"CDICAE - Collaboration to Design an Innovative Curriculum for Animation Education - 2017-1-TR01-KA203-046117 " project carried out by Republic of Turkey Ministry of EU Affairs, Education and Youth Programs Center Presidency and Erciyes University Faculty of Fine Arts, Visual Communication Design Department within the scope of the Collaboration for Innovation and Exchange of Good Practices within the framework of Strategic Partnerships for ERASMUS+ Program KA2 Higher Education Programs.

# A Framework; Defining Needs and Expectations Between the Labor Market and the Academy

(O1.)

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsi-ble for any use which may be made of the information contained therein."

"Erasmus+ Programı kapsamında Avrupa Komisyonu tarafından desteklenmektedir. Ancak burada yer alan görüşlerden Avrupa Komisyonu ve Türkiye Ulusal Ajansı sorumlu tutulamaz."

## 2.1.Introduction

In order to support universities with the further development of study programmes, the understanding of labor market is critical. It is a structural mechanism to assure that highereducation provision delivers the quality and skills needed on the labour market.

Education should be in a position to work autonomously, to acquire new knowledge and find solutions for new problems. Higher education should have the task to assist students to develop such abilities to be successful on the labour market.

The development of qualification frameworks is a recognised way to connect labour marketneeds and higher education provision. These frameworks have the potential to bringtogether the skill needs of employers, the educational programmes to prepare students withthese skills, and the information about the competencies needed for given occupations.

In many countries qualification frameworks are operative, most often established in closecollaboration with employers and/or professional organizations. Giving this information will help students make better informed decisions and contribute to raising quality.

The Framework includes the following;

- labor market needs/expectations
- course information
- employment and earnings outcomes/ salary data
- financial information of academies (such as fees, accommodation, etc)
- academy offers
- student satisfaction

In order to identify these information, CDICAE included surveys, researches and meetings with stakeholders in CDICAE partner countries: Belgium, Slovenia, Spain and Turkey. The main focus is put on Turkey due to the fact that the undergraduate programme to developed and piloted during the project life targets the opportunities on the labour market given to the undergraduate graduated students of animation in Turkey, specifically at Kayseri´s Erciyes University.

## 2.2. Labor market needs/expectations

The animation industry, as old as film itself, keeps fighting the misconceptions about it among the general public. Animation is an artistic tool to tell a story, whether a comedy, drama or documentary. Animation implies above average production periods and above average investment. To begin with, it is not unusual to spend more than three years in the development stage. In addition, crews are larger and the actual production takes much longer than that of non-animated films. Therefore, it is not surprising that it often takes more than a decade to see the first recoupments.

Despite the enormous differences from country to country, it can be said, as a general rule that the decrease of investment in animation by European broadcasters has forced producers to explore new sources of financing. Licensing and internet services have become more and more fundamental for the industry. Producers, broadcasters and distributors are now partners in the business of IPs and Brands rather than handling single titles. Successful programmes are expanded to become sagas, and the subsequent sequels add market value to the properties. The multiplier effect of online services is necessary to develop the brand's digital presence, thus to enlarge its commercial value.

### Animation production and distribution in Europe

- 14.7% of European admissions go to animation films.
- European animation only gets 20% of the animation market in Europe.
- A yearly average of 50 animation films produced in Europe.
- Russia, the UK and France accounting for more than half of the yearly average admissions to animation in Europe between 2010 and 2014.
- Of the 188 new animation films on release in the European Union in 2014, 107 were produced in the EU. However, the 44 American films on release accounted for most of the box office for animation that year.
- UK animation – with 53.5 million admissions abroad, tops the list when it comes to admissions abroad.
- From a total of 301 (plus an additional 40 HD simulcasts), 217 children channels are established in the European Union by US affiliates.
- In terms of TV production volume, France stands as the first European country with the highest number of TV animation hours produced, with 285 hours in 2015.
- The proportion of European works broadcast by European children channels seems to be linked to the dynamics of each national animation industry. UK or France children channels propose a high share of national animation.
- The proportion of European animation also strongly varies between European VOD paltforms. US (and sometimes Japan) are generally the first source of programming.

