



RESEARCH

Trends and skills' needs
in the **Audio Visual** &
Live Performances sectors

Report and Recommendations for **BG, GR, RO** and **UK**

RESEARCH

Trends and skills' needs in the Audio Visual & Live Performances sectors

Report and Recommendations for BG, GR, RO and UK

IME GSEVEE

Small Enterprises' Institute

Hellenic Confederation of Professionals, Craftsmen, and Merchants

Address: 46, Aristotelous Street, 10433 Athens

Tel: +30 210 8846852 / Fax: +30 210 8846853

E-mail: info@imegsevee.gr

www.imegsevee.gr

Title: Trends and skills' needs in the Audio Visual & Live Performances sectors;
Report and Recommendations for BG, GR, RO and UK

Publisher: IME GSEVEE

Publication Date: November 2018

Live Skills project number: 575425-EPP-1-2016-1-UK-EPPKA2-SSA

Contributors:

Author/Editor: Dr. Dimitris GIAKOULAS

Country research contributors:

Bulgaria: Dr. Vesela KAZASHKA - National High School of Stage and Film Design &
Academy of Music, Dance and Fine Arts - Plovdiv.

Dr. Momchil GEORGIEV - Secretary General of Bulgarian Association of
Employers in Culture (BAROK).

Greece: Dr. Vasilis AVDIKOS - Panteion University of Social and Political Sciences,
Department of Economic and Regional Development
(country report and scientific contribution on Chapter 3 "Literature Review")

Romania: Leonard Octavian PADURET - Manager, FAIR-MEDIASIND
Constantin POPOIU - Researcher, FAIR-MEDIASIND

Dr. Anda BECUT - The National Institute for Cultural Research and Trainin

UK: Erica ROSCOE - Research Manager Cultural Skills, The British Council
Dr. Thomas SCOTT - Belfast Metropolitan College
Glen MCMAHON - Belfast Metropolitan College

Original language: English

Designer: Yannis PANDIS

Reviewer: Katherine LAMBRAKIS

Photos: Shutterstock & Pexels

© 2018 IME GSEVEE. All rights reserved. Licensed to the European Union under conditions.



The "Research: Trends and skills' needs in the Audio Visual & Live Performances sectors;
Report and Recommendations for BG, GR, RO and UK" is licensed under a
Creative Commons Attribution—NonCommercial—ShareAlike 4.0 International License.
You are free to:

Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material

The licensor cannot revoke these freedoms as long as you follow the license terms.



Co-funded by the
Erasmus+ Programme
of the European Union

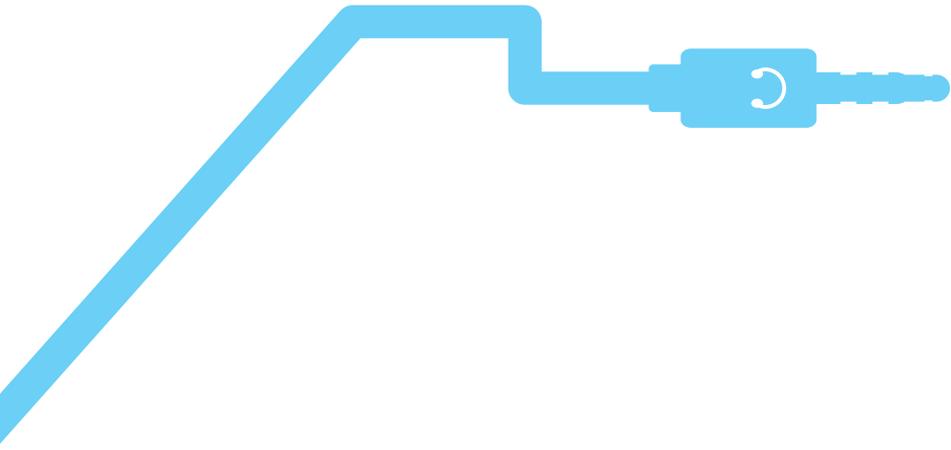


This report has been developed by IME GSEVEE within the framework of Live Skills Project (P.N: 575425-EPP-1-2016-1-UK-EPPKA2-SSA), funded by Erasmus + Programme, EACEA with support from the European Commission. This publication reflects the views only of the author, and the Commission or EACEA cannot be held responsible for any use which may be made of the information contained therein.

RESEARCH

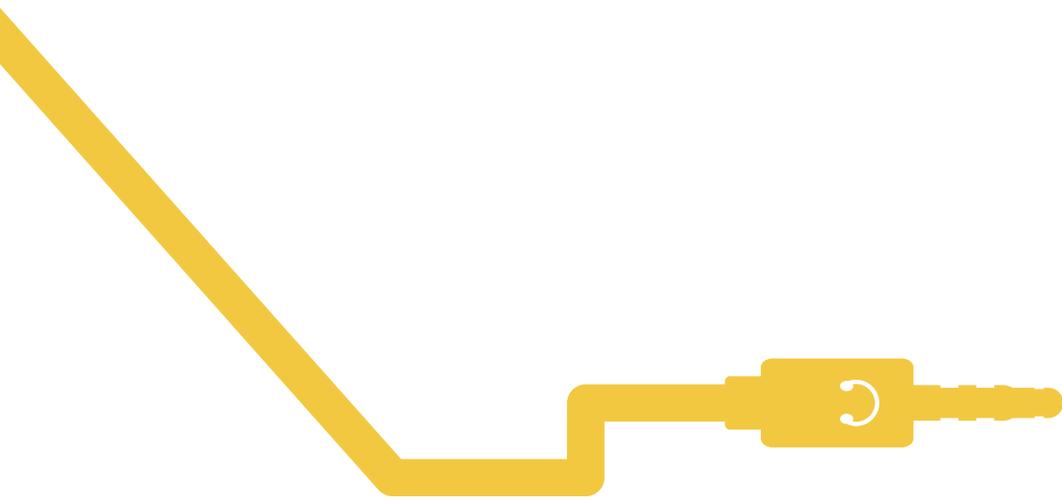
Trends and skills' needs in the **Audio Visual & Live Performances** sectors

Report and Recommendations for **BG, GR, RO** and **UK**

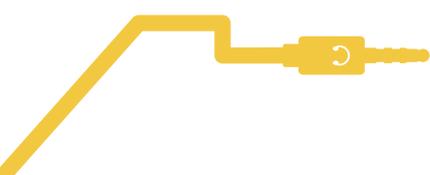


CONTENTS

	Executive Summary	8
1	Introduction	12
2	Methodology of the research	16
2.1	Building a common methodological framework for State of the Art and scoping analysis	19
2.2	Initial skills mapping and identifying common trends	19
	Classification of the two selected professions	22
2.3	Conducting country-specific validation of findings	24
2.4	Conducting Pan-European consultation	25
2.5	Analysing the findings and making recommendations	26
3	Literature Review	28
3.1	Introduction	30
3.2	Key figures for the Audio-visual and the Live Performance sectors	30
3.3	Trends in the creative and cultural industries	34
3.4	Trends, skills gaps and shortages in the Audio-visual and Live Performance sectors	37
3.5	Recommendations for the types of training for the curricula	45
4	Focus groups and interviews country-specific reports	48
4.1	Focus groups and interviews country-specific reports	50
4.2	Bulgaria	50
4.3	Greece	52
4.4	Romania	56
4.5	UK	58
5	Analytical results of the workforce survey	66
5.1	Demographics	68
5.2	Education and training	70
5.3	Income	73
5.4	Professional status	76
5.5	Level of satisfaction on their skills	78
5.6	Skills to be improved	79
6	Country specific conclusions and policy recommendations	84
7	EU specific conclusions and policy recommendations	94
	Bibliography	100



EXECUTIVE SUMMARY



Executive Summary

This is a report on the results of a research on trends and needs in entrepreneurial and digital skills in the professions of the Audio Visual and Live Performances subsectors.

The research is part of the “Live Skills” project funded under the Erasmus + SSA Programme. **For more information about the project please visit** <https://www.live-skills.eu/>

The aim of the “Live Skills” project is to tackle skills gaps in the Creative and Cultural Skills (CCS) and more specifically in AV and LP sectors by addressing market needs for digital, new technologies, arts management and entrepreneurship skills. Thus, to enhance the relevance of the initial and continuous Vocational Education and Training (VET) systems in four EU countries to sector-specific labour market demands.

In this context, we are conducting research into skills gaps in the audio-visual and live performance sectors.

In particular we are looking for skills in the areas of:

- A) Arts management
- B) Digital and new technologies
- C) Cultural entrepreneurship

This will lead to the development of three new innovative training courses for these sectors in Bulgaria, Romania, Greece and the UK.

In this respect, we will apply them in two specific professional categories that were selected under specific criteria, that of the sound manager and the film editor.

The research followed the triangulation method which including:

- desk research
- qualitative research conducted through focus groups and interviews
- quantitative research through an online questionnaire given to practitioners

The results show that the creative and cultural industries can act as drivers of growth in the local and national economies, but they have been heavily affected by the crisis and consequent state budget cuts. The impacts have been more intense in Greece, Bulgaria, and Romania than in the UK, where the industry is totally integrated into the market economy and holds a significant share of the economic activity.

