), The Animation Workshop/VIA University College





Historically, it's been having a very solid craft [animation] and experience in the current software that's been used. We have always aimed at, that our graduates can go out into the industry and they are ready to work from day one. That's super important. But with the current fast changes in the industry, it is more and more important not to necessarily know one specific software, but having the ability to understand how softwares work. So you can learn yourself new softwares and new ways of working. Then it becomes much more important that you have an understanding of how technology works, but also that you have an analytical reflective mind. That you've been trained to think about which process and which method is most relevant in a specific situation. Because the thing you are learning right now will probably change just two years from now. So you need to be able to constantly adapt to a new situation. And I think that requires us to teach them in a different way (42).

Our approach is not to teach software, but first to teach the principles of how a computer works. We want to teach students how to manage computers with an artistic approach, to understand how a computer works in the background because we have the experience of tools that are replacing each other. We observe that Unity is just crashing down right now and Unreal Engine is a coming up and we have a lot of studios who are including Unreal Engine as a new software. But we know that Unreal Engine will probably be replaced sooner or later, maybe in 10 years. So there is software changing every time. We try to let students not to be dependent on a software (30).

Students are increasingly tasked with self-teaching various hard skills using the growing array of high-quality, often free, online tutorials and courses. Educational staff assist in identifying crucial hard skills for each student's academic and professional career and may suggest online sources or expect students to find these independently. While there are strong proponents of self-directed learning methods, there are also skeptics. An ongoing discussion according to teaching participants revolves around whether online courses will eventually replace educational institutions and what that means for the future relevance of games, animation, and VFX education within these institutions.

Teaching participants highlight that while online courses can help students learn and refine hard skills, there remains a critical need for guidance in their learning path to ensure relevance. Moreover, practicing these skills within interdisciplinary pipelines and teams is essential. This practice is vital for developing soft skills, particularly collaborative work toward common goals, within a supportive learning environment before transitioning to the industry. The COVID-19 pandemic, according to teaching participants, has highlighted the limitations of online learning communities in effectively replicating these offline collaborative learning environments and underscored the continued importance of physical, collaborative learning experiences in adequately preparing students for careers in games, animation, and VFX.

Nowadays you can go online and you can do a course in just the thing that you want to do, right? So if I want to be an animator, why would I spend three years doing an undergraduate degree? That's gonna cost me a lot of money. I'm gonna have to pay off over years when I could spend six months and pay a lot less and just do a course in animation from an online course, right? That it's a very fair point, but here is the problem.



The industry doesn't exist in a vacuum. You don't work by yourself in a room. The industry is 100% collaboration and there's a very, very big difference between being an artist and being a collaborative artist. Collaborative creativity is such a wonderful process. There's nothing better than working with people on a creative project. It's magic. But again, that is a skill set and you have to learn to leave your ego behind. You have to learn that it's not my project or my shot. It's our project and it's our shot and that is probably the hardest thing that they struggle with when they're in the job. The second hardest part is feedback and as a creative artist, how do you come up with something creative and being told that it's wrong? And as artists, this is soul destroying. You know, it's hard to hear and you have to try and distance yourself from the work and understand that it's not me. They need to learn that in a group. Look, it took me years to understand this, because if you define yourself by your work, then when you get told your work is not good, what you hear is I'm no good. It's a horrible thing, but juniors really have to learn that, you know, working collaboratively, such an important part of the process is feedback. So the reason why I think the role that educational institutions have is to teach that part of the process, to teach collaboration, communication and those things that are important to be a collaborative artist (78).

If you look at YouTube, there's so much really well researched, thorough tutorials. So sometimes I'm at the point: OK, why don't we [educational staff] just all go home and sleep, you know? Does it really need to be educational institutions and stuff? And then I figured out when there was Corona. And it was really tough on the students to only work from home. And no matter what we did, how much teacher supervision we gave them, how often we would check up with them. We couldn't win. The simple thing was that there was just an urge to be physically together in the same room, and I think in the most simple terms, what [educational institution] is about, is that we group people together with similar interest and in a physical space and in groups. Of course, we educate them, so they can go out and get a job, but the whole sort of key and the magic actually comes from the fact that people are together and working in the same classroom (50).

There is so much free stuff out there, so much free teaching out there. All very, very cheap teaching, and future students will ask us why should I spend 3 1/2 years here when I could just as easily spend half a year on some kind of online thing. Maybe there's some mentorship involved in it. And then I can get a job. I think part of the reply could be: with us you get the applied part. Much better than the Internet can do. We help them grow soft skills that you need to be in a social community rather than having these individual pieces of learning. I think we gonna need to teach more soft skills, and a little less hard skills because hard skills will be outdated faster (42).





I'm so impressed by how educational institutions work nowadays. Because for a long time, I was unconvinced, especially because I didn't learn my job at an educational institution. I taught myself. I learned stuff, short courses and stuff, but it wasn't like an educational institution. So I was like: 'Actually [educational institution] is kind of an outdated idea'. But then I went to an educational institution and I've seen how it works. It all makes sense now. [...] My understanding is now that the main value of [educational institution] is being able to collaborate. To collaborate without pressure, client pressure. It made me understand, it makes sense to have a place where people come and they are excited about what they do. They don't wanna skip the classes. It's a tough journey, especially when you're doing this kind of long journey on your own online. It is easier together (28).

Another significant advantage of studying in an educational institution, according to teaching participants, is the opportunity to work on group projects that mimic industry scenarios. These projects provide students with their first real industry exposure within a safe educational context.

The projects are supervised by industry and educational experts. According to teaching participants, this dual approach serves several critical purposes. It facilitates the swift integration of industry demands into educational projects, ensuring practical relevance and application. Simultaneously, it upholds didactical standards by embedding these industry developments into meaningful learning experiences. Educational experts contribute by designing structured learning paths or assisting students in designing their individual learning trajectory that progressively develop skills, cater to diverse learning needs, promote inclusivity, and stimulate critical thinking about ethical issues within the industry.

50% of our teaching here is done by internal staff, 50% by the external staff. So that means we have constantly people coming in that usually work within the business and then they are teaching for a week or two weeks here and then they out into the industry. And so there's a lot of flow of that kind of latest industry information in our classrooms. So it's not that important for my internal teachers to have that knowledge. [...] We tried to find external teachers who are experienced teachers. So someone who has a a career in the industry and they have some kind of teaching experience. But that is not easy. So we have new teachers come in all the time from the industry. And we make sure with our internal staff that there is consistency and that there is a clear progression (42).



Additionally, teaching participants highlighted their practice of regularly inviting groups of industry professionals on specific days to expand students' networks and knowledge of job opportunities across various sectors and companies. These professionals introduce their work, companies, and sectors to the students, often providing feedback on portfolios and offering application tips to students.

We organise portfolio days where we invite industry representatives to meet our students. Then the students will bring their portfolio and they sit together with the companies and the companies give feedback and it's really good because the companies almost say the same things as we do. It's good that they [students] hear it also from someone else. So they are able to adopt the comments to improve their own individual work and later in the industry, that helps as well (45).



Image credits: Fayburrow (2022), The Animation Workshop/VIA University College

Teaching participants acknowledge the importance of preparing students to meet industry expectations for employability but emphasise that fulfilling these demands is not the only role educational institutions have. They emphasise the crucial role educational institutions play in the personal development of students by creating a safe space for fostering unlimited creativity, encouraging risk-taking without fear of consequences, allowing for learning from mistakes without repercussions, engaging in sensitive discussions around inclusion and diversity, and strengthening critical thinking skills. According to teaching participants, these elements are integral to developing not just employable professionals but well-rounded individuals capable of innovation and adaptability for a sustainable workforce. Consequently, they stress the importance of a nuanced approach to industry-led education rather than a strictly industry-focused one.



We want to make sure that everyone knows that our premiere task is not to only prepare people for employment. So, we as an educational institution in higher education, we train people to be themselves, to find their own creative approach they see and feel in their heart. And later on in their industry life they might not be able to do this anymore. So I think there is a certain limit where we just have to say 'no'. We are a higher education institute and we do follow some kind of lecturing vision or some kind of rule in our house. This is a limit that we should not cross, because we are not only a facilitator for the industry. It is really finding a balance between both (24).

Teaching participants noted that while the industry acknowledges educational institutions for fostering aspects like unlimited creativity and safe experimentation, certain practices, such as thesis writing and engaging in research, are less understood and sometimes questioned for their relevance by industry stakeholders. In these discussions, teaching participants emphasise the importance of educational institutions not blindly adhering to industry scepticism or demands, but rather maintaining the institution's dual role. According to the participants, some of these traditional practices are still essential for fostering deeper learning, critical thinking, and research skills, which are integral to the personal development of students.

We have a thesis as well, even when the industry doesn't fully understand and might be slightly ignorant towards the value of this kind of education. I had a conversation with somebody who ran one of the large studios here and he was saying why did the student have to write the essay in their fourth year? And then I pointed out that most of his senior staff and his creative talent had come through our program and that's why they had progressed. You know, you may not value it, but you value their intelligence or smartness or their creativity, or their ability to work in the team. And you know, I had to do a little bit of schooling in terms of his own senior creatives. It's always an interesting discussion. 'Oh, they need to learn this piece of software.' Well, actually no. They can learn that quite quickly in your pipeline. You need people who are adaptable and quick and able to kind of implement strong principles and so forth. But again, there's always that push and pull because industry always wants everything as cheap as possible, as quick as possible (52).

Talking to most of the companies that we send students to, almost all the companies are like: 'Wow, we don't have to explain what they have to do. They come in and they are ready.' And sometimes they even explain to other interns from other schools how it works, right? I like it very much because it says in terms of preparing students for the industry, we're doing it well. The feedback for our students is that they don't only execute well, but also think for themselves. So, when it comes down to soft skills, I think it's very important and that's what I emphasise in my lectures: I want you to think for yourself. I don't want you just to sit there and wait for your superior to say like you are gonna do this and this. I want you to be able to think for yourself (93).



To sum up, participants stress a nuanced approach to industry-led education.

The participants reflected on the evolution of games, animation, and VFX educational institutions - from elite establishments producing a select few rockstars to institutions striving to align with industry trends, preparing students as T-shaped, adaptable team players and lifelong learners. While emphasising the essential collaboration between industry and education to adequately prepare students for their careers, participants highlighted the challenge educational institutions face in balancing industry demands with broader educational objectives. They noted that the combined approach of integrating both educational and industry experts in the classroom aims to prevent hastily accommodating industry needs without thoughtful consideration. This 'nuanced industry-led' approach strives to ensure that educational goals such as nurturing creativity, fostering independent and critical thinking, and ethical reasoning among students are not undermined.





Navigating ethical dilemmas: conflicting industry demands and the influence of staff and student backgrounds on creating one coherent curriculum.

Next to the challenge of effectively and coherently integrating industry demands and the specific role of educational institutions within one curriculum, teaching participants pointed out four additional factors that further complicate this process:

- persistent conflicting demands from within the industry itself
- job market realities
- varied backgrounds of the students (particularly noticeable in games education)
- non-unified voice among teaching staff

While educational institutions are increasingly asked to 'produce' adaptable team players as the new 'ideal employees' as described earlier on in the report, teaching participants also noted an ongoing persistent demand for exceptionally skilled, passionate, and compliant young talents who are willing to work diligently within demanding industry pipelines without advocating for improved treatment.

Image credits: Animals (2019), The Animation Workshop/VIA University College





This ongoing demand aligns with the skills needed to differentiate oneself within the oversaturated and highly competitive job market - the skill set of the "ideal applicant" as identified and discussed earlier in the report: being a competitive self-promoter with exceptional hard skills. According to the teaching participants, these persistent industry demands, combined with job market realities continue to overshadow the industry's vision of the adaptable team player as the "ideal employee." This further complicates educational goals and strategies aimed at meeting industry needs while fostering a well-rounded workforce.

I think our industry partners would rip us apart in the feedback [if we would only concentrate on group work and soft skills]: Hey, they lack technical skill, they lack to follow orders. [...] They want simply affective obedient workers. This is not about leadership. This is not about can you innovate? Push boundaries? No, it's about can you do the job consistently as hard as bloody possible. And that's the recruiter saying it. Normally the front facing part says: come work at their pleasant working environment. This is recruiters, not just corporate level, that says: We don't give a shit about the public image. That's what we have a marketing team for now. This is the HR marketing team saying it. They're not even trying to hide the fact that this is the case. So, that leaves us as an education in an incredibly tricky situation. Do we teach right now for the skills they need to get a job today, or do we teach what the industry should be according to a little more liberal interpretation of what a healthy workforce is? And there is a direct conflict with that. Because the passion justifies suffering through the negatives. Because there are enough people willing to say: I will lower my expectations to do the thing I love (18).

Confronted with these conflicting demands, teaching participants pointed out a fundamental dilemma. On one hand, there is the option to prepare students for possibly immediate job placement by emphasising high skill levels, competitiveness, and a willingness to work hard without complaining. On the other hand, there is the goal of training students to become the ideal future generation of the industry – well-rounded, adaptable team players who maintain a healthy work-life balance.

According to teaching participants, particularly those with backgrounds in game education, this dilemma is further exacerbated by the specific characteristics observed in typical students entering these educational programs. These students often willingly comply with the demands of the job market and industry players, which emphasise hard work and compliance. These students are typically highly passionate and ambitious, driven by dreams of achieving greatness and securing positions with top-tier companies in the industry within a short timeframe. Teaching participants noted that these students demonstrate a readiness to endure unfavourable working conditions, embrace hardships, and prioritise success. They are prepared to follow the industry's expectations of being exceptionally skilled, passionate, and compliant, and are willing to work diligently within demanding industry pipelines without necessarily advocating for improved treatment or conditions.





Image credits: Viborg Animation Festival 2021, The Animation Workshop/VIA University College

Confronted with these conflicting demands, teaching participants pointed out a fundamental dilemma. On one hand, there is the option to prepare students for possibly immediate job placement by emphasising high skill levels, competitiveness, and a willingness to work hard without complaining. On the other hand, there is the goal of training students to become the ideal future generation of the industry – well-rounded, adaptable team players who maintain a healthy work-life balance.

According to teaching participants, particularly those with backgrounds in game education, this dilemma is further exacerbated by the specific characteristics observed in typical students entering these educational programs. These students often willingly comply with the demands of the job market and industry players, which emphasise hard work and compliance. These students are typically highly passionate and ambitious, driven by dreams of achieving greatness and securing positions with top-tier companies in the industry within a short timeframe. Teaching participants noted that these students demonstrate a readiness to endure unfavourable working conditions, embrace hardships, and prioritise success. They are prepared to follow the industry's expectations of being exceptionally skilled, passionate, and compliant, and are willing to work diligently within demanding industry pipelines without necessarily advocating for improved treatment or conditions.