## 2.3. Market analysis

The demand for animation, VFX and gaming has expanded with the increase in targeted broadcasting hours by cable and satellite TV, availability of low cost internet access, penetration of mobile devices along with the growing popularity of streaming video. In addition, the demand for Animation and VFX content to power immersive experiences such as Augmented Reality and Virtual Reality is growing exponentially. The rapid advancement of technology has made animation, VFX & games available to the masses, and this industry has become one of the fastest growing segments in the global media and entertainment market. We are increasingly seeing more of the global animation, VFX and games production taking place in a globally distributed mode. Production work is becoming global with tax incentives, regional low labor costs and lower computing costs, which put pressure on companies to reduce costs and set up facilities in tax advantaged or low-cost regions. This is a model which is increasingly being tapped by content producers.

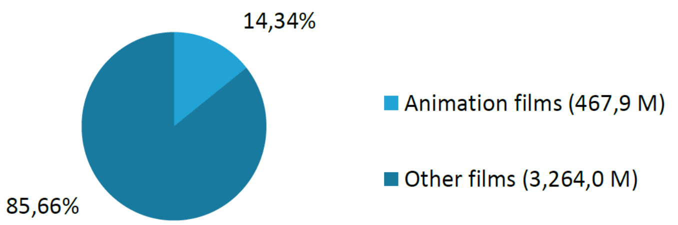
The European animation studios have started partnering with global players to produce animation content for Television. These alliances have resulted in content suited for local population. This is particularly seen in countries such as France, UK, Germany and Spain. The European animated feature film industry has still not achieved the popularity and global appeal of their American counterparts. International marketing is a key area for improvement for European animation studios. There are very few European films with trans-national success. This is partly due to the diverse cultural backgrounds. However, this is undergoing change with a small number of local European productions enjoying European and global success.

## MARKET SIZE

The total value of European animation industry was US$ 45.4 billion in 2017 and is projected to reach US$ 46.2 billion by 2020. The size of European video gaming industry was US$ 18 billion in 2017 and is projected to reach 19.5 billion by 2020. The total value of global animation industry was US$ 254 billion in 2017 and is projected to reach US$ 270 billion by 2020. The spend on special effects as a percent of production cost is about 20%-25%. The traditional form of content viewership is giving way to a sharp increase in streaming video consumption.

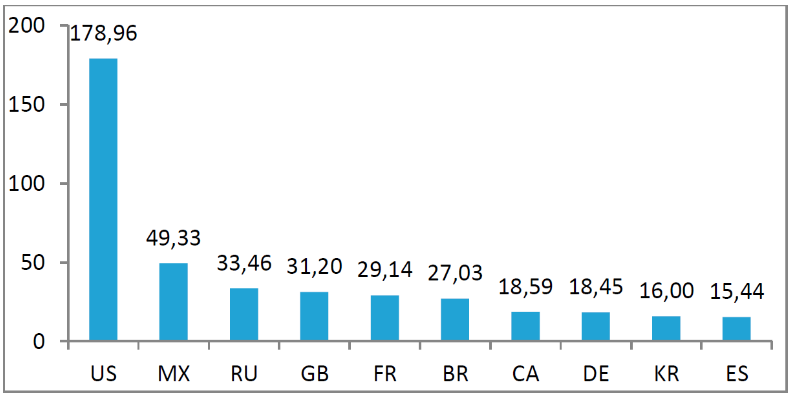
Worldwide the animation market share is represented in the Figure 1 including the data of the "Mapping the Animation Industry in Europe" study[1].