There are some radical structural changes that are currently taking place in the cultural and creative industries. These changes refer to:

- the birth of new small enterprises, self-employed practitioners and collaborative schemes, as a consequence of the shutdown of big enterprises in the sector
- the rapid digitalization of the sector with the appearance and application of new technologies, as well as new forms of artistic and creative expression

All these transformations in the sector impose the development of t-shaped skills¹ of professionals and in particular of entrepreneurial and digital skills that our research has already identified. Specifically, in the field of arts management, arts financial management, project management and fundraising and grant writing, presentation and communication skills are top skills. In the field of digital and new technologies, understanding which new technologies are best for each purpose, marketing and audience development, digital art and design skills, social media - use of social networks and digital marketing are the most important skills, while in the field of cultural entrepreneurship, creativity, creativity-idea generation, strategy, innovation and planning, new business models, vision, negotiation and crisis management.

Considering current trends, policymakers and decision makers should undertake actions, such as:

- developing national strategies for the AV and LP
- establishing an industry-education/training forum that will bring together the demand and supply sides of skills development in the AV and LP sectors
- prioritizing the upskilling of experienced professionals already in the labour market with digital, new technologies, and social media skills
- strengthening the interlinkages between the learning processes and work-based learning opportunities
- deploying a detailed census across the industry in every country
- creating an online Pan-European professional learning network for freelancers, paid employees and employers, where these groups will exchange information about new jobs, new technologies, and they will network each other
- developing collaborative schemes, such as clusters, should be boosted through the establishment of creative hubs and coworking spaces in the CCI. ■

1. T-shaped skills describe specific attributes of workers. The vertical bar of the T refers to expert knowledge and experience in a particular area, while the top of the T refers to the ability to collaborate with experts in other disciplines and willingness to use the knowledge gained from this collaboration. A t-shaped person is someone with t-shaped skills.



1. INTRODUCTION





Introduction

This deliverable consists of the “Final Report and Recommendations”.

Its purpose is to provide key-actors in the field, policy-makers, career advice agencies, high-profile stakeholders and the E.C. with a coherent analysis of the research findings at country level and also of specific policy recommendations.

It includes four country-specific reports, which compile and analyse the findings that have derived from the country-specific interviews, focus groups, and on-line survey. The country reports give a snapshot of the country’s current state of play in skills gaps and shortages, as well as current training provision. The reports feed into the analysis of the overall study and are presented as distinct chapters in the final report.

The final report also presents the State-of-the-Art in training and learning methodologies for the AV & LP sectors in the participating countries and makes key-recommendations for VET providers, policy makers and other stakeholders involved in training and qualifications for the sector.

Specifically, this deliverable is the output of the task 2.5 **“Analysing the findings and making recommendations”**.

In this task, a thorough analysis of the findings has been conducted by IME GESVEE, in the form of a state of play report and, as well as specific recommendations in country and EU level. This deliverable constitutes the final report of the whole study, which encompasses the analysis of findings of all previous stages – desk research, consultation process, interviews, focus groups, and online survey.

The ultimate purpose of this analysis is to feed directly into the design of curricula, but also to be used as a valuable learning resource on its own for any interested audiences, to expand sectoral knowledge and to inform potential policy makers.

The research of the Live Skills project has been a rather challenging venture. It included desk research, qualitative and quantitative research. Especially, the implementation of the qualitative research by different partners in four countries has been the most difficult part.

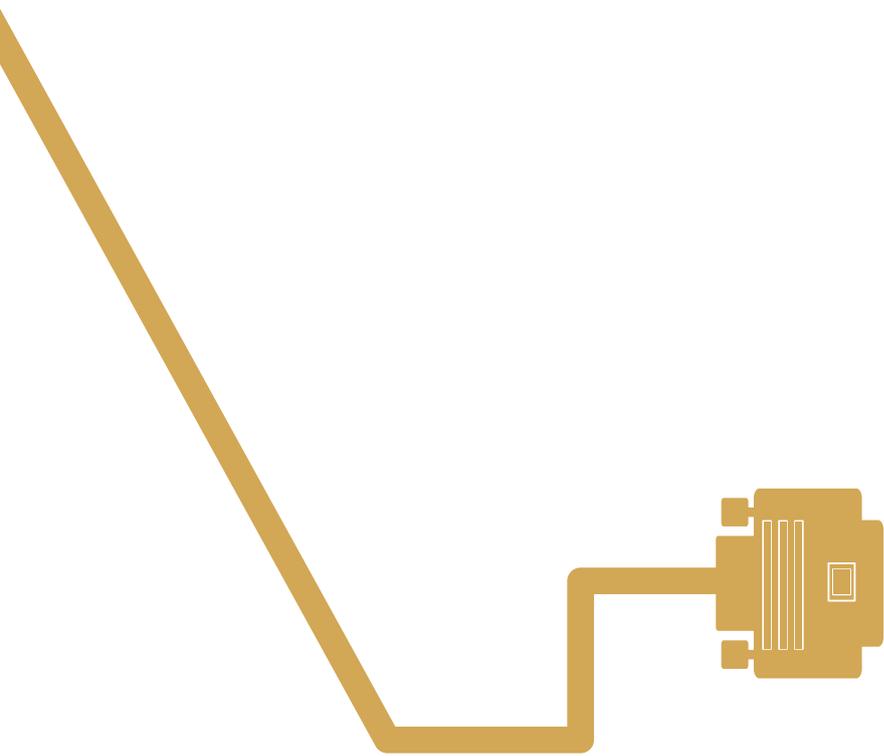


Despite the fact that a common framework was developed, keeping the predefined research procedures under control has not always been an easy task.

The greatest challenge and also limitation of the study has been how deep we should go into the investigation of profession-specific skills or remain at the level of horizontal (transversal) skills. The first choice would be in favour of scientific accuracy and the second in favour of the added value of the whole project.

In this respect, we decided to follow the second choice, considering the added value and the capitalisation of this project by other professions and subsectors of the Creative and Cultural Industries.

The actual outcome and output of the research has eventually been quite positive, since it has not only covered the initial target of unveiling the skills gaps in the selected professions, but it has gone further, providing broader informative insights into the Creative and Cultural Industries sector. ■



2. METHODOLOGY OF THE RESEARCH





2. Methodology of the research

In this section we present a brief report of the structure and implementation of WP2 **Scoping Analysis & State of the Art Review**.

The aim of WP2 is to identify skills shortages and respond to the demand for new skills in the AV and LP subsectors. WP2 is the first implementation-specific package in the row and its purpose is to feed the next two work packages that are about curricula development and delivery. It is composed of 5 tasks and 6 deliverables.

As the lead partner for this work package, IME GSEVEE was responsible for developing the framework of the research, coordinating the research activities and contribution of all the partners, and physically implementing the research activities in Greece.

In this context, IME GSEVEE organised research into skills gaps in the audio-visual and live performance sectors in four countries. In particular the research gaps refer to the areas of:

- A) Arts management
- B) Digital and new technologies
- C) Cultural entrepreneurship

The results of this survey will subsequently lead to the development of three new innovative training courses for these sectors in Bulgaria, Romania, Greece, and the UK.

In particular research tasks comprising WP2 include:

- desk research on the state of the art analysis within the field that will be conducted by IME GSEVEE with feedback from the consortium
- qualitative research that will be conducted in four countries
- quantitative research that will be deployed through an online questionnaire
- consultation with pan European stakeholder organisations

The tangible outputs of this research are:

- a skills needs analysis for the two professions (Skills Chart) that will feed the design of the curricula
- a compilation of selected cases and basic practices (online toolkit)
- a final report of the research that will include our findings and recommendations (current document)

In the following pages, we provide a brief description of the specific tasks our research comprised.

2.1 Building a common methodological framework for State of the Art and scoping analysis.

The aim of this task was to provide to the partners with a manual (harmonised framework for the scoping study) regarding the implementation of the WP and also to equip them with all necessary tools in order to conduct the scoping study in their respective countries. This manual was developed by IME GSEVEE and disseminated to the partners prior to the beginning of the research.

Specifically, this manual includes:

- Summary of WP2
- Research method
- Analysis of every task of WP2 individually
- The human resources required from every partner for the implementation of the WP
- Analytical description of specific assignments and milestones per partner
- Instructions for the Focus Groups and Interviews
- Forms and templates to be used in the Focus Groups and Interviews

2.2 Initial skills mapping and identifying common trends

This task has been a desk research of the relevant literature which helped us

- Map the emerging trends in skills in the Creative and Cultural Industries
- review the basic literature around new trends and skills gaps of the Audio-visual and the Live Performance² subsectors in the creative economies of Bulgaria, Greece, Romania, and the UK

We started our literature review by studying the available reports and studies, along with those already proposed by the British Council. We also asked our partners to suggest any relevant studies regarding their countries.