If you look at our student behaviour, it's vastly different from most other academies. We have people here Monday till Friday and on Friday we need to kick them out because the building is closing. How many educations do you know where you need to kick out your students on a Friday? There is this mindset that, what I call in games 'grind set' of just grinding your way through things. They have such passion and interest in the subject that they will take on unhealthy habits of working and learning to achieve certain goals. [...] The passion is so incredibly high... Like, passion is good. It brings motivation. It brings joy in all these kind of motivational aspects, but it also opens the door to very abusive practices. A tolerance towards a lower bar of quality expectance in terms of your personal health, your mental health, physical health and I've seen it happen on several accounts. I know several graduates that basically never went into games industry because they burned out during their education already because their passion was so strong that they could not fail. Failure was not an option [...] You will not find a student that says: I joined this education to learn how to make better Candy Crush games. Not a single one will be there going like, oh yeah, that's the reason I want to do this job. Not a single one. Maybe now you'll find one or two after so many years. But that is not the passion they're going for. [...] It is being part of that biggest title. I was in a leadership position cause that's what everyone's aiming for. Everyone wants to be the lead. Everyone wants to be the film director. They want to be the lead artist. They want to be the lead programmer. They want to be the lead designer. And it's a fight to the death to get there, and realistically the majority will never, ever get even close to it. And these companies know exactly what they're doing. They're creating an environment which is hyper performant and they will burn out. But there are hundreds of new ones for them every year. And yes, a bunch of the seniors, the ones that survive, will go to a senior position and will maintain this process. [...] Several students have described it as a 'live fast, die young' kind of work mentality and it's a particular mindset. They all seem to think that they are the exception to a burnout. No, that won't happen to me. That other guy wasn't good enough. That's why he had a burnout. It's a complete misunderstanding of what a burnout is, how that works. And also the complete obliviousness that they're setting themselves up for. They are putting on their Nikes to run towards a burnout. [...] It's an incredibly tricky situation. I give them [the students] a few examples of former colleagues. Former students I studied with, that now have a burnout. I know quite a few of them that I studied with, that are now at home after five years of industry and they're burned out. They're just unable to work, and I repeat this to them because I see certain traits, and because I get students from different universities in the masters that all have the same background and they've all been trained the same way. So we're not the only institute that does it this way. I see the same mindset of: let me work until 12 at night until I pass out and then go to bed and do it again tomorrow because it needs to be the best of the best. My portfolio needs to be the best of the best. And nobody's teaching them healthy work practices. Nobody. They're all being trained to be the best of the best on a technical level and they lack the ability to protect themselves from abusive behaviour in a company. They have no clue how to say no (18).





They're driven by passion. [...] Passion is often exploited. Well, this is your passion, so you know, you do this to get the exposure. And I think that it is often exploited in a patriarchal society and I think it has a lot to do with this devaluing of our time and resources. I believe that there needs to be a big change in the culture and the values around work. Because people who achieve their dream job in their mid 20s, they will burn out by the time they're in their early 30s and then they will need to switch jobs. And then they will need to retrain and the opportunities to move up and to succeed become smaller and smaller, especially for women in their middle age (22).

I went into the industry with like wide, wide eyes, like wonderment. Like, oh my God, this is so great and only great. But I think this is not how this should work, I think it's important to go there prepared. The younger generation needs to learn that this is a job and not your life, right? But our main problem is that we as game developers think it is our identity. It is part of who I am and it's really easy to fall into that trap of connecting your work and how productive you are to your identity. And I think that is really dangerous. It's something that I've had to learn the hard way. And I still love the industry, don't get me wrong, but it's important to realise it is just a job, we're not saving lives. We're just making fun things for people, you know? [...] But we do not want to hear that as students. I remember in my educational institution, when someone that had already a year of experience, came back and he said: oh yeah, the industry is rough, AAA is rough and I was like: You know what, that's just him being weak. No, it can't be that bad. [...] I was like: They're just not strong enough to deal with it. I will deal with it. I'm hardcore, I am the type of person that survives this. There are some people, like magical unicorns, that can learn from other people's mistakes. I'm not one of those. I gotta hit my head on the wall and then I will learn it. [...] And yeah now having experience myself, I don't wanna say that it's bad all the time, but there are moments where you're doing overtime. You're working so hard and there's moments where you put your heart and soul into what you're making and then still get the feeling it's not good enough. There's moments where you don't feel appreciated. You don't feel like you're work is being seen because no one is out there telling you: Hey, good job. You did the task that we assigned to you. I think it's really easy to fall in the picture: I'm gonna give my everything and they will see that I'm worthy. But no, that will not happen. You need to know that you are worthy and that you deserve to be here. You should never depend on a company or your leads to tell you, and get your self-worth from that, that you're good enough to be here. I think you need to know yourself that you deserve to be here (62).



Additionally, many of these students experience a deep sense of belonging within their educational institutions and feel they have finally found their place among like-minded individuals. According to the teaching participants, this sense of belonging motivates them to work even harder to remain in this 'new-found family.' They dedicate themselves wholeheartedly to their studies and career ambitions, willing to make significant sacrifices to stay at the educational institution and later secure a job in the industry.

They [peers at educational institution] were my people and it was the first time I felt like I was part of a collective. I've never had that before. I went through a regular education, I went to college, were I did chemistry and that was not for me. But my first year at game education and I was like, these are my people and I think that does a lot. I think that really kept me there. And anyone that is a game developer, I'm like: You are my homy. We've gone through the same things and we're the nerds that society didn't really deem acceptable. [...] I think it's the people that were a bit ostracised by society because up to a couple of years ago, gaming was not really seen as socially acceptable. I think currently it's become a lot more widespread in society and people are like: Oh yeah, it's a gamer. That's fine, you know. But just a short time back, it was like: Oh no, gamers. Those are nerds. Especially for me as a female. Girls don't play games. Obviously that still happens, but I think it was quite worse in the past and I think 'my people', the nerds, are people that are like that. That are gamers. This even goes with the artists, they don't have to be like gamers, but they were probably doodling in their sketchbooks in high school, and then other people were like: Oh, look at that nerd just drawing. All they do is just sit there and doodle. Then you come to a place, where everyone has been ostracised at some point and you're like: Oh, we've all been ostracised for being different. For not fitting the mould that is the society. So the joke here is when you talk to a 'normal' person about Dungeons and Dragons, they are gonna be like: What the fuck is wrong with you? But then, within the games industry, you're gonna be: Hey, I bought this new dice, and I'm gonna start a new campaign. They gonna be like: Tell me more. Let's go. That's the kind of industry that we are and that I really love and it makes me feel at home with these people (62).





Often they [students] maybe have been dealing more with loneliness and have been more excluded, like they have been more loners in school. They haven't been in the sports team. They haven't been the centre of attention. They've been more in the background and so now with this education, it is their chance to be seen and heard and to be admired. And it's very dangerous [that they push themselves to hard] (46).

The personalities [of students] tend to be people within a neurodiverse background. Tend to be people that were somewhat ostracised in their previous educations because their social skills might not be the strongest or their behaviour was a little different from the rest of it. They often have experience with being bullied and then they come here and they are: I have found my people. They are less than 1% of the total population, so we're talking about a personality profile that is substantially different from the average population that has found a group of people that all converge towards the same subject, the same interest that all have this passion for the same thing and they all experience: I have found my people. [...] I am quite sure if you would do an inventory on the current student population on how many of them have had bullying experiences because of being different from the rest of their peers. You will find an exceptionally high number. So what I fear is happening here [at educational institution], is that this is an outlet for people that have been othered in society and have found a common ground here. Have finally found a 'I am happy here'. And there is an industry that has realised this as well. Maybe not directly, but has observed that this works and continues to work that way, that we have a group of socially not particularly strong and very easily pushed young individuals that finally have a feeling of belonging. Then see this behaviour of: Oh, apparently to be part of this club. This is how I need to operate and start mimicking that behaviour, and start internalising, therefore justifying it, and we repeat this cycle over and over again (18).

Image credits: Untamed (2016), The Animation Workshop/VIA University College





Many of these students, according to teaching participants, have been socialised from an early age in environments of highly competitive and sometimes toxic online games, where success is celebrated and failure can lead to harassment. They have experienced a critical and demanding attitude that extends to the game industry itself and are familiar with witnessing online harassment and threats directed at game developers who fail to meet community expectations. Teaching participants observe that this background can contribute to students' insecurities about their own work meeting industry quality standards and gamers' expectations, prompting them to work even harder to prove themselves. Moreover, it can perpetuate a critical and rough tone in group work and discussions within educational settings. Teaching participants noted that this culture sometimes manifests as gatekeeping, where groups of students impose arbitrary standards or qualifications, excluding others and often leading to bullying or questioning of someone's abilities or suitability for a particular field. For example, there may be a belief that one must excel in gaming to make games and be considered worthy of staying in the educational programme.

They [students] have been socialised already towards a 'do or die' mindset. We see that in our first year already, they're already in that mindset. That's not a learned behaviour in education fully and I think we're strengthening it, but it's already there. That also has to do with how online games are played. It is incredibly toxic. How? If you look at League of Legends or other competitive gameplay experiences to the level of communication you see in these games borderline aggressive behaviour and it's OK. It's expected in those games if you join an online multiplayer session, you should be prepared to be cursed out if you fail to do your job. That is the norm. [...] And that brings another very nasty part of this, which is: if someone [gamer] doesn't like your project [that you developed], if you're building the sequel to this beloved game, you as a developer can get targeted. Social media exists and they know who you are because your name is on the credits. If they didn't like it, they will find you and harass you. This has happened hundreds of times so. And nobody's preparing them [students] for that part at all. They have no clue how to deal with this. And I think most of these companies don't know how to deal with this either. How to protect their employees. We used to market games together with the names of developers and they stopped doing this, because I think they realised that yes, that works really well if the game is successful. But if it's not, holy crap, the fallout you're gonna get to the point that people were getting death threats because they [gamers] didn't like a game mechanics. So that also shows a little bit that culture that is in the industry, in education, but it's also in its user base. What I say has no repercussion, whatever I say to you in a DM. What I say to you on a forum post has zero repercussion. It doesn't matter how vile and harassing I am, there is no repercussion to the thing that is being said and this is that first generation of digital natives that grew up with this, that know this, that intuitively know I can say whatever I want. [...] We have this entire group generation of young developers that are completely digital native, that also have this mode of communication with the zero repercussion. And the way they communicate with each other at times is like, holy crap, the hostility is almost off the charts. So if we're talking 20, 30 students working on the team, the way they communicate with each other is incredibly performance driven. The game needs to be good. The product needs to be excellent. I don't give a shit about your health at the moment (18).





Image credits: City of Memories (2018), The Animation Workshop/VIA University College

This background and behaviour of some students combined with job market realities and an ongoing demand from some industry players for diligent, hard workers exacerbates the ethical dilemma for educational institutions. Given the actual demand of the industry and the job market and the students' desire to work within it, educational institutions may feel compelled to prepare students accordingly to meet these demands and enhance their employability. However, teaching participants highlighted concerns that this approach could potentially lead to the production of 'cannon fodder' for the industry. This term reflects the fear that educational institutions might unintentionally contribute to issues such as burnout, unhealthy work environments and dynamics, and a disregard for the industry's ideal path toward more sustainable employment practices and a healthy work-life balance among the workforce.

According to teaching participants, this ethical dilemma is sometimes further complicated by the composition of the educational staff. Many educators share backgrounds similar to those of the students and have been socialised within the 'old ways of working' prevalent in the industry. This familiarity often leads these educators to perpetuate traditional practices in their teachings. They are accustomed to this approach and recognise the drive in students to succeed in an industry that still largely operates in this manner. Moreover, they believe that the job market favours applicants who exhibit these traits. As a result, these educators prioritise teaching students to work diligently and discourage them from complaining or advocating for better working conditions, as stated by the teaching participants, believing this approach is essential for ensuring student success in the competitive industry landscape.



And the tricky thing is that even within our degree programs, we don't have consensus on this [teaching approach], because there are still industry veterans that say no, this is how the industry works. This is how we are going to do it. I don't care if you don't like it. Whilst there are quite a few people [education staff] moving more towards the same direction as the industry. Moving towards healthier work practices; more people are talking about healthy, sane working practices. But that's not a universal message yet, and I don't think we can get away with a universal message yet (18).



Image credits: PANEURAMA NXT GEN LAB, Group 2

The teaching participants pointed out that there is a growing inclination among younger educational staff and students to embrace healthier work practices and align with evolving trends towards more sustainable employment. However, according to the teaching participants, this primarily results in generational conflicts and struggles to find a unified voice within both the teaching staff and student body.

The young people [staff and students] who are coming up now, they are raised a bit differently than we were raised, they already bring a great camaraderie with them and have already learned to take care of each other in a different way. And they want that too. And when professors or people from the industry somehow still hold on to this old way, they speak up very loudly, very vocally. That is a positive development. Very positive (35).



This background and behaviour of some students combined with job market realities and an ongoing demand from some industry players for diligent, hard workers exacerbates the ethical dilemma for educational institutions. Given the actual demand of the industry and the job market and the students' desire to work within it, educational institutions may feel compelled to prepare students accordingly to meet these demands and enhance their employability. However, teaching participants highlighted concerns that this approach could potentially lead to the production of 'cannon fodder' for the industry. This term reflects the fear that educational institutions might unintentionally contribute to issues such as burnout, unhealthy work environments and dynamics, and a disregard for the industry's ideal path toward more sustainable employment practices and a healthy work-life balance among the workforce.

According to teaching participants, this ethical dilemma is sometimes further complicated by the composition of the educational staff. Many educators share backgrounds similar to those of the students and have been socialised within the 'old ways of working' prevalent in the industry. This familiarity often leads these educators to perpetuate traditional practices in their teachings. They are accustomed to this approach and recognise the drive in students to succeed in an industry that still largely operates in this manner. Moreover, they believe that the job market favours applicants who exhibit these traits. As a result, these educators prioritise teaching students to work diligently and discourage them from complaining or advocating for better working conditions, as stated by the teaching participants, believing this approach is essential for ensuring student success in the competitive industry landscape.

And the tricky thing is that even within our degree programs, we don't have consensus on this [teaching approach], because there are still industry veterans that say no, this is how the industry works. This is how we are going to do it. I don't care if you don't like it. Whilst there are quite a few people [education staff] moving more towards the same direction as the industry. Moving towards healthier work practices; more people are talking about healthy, sane working practices. But that's not a universal message yet, and I don't think we can get away with a universal message yet (18).

The teaching participants pointed out that there is a growing inclination among younger educational staff and students to embrace healthier work practices and align with evolving trends towards more sustainable employment. However, according to the teaching participants, this primarily results in generational conflicts and struggles to find a unified voice within both the teaching staff and student body.

The young people [staff and students] who are coming up now, they are raised a bit differently than we were raised, they already bring a great camaraderie with them and have already learned to take care of each other in a different way. And they want that too. And when professors or people from the industry somehow still hold on to this old way, they speak up very loudly, very vocally. That is a positive development. Very positive (35).



This is where the trickiness with the new generation of lectures comes in. Because you need industry credibility, industry experience to be able to teach this field properly. I think that's one of the leading reasons why games as an education has been successful is because we have industry people. The problem there is that those are the ones that talk about their past experiences instead of what the future needs to be, and it's generally the younger generation of educational staffs that talk about, hey, we need to do this differently. We need to change a few things. The problem is those tend to be juniors, so we got a hierarchy problem in making this change (18).

To sum up, participants advocate for a dialogue between all parties to address the ethical dilemma

Teaching participants highlighted the ongoing challenge faced by educational institutions in balancing conflicting industry demands, job market dynamics, the diverse backgrounds of students (especially in game education), and the varied nature of teaching staff with the educational mandate. They noted that this complexity often leads to ethical dilemmas for educational institutions and results in inconsistent approaches within the same faculty.

Teaching participants emphasised that this situation underscores the critical importance of promoting open dialogue among industry stakeholders, educators, and students. They stressed that this collaborative effort is essential for collectively addressing these challenges and taking unified steps toward fostering healthier, more sustainable work environments and dynamics. These efforts aim to benefit everyone equally, both within educational institutions and across the broader industry.