***1 Animation market share 2014***




*RENTRAK, OBS LUMIERE*

***2 Top 10 markets by admissions to animation films ● 2010-2014 average, in millions[2]***




*RENTRAX, OBS LUMIERE*

**Figure 1.** Worldwide Animation Market Share

[1]MAPPING THE ANIMATION INDUSTRY IN EUROPE. European Audiovisual Observatory (Council of Europe), Strasbourg, 2015

The Figure 2 represents the top production countries by volume of animation:

*3 Top production countries by volume of animation[3] ● 2010-2014 average*

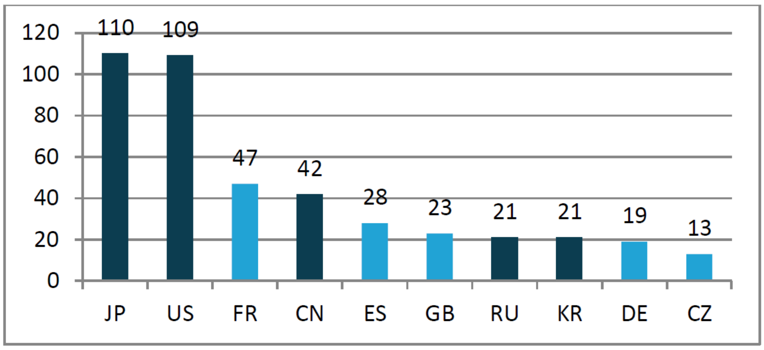



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**Figure 2.** Top production countries by volume of animation.

## European key figures

| | | | | |
|---|---|---|---|---|
| **Europe** | | | | |
| Population 2014[e] | 726 | million | | |
| Gross box office 2014 all films | 6 407,2 | M EUR | 8 517,0 | M USD |
| Admissions 2014 all films | 1 147 | million | | |
| Gross box office 2014 animation | 943,5 | M EUR | 1 254,2 | M USD |
| Admissions 2014 animation | 168,4 | million | | |
| Average admissions 2010-2014 animation | 179,8 | | | |
| Screens 2014 (digital screen penetration) | 34 773 | 84,65% | | |
| **EU** | | | | |
| Population 2014[e] | 507 | million | | |
| Gross box office 2014 all films | 5 327,7 | M EUR | 7 067 | M USD |
| Admissions 2014 all films | 909 | million | | |
| Gross box office 2014 animation | 754,3 | M EUR | 1 003,2 | M USD |
| Admissions 2014 animation | 128,7 | million | | |
| Average admissions 2010-2014 animation | 142,1 | million | | |
| Screens 2014 (digital screen penetration) | 29 395 | 85% | | |

*OBS LUMIERE*

**Figure 3.** European key figures.

Not surprisingly, the largest European markets were also the largest markets for animation in Europe, with Russia, the UK and France accounting for more than half of the yearly average admissions to animation in Europe between 2010 and 2014 (179.8 million). However, when it comes to the market share of animation in each country, smaller territories such as the three Baltic states, Slovakia and Slovenia stood out (see page 13) during the same period. In 2014, 14.7% of the overall European admissions went to animation films.

European animation films achieved most of their admissions outside the national markets. Only 36.3% were generated in the main country of production, compared with 50% in the case of European productions of all genres. Part of the explanation is to be found in their performance in non-national European markets, accounting for 29% of the total admissions to European animation (only 23.7% if we look at films of all genres). However, it is in non-European territories where the difference becomes more evident, with 34.8% of the admissions to European animation generated there compared to only 26.3% of those to European films of all genres.

This, along with the high number of average territories in which animation films were released finally proves that, in general, European animation performs better and has a wider circulation in foreign territories than non-animated films. Nonetheless, it is also true that there is an above average concentration of admissions in the world of animation; when it comes to non-national markets, the top 20 European animation films between 2010 and 2014 had 84% of the admissions (with only three GB inward investment productions accounting for slightly more than a third).