² AV covers: film, broadcasting (television and radio), video, live theatre, and multimedia industries - LP: performing arts (theatre, dance, music, opera), festivals, operation of performing arts venues and facilities

The desk research was mainly based on a wealth of resources that have been explored. Some focal points of the resources were:

- The recent British Council research examining skills gaps in the cultural sector across four European countries (2014)
- The various reports published in the last five years by Creative Skillset and Creative and Cultural Skills (the 2 Skills Councils in the UK in the creative and cultural sector)
- The 3 thematic reports produced by Creative Skills Europe looking at the changing operating and employment environments in Europe in the AV & LP sectors and their impact on skills needs The relevant Skills Panorama/ CEDEFOP resources on the assessment and anticipation of skills needs for the arts and entertainment sector
- The various EC commissioned reports and studies on the growth, potential, trends, challenges, and needs of the Creative and Cultural sector

By studying this material, we drew up a separate deliverable called "Summary of desk research". It includes a review of the basic literature around the new trends and skills gaps of the AV and the LP sectors in the creative economies of Bulgaria, Greece, Romania, and the UK.

Apart from the summary of desk research, a list of skills was identified through the literature review, along with a list of professions drafted by the consortium during the drawing up of the proposal.

The criteria for selecting the professions at this early stage have been:

- the existence of comparable definitions in current statistical categories
- the existence of the professions in the apprenticeship system of various countries
- the potential for transferability of the curricula
- the popularity of the specific professions
- the necessity for implementing modern educational practices
- the prospects of the specific sectors in the related markets to contribute to individuals' employability

From these two sources, we were able to create a wide list of professions and sent it back to the consortium, asking them to select those they considered most important and also suggest new ones in case their choice did not correspond to this list (following some predefined criteria).

The selected professions were aligned taking into consideration the criteria below.

- The professions should relate to the AV and LP
- The professions should be certified in the respective partner's country (fall within certified national occupational profiles)
- The professions should be linked with specific learning outcomes/ performance indicators
- There has to be a current or future labour market and sector need for the professions suggested. This need should be proven by results of studies or reports or analyses regarding labour market and employment trends in the creative and culture sector of the country in question
- There should equally be a vivid and pronounced interest from students in these professions in the respective partner's country
- Ideally, the suggested professions should incorporate/ relate to a great deal of transversal and portable skills across a range of related professions
- Ideally, the suggested professions should have a broad scope of application from one sub-sector to another – cutting across different arts forms and disciplines within the broader AV & LP sector



As a result, through this procedure, a list of **22 most relevant professions** had been drafted.

Table 1. List of selected professions	
Dance instructor /Dancer of multicultural dances” and “Teacher of social & multicultural dances”	Sound Recorder
Light Designer	Theatre Puppet Designer
Lighting Manager	Make-up and Wig Designer
Animation/ 3D Animator	Theatre Scenery Designer
Filming	Technical theatre staff
Film Editor/ Video & Film Editor	Costume Designer/ Theatre Costume Designer
Camera Operator	Production Assistant
Stage manager	Artistic Director
Sound Designer	Show (performance) organizer
Sound Manager	Graphics designer
Sound Engineer	Multimedia specialist

On the basis of the standards of our proposal, we then had to shortlist two specific professions using the condition of the existence of certification in the four countries of the consortium. The main rationale behind this limitation has been the fact that this research will lead to the development of profession specific curricula across the four countries.

To this end, we sent a questionnaire to the partners, asking them to identify which of these professions was already certified in their respective country. We then compiled their answers to see if there was alignment in certain professions.

The first profession is **film editor** from the AV subsector, which is certified in all four countries.

Given that there was no other profession certified in all four countries, we had to adopt the minimum criterion, which was that the selected professions had to be certified at least in Greece and the UK. In this respect, we came up with the second profession of the **sound manager**. To validate the selection process of these two professions, a special task force was formed with the aim to develop a special methodological note, in order to highlight and support the selection. An abstract of the content of this methodological note is presented below.

Classification of the two selected professions.

The classifications widely accepted in the EU are NACE³ for classifying economic activities and ISCO/ESCO⁴ for classifying professions. NACE codes are commonly used for categorising firms and ESCO codes for categorising professionals.

Statistical Classification of Economic Activities in the European Community, commonly referred to as NACE (for the French term “nomenclature statistique des activités économiques dans la Communauté Européenne”) is a four-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment, and national accounts) and in other statistical domains developed within the European statistical system (ESS).

ESCO is the multilingual classification of European Skills, Competences, Qualifications and Occupations. ESCO is composed of modules that contain elements, such as occupations, knowledge, skills and competences, qualifications, and the International Standard Classification of Occupations (ISCO) hierarchy, which is a four-level classification of occupation groups managed by the International Labour Organisation (ILO). When combined and inter-related, these modules make up the whole classification.

The ESCO classification identifies and categorises skills, competences, qualifications and occupations relevant for the EU labour market and education and training. It systematically shows the relationships between the different concepts. ESCO is an important deliverable supporting the Europe 2020 strategy and the New Skills Agenda for Europe.

NACE classification

The activity of Film/ video editing falls within code **5912 “Motion picture, video and television programme post-production activities”**. These activities include:

Animation and special effects, cinematographic film colouring developing printing or repairing, developing and processing motion picture film, film cutting activities, film sound track dubbing and synchronisation, film title printing, motion picture film laboratories activities, motion pictures post production activities, stock footage film libraries activities, television post production activities, video post-production activities, editing, film/ tape transfers, tilting, subtitling, credits, closed captioning, computer-produced graphics activities of special laboratories for animated films activities.

The activity of sound engineering/ recording / managing falls within **code 5920 “Sound recording and music publishing activities Sound recording and music publishing activities”**. These activities include:

-
- 3 The Statistical classification of economic activities in the European Community, abbreviated as NACE, is the classification of economic activities in the European Union (EU); the term NACE is derived from the French Nomenclature statistique des Activités économiques dans la Communauté Européenne.
 - 4 The International Standard Classification of Occupations (ISCO) is a four-level classification of occupation groups managed by the International Labour Organisation (ILO). Its structure follows grouping by education level. / The European Skills/ Competences, Qualifications and Occupations (ESCO) is a multilingual classification, which identifies and categorises skills, competences, qualifications and occupations relevant to the EU labour market and education. In ESCO, each occupation is mapped exactly to one ISCO-08 code. ISCO-08 can therefore be used as an hierarchical structure for the occupations pillar

CD publishing, copyright collecting society, compact discs publishing, copyright acquisition and registration for musical compositions, DVD publishing, gramophone record publishing, matrices for record production, music downloads (online publishing with provision of downloadable content), printed music publishing, printing of sound tracks, production of tapes and CDs, publishing of music and sheet books, radio programmes production, recording studio (radio and television), releasing, promoting and distributing sound recordings, sound recording publishing, sound recording studio activities, tapes with music or sound publishing, copyright services (except motion picture), taped radio programming production.

ESCO/ISCO classification

Both professions of **Sound Engineer** and **Film/ Video Editor** fall within profession **3521** of **ISCO-08 “Broadcasting and Audio-visual Technicians”**.

Broadcasting and audio-visual technicians control technical functioning of equipment to record and edit images and sound and transmitting radio and television broadcasts of images and sounds, as well as other types of telecommunication signals on land, sea or in aircraft.

Tasks related to Broadcasting and Audio-visual Technicians professions include:

Controlling equipment to record sound, controlling equipment to edit and mix image and sound recordings to ensure satisfactory quality and to create special image and sound effects, applying knowledge of principles and practices of image and sound recording and editing in order to identify and solve problems, controlling transmitting and broadcast systems and satellite systems for radio and television programmes, controlling radio communications systems, satellite services and multiplex systems on land, sea or in aircraft, applying knowledge of principles and practices of broadcasting, telecommunications terminals and transmissions systems in order to identify and solve problems, making emergency repairs to equipment.

Examples of the occupations here classified are: audio-visual operator, broadcasting equipment operator, broadcasting technician, camera operator (motion picture), camera operator (video), production assistant (media), sound artist, sound designer, sound editor, sound operator, video operator, video technician, audio-visual technician, recording studio technician, etc.



2.3 Conducting country-specific validation of findings

This has been our core task and it included a field research in order to further look into the professions and skills already compiled through the previous task.

This task was a skills needs analysis and was implemented through:

- focus groups and interviews in each country
- an online workforce survey. At the beginning a National Stakeholders' Committee was set up in each country. Their work was to have an active role in the project and specifically to participate in the focus groups

The participants in these committees have been defined through a joined-up approach of cooperation between the VET providers and the social partners in every country. In this respect, at the beginning of this task these committees were formed by the partners in their respective countries.

In general, the National Stakeholders' Committees will be composed of:

- Organisations covering horizontally the field of cultural and creative sector and also the Audio Visual and Live Performances subsectors in all countries (sector skills councils, ministries of culture, etc)
- Organisations and practitioners covering vertically the professions or professions' categories (unions, experienced practitioners, etc.)

After the National Stakeholders' Committees were finalised, the social partners (IME GSEVEE, BAROK and the NIRCT), along with the British Council, started the implementation of the focus groups and interviews sessions in all four countries, using our method and tools provided in the harmonised framework of the scoping analysis.

In particular at least 3 semi-structured interviews and 2 focus groups were implemented in every respective country.

These sessions took place in May 2017 and once completed by the partners, their findings were delivered to **IME GSEVEE** under a report that resulted into specific skills that are important and skills that are in shortage, along with their findings about the trends of the sector in the respective countries. The results of these reports were also used to feed the online workforce survey that followed.

We used an online questionnaire platform (jotforms) for the construction and dissemination of the questionnaire that was addressed to practitioners of the sound management and film editing broader professional categories or related professions.