Striking another balance: addressing inclusivity and other sensitive topics at educational institutions for employment preparation

In order to adequately prepare students for global workplaces and diverse audiences, teaching participants emphasised the importance of integrating discussions around inclusion and diversity in the workplace and creative products across all projects and courses. However, according to teaching participants, this process is not straightforward, with several challenges that seem to hold educational staff back:

- Concerns about personal vulnerability
- Potential exposure to strong political viewpoints from students
- Reasons to keep politics separate from education



I do not talk about politics in my class. I teach you how to think, not what to think. And I know that within games industry there there is no moderation. You are either extreme left or you're extreme right. There is no middle. And if I have a class on workers rights on, typically seen as left wing ideology, I am gonna ruffle some feathers. [...] We have one of our ethics lectures that we bring in - an external one. She talks about the commodification of the arts. What is work? Why do we do 40 hours? What is preservation of self? What is an acceptable working condition? Inclusion, etc. I very intentionally keep her as an external instead of a internal educational staff, because then students can go into the debate, criticise and reflect more easily than with someone that is part of that same context, someone that might be assessing you. Someone that might be reviewing your projects. Because this guest educational staff will say very, very, very provocative things. And that is very intentional and it will really ruffle some feathers with some students every year as well. Because she brings a few topics to the table of toxicity in the workplace. Like: What the hell? Why are you OK with this? Should this be OK? And by not having me or one of the current staff bringing that, they can continue having a healthy discussion with their supervisors without their supervisor being the one dictating: This is OK or not, so we can kind of avoid the legacy problem of long long running staff that has all outdated views ... still accurate views, to be honest, still has accurate views on how the industry works, but doesn't want to embrace future perspectives on this (18).

Image credits: City of Memories (2018), The Animation Workshop/VIA University College





I've given these talks [inclusion and diversity in the industry] in various places. I had teachers come up to me: Thank you so much for being so brave. You are so brave for being so vulnerable up on stage there. OK, I don't consider myself being vulnerable talking about this stuff, I consider this strong to talk about this stuff.

To be explicit about this stuff, that's strength, but a lot of other teachers see as being very vulnerable and really opening yourself, to be able to talk about personal experiences and situations you've been in, the discomfort you've had with things. [...] I think a lot of teachers are comfortable talking about blueprint and programming and optimisation and server processes, but as soon as they have to say, and I believe it's right, that transgender people exist, they're like, oh, can I say that? Yeah, of course. You can bloody say that, but it feels like for them a very uncomfortable territory to walk into, because then they're having to share something about themselves and how they see the world and perhaps the people they're friends with and the groups they know and the groups they don't know.

And perhaps they feel bad that they don't have many black friends, and suddenly they have to talk about race. That's complicated. OK, you might feel like that's vulnerability, but you've worked in a really white dominated industry. It's probably fairly natural you don't know any black people at this point. I get that doesn't mean you can't say something meaningful like, hey, maybe we should try and be more diverse in our hiring and talk to different communities and maybe we should look at the early education of people and the access of education of people from communities of color to see how we could get more of them trained into our industry just because you are sort of part of the problem.

It doesn't mean you can't also be part of the dialogue that creates the solution. [...] Currently I only give once off lectures about the topics. I hope they [students] can see a whole new world. I hope at least it opens it just a little bit, but I do think that wider integration of these ideas into all of the teaching materials is going to be more important. [...] Because if then the 3D artist after the lecture goes to their next class and all of the examples they've got for sculpting are bikini women or are racist caricatures or the design educational staff makes a joke about trans people not needing to be included or something like that or says nobody cares about accessibility in video game interfaces. It's just a minority thing, but nobody wants... why bother spending the money. And all of a sudden all these nice ideas from the previous lecture could easily be undermined, and how much of an impact can one lecture have? So I think it also needs deeper integration into all the teaching materials (51).



Teaching participants stress the importance of openly discussing the challenges staff face in addressing diversity and inclusion, advocating for guidance and additional training for educators. They also propose that educational institutions critically examine their hiring policies and emphasise greater diversity among staff members. These approaches aim to provide diverse role models to students and ensure that teaching staff feels ready and prepared to mentor students to thrive in an increasingly diverse industry.

It is still the case that they [female students] need strong role models. That's why I decided to take this professorship. In my industry, there is only one percent of independent producers who don't have a man above them who decides. One percent. I always got angry about that one percent, until I realised. The other side - 99% I get even more upset about that now. I had the kids very early. I try to motivate female students not to be afraid. I always introduce myself the way I am. Then they all think, but it works. And I'm always looking for new role models that I bring along and introduce, so that the picture becomes more colourful. My tip is: stick together. Stick together nicely. Together we are stronger. Just always look. Everyone has their needs. We also have many mothers here, who have really flexible time management, flexible work place allocation. And I think it works very, very well. So I'm always very proud of that (35).

In education, there is still a large gender imbalance within the educational system with us actively trying to recruit more women into game development. And even then, with those efforts we are not reaching those numbers. [...] I mean, even if you have a diverse hiring policy, right? How are you going to walk into that company as the first diverse person in that company? Are you gonna fight that battle? Then your job is changing the company not actually doing your job. And a lot of people are turned down by this and to an extent also within [our educational institution]. If we look at our games curriculum and the staff ratios, that's majority men, majority white. And those are the role models for our students. And we've tried to get more women on staff. We've actively tried. We've recommended people, we've had people in the hiring process. That would have been great hires and they said: No, I'm not gonna go into this workforce in that ratio of gender distribution because I will be the one having to have that fight of change. And I have done that already in another place. And I'm not gonna do it again and again and again. You fix this first, and then I might go (18).





Overall, teaching participants emphasised the critical importance of genuinely embracing and supporting diverse communities within educational institutions and the industry. They specifically highlighted neurodivergent students, noting their increasing visibility in classrooms and their unique learning needs that often require accommodations. According to teaching participants, this situation prompts discussions about how these needs should be accommodated within games, animation, and VFX education, and whether such accommodations adequately prepare graduates for potentially less accommodating work environments they may encounter after graduation.

I know over half of our students have some form of a ADHD, autism, dyslexia and the like, anxiety, depression, etcetera. So more than half of them have something. That number should be 5%. That is national average as far as I know. That means that we have tenfold that people with some form of difference to the norm of what the student experience is supposed to be. And that's a tricky one, because that opens the door to what extent does an educational institution need to support this? Or should we be adjusting the education towards that? That creates a lot of interesting questions because we're not equipped to deal with medical problems, right? Like, we're not professional doctors, we're not psychologists to deal with mental health distress. Yet, we know that the majority of them are experiencing this and we also know... there's a lovely study on this, regarding neurodivergence and peak stressors in their lives, a teacher is in the top five most stressing things in their daily experience. It's easier to talk to a banker about your mortgage. It's easier to talk to a random stranger on the street then it is talking to your lecturer. So we are one of the highest stressors in their lives during their education and coupled up with an industry that thrives on passion and exploits passion. That creates an environment where your passion becomes your job. You add incredible amounts of stress, underpaid situations and, quite frankly, likelihood of harassment and toxicity. You're building a recipe for disaster. You're building a pathway to burnout a lot of students (18).



Image credits: PANEURAMA NXT GEN LAB, Group 3



We have students with autism, ADHD, and you [teaching staff] have to understand that. Then we had to get educated and have the understanding that no autistic person is the same and we had to find workarounds for it. For example, one autistic student, we had a different way of giving her a set of objectives and had to plan it out in a different way for her and cater to that. And she's actually successful and she's gone on and worked on great movies because she found ways around, coping mechanisms. [At educational institution] she got the industry environment to a certain extent, but at the same time she was sheltered being still a student. And in that combination she got prepared ideally for her path (29).

So a lot of the accommodations [for students, which we discuss at the moment] may be coming through left-leaning ideologies of inclusivity and you know, making sure everyone belong. But workforce, as any business in a capitalist society is effectively right leaning approach. To pay you this amount per hour, you have to give me even more profit an hour. Because on top of your pay I have to pay taxes, I have to pay pension, I need to pay electricity, rent, all sort of costs.So if you're not making that money, I'm not going to employ you or I'm going to fire you because it's not profitable for me. And if I have to do certain provisions that will cost me even more money just to get you to the minimum I require, I'll will not do those accommodations. And we can see that a lot of people don't do those accommodations (66).

Image credits: Wrap It Up (2017), The Animation Workshop/VIA University College





To sum up, participants emphasise the need for ongoing discussions and clear stances on inclusivity and diversity in education and industry

Teaching participants underscore the importance of educational institutions adopting clear stances in their teaching and hiring policies regarding inclusivity and diversity. They emphasise the need for further development of teaching staff on these topics to ensure they feel equipped and comfortable discussing them. Additionally, teaching participants advocate for ongoing open dialogues involving all stakeholders to effectively and realistically support diverse communities within educational institutions as well as later in the broader industry.



The Evolving Role of Educational Staff: Transitioning from Lecturers to Creative Coaches

In the midst of this context, educational staff is additionally required to navigate a significant shift in their roles. Traditionally, industry professionals entered academia to teach large classes, focusing primarily on imparting hard skills within a hierarchical structure. According to teaching participants, with new educational approaches evolving towards more individualisation and personalisation, educational staff are expected to embrace a much broader scope of responsibilities. Their role is evolving from lecturer to that of coaches, balancing the development of students' technical skills with nurturing their personal growth, and guiding and mentoring them through their individual educational journeys. The teaching participants mentioned that an increasingly important role for current educational staff is to act as career advisors on an individual level, helping students avoid mismatched career aspirations and ensuring that their career goals align with their skills, interests, and the demands of the industry.



I think because it's a creative industry, which is still very, very much a growth industry, it's very attractive to a lot of young people. There's a lot of people who would like to make games or say they would like to make games. But they don't see the reality of it. It's actually an office job. You sit in front of a computer for typically 8 to 11 hours a day. And you work on a thing. One of my favourite kind of example is ... there's a game called 'Batman: Arkham Asylum'. 10 months, the only thing someone did everyday was make that cloak flutter better. We used to joke that in 10 or 15 or 20 years it will be somebody's job to make curb stones on the edge of the road look shiny. A year and a half making Batman's cloak is kind of polishing the curb stones. It feels like that. But obviously in that game it was a very important part of the character. Batman's cloak is important, but still your day job is to spend 18 months of your precious life working on a cloak. You have to be very dedicated to the creative vision that you're trying to create there. It's not Michelangelo painting the Sistine Chapel or anything, it's really rigorous problem solving and then testing and retesting and retesting or you have to walk a character around every single wall in the level to make sure the character will not fall through the wall. Students need to know that [and must want to do that during their career] (51).

We have a long list of 300 studios and we give them [the students] this list and we tell them to check out each one of these studios and see what resonates and what is interesting for them and then they come up with a list of, I don't know, 10 places and then they start with applications and if they don't hear from anyone then we step in. And in between of course we do some kind of a diagnosis for what might fit them. Otherwise they maybe just chose the wrong path to go. They do that because they have big dreams sometimes and they're just not there. And we find something that really fits to them and what they really need. And so we give them the push if needed. Or we put out floaters if they can't really start swimming by themselves yet. We really try to take the floaters away as fast as possible, but we don't let them down (43).



Image credits: Bacchus (2018), The Animation Workshop/VIA University College



I think some of our students have, and it's definitely not all, but some of them have the big dream of being a part of a big blockbuster and then of course, they dream of going to London. But I think at some point they need to ask themselves, like what if you get a girlfriend or boyfriend and what if you wanna have kids and do you wanna be close to your family? And I think that's really hard for students to completely think through. And they are driven by a dream and I try to make a point: [...]if you wanna be on a blockbuster movie. You have to figure out what you wanna do. Like what is it? What is it that drives you? And often, you know, like you kinda have to figure with them what it actually is that they want [...]. For example in the second year, we always have a talk about where they wanna go and we show them different companies and different company profiles. So they have like an idea about what is out there. Maybe a student doesn't have a lot of the effects and high end realism. But maybe they're really good at shading stuff and different kinds of looks. And then for them, [company names] could be of interest. We try to pull out examples for them. And then it always comes down to who you are and what company you want to approach (50).

Another task of educational staff, as pointed out by teaching participants, is to integrate each student's academic and career path into the context of an increasingly complex curriculum. This includes creating and working with individual and group learning outcomes and assessments that align with current teaching methods and projects, while remaining flexible enough to allow students the freedom to shape their own paths. Staff must also collaborate effectively with other educational staff to address their students' needs within the same projects, all while adhering to the educational institution's vision and complying with country laws.

Additionally, staff are expected to regularly zoom out and work on the curriculum itself. Given the rapid changes in the industry and its evolving needs, educational staff must frequently adjust the curriculum, didactic approaches, and content to remain relevant. According to teaching participants, this constant need for adaptation can be time-consuming and overwhelming.

It's very important that we have staff that can be part of creative development, because so many things are in a state of fluxes all the time. Both when it comes to software and technologies and we have been growing our didactic competences. It means that there's a constant need to reevaluate what we're doing, whether that is admin stuff or its teaching stuff or it's whatever it is. There's a constant need for development. That's why I'm looking for people usually who are capable of being part of that process. That are not too stressed by the fact that things are constantly changing. I would say those are the two most important bits outside of the sort of the core skill sets that we're looking for in our educational staff (42).



In order to fulfil their tasks educational staff are expected to keep their own skill sets and industry knowledge current. However, teaching participants pointed out that while this is essential, it often takes a backseat to other responsibilities like grading, student interactions, and updating course materials, which are prioritised over staff self-development.

I think universities need to be very flexible. I think one of the big issues with a lot of schools is that we have teachers who are, because they've been there for 10 or 15 years and it's very cool that you have all this teaching experience, but you haven't been in a studio environment in 10 or 15 years now. Maybe you have friends that are there, but that's still a second. Now you're removed from it and I think having people who are in it and know what's happening right now is so important and the school needs to be approaching these people and asking them, are we teaching students things that are actually applicable to your studio experience? Having that constant flexibility and adaptability (92).

We do have a certain amount of hours that we meant to commit to teaching and we have 16 hours of classes scheduled a week. If I add to that what's planned to be my prep time, then that's effectively 90 something per cent of my contracted hours. But as a result, I have no time for my own practice, my own research, any sort of meetings, grade approval or tutorial meetings or any sort of administrative responsibilities: dealing with the emails, marking... like all of those things will be outside of my contracted hours, because they're not my class or my prep. But on top of that, I also do a lot of things outside of the educational institution. [...] I am expected to hold a PhD, so at some point I will have to need to start to do that. I do book reviews. I volunteer for [several organisations related to the industry]. That is part of my job and informs my practice and students benefit from it. But contractually I'm not paid for it and it's impossible for me to make time within my 9 to 5 [...] For as long as I work in academia, the union is on strike because of, among many other things, workload. People are overworked, underpaid, undervalued. And we do have a test magazine, you can find articles since 2019 of support stuff being overworked, underpaid, undervalued. From 2022 on there was more money, but did not fix drastically overworked teachers. It's a problem of how much time should go and can go into the whole structure and workload of academia. It's about researching the material, putting the material together, making sure it's accessible, inclusive, possibly in different formats depending on the needs of students or if any of them have any individual support agreements. That is to take into consideration. And we're often required to provide materials beforehand so people can familiarise themselves with it, and it's tricky. [...] So yeah, just trying to 'live the dream' and not make it turn into nightmare (66).

The teaching participants stated that one way for staff to address their own skill and knowledge gaps is by regularly inviting guest speakers from the industry. However, these efforts are often hampered by non-disclosure agreements (NDAs) that prevent these industry professionals from openly discussing the latest methods, issues, and developments in the classroom.

Well, a lot of things will have to change within both universities and industry. Problem with industry is that everyone hides behind non-disclosure agreements, NDAs and they cannot talk about their work for many, many years even after the work is completed. Consequently, whatever you can learn at educational institutions - because it is legally available - is at least five years out of date (66).



Image credits: Ride of Passage (2012), The Animation Workshop/VIA University College

Everything is NDAed. Every company has the same culture in that sense of: you do not share how our processes work. To the point where for a lot of the companies, internships are a massive problem. But also guest speakers often can't talk about anything specific, so they can talk about general things in a guest talk, but they can never go into practicality because they're not allowed to. I know several companies where you need to go through several HR cycles just to be allowed to give a public talk about the thing that you worked on and that's assuming you're game got published. There are plenty of projects that never reach market, and those are never talked about (18).