Not a single European production made it to the top 30 list of animation films in Europe by admissions, which was completely monopolised by American productions. In turn, only 8 European countries were represented as main producers in the top 30 list of European animation films by admissions in Europe, with only six titles getting more than five million admissions. *Arthur Christmas* and *Paddington* were the only two titles which, with close to the eight million admissions, topped the ranking.[2]

## Viewing Trends and New Formats

OTT channels like YouTube and others are seriously challenging traditional distribution channels. There is a drive to build community and viewership on these channels because audiences are shifting there. These channels are also changing user patterns and are part of the reason for the movement away from long and complex storytelling over 90-120 minutes to a shorter-form animation in the 2-20-minute range. The consumption patterns of children and young adults show that short-form animation is growing in importance. YouTube allows equal access to all content but involves additional production, marketing and branding costs in order to adapt formats and increase awareness. Thus, while it might be easy to be on YouTube, it is not easy to build a profitable business model.

## Talent and Skills

There is talent in Europe, but with the key players in the industry being outside Europe, talent is bound to seek opportunities outside Europe and once talented Europeans leave, it is harder to attract them back.

Europe and European animation studios need to be in a position to create the right conditions for talented individuals to return to open their own studios or else to work with existing studios on exciting projects, or else to find production houses to take on their projects.

There is also a skills gap which needs to be addressed. There is no specific data on the skills gap in Europe, but from anecdotal evidence, there may be a gap in specialist skills, for example storytelling. Initiatives such as industry-led courses or mentoring programmes targeting recent graduates could help bridge this gap.

Lifelong learning is a necessity today in most industries and the animation sector is no exception. While the skills needed to make animation have remained the same (storytelling, storyboarding, character design), professionals need to be constantly trained to adapt to and embrace new technologies, and translate them into new creative content or formats. This applies not only to students and professionals, but also to teachers. Moreover, it is essential to involve industryprofessionals in

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[2]OBS LUMIERE

education activities, as some programmes supported by MEDIA do, such as Animation Sans Frontières, Atelier Ludwigsburg-Paris, Cartoon Masters and La Poudrière.

## Short National Reports

In this deliverable we put our focus on the CDICAE partner countries: Belgium, Slovenia, Spain and Turkey in the following short national reports:

## Spain

Spain was the fifth largest market by admissions in the European Union in 2014 (87.4m), with an increase (+14%) for the first time after 10 years of decrease. Total gross earnings were €522.5m. For animation feature films, the 12,07m admissions represent 13.81% of total market share in 2014, which implies a decrease (-21%) from the 15.23% average market share for the period 2010- 2014. Animated feature production has dropped with only 5 films produced in 2012 (and in 2013), as compared to the peak of 9 films in 2011. On average, in the period 2010-2014 Spain produced 28 animation features for theatrical release, a yearly average of 5.6 films.