The online questionnaire was launched on 13.7.2017 and remained accessible until 31.12.2017.

All partners were involved in the dissemination, by contacting relevant practitioners and organisations directly or through their networks

The direct result of this task had been the construction of a separate deliverable, the "skills chart". Its purpose is to interpret, identify, and document trends and skills needs that will be the foundations for the next work package – curricula design. The skills chart in particular will produce a map of the general occupational (or qualifications) standards that are actually needed or missing from the sector and it will identify the relevant curricula in the participating countries.



It includes:

- a short methodological introduction
- a brief summary of the literature review
- the results of the focus groups and interviews on the skills gaps per country
- the results of the online survey on skills per country and in total

The drawing up of skills chart started in September of 2017 and its final version was delivered on 22.12.2017.

2.4 Conducting Pan-European consultation

The aim of this task is twofold:

- The first is to have some additional feedback on the skills (especially future skills) Thus, it will also provide feedback to the previous task of country-specific validation of findings; and
- The second is to compile some best practices in order to develop a separate deliverable called “e-learning toolkit”

This task has been mainly implemented through an online questionnaire and partially through telephone and skype calls.

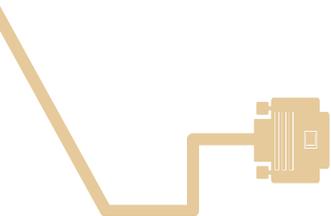
We started this task by asking our partners to suggest us European-wide organisations that should be involved in the Pan-European consultation. We examined their suggestions and created a list of about 30 European stakeholders’ organisations.

In parallel, we developed an online questionnaire that was disseminated to these organisations. With this questionnaire we asked them about upcoming trends in the cultural sector and specifically about future skills. We also asked them to indicate best practices and selected cases of professionals and educational processes.

Additionally, we made some phone calls and skype meetings with selected stakeholders in order to have an even deeper and more qualitative aspect of the subject.

This task has been rather efficient, since we managed to compile more than 20 selected cases that comprised a separate deliverable, the “online toolkit”.

The purpose of the “e-learning toolkit” is to collect best practices and selected case studies addressing policy makers, governmental agencies, businesses, and employers in the AV & LP sectors and education providers.



In particular, we have been looking for best practices and selected cases of:

- Professionals within the creative sector, who have successfully developed and used management, digital and entrepreneurial skills within their work
- Educational processes on the creative sector (e.g. training curricula) across Europe
- Similar projects with great impact

It is obvious that this deliverable had a strong educational character (as all deliverables of this WP), having as potential users/ audiences the whole cultural field, encompassing actors in culture and education and facilitating the interplay between education, culture and civic society.

2.5 Analysing the findings and making recommendations

This aim of this task is to provide a thorough analysis of the findings of the preceded research (desk research and consultation process, interviews, focus groups and online survey), as well as specific recommendations for policy-makers and stakeholders.

In this context a separate deliverable in the form of a state-of-play report was produced (current document).

The final purpose of this report is to feed directly into the design of curricula, but also to be used as a valuable learning resource on its own for any interested audiences, to expand sectoral knowledge and to feed potential policy.

It is worth mentioning that the whole research task was targeted into two specific professions and their wider professional categories. These professions have been identified as:

- film/video editor
- sound manager

The reason for selecting two specific professions is because the curricula that will be developed will have to be piloted in specific professions. ■

Table 2. An overview of the overall structure of Live Skills and WP2

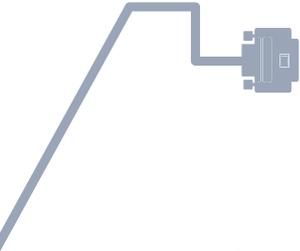
Table 2. An overview of the overall structure of Live Skills and WP2		
Live Skills Work Packages	TASKS	DELIVERABLES - WP2
WP1 Project management	2.1 Building a common methodological framework for State of the Art and scoping analysis	Harmonized framework for the scoping analysis <ul style="list-style-type: none"> → principles, aims and objectives → analysis of the agreed methodology → research target groups → templates of questionnaires, → framework of interviews conduct, → number and criteria for case study selection and scoping → study expected outcomes
WP2 Scoping Analysis & State of the Art Review	2.2 Initial skills mapping and identifying common trends	
WP3 Core curricula design / Implementation	2.3 Conducting countries specific validation of findings	F2F interviews and focus groups with the National Stakeholder Committee x 4 countries a set of minimum 3 in depth, semi-structured qualitative interviews <ul style="list-style-type: none"> → 2 focus group discussions on the identification and interpretation of skills needs and competences in the targeted sectors will take place in each country between M5 and M6
WP4 Curricula Delivery / Implementation		On line workforce survey <ul style="list-style-type: none"> → online survey targeting specifically current and aspiring workforce of the sector will be conducted in each country → a minimum of 100 professionals working or aspiring to work (graduates including) in the AV& LP sectors will be targeted.
WP5 Quality Assurance		Skills Chart <ul style="list-style-type: none"> → Skills Chart that will focus on interpreting identified and documenting trends and skills needs and formulating recommendations for improved professional training schemes in alignment to national and European qualification frameworks in the participating countries.
WP6 Evaluation	2.4 Conducting pan European consultation	E- learning kit <ul style="list-style-type: none"> → a learning toolkit for policy makers, governmental agencies, businesses and employers in the AV & LP sectors and education providers.
WP7 Dissemination and Communication	2.5 Analyzing the findings and making recommendations	Final report and recommendations n electronic report including 4 country specific reports which will compile and analyse the findings that will have derived from the country specific interviews, focus groups and on line survey.
WP8 Exploitation and Sustainability		



LS live skills
Image Sound & Performance

3. LITERATURE REVIEW





3.1 Introduction

The following pages attempt to review the basic literature around the new trends and skills gaps of the Audio-visual (hereafter AV) and the Live Performance (hereafter LP) sectors in the creative economies of Bulgaria, Greece, Romania, and the UK.

Nowadays, the creative and cultural industries play an increasingly important role in the growth of national and regional economies. In the European Union, approximately 1.5 million cultural and creative businesses have a turnover of around 650 billion euro and employ more than 8 million workers. CCIs have positive effects on GDP and employment, improve competitiveness and help localities and regions revitalise their economies and attract more investments, new businesses, and skilled labour.

However, recent research and policy reports highlight the skills gaps and shortages of the workforce in the cultural and creative sectors. Moreover, the new trends that have emerged during the last decade, due to the digitalisation of the world economy, put some considerable barriers to the business environment of the creative economy. Especially, given that the vast majority of the creative businesses are micro and small enterprises (up to 9 employees).

The following section (section 2) provides an overview of the economy of AV and LP sectors in all four countries, using comparable statistics (Eurostat) for the number of enterprises, the value added, and the number of persons employed from 2008 to 2014. Section 3 highlights some trends that have emerged due to the digitalisation of the economy and which affect the CCI, while section 4 discusses the literature on skills gaps and shortages in the creative economy in general, and in more details for the AV and LP sectors in the four countries. Finally, section 5 provides an initial set of recommendations for the design of the curricula for two professions in the AV and LP sectors.

3.2 Key figures for the Audio-visual and the Live Performance sectors

In order to sketch the economy of the AV and the LP sectors in all four countries, we have elaborated statistical data from Eurostat for the following statistical codes:

- AV sector: NACE 59 “Motion picture, video and television programme production, sound recording, and music publishing activities” and 74.2 “Photographic activities”
- LP sector: NACE 90 “Creative, arts and entertainment activities”

And for three economic variables, that is:

- Number of enterprises
- Value added at factor cost; and
- Number of persons employed

As you may see in **table 3**, the AV sector in the four countries comprises 41,575 enterprises that employ 172,497 employees, while their Value added is approximately 9.5 billion euro. The economic crisis seems to have severely affected the AV sector in Greece and Romania, since these two countries have lost almost 8,200 employees and 1.450 enterprises and about half of their Value Added between 2008 and 2014. On the other hand, Bulgaria seems to be in a process of catching-up with the rest of the EU, as all three variables have rapidly developed between 2008 and 2014, while the UK, as one of the leaders in the European AV market, has seen a considerable growth in the number of enterprises (27%) that doubled the Value Added of the sector.