Additionally, according to teaching participants, many educators and students are grappling to adapt to the new role of teaching staff as coaches. They state that both staff members and students frequently feel ill-prepared for this new didactic approach. Some educators express feeling over-qualified or insecure in the role of being a coach. Moreover, students often arrive at educational institutions accustomed to the structured guidance they received during their high school years, which makes it challenging for them to adjust to the independence required during their studies.

I think that we need to rethink our roles, where we are much more seeing eye to eye with the students. We are working together with them on experimenting with something where we can support with the didactic part of it and the reflection part of it. But not standing in sort of a classical hierarchical position where you as a teacher know everything. I think it's gonna be important that we take on a different kind of role and help the students understand the value of that. And I don't think it's gonna be easy because some students will definitely be like: Teach me. And if we can't do that, they'll be like: Why should I be sitting here when I could be sitting at home and watching YouTube? And I don't think there's an easy answer to that. I more and more think that community is part of it, that being in a social environment where we have different roles towards each other - that's what we can provide and online cannot provide. What the COVID lockdown showed was that there are certain things we can do online, but we also saw what we couldn't do online and I think community is part of that. We are shaping education for the future. But I don't think anyone is ready for it. As an institution, we will always be some years behind and every institution works like that. Turning the big boat around with a certain sort of old knowledge that is in an institution is slow. And also we must remember, that the students were brought up through education systems that were teaching in an old-fashioned way. And I think there is going to be noise and friction because some students will be looking for an old-fashioned way of teaching that we know is not gonna prepare them for the job market. The readiness for this kind of teaching is at least as important as the hard skills and maybe more important, because a lot of the hard skills will be helped or assisted by technology in the future (42).





On year one we only had 12 hours of class per week. The remaining 18 hours students are meant to do independent study, like work on their projects, work in the library and things like that. A lot of students who were always spoon-fed wait for someone to tell them what to do. They feel lost, because these provisions are not in place. It's difficult for them. I think educational institutions are a kind of transition between babysitting school that looks after you and the real life where genuinely no one cares about you, with the exception of maybe your closest friends and family (66).

At educational institutions you get personalised guidance. You can learn software in your own time, no problem. When I taught myself, there was no guidance. I had to learn three other software while I found out, that these are not the ones to learn for the job I wanted to do. That was a lot of work for nothing. Learning the software was okay, one needs to learn on their own. But it is important to have guidance on what to learn. I don't understand how people in educational institutions can complain about not being taught everything step by step. They don't understand educational institutions are guidance. They show you what to learn and you learn it on your own. Because especially how the industry is changing so rapidly, people with that fixed mindset will not win. There are so many new things that you have to learn yourself. If you don't figure out how to learn things by yourself, then you are not the right person (28).



Image credits: Slay the Dragon (2021), The Animation Workshop/VIA University College

To sum up, participants ask for more acknowledgement and support regarding increasing and complex challenges of teaching staff

According to the teaching participants, these shifts in the role of educational staff and the complex expectations placed upon them require significant time, practice, and adjustment for both staff and students. They emphasised that staff often wish for greater understanding and support from educational institutions regarding these challenges.



Students and the balance between individual excellence and interpersonal skills

While the previous sections looked mainly into the experiences and challenges of educational institutions and staff, the following sections concentrate on the experiences of students and young professionals (henceforth: student participants).

The student participants highlighted a significant shift within the student body in recent years towards increased awareness of mental health and the importance of maintaining a healthy work-life balance. This trend aligns with industry movements and the efforts of educational staff to discourage overworking and prevent student burnout. Junior professionals among the participants, who graduated within the last two years, also noted this change. Initially, when they began their education, the prevailing ideal mirrored the work ethic of a rockstar – someone who doesn't need to sleep, shower or have a weekend off. However, throughout their academic journeys, they observed a shift among younger students who now prioritise leaving the educational institution by 5 PM and engaging in social activities with friends over pushing through all-night work sessions.

It's very much depending on your peers in such an institution. I remember that we were all super competitive and we kind of looked up to the people that were..., well, slightly what you would call a little unhealthily, you know, you might call it crunch basically. For our third year project, during some holiday, we would still be working on that project and completely mess up our sleeping schedules so that we could keep making some bug fixes because it was out on steam. It just felt like that was the ideal of a developer that really cares and that's a little bit of a crooked ideal, right? It's a little bit harmful, so it's a weird thing where it feels motivating. It feels like: Wow they're really putting everything into this. But as a standard or as an ideal or as a kind of thing to aim for, it's not a sustainable way to live your life. So, I am happy it is changing. I can see it changing with the younger students now (81).

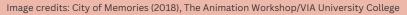
I feel in my year when we started there has been very much focus on: It's not cool to work overtime, and it's important to get 8 hours of sleep. That's the general feeling. The work doesn't get better if you push yourself too hard. That has been from the start of when I started here very clear. I don't even see that as an option. Just sleeping six hours, no, I don't think that's a good solution. So I've never done that. And a lot of people are actually really focused on that. I think this is something that has changed because the feeling I got from the students 2 years above me, it was a different mindset. Some things have changed (79).

A lot of people around me now have a more healthy way of managing their life. People are taking care of themselves. What we had back in university was a problem that the faculty smelled bad because people weren't showering. And this kind of stuff. That's not a thing now. Like there's a level of maturity now (63).



However, student participants stated that they struggle to maintain a healthy work-life balance due to the diverse industry requests, job market realities, and demands of educational institutions. This struggle according to the student participants, already starts within the first days of their studies when they encounter their peers. Students who were top of their high school classes in skills like drawing or programming suddenly find themselves among peers with similar backgrounds. The student participants described this experience as a "reality check" for many, where meeting their peers and assessing their own skill levels against those of their peers, as well as industry and job market expectations, is often daunting.

I think that there's also a big shock for them, when they enter educational institutions. Because, I am not the best at it any more. I used to be the best one at drawing, the best one at this, the best one at that. That was my super strength and now I'm struggling to keep up with all of these other people who are the best at what I used to think I was the best in. They face many challenges that have to do with self-esteem and identity and things like that. And with insecurity, a fundamental insecurity while finding their path to become animation professionals (22).







According to the student participants, many students experience pre-professional stress when they realise the effort needed to compete alongside their peers in a highly competitive and oversaturated job market. They state that this realisation often compels students to make strategic choices about how to navigate their academic life and future careers in the industry, leading to a form of peer stratification, where they begin to categorise themselves and their peers into distinct tiers or levels. Students distinguish between those who are 'positioned to succeed in their original ambitions' and those who are 'expected to thrive in related career paths'.

It's something that I did when I started this education. I was comparing myself to everyone and that really gave myself a hard time because I was like: Oh my God, how are these people creating this? And I am still here? But after a while, even though they are here, I finally stopped comparing myself to them because it's also unfair towards me. Right? Because everyone is learning at their own pace. When I started, I had zero experience. But there were also people who already had three or four years of experience that I was comparing myself to. It doesn't work that way. So they do their thing, I do mine (90).

People that manage to do even things outside of school to improve their skills? They're like... I mean: Whoa, where do you find the time and motivation? Like, I don't even feel like competing with them because they are in a different league. I don't even have to think about that, because they're just so super good. I don't even compare myself to them (91).



Image credits: 'The Battle #2', White Hole Theater



Within this self-categorisation process, students make strategic choices concerning the work ethos they adopt. The student participants identified three primary approaches that they recognise among their peers:

- The 'rockstar' approach: Students adopting this approach focus primarily on their individual skills development and on excellent portfolios. They invest the minimum necessary hours in group projects unless these projects involve other 'rockstars,' promising exceptional output.
- The middle path: These students give 200% by embracing a competitive improvement mindset, committing fully to both: individual development and group work. They hope that securing a job in the industry will eventually lead to a more manageable workload.
- The self-preservation mindset: These students prioritise work-life balance over their initially ambitious career goals, choosing to maintain a healthier lifestyle rather than pushing themselves to the limits.

Of these three approaches, the 'Rockstar' approach is still often lauded for its exceptional output, though not necessarily for the associated work mentality.

It's [their work] admirable. Like, whoa, how did she do this? Or how did you make that? I also want to be able to do that, but at the same time, I accepted, whoa, you are good at that. I'm good at other stuff. It's just their work that is sometimes admirable, but not the work mentality that they have (91).

I think that this is an attitude that I definitely held in uni. We were eager to try to prove ourselves. Like, we have all these special capabilities and we can push through the misery and the suffering because of that's who we are. It was more important back then to distinguish yourself so that you would be part of that little sliver that would end up in the industry. [...] I mean, in uni I think my standard week was like 80 hours and then it would jump up to 110 at times. So eventually I also took a break for a year like between my 3rd and 4th year because, you know: It's great, but then I was like, I also still want some freedom. So I do that for a year and then I got back to this. Then I felt like, I felt I lost time. I worked hard again and made up for putting a gap year in so to say (63).

I think that's heavily depends on mentality. I guess some people really want to become the best of the best and they crunch like day and night. I got a friend like that and I think: Take a break... But he's really, really good in what he does and it's amazing. And he's enjoying himself. So I'm like, yeah, OK, just let them be (95).

The students who adopt the middle path, according to student participants, aim to balance meeting industry demands and job market expectations simultaneously. They frequently work long hours outside of official educational institution hours, dedicating themselves to both individual development and group work. The student participants note that these students set a specific timeframe of three or four years during their education to strive towards becoming both the 'ideal applicant' and the 'ideal employee', with the objective of securing optimal opportunities post-graduation.



Game education is something that you have to sacrifice things for. It takes time, not just a regular nine to five. They say it is, but it isn't. You will do more outside of it because you will want to learn different things. You'll want to make a portfolio, so you gotta put in those hours. You gotta do your research for that in order to get to where you want to go. You need to already start looking at job descriptions that seem fun from the beginning on. Talk to those people, make connections right away. The time is rough. Do your best. Be nice. Be friendly, be flexible. Make sure you try to see things from a different perspective and not just your own. Don't think the world revolves around you, because that's not gonna happen. Then you're just a dick. You just need to work hard and be nice to get in (95).

It's a lot of hours to work in a group. Of course, people will stay an extra two hours. But then not to work on our project, but to work on their portfolios or even just to work on some project they have for fun. But you also need time to cook a dinner and do completely different stuff. And I think a lot of people put a lot of pressure on themselves, like oh... I'm so lazy and sometimes I even feel lazy. But actually I work a lot, but it doesn't feel like work always. Because if it's a passion project, then you know that's just fun (79).

There's obviously also the element of when you are a student, you have possibly a bit less responsibility and a little bit less to do. You are literally younger. So you have a bit more energy and maybe you don't have to sleep for that many hours and you just get up in the morning and you're like: We're still working on this project and we're gonna make the best project ever. You can put more hours in to be the best. So that's maybe why that feels very competitive at [educational institution]. And then when you get into the industry, you know there's a lot of people that just have families and they just work nine to five because they have to spend time with their family and they have other things to do. They have a life basically. They have things outside of making games that are also fulfilling (81).



Image credits: The Drawing Academy, The Animation Workshop/VIA University College



The third approach pointed out by student participants is opting for a self-preservation mindset upon realising the need for overtime to compete within the peers and others in the oversaturated job market to achieve their initially high ambitions. In this approach, students prioritise work-life balance over their initial career aspirations. They recognise the importance of maintaining personal well-being and avoiding burnout while still aiming to succeed in the wider field of the industry.

Even the teachers showing us what we should aim for in terms of work ethics. They actually teach us: Don't crunch, don't work over hours like that. They stuff that in your brain like in the first year already. I think that's very good, because then you also get kind of relaxed: It's ok for me to not work over hours and not be maybe as crazy as others. But listen to myself (90).

Like, there's just a few of them, who are like the over workers. The majority is just normal, normal people, like us. [...]I think it's not for nothing that the teachers put so much emphasis on not crunching. The teachers say: Even though it might feel like you're just doing your hobby, you don't want to be doing the entire thing from 9:00 AM in the morning till 10 or 11 at night, right? I think everyone is slowly trying to get to a more normal working schedule I guess (91).

I think it's something I want to get away from, like having too much work. Like now, it's too much. I need to find a way to do less, because I think this [healthy work life balance] is super important and I don't wanna be that person that's too stressed to be in a conversation or something (79).

According to the student participants, for some students, compromising on their initial ambitions in favour of a healthy work-life balance offers relief from pre-professional stress and anxiety, especially when constantly being surrounded by peers with stronger skill sets.

If I think about it too much, then it gets stressful. Then I'm like, oh shit. Maybe I also need to do that [work as hard as them], but I know for myself, I'm not even able to do that kind of stuff, like work afterhours and stuff. So for me, I'm like kind of accepting it. Like we'll see where I land and I'm not trying to worry about other people (91).

And I mean, you know that there are people at university who are on the highest, highest level. But I'm really trying my best and I can't do more than that, right? So I'm just also trying to not think about it too much and just do my best (90).



*I*While for some students it is a relief, according to the student participants, for others adopting a self-preservation mindset and consequently recalibrating their initial career aspirations can be a daunting and emotionally challenging process. The student participants stated that they observe that this adjustment is often accompanied by feelings of envy, disappointment, and a sense of failure. As these students witness their peers pursue their original ambitions, some students may grapple with a sense of loss and uncertainty about their future path.

I personally struggled a bit with it when I was studying. I didn't want to be one of the people who stayed very late. I only wanted to be there 9 to 4 - our school hours and then have relaxing time or be off work essentially. But I could also feel, that also meant my portfolio was not as good as some of my classmates, because the people who stay overtime, they make more. And I don't mean that in a competitive way of: Oh I have to be as good as them. But more like, it was very clear that if you wanted a higher level of technical skills and if you wanted better jobs or like better opportunities later than you needed those extra hours and that extra work and it wouldn't have to be a lot either. It could be just staying a couple extra hours. But I personally chose not to do that and I think the school also does a good job of not pushing you towards staying late and so it is very much a personal choice. But it became very obvious that you do need those extra hours a little bit if you want a much better chance later on (92).

I think there's a lot of difference between people. For example, there is people that work the entire day on the school project and then work the entire night on a personal project and other people really need their rest. And their time. So yeah, I think it's unfair to compare them and you shouldn't be blaming yourself for not working on basically your job the entire day. Because even though it's still your hobby, it is you turning it into your job and someone who's doing a completely different job probably also wouldn't be praised for doing it the entire day, right? (91)



Image credits: The Wanderer (2015), The Animation Workshop/VIA University College



When exploring alternative career opportunities, students are increasingly looking beyond the creative industry to fields such as healthcare, military, or architecture, which also value similar skill sets. However, according to the student participants, students remain hesitant to pursue these non-traditional fields due to a perceived loss of initial passion for the job when not working in the actual games, animation and VFX industry and due to influences by the experiences shared by their peers who have interned or worked in such settings. They perceive non-traditional companies as challenging environments for junior professionals, not because of high skill or quality output expectations, but due to the inexperience and unpreparedness of these industries in working with games, animation, and VFX professionals. The participants highlight that working in non-traditional industries without prior experience in traditional gaming or animation companies can be particularly challenging for young talents.

That skill set can be easily applied in different industries. There you can very easily get a job in a closely related industry. You'll earn way more. Like not a little bit more, but double the amount. But you'll work on interactive database and you're like: OK, this is not a video game anymore. Suddenly that passion is gone, but the skill set is applicable and we see this in the graduation numbers as well. About 80% of our bachelor graduates find a job in the games industry. That is a ridiculously high number, to the point that I normally would flag that as a concern of we're not training them versatile enough. The thing is, they are versatile enough. That's not the problem. This is again their passion, the idea: I want to work in games and nothing else (18).