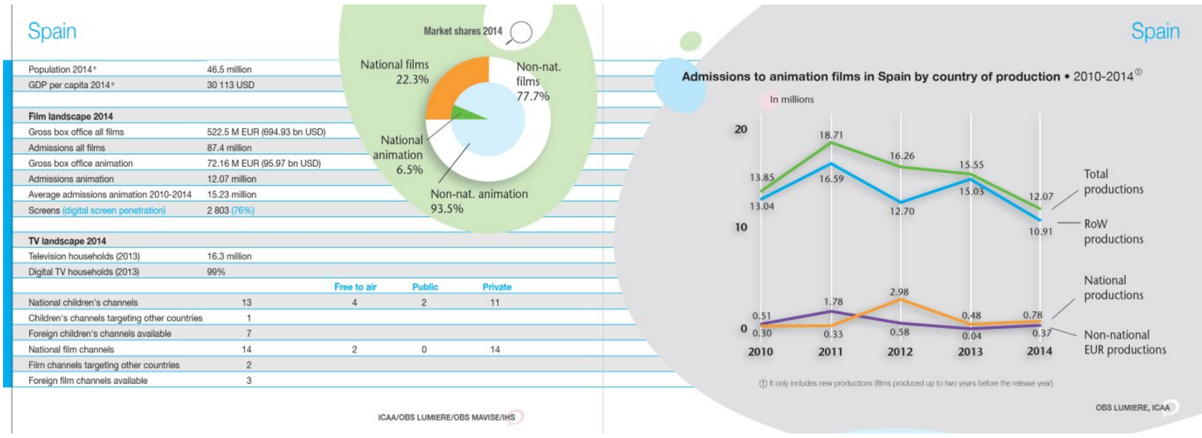



**Figure 4.** Spain Amination Production.

### *Short National Report regarding the competences needed by the companies in the animation sector in Spain*

The Public Employment Service (SEPE), through the Observatory of Occupations, conducts studies on the labor market focusing on knowledge of economic activities and occupations, as well as trends and employment prospects, to know which are the economic activities that have better employment prospects in the short and medium term.

This study has been prepared taking into account the key position of this sector in the Spanish economy, since the social and productive development of an advanced society is no longer conceived without the incorporation of information and communication technologies, which contribute to facilitate enormously the accomplishment of multiple business operations, industrial and services for the community in general in a more effective and efficient way.

Regarding employment, the study addresses the evolution of occupations and the new skills that will be required of workers, given that the vertiginous progress and complexity of these technologies are generating the need for new professionals to respond to the requirements from the market.

## Turkey

## 2.4. Employment and Earnings Results / Salary Data

Within the scope of the project, the survey data obtained from the interviews with the agencies were given by Bursa Eskişehir Bilecik Development Agency in 2017 in order to increase the national and international recognition and competitiveness of the animation industry in 41 regions of our country, especially in Eskişehir, and to draw attention to the sector potential in the region. It is seen that it overlaps with the numbers.

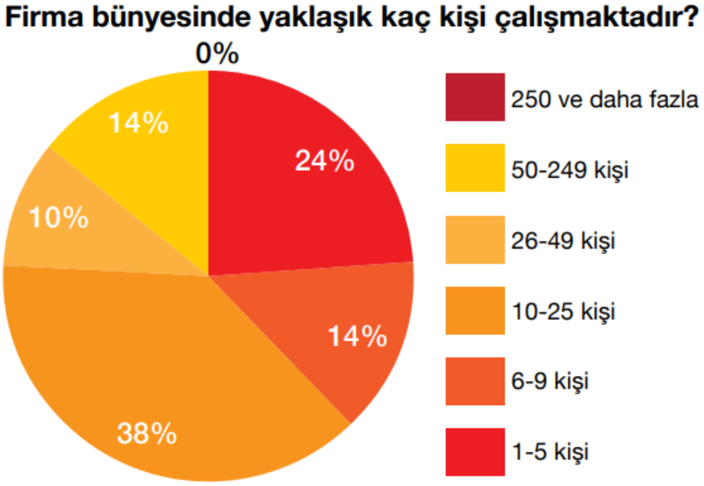



**Figure 5**. Percentage distribution of the number of employees within companies (BEBKA 2017).

In the light of these data, considering the number of employees of the animation sector serving in our country, it can be said that the vast majority are small or medium-sized companies.

**Table 1.** Numbers of employees working in Animation Studios.

| Firmanızdaki çalışanlarınızın mezun olduğu bölümlere göre kişi sayısı kaçtır? (Sadece sayı değeri giriniz) | |
|---|---|
| Seçenekler | Toplam Kişi Sayısı |
| Animasyon Bölümü | 106 |
| Grafik-Tasarım Bölümü | 38 |
| Endüstriyel Tasarım Bölümü | 14 |
| Mimarlık | |
| Heykel | 9 |
| Diğer Güzel Sanatlar Fakültesi Bölümleri | 45 |
| Mühendislik Bölümleri | 17 |
| Diğer | 111 |
| Toplam | 340 |

* Animation Sector Report (BEBKA, 2017, s.127).