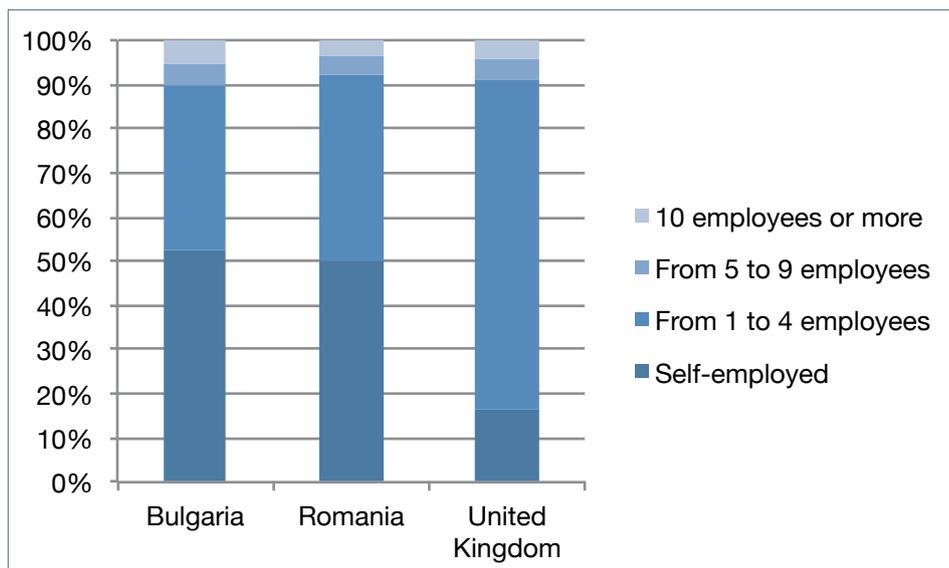
Table 3. Data for the “Motion picture, video and television programme production, sound recording, music publishing activities and photography” sectors, 2008 and 2014									
	Number of enterprises			Value added at factor cost			Number of persons employed		
	2008	2014	2008/14 change	2008	2014	2008/14 change	2008	2014	2008/14 change
Bulgaria	1,082	1,719	58.9%	31.8	56.0	76.1%	3,651	5,004	37.1%
Greece	5,947	4,957	-16.6%	475.9	208.2	-56.3%	13,889	9,746	-29.8%
Romania	3,359	2,899	-13.7%	207.6	149.3	-28.1%	12,430	8,444	-32.1%
United Kingdom	23,608	29,986	27.0%	3,469.6	7,029.0	102.6%	142,347	147,289	3.5%
Total	36,004	41,575	15.5%	6,193	9,457	52.7%	174,325	172,497	-1.0%

Source: data from Eurostat

Table 4. Number of persons employed in the “Creative, arts and entertainment activities sector”, 2008 and 2014 (in thousands)			
	Number of persons employed		
	2008	2015	2008/15 change
Bulgaria	14.9	12.2	-18.1%
Greece	12.6	9.6	-23.8%
Romania	14.9	16.9	13.4%
United Kingdom	163.2	205.7	26.0%
Total	206	244	18.9%

A look at **figure 1** reveals that the majority of the enterprises in the AV sector are micro and small enterprises, while about half of the enterprises in Bulgaria and Romania are self-employed persons with no employees. Especially in the UK, we can see that the majority of enterprises in the AV sector employ one to four employees (73%) in 2014.

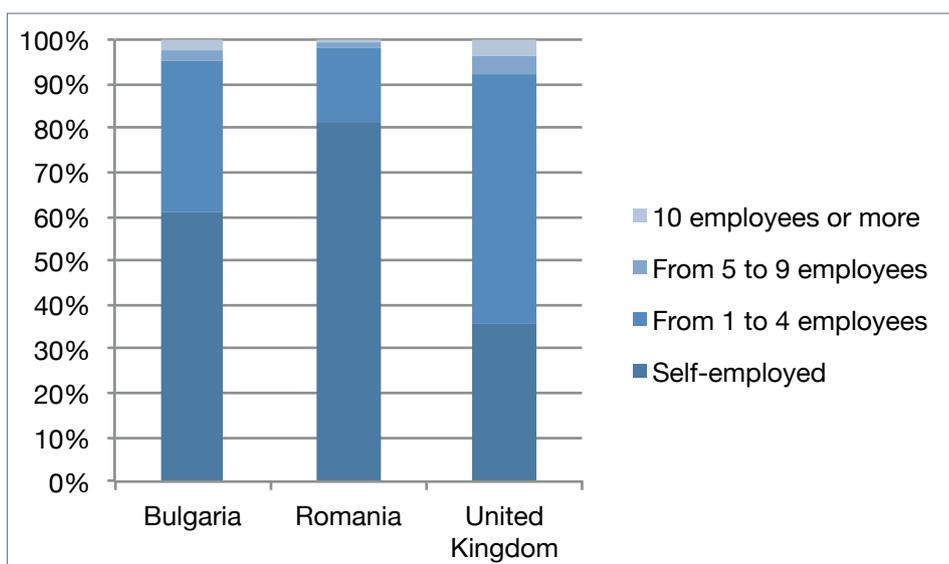
Graph 1. Number of employees per enterprise for the “Motion picture, video and television programme production, sound recording, and music publishing activities” sectors, Bulgaria, Romania, and the UK, 2014 ▼



Source: data from Eurostat, no comparable data for Greece

For the LP sector the enterprises with no employees (self-employed) are 61% in Bulgaria, 81% in Romania, and 36% in the UK. In the UK the micro-enterprises with one to four employees are dominant in the LP sector (56%).

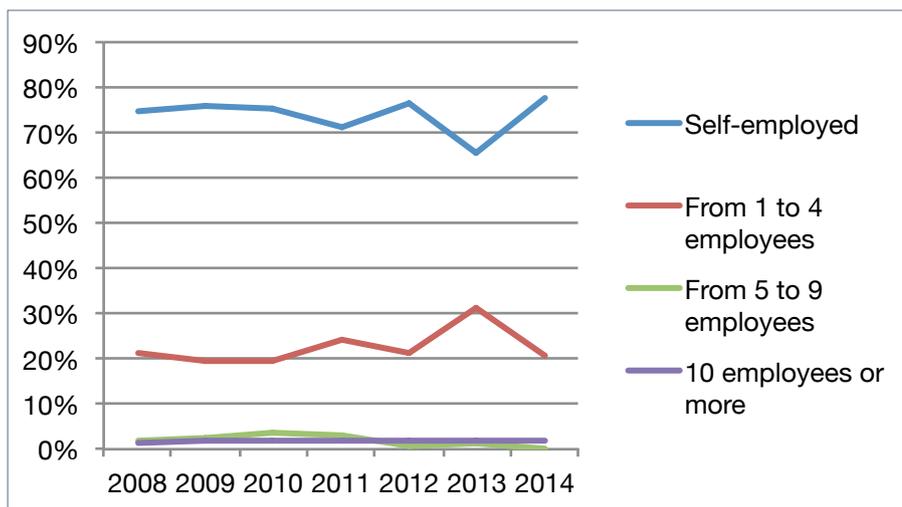
Graph 2. Number of employees per enterprise for the “Creative, arts and entertainment activities sectors”, Bulgaria, Romania, and the UK, 2014 ▼



Source: data from Eurostat, no comparable data for Greece

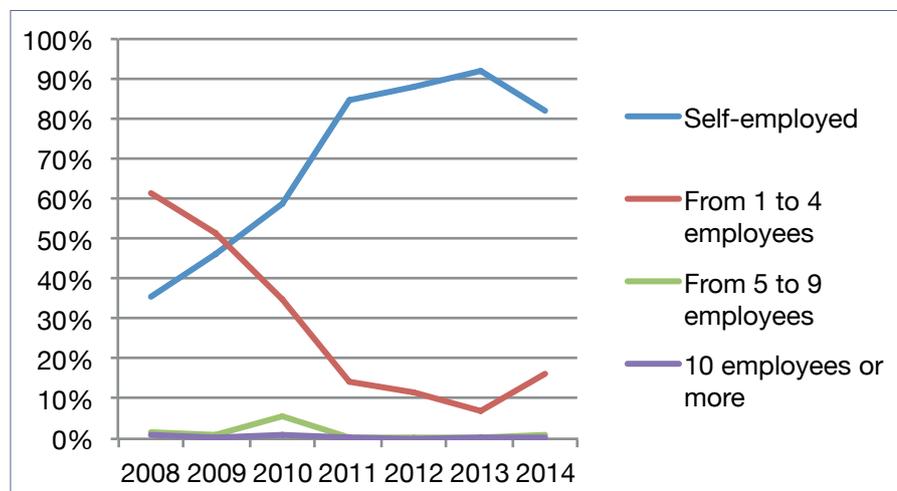
A closer look at the following three graphs that show the birth of new enterprises in the LP sector in the three countries during the recent economic crisis, highlights that especially for Romania, the creation of new enterprises of self-employed has become dominant after 2009. For instance, 90% of the new enterprises registered in 2013 were enterprises of self-employed with no employees. On the other hand, in the UK the share of new enterprises that employ one to four employees has increased from 58% (2008) to 72% (2014), while at the same time the new enterprises of self-employed have fallen from 36% (2008) to 24% (2014).