I think it's tough because we're definitely made aware that a lot of hospitals use animation for communicating. They use them for showing we stick the needle in and then this goes into your body and it changes these things and it's really nice for them. I think there is quite a reluctance from myself, but also from a lot of students, because a lot of the requirements are specifically about experience working in a production or like as part of a team. And to me, like working with a creative team in a bank or at a hospital or somewhere else will also be like a marketing person who's telling you what they want. And then at most you'll have one other person that you're working with, but you're in charge of a lot of it. Like I know someone who did some commercials for a real estate agency and they were just like: Can't you make 20 seconds of animation in a week? And that's not doable at all, but they have no idea, both in terms of what they're asking for, but they also only relying on him as the one person. And I think that's kind of the reputation. Even though it's a path to go, it seems stressful, at least in some cases, because there's not a lot of experience from that side in working with animators, working with people who actually know what they're doing. And since you're coming straight out of school, you can't really say: Hey, this doesn't work, because they can be like: Well, you're just a student. You just started, don't know what you're talking, so I think there is a reluctance compared to going to a more traditional like animation studio, game studio because even though the jobs are limited, you know that at least once you get in, you are doing proper work with other people with the same background (92).





Conversely, according to the student participants, other students find that upon entering alternative fields during internships or work experiences, they feel valued and supported. The participants stated that after years of self-doubt and feeling inadequate amidst their highly skilled peers at educational institution, this experience helps them rediscover their remarkable skills, which are highly valued in contexts beyond the demanding game and animation industry.

So it's [alternative industry] something different than games, but it was also very interesting. The workflow is completely different from games like it's not what we're taught at school and kind of the same experience as others had at the end of the internship. I was like at the same level of like the juniors working there, so at least I was being told so. It was a really fun experience (90).

My friend group is more open-minded to see how animation could be in a different context. We're gonna sit here and work from 9 to 5 or 9 to 4. So, the most important is that it's fun to be there and what I've heard when reaching out to the graduates about how it went [in nontraditional industries], and they are happy. I think we are hearing more and more of those stories. More people generally are open to do something that's fun (79).

At first I didn't know a lot about the programs they [alternative industry] used, because they used something else then we use at school. But I think because I've learned a lot there [alternative industry], and especially because they were comparing me to previous interns all the time who were not from a game study and they noticed that I was learning at a quicker pace than other students would normally. I think in their perspective they didn't think that I would be this 'good'. I guess I met those or I exceeded those expectations. That's what they said at least (91)



Image credits: Ur Aska (2019), The Animation Workshop/VIA University College





Image credits: When the Moon Was Gibbous (2021), The Animation Workshop/VIA University College

Conversely, according to the student participants, other students find that upon entering When returning to the educational institution after internships in other sectors of the industry or non-traditional industries and attempting to realign their initial career ambitions, student participants noted that students often experience a sense of uncertainty in their career development. For instance, if students are studying at an educational institution focused on AAA games production but wish to pivot their careers towards indie games or in architecture animation, they feel a lack of direction from the educational institution. They perceive that they've been left to navigate their journey alone in pursuing this alternative path.

Industries tend to fuse and to melt, and we are so adaptable that we can do a lot of different jobs. I think that it's really important to say to students, hey, maybe you will make it [in the industry], maybe you will not. But if you want to make it, try to do your job as much as possible even if it is somewhere else. Either it is with Indies or cinema or TV shows or website or architecture or whatever. But do it and you will get better, and you will get experience and you will have a chance one day [in the industry] and you will take that chance. I have a lot of examples like that. Yeah, I think it's a great idea to open the students' eyes and tell them: OK, this [big studio] is your goal. Perhaps it does not work right away. If you feel that you don't have the skill set right now, just train in a parallel field or parallel industry and you will get there at one point (20).

f I would work in education] I would make sure that students get an idea of what kind of studios are out there. And also employers who aren't maybe in animation or games, but in hospitals or banks. It would be good for school to actually set up those points of connections and say: Hey, we have students with skills here, that you could need and help building those points of contact for students (92).



When reflecting on their decisions, student participants who had chosen the self-preservation mindset during their studies stated that they do not regret prioritising their well-being. However, some mentioned that after graduating, they found themselves needing to invest additional time in enhancing their education or portfolio during a period of unemployment or while pursuing a master's degree. They expressed feeling pressure as they realised they were not being considered for opportunities in smaller or less prestigious studios due to the absence of an outstanding portfolio.

One of the things we see a lot is that the requirements for getting in are a really, really high, like a lot of studios will say, oh, you need at least a couple years of experience or you need to have worked on a published AAA game or you need a portfolio at this level. But the actual work that you're going to do doesn't require any of that. And I think that is one of the issues I'm fighting right now. I chose to focus on a work life balance and the group work rather than my portfolio. I could see that the assignments I handed in were always good enough. And I had an idea, that I'm not going for AAA, I'm going for smaller Indie studios, preferably like 20 people and the work I looked at, I was like: Well, the stuff I have in my portfolio is enough for that. But the issue is, it's not good enough for the requirements that they ask for. It's so frustrating because my technical skills are what they need. [...] For a lot of studios I can definitely do the work that they need me to do, but you can't get that chance unless you either know someone or you have a portfolio that's way above what they actually need, which seems dumb to say it very honestly. [...] I get that it's kind of a natural selection thing when there's a smaller market or less jobs then you want the best person and you keep upping the requirements. And that's my issue. I don't know because I can write in my cover letter that I have a lot of experience with communication. I can write examples of how I've used that in our productions I've been a part of, but everyone can write that. I need the actual interview to show it. I need to be there in person but I get it that they don't have time to interview everyone. I would need the point of contact, or someone to speak for me, because I feel like once I actually get to talk to people, everything runs a lot smoother and I get a lot further. But as long as I'm just sending portfolios, I need a different portfolio. Then my portfolio isn't at the level where it needs to be. And that is creating a lot of frustration from a student point of view trying to get into the industry, because there does seem to be a disconnect between what you want in an employee. One that's good in communication and has a first class portfolio, but it's difficult to have high skills in both. But I sacrificed the portfolio to focus on the work environment and dynamics and the communication and the projects and such. That is something I'm struggling with quite a bit (92).

If you look at the profiles of the people that join the masters that have industry experience, there's a very clear reason why they are doing a masters. It's because they were getting very close or are in their burnout. They are: Oh crap. I can't keep this up. I need to do something else so they do a masters. Or they are super junior ones that are: I can't get a job. I can't get into this fortress. The gate is too well defended. I need to get another degree to be qualified enough to get in. And the interesting thing is the vast majority of them don't give a crap about research, the actual objective of the masters. They are again so passionate about working on their hobby, that they will suffer through a research degree, so they can get the qualifications to get into that massively gated industry (18).

When discussing these student experiences regarding their choices of work ethos and the consequences they deal with, teaching participants critically examined their strong stance on promoting a healthy work-life balance during student interactions. While this approach aims to help students avoid burnout, protect them from potential exploitation in the industry, and promote sustainable employment practices, teaching participants expressed concerns upon hearing the students' voices. They worried that an overemphasis on a healthy work-life balance during education might lead to self-imposed limitations and premature compromises in ambition. They emphasised the importance of critically assessing whether such a balance is necessary based on individual students' skills, abilities, and growth trajectories. Teaching participants cautioned that an excessive focus on balance might overlook opportunities for students to challenge themselves and pursue their initial aspirations more vigorously.

Additionally, student participants have observed that the emphasis on wellbeing and avoiding overwork from educational staff, peers, and industry professionals can have further unintended consequences. They noted that this emphasis on wellbeing can paradoxically create additional stress for students who are already juggling multiple demands in their academic and professional lives. According to the student participants, some students feel pressured to demonstrate their ability to balance their workload effectively while managing group projects, refining hard skills, networking, and handling various other commitments.

I do feel a lot of pressure because everything feels so competitive and especially because it's such a small world and small industry, it really feels like you have to fight and work really, really hard for your position. But even though I enjoy this so much and I chose this specifically because I want to do something that I enjoy later, I think it's still so important to have free time and to relax and do other things and not just focusing on this 3D artwork, even though you might enjoy it so much. That's what the teachers keep telling us throughout the education as well. Like it might feel like fun if you're working on the school project the entire day, but in the end it's still going to be draining emotionally. So it's also good to take time off and do things for yourself. And I mean, life isn't just working right. And even though you might enjoy it. Doing others things in your free time is still extremely important, but I see where the image is coming from because there's just so much pressure to do good and do well and make pretty art and be like the best employee you can when you're applying because there are so much other good people applying as well (90).



I see it very much as a peer pressure thing. If you start having a larger group stay late, then more and more people will feel the pressure, not competition, but more like: Well, my classmates are staying late. I should as well stay. But there is also the other way, if it's a minority that's staying late, then they might feel the pressure also go home. Everyone is going home and having a good time. Maybe I leave a little earlier. Obviously you always have outliers. You have people who want to work all the time and you have people who would never feel pressure to join. But I do think that whichever the majority is, you will kinda decide in the classroom in a way, because I think people are very much led by what they see around them (92).

Student participants highlighted that in certain instances, students may resort to secretly overworking to meet the expectations set by educational staff and peers regarding maintaining a healthy work-life balance. They emphasised that the perceived pressure to demonstrate balance while sustaining high productivity can prompt students to work excessively in secrecy, potentially compromising their well-being despite their efforts to outwardly uphold a healthy work-life balance.

[I tell my students]: You have a task. You need to be able to do that within the 40 hours a week. If you're spending 60 hours a week, you're basically creating a portfolio that's built on a lie. [...] I see this happening all the time, especially with visual artists. They will spend hundreds of hours on their portfolio making their most visually impressive portfolio in existence, and then they say I worked on this project in a nine to five kind of context. So you're basically saying to whoever's is hiring you, I can deliver this level of quality in 40 hours a week or. Horseshit, you can't. No way you can, so you're basically getting hired on a lie. You're setting up yourself for a situation that you promised you can do that level of quality on a regular basis. You can't, and now you are on a job where you promised that you can, so suddenly you're in a context where you're going to be working your 40 hours a week and you're gonna be catching up during the evenings because you can't actually reach that quality level because you already started on an unrealistic expectation. And that's even before their bosses start asking for more (18).

Image credits: Shergar (2020), The Animation Workshop/VIA University College





To sum up, participants express concerns about the nuanced challenges surrounding students' pursuit of a healthy work-life balance

Student participants noted a trend among younger students similar to that in the industry: an increasing awareness of mental health and a preference for a healthy work-life balance. This trend is accompanied by efforts from educational staff to discourage overworking and prevent student burnout. However, student and teaching participants expressed concern that an excessive focus on maintaining this balance during educational institution could potentially lead to added stress, self-imposed limitations, and premature compromises in ambition. They stressed the importance of carefully evaluating whether such a balance is universally necessary for every student, advocating instead for teaching staff to closely monitor students and provide tailored advice based on their individual skills, capabilities, and developmental paths.

Shift towards more value on collaborative culture and co-existence

Next to a shift towards a healthier work-life balance among students, another trend identified by student participants aligns with industry trends: a noticeable shift towards embracing a more collaborative work mentality. While the 'rockstar' archetype, which prioritises individualistic and competitive work mentality, still exists, the majority of students, according to the student participants, acknowledge the benefits of working in teams and groups. This shift goes beyond group projects, indicating a broader recognition among students of the advantages of collaborative approaches in preparing for careers in the industry. Student participants noted that students have a growing awareness of the benefits of teamwork and cooperation across all levels and tiers, even amid the realisation of entering a fiercely competitive job market where peers can become rivals. One of the reasons given by the student participants is the increased motivation individual student get from working together with others.

For sure, you kind of still want to be the best. But you also want your friends to succeed as well, right? So we are really pushing each other. We motivate each other. I would not have managed to get where I am right now without my friends and that is really important to me personally. They helped me continue. I helped them push. We all push each other and make sure that we did our best. I think that's very important as well because it will help you so much when you're in an environment where all the people are working and everybody is doing their best. You know, it's so cool to see people who are striving to become the best. It gives you motivation as well to do that, and I would not have done that if I was alone animating in my room without an education. Zero doubt about it. It takes some really, really hard discipline to do that. It's much easier to do with an education (95).

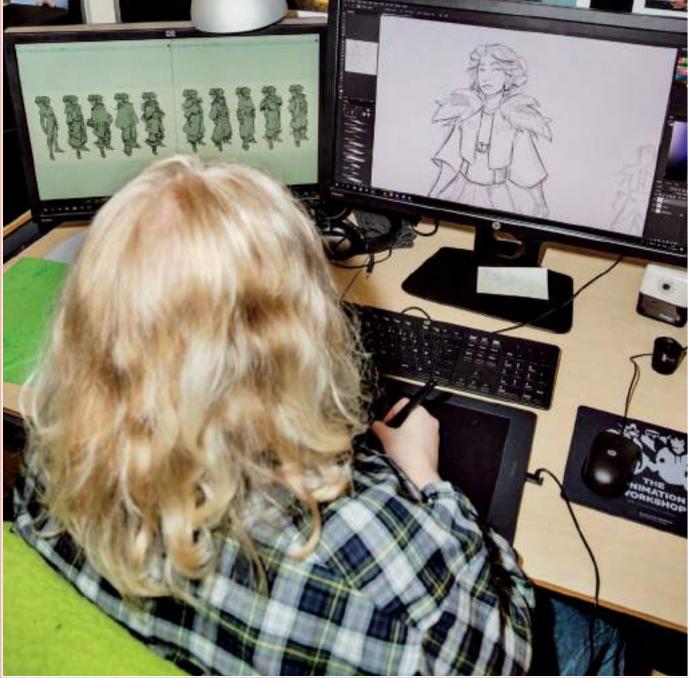
It's motivation from students. I think that's the fun part. You motivate each other and that you actually work together on projects and then the teachers look at your game. And you feel like, this really works (91).



Another advantage student participants name as a gain from working together with others is their appreciation for feedback, particularly in interdisciplinary collaborations, which helps them improve both their hard and soft skills.

We join together with other students from the complete educational institution on Fridays and there was a presentation of a 4th year student, and she showed her portfolio and she had like these really nice thumbnails with the program she used and the title of the project. And I saw it and I was like, oh, that looks kind of professional. I was using the same website but my portfolio looked like less professional than hers. [...] Her sharing her portfolio with us, helped me to elevate my portfolio. But without these Fridays, I would not have known (90).

Image credits: The Animation Workshop/VIA University College





Furthermore, the student participants stated that researching the latest industry and technological developments independently is a significant workload that can be effectively shared within a group. According to the student participants, these research activities sometimes evolve into a form of peer career guidance, where students help each other find job opportunities or industry sectors that align with their skill sets, abilities, and ambitions. Networking activities also occur through shared professional networks, and students are increasingly aware that their peers constitute their initial network when it comes to future job opportunities.

Yes, that's a weird thing. It's weird because they [the peers] are their [students] first competitors when they get the degree and leave school, but at the same time they are their first network to get a job out there. You know, there is a job and you are like, OK, I will first obviously apply for me. And then, if there is another opening in their company, you [peer] can come. You tell your fellow students. I have a job, it is going well and there is an opening (20).

I think it's very hard to get into it [industry] when you're on your own. So right now I got the connections at [company] and [company], all kinds of studios because they are my friends. Even from people in the school year above me. It's just really easy to make those connections at university compared to like not going to university. [...] So for me, like the guy that worked here is just a friend of mine, a buddy, you know. And I know him because we did our exam together in our education. He was in the year above me and we stayed in contact and then he worked here. I was looking for companies to find an internship and I asked him: Are you guys looking for animators? He was like: We actually have openings for animators. And I: Oh, that's interesting. Could you do me a favour and show them my portfolio. And he was like: Yeah, yeah, I will. Then they said like: Oh yeah, this is interesting. I sent an application a couple months later when I had improved my portfolio a lot more. I sent the application and I kept close touch with the friend. Then he was telling me: Hey, yeah, I just saw them. Walking out of the meeting room. How did your interview go and stuff like that? So, having this man on the inside was really a fun thing to have, but also like a rare thing for someone who's just about to enter the industry. But I was very lucky to have had that (95).