While most of the university graduate staff employed by animation firms are graduates of animation and animation departments, graduates of graphic design and visual communication design take the second place. Accordingly, 31.1% of the total number of personnel employed in the companies consists of animation departments and 68.8% of other departments.

In the observations and interviews made with the companies, it was concluded that the biggest problem of the companies was experienced in finding qualified personnel, and they are not sufficiently prepared and equipped for the market, including graduates holding diplomas. Because the agencies emphasize that they prefer to work with graduated staff who have 3-4 years of market experience and that there are few qualified personnel in this number. At this point, some deficiencies or deficiencies in undergraduate education given in the field of animation can be mentioned.

### Salary Datas:

When we look at the numbers given in 2017 for BEBKA researches, it was observed that the project was coincided with the survey interviews with the studios. The studio representatives within the scope of the research were asked "Artist / designer salary amounts according to the departments they work at". Some studios did not want to provide answer information, while others agreed to provide information, provided that it was not published under the studio name. Since the interviewed companies do not allow the publishing of wage information, a detailed salary distribution table is provided here.

**Table 2.** Average Salary Levels of Employees in Animation Studios

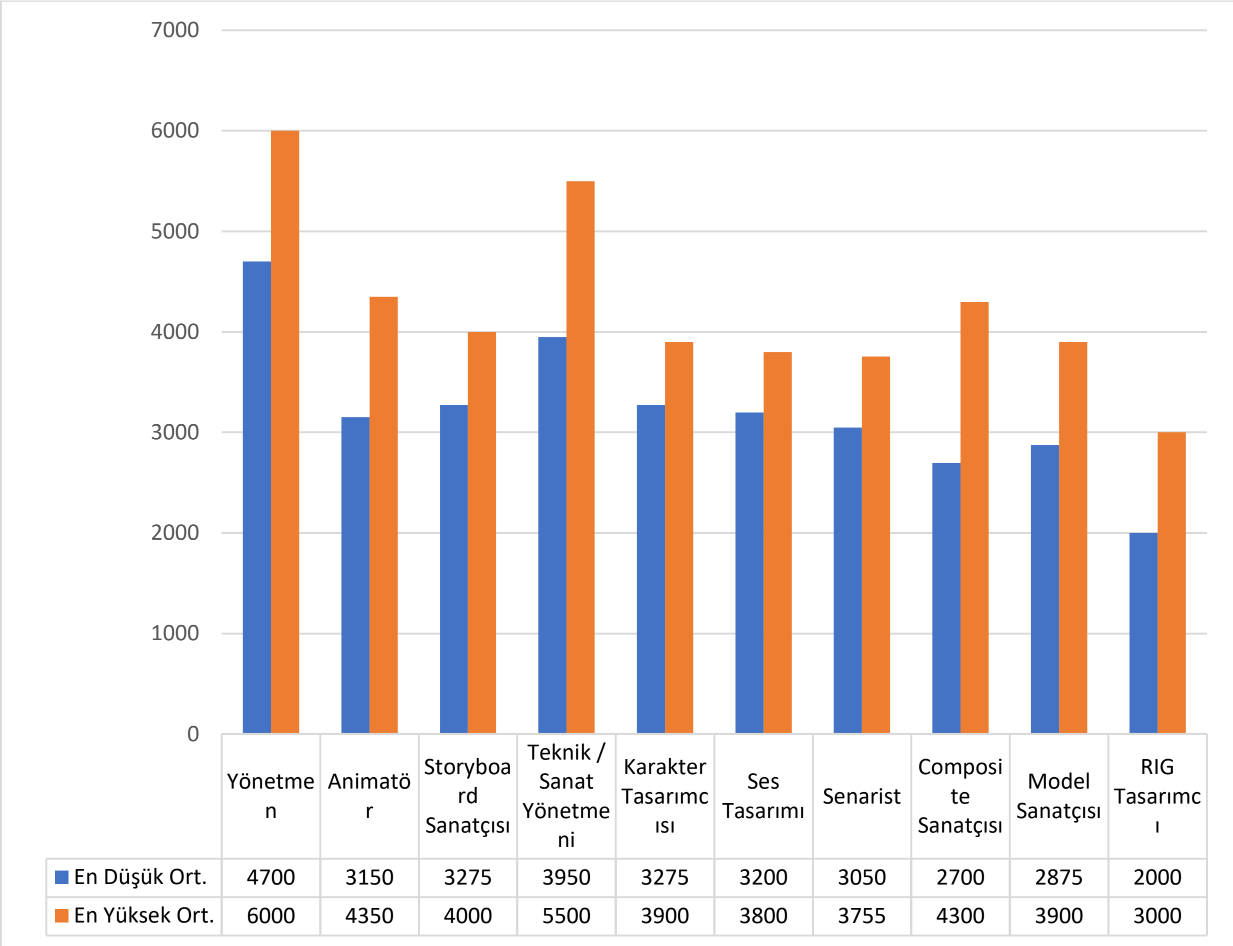
| Firmanızda sabit olarak çalışan personelinizin ortalama net maaş düzeyleri nedir? (TL) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Seçenekler | 0-1.000 | 1.001-2.000 | 2.001-3.000 | 3.001-4.000 | 4.001-5.000 | 5.000 ve üstü | Frekans |
| Öğrenci | 7 | 4 | 1 | 0 | 0 | 0 | 12 |
| Yeni Mezun (1-3 yıl) | 0 | 8 | 9 | 0 | 0 | 0 | 17 |
| Deneyimli (3-5 yıl) | 0 | 2 | 6 | 5 | 3 | 1 | 17 |
| Çok deneyimli (5+ yıl) | 0 | 2 | 2 | 2 | 4 | 4 | 14 |
| Diğer | | | | | | | 1 |
| | | | | | | Cevap veren firma sayısı | 18 |
| | | | | | | Cevap vermeyen firma sayısı | 4 |