Graph 3. Birth of new enterprises per number of employees (2008-2014) in the “Creative, arts and entertainment activities” sector in Bulgaria ▼



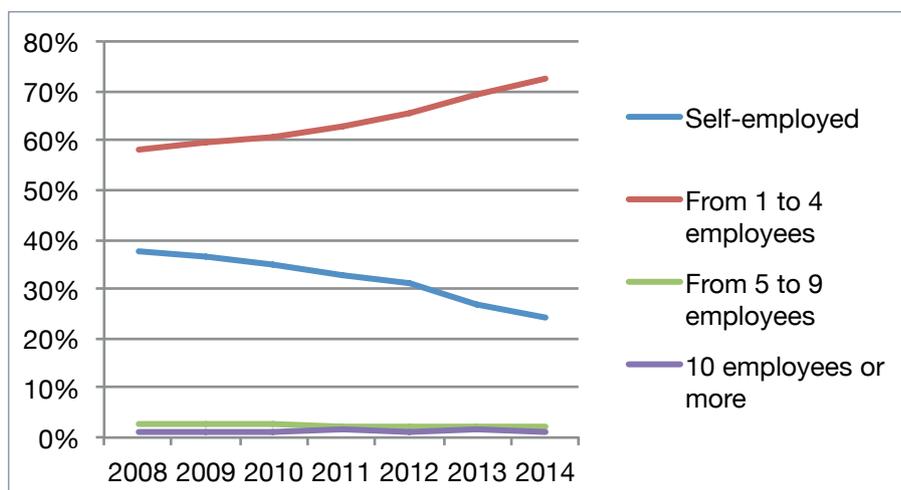
Source: data from Eurostat, no comparable data for Greece

Graph 4. Birth of new enterprises per number of employees (2008-2014) in the “Creative, arts and entertainment activities” sector in Romania ▼



Source: data from Eurostat, no comparable data for Greece

Graph 5. Birth of new enterprises per number of employees (2008-2014) in the “Creative, arts and entertainment activities” sector in the UK



Source: data from Eurostat, no comparable data for Greece

3.3 Trends in the creative and cultural industries

Although the creative and cultural industries can be seen as pioneers in the service sector and they can act as drivers of growth in the local and national economies, there are some new trends that could put some considerable barriers in the development of creative businesses and require new skills from the creative labour. In the following paragraphs we sketch the most important trends.

The rise of self-employment, precariousness and the rise of collaborative economy

During the last decade, European economy faced, and some national economies still face, a very difficult and turbulent economic situation, due to the financial crisis of 2008. As a result, radical changes and reclassifications have been mentioned during this period. These changes mostly concern the status and the nature, as well as the labour market of creative work. A remarkable turnover towards flexible work forms, like self-employment, as the previous section showed, and collaborative spaces have been observed and mentioned in several studies.

Digital technology and mobile internet gave the opportunity to creative workers and entrepreneurs to work with a laptop wherever they found broadband internet. In parallel, the digitisation of the economy and the emergence of digital capitalism (Schiller, 1999) altered the business ecosystem, as firms become orchestrators in networks of outsourcing and subcontracting, rather than owners of skills and know-how (Gottfredson et al 2005, Moriset 2013). This resulted in the geographic splitting of value chains and in the increase of the numbers of self-employed and freelancers, especially during the economic crisis (De Propriis 2013, Christopherson, 2013) and gave rise to the phenomenon of “lone eagles”. Burgess (1994) coined the term “lone eagle” to describe the self-employed entrepreneurs, while Beyers and Lindhal (1996) used the same term for one-person proprietorships.

According to Young (1997), lone eagles are knowledge workers, who can live and work anywhere, primarily because of advances in telecomputing technologies. At the same time, it seems less costly for firms to outsource particular parts of projects to freelancers than keep them in-house (Stanworth and Stanworth 1997). On the other hand, O'Connor (2007) suggests that the notion of the individual worker "doing it for oneself" is part of a wider cultural shift in the notion of labour, away from routine and line management (also cited in Mould et al 2014). However, freelancing is highly problematic, as it is associated with high individual risks and it is difficult to sustain it (Mitchel 2005 Gill and Pratt 2007).

One of the pitfalls of working as a lone eagle is the sense of loneliness and isolation from the out-world and it is associated with a process of erosion of the boundaries between home and work life (Spinuzzi 2012, Hesmondhalgh and Baker 2010). Working from home lacks social and professional interaction, and freelancers or self-employed may lose the benefits that geographic proximity can give, with other co-workers or freelancers. The spatial concentration and agglomeration of economic actors facilitates the exchange of knowledge, both through market and non-market relations. Thus, proximity is crucial for the mobilization of knowledge that may result in the production of new and innovative products and services.

The answer to the lack of proximity can be given through the rise of third places, such as the coworking spaces, business incubators, fab labs, hacker spaces, creative hubs, etc. and the rise of collaborative or sharing economy. All these give the opportunity to self-employed and freelancers to exchange knowledge, detach work from home and also they might increase their chances to find new projects and market themselves in new business environments, be part of specific learning processes, gain access to new resources and lower their operational costs and personal-professional risks, therefore reducing employment precarity.

Cuts from the public sector/ the rise of crowdfunding

It is a fact that, due to the economic crisis (2008-), most countries have implemented severe financial cuts, concerning both public and private cultural operators. Moreover, despite the fact that studies of arts, culture and humanities flourish in the universities, the findings of researches are of little interest to governments.

As a result, the cultural and creative sector is underfunded. Therefore, there will definitely be a serious negative impact to the CCI. However, the most important factor, except for the cut size, will be its duration, since most European countries are obliged to implement strict austerity measures in order to cope with large public deficits for a long period.

According to the above, provided that these funding cuts will most probably last for long, creative and cultural organisations are obliged to adjust to the limited public funding, and re-orient towards alternative funding sources, such as crowdfunding. This new funding model includes elements from public funding, income, donations or rising contributions from a large number of people and other forms of alternative finance, combined with high marketing skills and public motivation to achieve the best result.

It is obvious that people with high skills in fundraising and finding innovative financial sources are of high importance especially for the creative sector.

The digital future

Creative industries are closely attached to new technologies. Creative economy in general is a part of new economy that is based on knowledge and new technologies. Online services play the leading role. Most creative sectors promote the digital age by producing technological innovations. As it is known, the necessary condition for someone to be creative is that he is highly technologically skilled. According to Florida (2002), technology is a basic feature of the so called "Creative Class". Especially given that most start-up companies and collaborative spaces seem to be entirely based on new technologies. This proves the tight bond between creativity and technological progress.

Online platforms are also essential for the economic growth of creative sectors, since they broaden their services and are appealing to a larger audience. All this ends up to a democratisation of audiences, however under the threat of losing a market share to new online platforms.

On the contrary, for some creative sectors (publishing, music industry) the massive introduction and adoption of technological innovations did not prove to have so beneficial effects. These are mostly creative sectors that operate in a more traditional way.

It becomes clear that, apart from the group of people that are able to find new ways in the funding process, there is a large workforce able to understand, manage, and promote modern digital technologies.

The T-shaped skills

The demanding environment in which the creative labour force is called to respond and function presupposes that creative workers should be characterised by a large variety of skills. These skills vary from professional to digital and technical skills. There is a very interesting concept trying to describe this need. This concept is described by the term "T-shaped skills". The vertical bar on the "T" represents the depth of related skills and expertise in a single field, while the horizontal bar represents the ability to collaborate across disciplines with experts in other areas and to apply knowledge in areas of expertise other than one's one (Wikipedia).

According to the Institute for the Future of Work, (2011), the ideal worker in the creative industries of the next decade is "T-shaped". This means that they have a deep understanding of at least one field but have the capacity to converse in the language of a broader range of disciplines. This requires a sense of curiosity and a willingness to go on learning, far beyond the years of formal education. As extended lifespan promotes multiple careers and exposure to more industries and disciplines, it will be particularly important for workers to develop this "T-shaped" quality.

One can easily understand that "T-shaped" skills, do not only depend on the accumulated knowledge someone has, but also it is the capacity to communicate and understand professionals from the same or other sectors, coming from different backgrounds, in terms of driving competitive advantage. The "T-shaped" worker can also work and respond to a whole range of areas in terms of a large business or corporation. This means that they are able to reduce the possibilities of staying under a regime of unemployment.

However, the sense of collaboration and the capacity of adaptation vary across creative sectors. Because of that, many believe that highly educated people, who are characterised by a wide range of knowledge of Science, Technology, Engineering and Maths, (STEM), could be cut off "downstream". This could happen because the education system, in most European countries, does not allow students to study across the above scientific fields in one curriculum.

Classifications of skills

As aforementioned, the real question does not concern the future growth rate or level of the creative economy. In fact, it turns to the combination of skills and knowledge of the people who intend to play the leading role in terms of strengthening and promoting creative economy in the near future.

One categorisation of skills in the creative industries comes from a recent study of the Athens Chamber of Tradesmen (2015). These skills are based in the main factors that can truly accelerate the process of economic growth through creative economy (Athens Chamber of Tradesmen, 2015).

- **Entrepreneurial and professional skills**, such as innovative thinking, initiatives, cooperation, communication, marketing, problem solving, innovation, risk management etc.
- **Digital skills**, such as familiarity with new platforms and technologies, social media, work tools etc.
- **Technical skills**, new technical tools, new trends in the profession, etc.
- **Intellectual property protection skills**
- **Soft skills**, such as personal management, reliability, flexibility/adaptability, etc.

This classification of skills needs to be taken very seriously into consideration both by those who plan and implement public policies and especially by those that are part of the creative labour force and wish to be pioneers and promoters within the creative sector, so as to achieve constant and sustainable economic growth. For the Live Skills project the above classification is condensed into three major categories:

- Arts management
- Digital and new technologies
- Cultural entrepreneurship

3.4 Trends, skills gaps and shortages in the Audio-visual and Live Performance sectors

One of Europe's top priorities in order to cope with the high percentages of unemployment in the creative sector is to forge a dynamic workforce that is able to face current and future challenges through gaining access to relevant training schemes each time that new skills needs emerge. It is obvious that skills development and professional training can play a crucial part during this process.