We favour each other. For example on the industry day, two girls from [company] showed up like right in front of me: Hey, we need an animator. How are you doing? And that's amazing. It's nice to meet you, but I have a job. But this is [name of friend]. He is also looking for something, right. Check out his work. You really just want to succeed together. [...] I mean, if you're being a dick at school, then why would I work with you? Why would I be friends? Why would I show my CEO your portfolio for you to get a job? Be helpful and cooperative and like flexible and stuff, just be nice (95).





I haven't personally felt a lot of competition from peers. I also think it's because we're very open about that your classmates will also be your points of contact. So even if you didn't get the job that they got... We had this happen two years ago: three people applied to the same studio and only one of them made it through. But because he made it through, one of the others recently got hired by that company as well. So even though they are technically your competition, if you keep a nice tone with them and make sure your friends with them, then it's less competition and actually an opening. Because I think one of the really difficult parts of there not being jobs is that almost no studio takes in a new person. Almost every studio wants someone they know, whether that's through one of the coworkers knowing them or maybe it works like I got my internship: I was told very honestly by my boss that I only got it because he knew one of my teachers and my teacher wrote a letter of recommendation for me (92).

In some cases, student participants reported that these collaborations also transcend academic boundaries. Some students proactively engage in recruiting peers from all over the world for extracurricular projects. Student participants believe that this helps them create effective and expansive networks worldwide, which are crucial for success in an international industry. Moreover, they state that such experiences prepare students for working with international colleagues in a global professional environment.

I'm also directing this short film with an international team. It's all volunteer based, but we are a team of more than 20 people and we have never met each other. We only know each other from zoom and we've worked together for a year now. And we're soon going into production, so that is also a big thing. It actually started three years ago, some students at an educational institution in Georgia, they wanted to make a short film and they found my friend on Instagram. So they kinda headhunted him and they did a short film which was nominated for the Student Emmy or something. And then my friend wanted to do another film. So they got the team together again, which is completely random and I got in as well. And then we all pitched ideas and we went with my idea. We have organised everything ourselves (79).

Also very interesting is the exchange with other universities, also international exchange. We have many universities with which we do seminars together again and again. There are also film school festivals or there are special seminars where you invite film students from all over the world. This whole networking of young people worldwide is also a very important form of education. I think this team building, this understanding of stories from other countries. Yes, it is important to always be open to something new and not always be in the familiar, that somehow does not fit with the creative professions (35).

Student participants reported that collaborations between students often span across different skill levels and work cultures. Variances in these aspects are viewed as inherent to individuality, with each student's commitment to skill enhancement being respected as a personal choice. In my friend group for example I got some people that struggle. I also got people who are really talented and we help each other. You just give feedback to each other and that's a beautiful part about education.



You become friends with people who are better than you and for sure that sometimes sucks. Because... well... you can easily think like, oh man, I suck at this. That's bad for sure. But no, this mean you are learning. Some people are a bit more sensitive to that, I guess. But we're always helping each other, always giving feedback to each other. I also can get feedback from an environment artist or character artist or another animator or something or vice versa and I'll just be respectful and just make sure we all get where we want to go (95).

However, the student participants stated that there is a distinction made for those who exhibit a 'student mentality' or are slackers. These individuals are often singled out and viewed as hindrances to the progress of the group, as they may not contribute effectively to collaborative efforts or fulfil their responsibilities.

There is also a lot of people, that have that '16 year old mentality'. They are like: We're just cool and it doesn't really matter if I like make it or not. But, no, that's not how it works. It's an education and you have to put your effort in it to get somewhere. Some people have that mentality [slacker mentality] that's just a waste on your end and on our end. I mean, the people who don't really put in the effort, don't really care, can go for what I care. I don't want them in the industry if they kind of act like this. That's very rough, but that's kind of how it is. Like I don't wanna work together with people and risk a lot of stuff. It just sucks (95).

You should be totally yourself, but you should also be humble and a good person and work with your team. And you don't have to be an ass going to school. I believe that you need to show up on time and behave. For example we have a student who's just sitting in the back, yawning and just minding their own business and having a really bad attitude. When I go to school I see people as grown-ups. It's not preschool. It's not high school. This is an educational institution, so if you wanna have a good experience, it's also your task to make it a good experience, not only just for you, but also your peers (48).



The other extreme often singled out, as student participants stated, is represented by rockstar students who frequently prefer to work alone. Participants described them as often reluctant to collaborate across different tiers and levels. They typically opt to work independently or within their own select group, motivated by a desire to excel and outperform their peers, especially in preparation for the competitive job market. This approach reflects their individualistic and competitive work mentality, focusing on achieving exceptional outcomes through personal effort and dedication.

As an exception to the collaborative times, student participants discussed competitive moments prevalent across all tiers and levels, especially leading up to internship and junior position applications. During these critical periods, students often prioritise individual advancement over collaboration, focusing their time and effort on enhancing personal skills and qualifications. This approach is widely tolerated among students, recognising the necessity to stand out in competitive job markets where personal achievements can significantly impact career opportunities.

At school, it's kind of fine and we work together and help each other out. But when looking for an internship, then it gets kind of competitive. For example, for me it wasn't competitive this year because the internship that I have is very close to my home and I live in [city] and I know that not a lot of people will be going to that company [non-traditional industry]. But if you live for example in [popular cities], where my previous school was, a lot of companies are in the surrounding area and then it gets kind of competitive, like: 'Oh I heard someone was gonna apply for this. Oh shit, I need to be fast.' And then it gets kind of more competitive, I think. In the last year, there was a position at [popular game studio] that came online and I think basically the entire class went for it. So in that way I could definitely see a bit of competitiveness (90).

Image credits: The Saga of Biorn (2011), The Animation Workshop/VIA University





At school, it's kind of fine and we work together and help each other out. But when looking for an internship, then it gets kind of competitive. For example, for me it wasn't competitive this year because the internship that I have is very close to my home and I live in [city] and I know that not a lot of people will be going to that company [non-traditional industry]. But if you live for example in [popular cities], where my previous school was, a lot of companies are in the surrounding area and then it gets kind of competitive, like: 'Oh I heard someone was gonna apply for this. Oh shit, I need to be fast.' And then it gets kind of more competitive, I think. In the last year, there was a position at [popular game studio] that came online and I think basically the entire class went for it. So in that way I could definitely see a bit of competitiveness (90).

To sum up, participants detected further opportunities for enhancing collaboration experiences at educational institutions

Student participants highlighted a shift towards collaborative practices among students and a growing recognition of the benefits associated with such approaches. They identified various forms of collaboration initiated by students themselves. Emphasising the potential of these initiatives, participants suggested several ways in which educational institutions could further support and enhance collaborative experiences. They underscored the importance of educational institutions taking an active role in facilitating collaborations that transcend disciplinary boundaries within and beyond their own campuses. This includes promoting intereducational institution and cross-institutional projects, as well as fostering partnerships among different educational institutions.

Moreover, student participants recommended that educational institutions assist students in establishing international connections for extracurricular projects. This could involve creating dedicated platforms where students from diverse fields collaborate on global initiatives. Additionally, educational institutions could bolster self-formed peer career advice communities by providing professional academic and career guidance and support.

Cognitive dissonance around group work

While students acknowledge the benefits of collaboration - such as peer networking, contextualised learning, and soft skills development - student participants highlighted significant challenges in the process. These include time constraints, concerns over individual contributions and portfolio relevance, issues with group dynamics, and stress related to leadership roles. According to student participants, excessive group work can lead to an overload of work hours, forcing students to prioritise between group and individual tasks. This balancing act can impact their competitiveness in the job market and their social standing within peer networks. While educational institutions are addressing some of these issues, participants stress that there is ample room for improvement.



[Group work] is cool, but it felt sometimes like a waste of time. Also because people just made dumb decisions and we had a clown to be our lead. That was bad. He made some weird choices that nobody really understood. But aside from that time-wise, I was all the time working. I made my portfolio after to school hours. The first entire half year of year three I just spent animating all the time. Making sure that I create a portfolio according to skills that companies want to see more. Catching up with the skills I lack. School work I rarely use in my portfolio. I think maybe one or two pieces out of the six, so it's mainly self-study work that I put in. [...] I think it is hard to put all of that [group projects and working on portfolio] into one year. Because students need to build up a portfolio, but you also need to learn communication skills. Need to learn how iteration works. You need the experience of making a game and all of that. Putting all of that into one year is very, very hard. I think in a way it is good that we have that year, but also I hear a lot of people wanting to have more self-study time or more time to build up their portfolio. It is very, very hard to balance it. I understand now a lot more that the teachers are really trying to balance it, but it is just very hard (95).

According to student participants, group work is widely perceived by students and junior professionals as highly time-intensive and inefficient. This perception is exacerbated by interpersonal challenges such as communication difficulties, unequal participation, conflicts, and disagreements. These issues are viewed as significant distractions that divert attention from what they perceive the primary objective of group projects – the group output. This leads ultimately to frustration among participants. Moreover, student participants state that students often feel powerless to address issues like unequal participation and free riding within groups, which further compounds frustration and creates time management problems for those who take on extra work to compensate.

There's like a lot of drama sometimes, especially between the different specialisations. They would constantly be blaming each other. It's kind of a mess sometimes. But in the end, if you have like normal conversations and you talk about this stuff, then you can fix everything. But it's not easy. You need to communicate a lot. It takes a lot of time (91).

One day I just took over. That pro-activeness started in my previous project because teammates sucked. They were having this 16 year old mentality. They didn't want to do anything. Ok, then I understood: when you want to have something done good, you have to do it yourself. This is how it started out. I started like taking charge of things like: OK, we're gonna do it this way. I'm gonna do it that way. And organise like meetings in groups. Make sure that everybody's well connected and also trying to continuously find risks. Finding risks really helped identifying them or finding, identifying, and then make sure that they will not become a bigger risk (95).



What's sometimes a bit difficult and frustrating for people is that we are supposed to work from 9 to 5, but there is no one actually keeping an eye on if people are actually doing this. So it might happen that you have someone in your team that just, stopped working at three every day and just tells people: Hey, I have this, I have that. And then on the other hand, you have people working till five or maybe even till 6 because otherwise they can't get everything done and there is like not really anyone that you can go to and talk about this because it's all your own responsibility. So that could sometimes be a bit frustrating (90).

An example that really, really frustrates me, but I totally understand, is that many of the art students did not give a shit about group projects because they didn't need to because their individual art pieces were actually more valuable to building a successful portfolio. Because by not having to worry about collaboration and making like bullshit art just to get something done quick so that the game could keep iterating, they could just be like, no, I'm just gonna spend half a year making a really, really cool character model that's fully textured and everything, right. And there's your portfolio right there and that actually works for them because as an artist, a lot of the time they're not looking that much at your collaboration skill. They're looking at your output, so the problem is that the goals are different and they don't align. The designer is heavily reliant on being able to work in a group context and produce work that is reflective of their design skill because a lot of design is foundational. So if there's nobody to build on top of your work like a programmer or an artist, then it doesn't exist. It doesn't come to life (60).



Image credits: The Animation Workshop/VIA University College



While student participants acknowledge the relevance of group projects in preparing them for industry work, they also perceive limitations in how beneficial these projects are for entering the industry. According to the student participants, soft skills developed through group projects are difficult to effectively showcase during job applications, and the quality of group projects may not always meet the standards required for individual portfolios. This dilemma presents a significant challenge for students as they navigate the balance between time-consuming group work and other essential tasks such as individual skill enhancement, portfolio development, and networking efforts.

I think they put a lot of emphasis on the soft skills, so learning how to work together and in a team. But it's a bit difficult portfolio-wise and applying for studios because there is nothing I can show really to prove my soft skills on. My portfolio, right, OK, they will see a group project and if the art is aligned, they will probably see: OK, multiple artists worked on this, they are able to work together and create something that's cohesive. But I cannot show them: I'm good at working together and I am reliable, that's just something they have to trust me during the interview. [...] And the thing is, you need to have good portfolio pieces. I think that's what we're mainly focused on and I think that's also what the teachers tell us: Oh you need to have a good portfolio (90).

I have always felt the productions aren't really portfolio work because the issue is that there's so many different people working on it. And it's very limited what you can achieve personally, because within the production you'll have to sacrifice a lot. Like if, let's say you're really interested in rigging, but the production that you became a part of only needed very simple rigs that aren't really showcase-able. You can try and argue for: Oh I wanna make something super complicated. But then it is up to the group, does the production have time for that and it could be that you are kinda sabotaging the project by making it more difficult. Common, make the rig during your time instead of in the project (92).

Image credits: 100.000 Acres of Pine (2020), The Animation Workshop/VIA University College



The student participants highlighted that the current curriculum's heavy emphasis on group work often results in an excessive workload for students. This situation forces students to balance group and individual work by investing long hours in evenings and weekends on individual skill development and building their portfolios, sometimes at the expense of group assignments. This dilemma creates tension as students risk being perceived as letting their groups down if they focus too much on individual tasks, potentially missing out on peer networking and collaborative learning opportunities. Conversely, neglecting individual development may hinder their competitiveness in the job market. Additionally, participants expressed frustration over the lack of sufficient guidance and support in crafting effective portfolios and reels, which adds even more stress. They noted that students often spend considerable time researching criteria for successful portfolios independently, further contributing to their workload and anxiety.

I wouldn't know about one major thing you could do to create the best portfolio and really stand out compared to other people. I don't think we ever really talked about this or had teachers explain this to us, I think we've been trying to kind of figure it out ourselves and just create a decent portfolio (90).

No, there's no guidance for the portfolio, no. We actually expected that this would be happening. Butno. You can ask a teacher individually: Can you look at my portfolio? But we would have expected to have maybe lectures about it or something. But we just focused on the software that we use and you always focus on making a game with a team, like working together and communicating with each other. But the portfolio part I just didn't really see anywhere during this study. [...] And for sure there are hundreds of portfolios online out there. But they are doing it completely different and no one is telling us: Hey, this is what a company would like to see. So it's really difficult to look at all these portfolios and think: Ok, should I go for this or is this maybe better? There's no reference or no person telling us: Hey, maybe this is better because a company would like that more. [...] I would really like to see more guidance in what does your portfolio need to look like. What does your resume need to look like. What does a good cover letter look like. Because it's so different from other industries that I cannot ask my parents, for example: Hey, what does your cover letter look like? Because it's so different from what they are doing (91).

I think that every school, every education dealing with animation should have a course in how to make a reel and how to make a website. And it doesn't have to take a lot of resources. They should get also feedback on it, best from the industry. I mean they need to know that they shouldn't put everything on the reel. They should put the very best work in front and the next best at the end. Because if that first four seconds is interesting, you wanna see more. It's like TikTok and all the rest. Like if we get hooked, we're gonna watch it to the end, and that's what you need to do, be competitive and fierce, but also creative (36).





Student participants also highlighted another perceived lack of guidance that contributes to the time challenges students face: the small amount of coaching and support in leadership skills. Students are feeling ill-prepared for the demands of leadership roles within group projects, often resulting in unnecessary mistakes and time losses that could otherwise be dedicated to improving group projects or individual skill development. This gap is according to student participants particularly pronounced for students aspiring to develop their leadership abilities within creative industries. They emphasised the need for more classes and development opportunities specifically tailored to leadership in creative businesses, expressing a desire for increased access to resources and training in this area.

When you make a game, it's very valuable and you learn a lot from it. But there is still this issue of a flat hierarchy. You have a lead, but the lead is also still a student. And that does not work. I think it would be really cool to have maybe industry people, maybe teachers be the leads or like the seniors that are embedded into those teams to help with collaboration and communication to make it a good learning experience. To learn from them how it is done (62).