* Animation Sector Report (BEBKA, 2017, s.133).

It is observed that the salaries given by the companies to their personnel vary according to the experience and skills of the employees. Accordingly, an average of up to 1.000 TL for students, between 1,000 TL and 3.000 TL for new graduates (1-3 years), experienced (3-5 years) staff, 2.000 TL and 5.000 TL, and highly experienced (5 + years) staff. It is observed that they pay salaries between 3.000 TL and 5.000 TL. Apart from these data, it is mentioned that they are subject to special remuneration in line with their individual abilities. According to the survey data, considering all experiences, it is understood that the average salary level is between 2.500 TL and 3.500 TL. "

Based on the survey data applied within the scope of the project, it can be said that parallel results were achieved proportionally with the BEBKA data. For the proportional difference in wages, it can be shown that the researches are done with an interval of one year. In Anken research, salary information of artists and designers was asked according to the departments in which they worked. Depending on whether you are a recent graduate or experienced, the lowest and highest amounts were investigated.

In addition, it is necessary to calculate the status of employees who receive wages per episode, such as Screenwriters, from other designers, based on the amounts they receive per episode. Some studios pay animators per minute, and the minute fee varies depending on whether they are new graduates or experienced. When the average of the studio data that makes this application is taken, it is seen that the minute fee varies between 725 - 1250 TL.




| | Yönetmen | Animatör | Storyboard Sanatçısı | Teknik / Sanat Yönetmeni | Karakter Tasarımcısı | Ses Tasarımı | Senarist | Composite Sanatçısı | Model Sanatçısı | RIG Tasarımcı |
|---|---|---|---|---|---|---|---|---|---|---|
| En Düşük Ort. | 4700 | 3150 | 3275 | 3950 | 3275 | 3200 | 3050 | 2700 | 2875 | 2000 |
| En Yüksek Ort. | 6000 | 4350 | 4000 | 5500 | 3900 | 3800 | 3755 | 4300 | 3900 | 3000 |