Although new trends in the creative and cultural industries have been analysed thoroughly before, it is very important to briefly analyse the transformations concerning the European Audio-visual (AV) and Live Performance (LP) sectors, before detecting skills' gaps and shortages, especially since the 2008 economic crisis, the digital shift that occurred, as well as the emergence of new business models in these sectors. The objective is to develop the sector labour market intelligence and its capacity to understand and anticipate change, according to a European partnership project between trade unions and employers' organisations in the EU about addressing the deep transformations affecting these sectors, in terms of activities, occupations, quality of work, and skills development.

The common features of both the Audio-visual (AV) and the Live Performance (LP) sectors are their young workforce, their small-sized company's structure, their large number of freelancers, self-employed and other precarious forms of employment, the relatively dynamic markets and the consequent growing number of companies combined with small employment opportunities.

Especially for the Audio-visual sector, many studies have shown that the development of the sector mostly depends on the general technology shift and the demand of high digital skills. These two factors also have a strong impact to the increasing demand for innovation in the sector. This also means that people who work in the audio-visual sector need to gather a large variety of skills in order to maintain and expand their work.

As regards to the Live Performance sector, most companies seem to be highly dependent on public subsidies. Therefore, the reduction of public subsidies that followed the financial crisis of 2008 had been catastrophic for the sector. This also led to an increase of the rate of precarious employment, as seen in shorter employment contracts and an increase in freelancing. According to the above and as long as job demand remains higher than supply in the sector, the emergence of multi-skilling is becoming very important.

Economic sectors which depend on technology, such as audio-visual and live performance, should always be in a position to keep in touch with the latest technological developments.

The transition to a multiplatform environment represents a significant challenge for the audio-visual sector, providing a combination of web and new multimedia applications with the traditional distribution channels. This means that the operator of such a multiplatform environment should have new digital and maintenance skills, as well new competences in the fields of creation and production.

The technological development and the new digital environments generate new opportunities for those working in the live performance sector, through discovering new audiences and, as a consequence, new income streams. It is obvious that creative workers in the live performance sector should adopt new skills in order to benefit from that digital shift.

When audio-visual and live performance professionals start getting familiar with new digital environment by acquiring the necessary skills, this would be an indication of a promising restart and a new era of certain progress for both economic sectors. This could also place the two sectors at the forefront of economic development within the creative sector.

To sum up, the drivers of change do affect both sectors in the same way, due to the fact that the audio-visual and the live performance sector share a number of common features. However, each sector is made up of different subsectors with different technical or artistic needs. These trends could be categorised as follows:

- Both sectors are composed of a variety of functions such as artistic, technical, administrative, and activities such as creation, production, distribution, that are all interlinked
- Both sectors are growing. Despite that, the expected impact on jobs does not occur
- The two sectors consist of small companies
- Job precariousness is expanding rapidly and in many cases work is organised on a project basis, which has a negative impact on the employment opportunities;
- The employment demand is often higher than the employment offer
- Information channels for job opportunities are mainly informal
- The majority of professionals find that an additional course of skills is often necessary to ensure their income (Creative Skillset and Creative & Cultural Skills, 2012, Creative Skillset, 2014, Franette, 2013, Coulson, 2012)

In addition, there are some external factors that affect both audio-visual and live performance sectors in many fields, such as future development or current operating environment.

The most important of these external factors are:

- The fall out of the financial crisis in 2008, which had a negative effect on job opportunities and on subsidized operators and led to an increase of insecurity but also pushed creative professionals to find new revenue streams
- Technological development and new digital environments in which some subsectors had to adapt more rapidly than others, but also gave them the opportunity to thrive by using their creative and innovative capacities
- Globalisation which increased competition but also opened up new markets

The combination of the internal features with the external drivers of change led to a new operating environment that required new sets of professional skills, based on a multi-operating system, such as new maintenance, production and distribution skills, cyber security skills, cloud computing skills, analysing big data skills, developing new business models and setting up collaborative platforms skills and generally new funding, organization and management skills.

Therefore, there are mainly two large groups of skills that both audio-visual and live performance professionals need to focus on in order to adapt to the current and future challenges.

The first group refers to skills that are relevant to business and entrepreneurship that are necessary for audio-visual and live performance workers to understand and respond to the new trends in the market and to the new labour market and working regulations status.

The other group of skills focuses more on technical skills attached to real work conditions. Both groups of skills respond to the demand for “multiskilled” professionals for the two, rapidly developing, sectors.

There are some necessary steps to be taken by all European countries. These steps refer to the development of labour market intelligence, by collecting relevant, harmonised and comparable statistics from national statistical agencies, under the guidance of Eurostat and the creation and promotion of exchange and cooperation spaces. Through such spaces, like sustainable and informed platforms, audio-visual and live performance, professionals can benefit from meeting and exchanging views opportunities and design joint initiatives that are crucial for the professional training procedure within the two sectors.

Moreover, audio-visual and live performance sectors should be equipped with the appropriate skills that digital shift and constant technological development demand. Consequently, European, national, and regional funding schemes should recognize the importance of digital skills development and support stakeholders to adjust to the new digital multiplatform environment.

In addition, audio-visual and live performance professionals should be able to adopt efficient career management skills to face the constant modification of their career paths. This means that workers and freelancers should develop efficient HR and funding strategies, and always respond to the latest trends of their sector, under the continuously growing threat of employment insecurity and precariousness.

Other skill gaps and shortages

The Music Blueprint (Creative Skillset (2011) is a project that looks in detail at the skills needs of the music sector in the UK. Music workforce consists of anyone involved in performing, creating, producing, recording, promoting, and selling music.

According to the Music Blueprint, the financial crisis of 2008 led a large number of subsidised music organisations to search for new revenue sources. At the same time, several issues concerning copyright and intellectual property in the digital age have emerged. The way the music sector operated has transformed, since the development of digital platforms and formats. The way consumers access, buy, and exchange music has also changed. It is undoubtedly a crucial moment in music's industry history. New skills, like business development and management skills seem necessary for the sustainability of any business model.

The variety of skills needed depends on the specific subsector within the music industry they refer to. Globalisation has increased the international competition but also unveiled new music markets. It seems that the majority of the music sector professionals take on more than one role, particularly in the subsectors of live performance, administration, and education.

Another interesting characteristic of the music sector is the high level of precariousness concerning the forms of work. The sector presents high percentages of part-time and self-employed work.

In terms of skills gaps, many job applicants lack key work-related skills. As a consequence, many new recruits to the music sector need further training on the job, usually offered by the professional and trade associations.

Music businesses experience skills gaps due to staff lacking experience, no time for training and limited budget. The most common effects of skills gaps are the loss of existing work and the need to turn away new work (Creative Skillset, 2011).

Evidence suggests that the top three occupational areas in employment demand are as follows:

- Musicians (who need performance skills and musical composition skills)
- Music producers (who require project management, HR management and facilities management skills)
- Audio-visual equipment operators (who require specialist equipment-based skills)

These are the subsectors that will need generous investment in the near future (Creative Skillset, 2011).

Finally, the most important key skills challenges for the music sector in the near future include: providing the proper information, providing training opportunities to individuals, ensuring that formal education is aligned with the needs of industry, embedding continued professional development within each organisation and within freelancers' planning.

Another account that discusses skills gaps and shortages comes from the Creative & Cultural Skills (2010). The Performing Arts blueprint states that the world's creative economy is growing faster than service industries overall and at more than four times the rate of manufacturing growth. To be competitive, a European country's performing arts businesses will need to train, attract, and retain the right workforce, developing skills to ensure that the country stays at the fore front of artistic and business success.

Performing arts are those venues, employers, small businesses and freelancers in the theatre sector, dance, opera and the live music industry. This includes performers, promoters and those who provide backstage technical input and administration but excludes the recorded music sector and its associated occupations.

The performing arts sector is characterised by a diversity of provision and business models. The sector is growing rapidly, but employment rates across performing arts subsectors differ enormously. The performing arts sector is also characterised, similarly to the music sector, by a high percentage of self-employment and of part-time employment.

In general, the performing arts workforce is predominantly young and highly qualified. Most employers in the sector are concerned about the disparity between what is available through the formal education sector and what the performing arts industry actually needs (Creative Skillset, 2010).

New entrants in the sector usually need further training on the job. It is a fact that, the future workforce of the performing arts industry does not have the specific associate professional and technical skills that nearly half of jobs require. Therefore, the existence of specialist offstage and backstage training centres is very important.

Performing arts businesses experience skill gaps due to staff lacking experience, no time to train and limited budget. The effects of skills shortages and skills gaps are different.

A key skill challenge for the performing arts sector is to attract the most talented and best trained new recruits from the widest range of backgrounds and to strengthen diversity. Other skills challenges include continuing professional development, given the fact that successful organisations need dynamic leadership in all aspects of business development, by developing management and leadership skills. Finally, it is very important for the performing arts professionals to obtain business and enterprise skills or recruit managers not just from the creative sector but also from the business side.

For live performance employers, who are often faced with tight production schedules and increasingly complicated financial situations, it can be a challenge to host interns or apprentices. There is a growing recognition, however, that for employers to benefit from a pool of skilled and job-ready technical professionals in the future, investment and proximity to education providers are necessary. The right balance must be found in a technician's training between the time spent in school classrooms and workshops and the time spent learning in the workplace.