What happened during our project is that there was misalignment in the team. There were communication things happening that didn't work. People disagreeing. People agreeing, people making choices too fast or too slow. [...] But it's also because we have such a tight deadline really. Like it's quite hard to make a game in a year with 30 people to make them aligned and everything you need, you need strict leadership in that part. But we are all students, so that really didn't really help (95).

And while they are people who will be interested in directing and leading the project, there's very limited teaching in that. So when we run these simulated productions, I think one of the issues that pops up a lot is that in a real studio, you will have people with experience that know what they're doing there. We're just kind of trying our best, which in a good group can mean a lot, but if you then end up in a group where the communication is not working or the director isn't good at making choices, then the production kind of falls apart and it can turn into like a terrible experience for people. I would like more teaching in the specific roles that we're getting, but I think it's also tough because there's also a limited curriculum and you can't force these extra things if people aren't actually interested in becoming directors or production managers. I don't really have a solution for it unfortunately, other than maybe having summer courses or extracurriculars (92).

According to the student participants, high-achieving students experience another set of stressors in group projects. On one hand, they may encounter stress when collaborating with peers of varying skill levels and ambitions, resulting in an inability to produce the high-quality output they expect from themselves and those around them. On the other hand, when working in groups with like-minded students, they strive for perfection and push each other to excel, potentially leading to an extremely toxic work environment and dynamics in pursuit to winning prices with their work and of industry recognition.



When talking to junior professionals and students who had just completed their internships about their perceived benefit of group work for their work in the industry, they acknowledged that the group work at educational institution genuinely simulates the messiness of real-world projects. They stated that even the frustrations experienced during these projects have effectively trained them for the challenges they face in the industry. However, they still emphasise the crucial importance of having a strong portfolio and demonstrating individual excellence to secure entry into the industry in the first place.

[At our educational institution] we got to make a game for the entire year, which sounds like a dream come true when you started. And at the end you think: Finally it's over, because it's such a shitshow sometimes. There are 30 people in a team, which is a lot for students. It's crazy. Everybody has their opinions and then you need a hierarchy, but everybody's students, so you can't really make a hierarchy because everybody's just equal and that can turn into a mess sometimes. But it is actually quite similar to the industry and that was very surprising for me. I'm like, holy shit, they were right. I did not expect that at all. [...] I also talked about it with friends who are also doing an internship at like bigger companies. Yesterday, I talked to a friend of mine who is at [company name] right now and he experienced similarities as well, like even at big companies. He experiences a similar chaos kind of thing. Chaos is a big word. But these kind of structures that are happening and similarities between our student project in year three and an internship in the industry itself... I thought it was just my experience in a small company but it is just game development (95).

I did an internship at a game studio recently and I was actually praised a lot about my skills in teamwork and such. And I think a lot of that comes from school and comes from knowing how I work in terms of deadlines and what I need time wise, but also knowing how to be someone that others can come to. And communication obviously meant a lot, and I think that came a lot from doing our own productions and having to do our own schedules and figuring out how long would it take us to do this. And I think that's like the big benefit of these simulated production (92).





The dilemma students face in choosing between concentrating more on group work or individual development is being addressed by some educational institutions. Student participants stated that these institutions are attempting to balance their curriculum by allocating time for both collaborative group work and individual portfolio development. This approach aims to ensure that students gain the necessary teamwork skills while also having the opportunity to improve their individual skills and build strong portfolios.

The school has recently addressed this issue. They shrunk the final production into one semester. And the other one is to focus on portfolio work. And I think that's how the school is trying to deal with that, because there has definitely been issues of how to balance portfolio versus project. And now you have a semester to focus on portfolio, get that out of the way, and then you have enough time to just focus on the production (92).

We had still one day a week for self-study. I've heard actually that they changed the setup for this year. Now they are actually doing half a year of self-study in the third year because we talked a lot about feeling like we had not enough time to prepare for internships and portfolio during our third year (91).

It was a full like 2 semesters of doing their final project, but we pulled it down so now they use one semester and then they actually have I think 8 or 9 weeks of elective time, which they potentially could use for making particular portfolio pieces that they want. It's not the perfect balance yet, but we have addressed the issue with the individual time without compromise and here are the collaboration projects, where you actually collaborate (50).



Image credits: 'The Hangar' by Irene Arnaiz



Furthermore, some institutions have addressed the issue of students feeling they receive insufficient guidance in creating effective portfolios and reels. These institutions have incorporated instruction on portfolio and reel creation into their curriculum and partnered with companies to provide tips and direct feedback to students.

We have a lot of portfolio review occasions. That means that they can come to us online or offline and bring the portfolio and we give suggestions on how to structure because a portfolio is storytelling. So it's not that you put everything you did in your portfolio, you have to curate the core very carefully. So the portfolio should be able to tell your story, who you are, what you are interested in, what can you do. You need 10 super strong pages. That's enough and show a clear identity. It's your story. And then we support them. We have them put it together. What they should include? What should they not include? Whether if it's coherent or not. First suggestion, very initial suggestion: put together projects you like, you are proud of. That's a good start. Because if you love a project of yours, it's probably done with heart. So it's an honest one. Most of the time it works. Another strategy: Show the development of your work. Show the best and where you started. I went through this process and I'm now here. That's very interesting (45).

And a third issue identified by the students is already being addressed by some educational institutions. These institutions have begun to offer more guidance for students in creative leadership, with some even considering the introduction of a specialization in creative leadership within their curriculum. Teaching participants believe that such a specialization would significantly enhance project-based learning but also necessitate a re-evaluation of current talent-based education selection processes. They argue that creative leaders, while not always needing the same technical expertise as field experts, should still be educated within the framework of collaborative projects.

That's a heavily debated topic within the curriculum right now because at the moment we let it [group projects] run and we've discussed many times: should we assign a supervisor as the team lead for each of these projects? Because we're expecting a personality profile [one of the students], we know is not a leader, to stand up and lead a group of 20 plus students. That is unrealistic at best. Borderline abusive. If you take a little bit more of a strong stance towards it. Then again, it's also an incredible learning experience to have that experience and go: Holy shit, that's hard to do. So on one hand, you kind of want people to experience this pressure because they need to be able to deal with exactly that pressure. Then again, it's not what we want the industry to be like, so it is the prime example of how do we deal with this right now. They're still running with: we barely interfere unless there's truly, truly people wanting to strangle each other. Then we interfere for sure. But like at the moment it's not a safe environment anymore. But coming to resolutions in a 20 plus man team is an incredibly valuable experience. That is also the reason our students can go into a company and the company says your students are ready to work the moment they move into our company. Is that a pleasant experience? No. Is that the best teaching methodology? No. Does it work? For some of them, and that's the problem. It doesn't work for all of them. And I'm not sure how to solve it. Because it's exactly that tension: they need to be tough as nails to survive in this industry. But by making him tough as nails, we are continuing the problem (18).



The our education it is a talent based education where people go through a test to come in. Like in a conservatory, when you want to be a musician, you have to pass this test. Actually you have to be quite good at playing before you even start the education. There is this talent based admission process. But then you run into this issue. We had a student that applied several times and he was not accepted. And he improved and came back. And followed all the advice and finally he got in and he turned out to be a star student that ended as one of the directors. Now he was not genius at drawing, but he was genius at supervising. He was genius at talking. He was genius at creating a great mood in the group. I think we learned something from that process by saying, OK, we need to be able to spot these guys. How do we look for that person among the applicants with our current admission processes? (37)

First educational institutions also offer creative leadership programmes. These programs are structured to cater to professionals returning to educational institution with the goal of enhancing their leadership abilities within creative industries. The primary objective of these programmes is to provide students with the knowledge and tools essential for effectively leading creative teams and projects within dynamic and innovative environments. This trend is welcomed by the industry and professionals, as traditionally, leadership positions have often been filled by highly skilled senior staff members, but these are often lacking specific leadership training or skills.

There need to be short courses that you can kind of supplement. Like evening courses. Or you can make an agreement with education, to go: Look, this person, this producer is great. She's got the skills. She's great in organising, but she's missing these interpersonal skills. Can she come once a week to the educational institution? You make an agreement with them. You know, whatever that commercial agreement sounds like. Whatever it is, maybe government funded, who knows? And then they can come. But the problem is, industry is so tight, right? They have really tight budgets, they can't afford losing one person for day. It could be like hell for them. So they have to change their ways as well, yeah (29).



Image credits: Untamed (2016), The Animation Workshop/VIA University College





A master class on how to be a lead artists. How to lead, to inspire the artist that works for your vision, to create your vision in the way that you want it to be done. So that they are happy and they will contribute the best they have in them. All the supervising animators in a company they should all learn how to do this. They need to know the communication necessary? Because they don't necessarily have that when they became supervisors. They became supervisors, because they were great to work and do it fast and they gave the director what he wanted. So he elevated them to become supervisors, but supervising is something you need to be able to do. You need to learn the noble art of supervising artists in a deadline focused environment, where you know: the director has all the time in the world to do the movie, but the production leader has only till the end of the excel sheet (37).

I've developed and run a post graduate certificate in production management for animation. And actually the number of people doing it has been incredible because it's more than just production management or line management, you do a bit of finance, you do a little bit of HR or you do a little bit of soft skills. A lot of people even in senior roles took the course. I had one person who had just recently left Disney as an executive, but actually came out as a student on this course. You know, she could have taught on the course, but she wanted to broaden her knowledge in terms of production and things like this. So, these kind of things are interesting in terms of lifelong learning (52).

To sum up, participants highlight the importance of group work while addressing current challenges and future improvements

Teaching participants appreciate students' recognition of the importance of group work for future careers despite facing challenges such as time constraints, individual contributions, and group dynamics. While educational institutions are making strides in addressing these issues, teaching participants emphasise the need for clearer communication about the learning value of imperfect projects and the importance of learning through mistakes in a group setting, encapsulated in their hashtag #FailingForward. Also they are working on giving more guidance in job applications and leadership roles in group projects.



Experiences and struggle with networking

Another struggle highlighted by student participants during the interviews is balancing industry demands and job market realities while determining how and when to pursue proactive and persistent networking. According to student participants, educational institutions and companies already offer many opportunities for networking, including regular gatherings of industry professionals in informal settings such as bars. Student participants noted that students do not struggle to find opportunities for both offline and online networking. However, they face difficulties in developing effective networking skills and managing the additional time commitment it requires, which adds to their already full schedules.

We have this day at school where people show their work and companies come along and people from [company] came up to me like: Hey, we are looking for an animator. But I was already set for [company]. Another time I also went to portfolio review sessions from companies with some of my peers and there you can also very easily just talk with them and show them your skills. Show them who you are. Show a friendly face and smile and that just helps so much. [...] These review sessions are posted on LinkedIn. You gotta look out for that. [...] Yeah, you gotta be proactive. Like, you're not gonna sit around and wait and nothing happens (95).

At school they had a portfolio day and then all these companies came like game companies, film companies and they had 8 or 10 artists sit down with us and they asked us a bunch of questions and we could ask them questions as well. That was helpful (91).

School is actually setting up kind of like speed dating interviews for you. I talked to a lot of different companies. And then there is this career day, where you can also talk to a lot of companies. So I met a lot of people there and I am still in contact with them on LinkedIn or Facebook or Instagram. You have to put yourself out there and stay in touch. I make sure to comment on people's stuff and say, hey, that looks great, or sharing it. There was a guy I talked to last year, a guy from the Netherlands. He actually offered me a job, but I wasn't able to move at that point. But he was super nice and I'm still in contact with him and see what amazing stuff he's doing. So also doing some stuff yourself on LinkedIn for example and sharing and helping out. Oh yes, helping out is also a big word. That you help your colleagues sharing their stuff. So for example, if he's posting something he's made and we had a great conversation, then I would for example share his post and say: Hey, this person has been doing this amazing stuff. Or if he was looking for work, I would like: Please hire this guy because he's really nice. He's really talented, as you can see. And then I would link his portfolio or his website. You spend a lot of time online. My boyfriend thinks I spend too much time networking online. But yeah, I spend a lot of time on it. Maybe also more than I should, because I think it's really important (48).



Of course, there is a lot of pressure because you wanna show the best version of yourself and not try too hard. You don't wanna suck too much and become a uncomfortable person. So you're gonna be very humble. And like: I'm really admiring your work and I would love to talk about your work and perhaps you can give me tips.... (48)

Persistent and proactive networking in all kind of ways is giving you a bigger chance in the saturated market. Yeah, communication and proactiveness. When I started this, I needed to apply for something. What will I do? Where will I look? You make a list of all the companies in [country] or outside and then youmake a list. I have an entire document with companies and links to their job opportunities, and I even list connections I had there. You just need to create a big overview. [...] Then you need to connect. I don't have a business card, I just have a smile. Works most of the time pretty well and just do your research when you're meeting people. You gotta know their games. right. Even though you haven't played them, just look at trailer online. Know what it's about. Know what kind of job you could expect. Show interest as well, like ask them questions. That's important (95).

'm trying to reach out to artists at studios rather than recruiters and just ask them to look at my portfolio. Also knowing that if I keep contact with them, then that's also a later contact, [...] especially through LinkedIn and such. I can just connect with someone and write them a message and then either they'll go: Yeah, I'll take a look at it or I'm sorry, I can't help you with that right now, but I think people in general are very open. I mean, there's a point where you don't want to bother people and you don't want to just keep asking the same person over and over again or having like 10 different people that you're going around. But I also think, it also takes time and it takes a lot of energy to reach out to people and keep up that communication and keep that circle (92).





In addition to struggling with time management and skills for effective networking in the industry, student participants report that many talented and highly skilled peers with strong soft skills find it challenging to promote themselves and showcase their abilities through networking. This difficulty in self-promotion can prevent these capable individuals from being noticed, despite their potential to be excellent employees.

You need to be an extrovert. Sometimes I can be concerned for the introverts. Because if you're not an extrovert and you don't like to meet other people, then it's gonna be hard (48). Lots of people [in the industry] usually are introvert and even when they go to events that are made for that [networking], they struggle to go to people and to ask questions and to get LinkedIn or email addresses or numbers or whatever. Umm, so yeah, networking is a huge part in the industry, but there is a lot of introverts, that are not comfortable, they struggle to go to people and just say hi (20).

To sum up, participants stress the importance of effective networking and the need for institutional support

The student participants acknowledge the crucial role of networking in securing employment within the industry, yet they also recognise the challenges students face in undertaking this task, including the time commitment and the inherent complexity and stress associated with networking, particularly for introverted individuals. They emphasise the need for institutional support that extends beyond industry connections, advocating instead for courses in personal branding, effective communication, and self-promotion. These courses, they argue, are essential for equipping students with the skills to navigate and succeed in the competitive landscape of professional networking.





Conclusion

This report has given a detailed overview of the experiences, challenges, and successes identified by the participants regarding the expectations for professionals in the games, animation, and VFX industry, the ideal and current work environment and dynamics in the industry, and the current job market. In addition, it summarised the attempts of educational institutions and students to fulfil the goals of industry, job markets, and educational institutions. After this investigation, this chapter seeks to address the initial questions that motivated this research project:

- Regarding graduate's levels of 'soft' skills, what are the perceived matches between the games, animation, and VFX industries, educational institutions, and students?
- What are the perceived mismatches and challenges that hinder alignment between the industry, education, and students?

Overall, it can be said that participants identified similar trends across all three parties (industry, education, and students). These are trends towards:

- creating more friendly, healthy, and sustainable work environments and dynamics
- valuing adaptable team players with a healthy work-life balance as the 'ideal employee'.