**Figure 6**. Average TL values of the lowest and highest salaries in companies according to departments.

When Figure 6 is examined, the departments with the most difference among less experienced and highly experienced employees are composite artist (1600TL), technical director (1550TL), director (1300TL), animator (1200TL) model artist (1025TL) and RIG (1000TL) designer respectively. It is seen that the highest salary averages in both less and more experienced employees belong to the director and technical director, while the lowest belongs to the RIG designer. Another important issue that arises in terms of pricing in questionnaires and interviews with animation studios is that there is a need for scriptwriting, rig designer, and specialized staff in modeling in the animation industry. It was stated by the studio representatives that people with these qualifications will be employed with high salaries and there is a serious need in the sector. As for the detailed research results related to this, 2.6. It can be accessed from the title.

In the answers given to the company officials about the questions regarding the freelance, they stated that they sometimes need to get outsourced in case the staff working with salary is insufficient. When Freelance wages were investigated, it was found that Freelance wages were approximately 1.5 times higher than permanent staff salaries. Percentage of freelance services in the studios is given in Figure 7.


**Figure 7**. Percentage of freelanced services in the studios.

## 2.5. Turkey Education Foundation University Fees

For the 2019-2020 academic year of the main foundation universities in our country, the annual fees of "Animation and Animation Departments" and "Graphic Design Departments" under the "Faculty of Fine Arts" or "Faculty of Art and Design" have been investigated from the websites of the relevant universities and given in Table 3.

**Table 3.** Turkey Foundation Universities 2019 - 2020 Annual Statement Fees

| Foundation University Name | Annual Training Fee |
|---|---|
| Atilim Üniversitesi, Tüm Fakülteler | 36.200 ₺ |
| Bahçeşehir Üniversitesi, Mimarlik ve Tasarim Fakültesi | 49.500₺ |
| Başkent Üniversitesi, Güzel Sanatlar Tasarim ve Mimarlik Fakültesi | 42.000₺ |
| Çankaya Üniversitesi, Tüm Fakülteler | 43.900₺ |
| Işik Üniversitesi ,Güzel Sanatlar Fakültesi | 42.816₺ |
| Istanbul Arel Üniversitesi, Güzel Sanatlar Fakültesi | 39.900₺ |
| Istanbul Kültür Üniversitesi, Sanat ve Tasarim Fakültesi | 41.250₺ |
| Istanbul Rumeli Üniversitesi, Sanat ve Tasarim Fakültesi | 37.900₺ |
| TOBB Üniversitesi ,Mimarlik ve Tasarim Fakültesi | 45.300₺ |
| Gedik üniversitesi, Güzel Sanatlar ve Mimarlik Fakültesi | 40.400₺ |
| Kadir Has Üniversitesi, Sanat ve Tasarim Fakültesi | 62.500₺ |
| Maltepe Üniversitesi, Güzel Sanatlar Fakültesi | 35.800₺ |
| Bilkent Üniversitesi, Sanat ve Tasarim Fakültesi | 14.500 ABD Dolari |

In the European Continent, when we look at the pricing for the citizens of the Union member countries, it is observed that the education fees in these areas vary between 3000euro and 10000euro on average, while in some European countries no fees are paid for undergraduate education. https://www.studyineurope.eu/tuition-fees

In the USA, wages are given as follows for the American citizens, when the transportation and other living expenses are also taken into account.

• $ 25,890 (state students / US citizen at a four-year public college)

• $ 41,950 (foreign students in a four-year public college)

• $ 52,500 (four-year private non-profit university)

https://www.topuniversities.com/student-info/student-finance/how-much-does-it-cost-study-us