This 'new ideal employee' is seen as crucial for maintaining the ideal work environment and dynamics, in contrast to the previous ideal employee - the rockstar. Historically, rockstars drove industry innovation through intense dedication and personal sacrifice, playing pivotal roles in shaping the industry's early stages. However, their tendencies towards egoism, limited teamwork skills, lack of adaptability, and insufficient soft skills have, according to the participants, increasingly posed challenges in today's collaborative team environments.

Image credits: Behind the scenes on 'Vessel', Breda University of Applied Sciences





The participants further stated that all three parties are making efforts to develop to reach their ideals:

INDUSTRY:

- Improving (physical) work environments and dynamics #FailingForward: Efforts are being made to create friendlier, more inclusive, diverse, and healthier work environments and dynamics. These improvements aim to welcome a diverse group of talents, foster a more sustainable workforce through a healthy work-life balance, and create a safe space for creativity and innovation through exploration, experimentation, and thinking outside the box, particularly with the advent of new technologies like artificial intelligence.
- **Redefining leadership in industry:** Leadership is evolving from promoting highly skilled experts with a primary focus on technical skills and performance metrics to embracing a more holistic approach. This new leadership style, often referred to as creative leadership, supports both the professional and personal development of team members and their (mental) well-being, fostering supportive and collaborative work environments and dynamics.
- Growing preference for talents with strong soft skills 'no asshole' hiring policy: There is an increasing emphasis on candidates who possess strong soft skills, even if their hard skills are somewhat less developed.

According to the participants, adaptability is central among these soft skills, encompassing dimensions such as team collaboration, flexible and proactive problem-solving, continuous and proactive skill development, client orientation, receptiveness to feedback, cultural competence, interdisciplinary communication, flexibility in managing overtime and work-life balance, creative inspiration from outside of work, willingness to relocate, and English language proficiency. Moreover, candidates need the adaptability to apply this set of core skills to meet the specific needs of different employers. This shift underscores the significance of interpersonal skills over technical skills when collaborating in interdisciplinary teams toward common goals. Adaptability, collaboration, and interpersonal abilities are increasingly crucial for success in these team-oriented environments.



EDUCATIONAL INSTITUTIONS:

- Shifting from traditional, modular theoretical approach to collaborative project-based learning: In this setting, students can apply their hard skills in simulated industry scenarios, often working with real clients and under the guidance of industry and educational experts. Simultaneously, they focus on developing and honing their soft skills.
- **Strengthen collaboration with the industry:** Educational institutions enhance connections between students and industry leaders from an early stage, facilitating the integration of the latest industry trends into education. This collaboration also fosters networking opportunities for both staff and students.
- Shifting from a traditional hierarchical model to self-directed learning: The educational approach is shifting from the traditional model, where the educational staff is perceived as the sole expert, to a self-directed learning paradigm. Here, educational staff act as coaches and mentors, guiding students along their individual learning paths. This shift allows greater flexibility for students to navigate diverse career paths within evolving industries, while also enabling both students and staff to promptly adapt to industry and technological advancements. In this approach, students are actively encouraged to:
 - Familiarise themselves with the industry landscape
 - Conduct critical self-assessments of their skills, ambitions, abilities, and work ethos in alignment with the diverse demands of various industry sectors
 - Set realistic career goals that align with their findings
 - Take initiative in identifying and establishing learning objectives tailored to these career goals
 - Identify specific learning needs based on their objectives
 - Source appropriate resources and methodologies to achieve these objectives
 - Adjust their objectives, goals, and methodologies as needed throughout the learning process.





Within this self-directed paradigm of education, staff are encouraged to:

- **facilitate learning:** guide students in getting to know the industry, and the many career opportunities in the traditional and non-traditional industry, help to critically self-assess the students' skills and ambitions in relation to demands of specific industry sectors and companies to find a realistic career goal within a specific industry sector, help them identify their learning needs, find resources, and design together with them personalised learning plans that align with their career goals.
- **mentor and advise students:** provide advice, support, and encouragement throughout the student's learning path. Share insights and experiences from their own industry background, and contacts to help students navigate challenges and make informed decisions.
- **provide resources:** assist students in finding and accessing necessary resources for learning. Connect them with relevant networks and create relevant collaborative learning experiences, such as group projects, and to enhance their learning experience and develop industry-specific soft skills while applying their hard skills in simulated industry scenarios.
- **give feedback and assess:** offer constructive feedback, teach students how not to take feedback personally, and help them see mistakes as opportunities for improvement on both personal and professional levels. As didactic experts, help students set up, evaluate, and adjust learning strategies.
- **motivate and encourage:** inspire students to stay committed to their learning goals, create activities to keep them enthusiastic and confident during challenging times, and help improve their work ethos and establish a healthy work-life balance. Develop a growth mindset, encouraging continuous learning and adaptation.
- **be an accountability partner:** hold students accountable for their progress, ensure they work with realistic deadlines and milestones, and help them remain focused and disciplined.
- support the development of essential skills within the specific role of educational institutions: support students by equipping them with essential skills, including critical thinking, problem-solving, time management, self-reflection, and activist skills. Foster growth in both personal and professional capacities.

While more and more educational institutions are adopting an industry-led educational approach, they are also careful not to embrace a purely industry-driven stance. Instead, they opt for a nuanced industry-led approach. This involves critical evaluation of curriculum changes and didactical methods to avoid blindly conforming to industry and job market demands. Such an approach aims to ensure that educational institutions maintain their core role focused on fostering students' personal development independently from immediate industry needs. This also requires that educations keep a long-term view, such as what will be the expectations in three-to-four years, i.e. at graduation, for students who start studying today.



STUDENTS:

- Trend towards appreciating collaborative work, learning environments, and peer networks: Students recognise that working on group projects provides valuable first work experiences. Besides participating in educational institution-initiated group work, they form learning communities with peers. Together, they collaborate on researching and sharing industry insights, job opportunities, and industry contacts, effectively saving time. They recognise their peers within educational institutions as their initial professional network, crucial for building industry connections and securing employment. Students appreciate peer feedback for personal skill development and actively seek international projects to gain experience in multicultural environments.
- Trend towards mental health awareness and a healthy work-life balance: In recent years, students have shown a growing awareness of mental health and have embraced the industry's evolving emphasis on healthier work practices. With widespread stories of burnout in the industry, students now often prioritise maintaining a healthy work-life balance and incorporate these principles into their education.

Overall, participants from all three parties expressed positivity about the general developments and trends in the industry, educational institutions, and student body. They observed all parties are striving towards a collaborative approach with shared goals.

However, participants also highlighted several mismatches and challenges among the three parties that are impeding progress towards industry and educational ideals. These challenges include ethical dilemmas and other obstacles that are slowing down or potentially hindering the achievement of these shared objectives. Some of the main challenges pointed out by the participants are:

- Questionable transparency in educational offerings: The increasing number of educational institutions has resulted in a wide array of study programs with varying qualities and skill sets, which are not always transparent to students or the industry. Combined with often generic applications from students, this makes it difficult for the industry to determine the level of graduates based on the educational institutions they come from. This lack of clarity can lead to exceptional talent being overlooked, as the industry may not have enough insight into the curriculum of these new educational institutions or may be dissatisfied with the curriculum or level of education provided. Furthermore, strong marketing efforts by educational institutions can mislead potential students into enrolling in programs that are not recognised by the industry or that make unrealistic promises about employability within a short period. This misalignment between some educational offerings and industry expectations can not only affect the students' career prospects but also complicate the industry's ability to find well-prepared, high-quality candidates, and can lead to an overall bad reputation of educational offerings.
- Extra pressure on students and educational staff to produce showcases: The increased competition among educational offerings can also lead to added pressure on both students and staff to produce marketing-worthy output. This output is used to attract future top talent and impress the industry, further intensifying the demands on students and educational institutions alike.



- Pre-selection role of educational institutions diminishes, adding extra pressure on students: The previous role of a handful of established and well-known educational institutions, in preselecting candidates through stringent intake procedures and specialised talent development offerings, has diminished. This shift places the burden of distinguishing oneself in a competitive job market onto the applicants themselves, increasing pressure on students and graduates in terms of time management and skill development. Simultaneously, industry professionals observe that the self-promotion and networking skills of young talent are often insufficient to stand out in the competitive job market, which can result in exceptional talent – even from top educational institutes – being overlooked.
- **Contradiction between industry expectations and job market demands:** Due to recent layoffs, many senior professionals are re-entering the job market, making it challenging for young talent to compete. Simultaneously, the increasing number of graduates, driven by growing interest in the industry and the proliferation of educational institutions offering game, animation, and VFX education, enter the job market each year. However, job opportunities are not expanding at the same rate.

This situation makes it difficult for young talent to enter the job market without the skills necessary to stand out in a competitive market, such as persistent networking, self-promotion activities and the presentation of excellent portfolios and reels. However, these skills diverge from those expected by the industry for 'ideal employees,' who are characterised as humble and adaptable team players.

The misalignment between industry expectations and the skills demanded by a competitive job market presents significant challenges and ethical dilemmas for both educational institutions and students who aim to meet both industry standards and job market realities. This dual focus often results in difficult time management issues for students and educational staff and creates a stressful academic environment. In an irony noted by the participants, these challenges contrast with the current trends in both industry and education, which emphasise promoting a healthy work-life balance from the outset to foster a sustainable workforce.





It also complicates the ability of educational programs to ensure employment after graduation and poses challenges for the industry in finding the 'perfect match' based on soft skills. When screening potential employees based on portfolios and reels from a flood of applicants, the industry often prioritises candidates with strong hard skills and a competitive demeanour. This emphasis can overshadow the crucial soft skills that are increasingly valued in today's workforce.

• **Ongoing contradictory demands from industry:** Next to the clear trend of the industry towards preferring humble, adaptable team players with strong soft skills, some segments of the industry still persistently demand highly skilled, determined, and passionate hard workers who do not complain or advocate for better working conditions.

This creates ethical dilemmas for educational institutions. On one hand, they could possibly ensure high employability for their students by producing such 'cannon fodder' for the industry (which would simultaneously also stand out in the competitive job market). On the other hand, this approach would not contribute to building a sustainable workforce, nor would it align with the current trends in both the industry and educational institutions. Educational institutions face the challenge of balancing immediate employability demands with the long-term goals of fostering a workforce that is adaptable, resilient, and capable of maintaining a healthy work-life balance.

• Educational staff perpetuating 'old ways of working': Internal factors have also been listed as making it difficult to follow the ideal outlined by industry and education. Educational staff who were socialised in the old-style working environment and (in games education) often exposed to toxic online game environments, continue to hold on to the traditional approach of preparing students to be rockstars or highly skilled talents ready to endure any hardship without complaining to secure their dream job in the industry. While these approaches are increasingly challenged by students and younger educational staff, they are reinforced by the persistent demand from some companies for this type of graduate and the skills needed to stand out in an over-saturated and competitive job market.

This situation perpetuates a dichotomy within educational institutions that is exacerbated by generational hierarchy issues. Senior staff members, who often hold entrenched views shaped by their experience in previous educational environments and industry practices, can hinder the adoption of new developments and methodologies proposed by younger, less experienced staff.





The generational gap can lead to resistance to change from senior staff, who may be more comfortable with traditional teaching methods and the approaches they were trained in. This resistance can impede the implementation of innovative educational strategies that are better aligned with current industry needs and educational trends, such as fostering adaptability, critical thinking, and collaboration.

- Self-sacrificing characteristics of (especially game) students: The journey towards creating healthier educational and workplace environments, especially in the games industry, is often further complicated by the self-sacrificing nature exhibited by some game students. They are driven by a strong passion and dedication to securing their dream jobs in top-tier companies, willing to prioritise career success above personal health and work-life balance. For many of these students, the industry and educational settings provide a refuge, offering a sense of belonging they may have lacked in earlier experiences, such as high school, where they may have faced exclusion and bullying. To maintain this newfound sense of community, they willingly commit themselves to rigorous workloads. Raised in toxic online gaming communities, they have become accustomed to harsh criticism, intense competition, and a culture that prioritises performance above all else, often at the expense of mental well-being, social balance, and inclusive attitudes. This background can influence their expectations and behaviours in educational and professional settings, perpetuating a cycle of high-pressure environments and self-neglect in pursuit of professional success.
- Extra level of stress, secret overworking, or premature self-limitation to maintain work-life balance: The increasing emphasis on mental health and achieving a healthy work-life balance within the games industry and educational institutions has introduced a complex dynamic for students and staff alike. While there's a strong push to manage workload effectively and maintain balance, many individuals grapple with the challenge of meeting diverse expectations without sacrificing personal well-being. This balancing act often leads to heightened stress levels, as the pressure to excel academically or professionally conflicts with the need for self-care and relaxation.

Some students opt to defy this trend, choosing to temporarily overwork themselves during their educational journey in the hope of later securing a competitive edge in the job market. They believe that enduring short-term stress will pay off with long-term career success, although this approach risks potential burnout. On the other hand, there are those who prioritise their health from the outset, recognising the importance of sustainable practices but potentially feeling disadvantaged in comparison to peers who push themselves harder.





Educational staff are increasingly concerned that some students might prematurely self-limit their efforts due to fears of burnout, despite potentially being capable of handling a bit more workload to advance their careers. This cautious approach reflects a broader sentiment among staff who observe varying levels of resilience and readiness among their students. They advocate for a more personalised approach to advising students on achieving a healthy work-life balance, recognising that each individual has different capacities and needs. Rather than applying blanket advice uniformly to all students, educational staff emphasise the importance of tailored guidance that considers the unique circumstances and ambitions of each student.

• Limited staff and student readiness to switch to self-directed learning: Transitioning from the traditional role of all-knowing experts, to becoming coaches and mentors in a self-directed learning environment, poses significant challenges for educational staff and students. Many experienced professionals in both industry and education may feel overqualified for this new role, viewing coaching as something anyone could do. Others may feel insecure and overwhelmed by the shift, unsure of how to effectively guide students in their individual learning trajectories.

Similarly, students who have grown accustomed to tightly structured learning paths in traditional educational settings frequently encounter challenges when transitioning to self-directed learning. Many question the purpose of attending an educational institution if they are expected to take on the primary responsibility for their own education. Moreover, adapting to a methodology that demands greater autonomy and self-accountability can be daunting for these students.

• Multiple approaches, demands, and tasks at the same time due to being in transition: Currently, educational institutions and students are grappling with the complex challenge of managing multiple priorities and accommodating diverse educational approaches simultaneously. This situation demands significant time and effort from both staff and students, often undermining efforts to achieve a healthy work-life balance. Students find themselves navigating a myriad of objectives: striving for excellence in individual skill development, engaging in networking activities, fully participating in group projects to enhance soft skills, maintaining a healthy work-life balance, and seeking out new hobbies for creative inspiration.

Meanwhile, educational staff are juggling their evolving coaching roles alongside traditional responsibilities. They are also tasked with constantly updating their own skills and knowledge, refining teaching content and methodologies, and perpetually adjusting complex curricula to align with the ever-changing demands of the industry. This demanding environment frequently leads to overwork and potential burnout for both staff and students alike.





Image credits: PANEURAMA Nxt Gen Lab, group photo

This report has identified interlinked dynamics between shifting physical and mental health priorities, professionalisation of the games industry, rapid technological advances, the influence of market and investor forces, and changing educational models. Students, educators, and the games, animation, and VFX industries are all navigating complex changes. Overall, there is a sense of optimism, embodied in trends such as predominant shifts away from 'rock star' employees to humble and collaborative colleagues, but issues of workload, stress, and high industry standards remain. Competitive and over-populated talent pools make it clear that, while hard-skill portfolios do still open doors, soft skills such as networking and engaging self-presentation are increasingly important to make graduates stand out for employers. New strategies to support these soft skills, such as group learning projects, are becoming common in educations, but each change has positives and negatives. All parties involved are working to find healthy and productive balances in fast-moving fields.