Some other important trends, although not particularly mentioned in the literature reviewed for preparing this report, will be affecting the European audio-visual and live performance sectors for many years to come. They will have to be considered, not only because of their social and economic impacts, but also because of the new skills that will have to be developed to meet the new demand. The most obvious example is the 'green revolution'. This requires the development of pertinent skills to ensure that productions are 'greener' in the audio-visual and live performance sectors too. The impact of the flow of new migrants into the European employment markets will also have to be understood and addressed, to make sure that the skills offered by the new entrants are used optimally, and to offer the right training schemes for workers needing to update or renew their skills set.

Furthermore, we should also present a recent study by NESTA (2017) that gathered data from job adverts in the UK from 2012-2016 for 30 creative occupations. The database contained thousands of job adverts and the researchers grouped skills that contained in relevant job adverts into five key clusters.

The five key skill clusters are:

- Support skills
- Creating & design skills
- Tech skills
- Marketing skills and Teaching skills

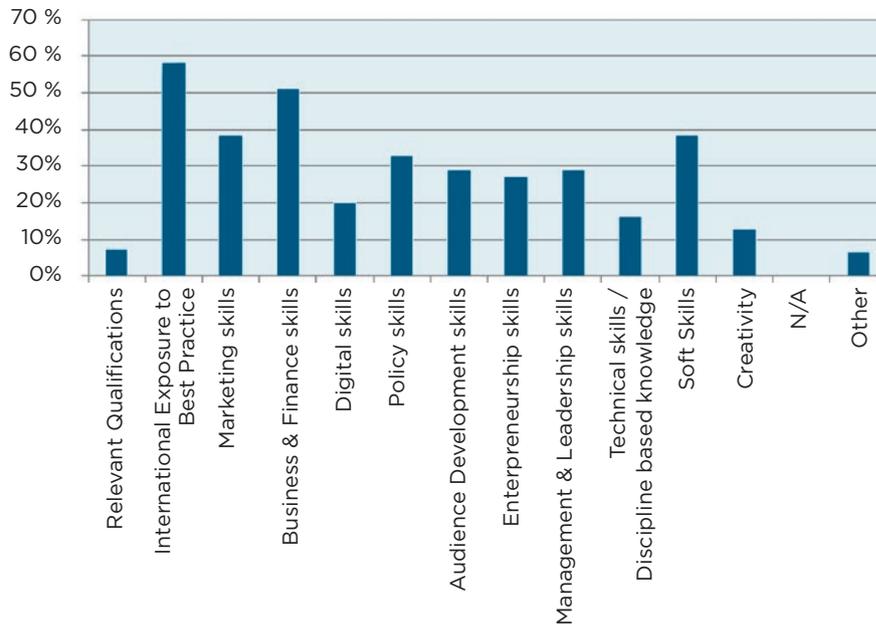
The table below shows the 30 skills in each cluster that appear most frequently in adverts for creative occupations.

Table 5. Most frequent skills appearance in job adverts

Tech skills	Support skills	Marketing skills	Creating & Design skills	Teaching skills
Microsoft C#	Building Relationships	Social Media	Adobe Photoshop	Teaching
Microsoft Windows	Project Management	Marketing	Graphic Design	Teaching Dance
.NET Programming	Business Management	Marketing Sales	Website Production	Tutoring
Software Engineering	Microsoft Excel	Campaign Management	Concept Development	Teaching Art
Software Development	Business Development	Marketing Communicat...	Adobe Indesign	Lesson Planning
ASP	Customer Service	Brand Management	Video Production	Biology
Web Site Development	Microsoft Office	Market Strategy	Adobe Acrobat	Chemistry
Extensible Markup La...	Contract Management	Strategic Marketing	Packaging	Child Behaviour
jQuery	Product Sales	Copy Writing	Photography	Library Research
Oracle	Sales	Product Marketing	Brand Design	Integrated Library S...
C++	Budgeting	Content Management	Digital Design	Library Resources
Hypertext Preprocess...	Budget Management	Brand Marketing	Music	Information Literacy
Information Technolo...	Customer Contact	E-Commerce	Video Editing	Teaching Art and Design
Technical Writing / ...	Account Management	Journalism	Image Processing	Teaching Information...
Technical Support	Key Performance Indi...	Advertising Design	Adobe Illustrator	Teaching English
MySQL	Microsoft Powerpoint	Online Marketing	Print Production	Lecturer
Scrum	Computer Aided Draug...	Digital Marketing	Retail Setting	Instruction
Microsoft Sharepoint	Sales Management	Direct Marketing	Art Direction	Teaching Music
Software Use Instruc...	SAP	Marketing Management	Materials Design	Biochemistry
UNIX	ITIL	Market Research	3D Modelling/ Design	Molecular Biology
Product Development	Telecommunications	Brand Experience	Typesetting	Teaching Mathematics
Python	Fundraising	Press Releases	Creative Design	Bioinformatics
Web Application Deve...	Procurement	Email Marketing	Web Site Design	Teaching Science
Visual Studio	Sales Recruiting	Public Relations	Process Design	Proteins
Object-Orientated An...	Accountancy	Newsletters	Printers	Contemporary Dance
Systems Engineering	Business Communica-tions	Broadcast	SketchUp	Teaching PE
Responding to Techni...	Administration Manag...	Branding Strategy	Interactive Advertising	Basic Programming
Agile Development	Organisational Devel...	Channel Marketing	MAYA	Curriculum Development
AJAX	Scheduling	Marketing Materials	Adobe Aftereffects	Exercise Testing
Transact-SQL	Office Management	Optimisation	Adobe Dreamweaver	Radio Frequency Iden...

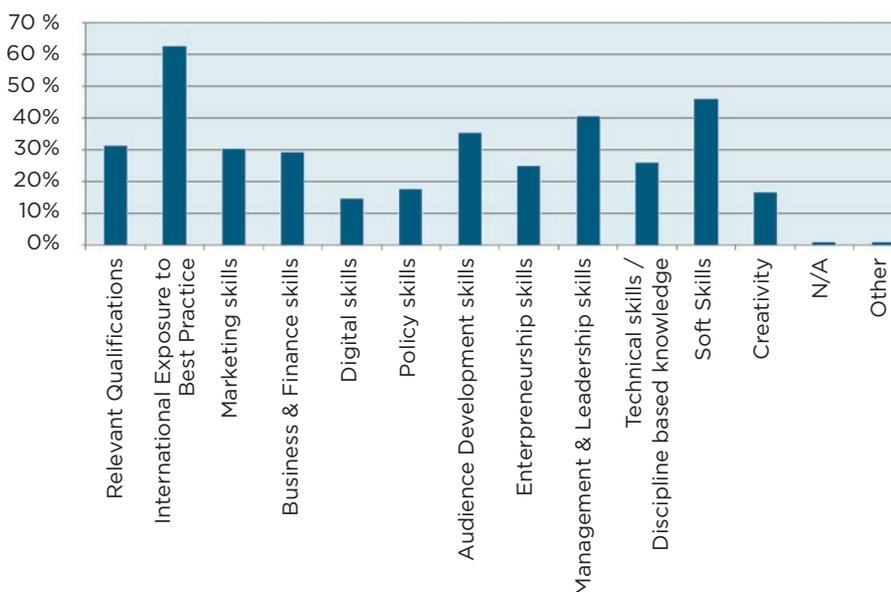
Also, we should mention the results of the British Council Cultural Skills Unit (2014) report about skills gaps of the cultural sector professionals in four European countries, with two of them being Greece and Romania. Figure 6 and 7 present the relevant skills gaps in the two countries. We can see that for both countries a major gap is the “International exposure to best practices” while for Greece other skill gaps contain business and finance skills, marketing skills, soft skills and management and leadership skills. For Romania, key skill gaps contain soft skills, management and leadership skills and audience development skills.

Graph 6. Skills gaps: Cultural sector professionals in Greece



Source: Cultural Skills Unit (2014)

Graph 7. Skills gaps: Cultural sector professionals in Romania



Source: Cultural Skills Unit (2014)

For the UK, Creative and Cultural Skills (2010) notes that major skill gaps in the LP sector are technical, administration, ICT, finance-accounting and marketing-advertising-PR skills, while future skills could include more marketing skills, ICT skills, etc.

Table 6. Types of skills lacking in the Performing Arts sector

Technical	22%
Administration	21%
ICT Skills	20%
Business development	18%
Finance/ accounting	16%
Marketing/ advertising/PR	15%
Management	7%
Sales	6%
Digital	3%
Other	34%

Creative & Cultural Skills. (2009). Creative and Cultural Industries Workforce Survey. Creative & Cultural Skills.

Table 7. Perceived future skills needs in the Performing Arts sector

Marketing skills	16%
ICT skills	11%
Creative expertise	8%
Digital skills	7%
Administrative skills	6%
Online skills	5%
Management	5%
Teaching skills	5%
Business skills	4%
Fundraising	3%
Finance/ accounting	3%
Foreign language skills	3%
None	34%
Don't know	11%
N/A	6%

Creative & Cultural Skills. (2009). Creative and Cultural Industries Workforce Survey. Creative & Cultural Skills.

3.5 Recommendations for the types of training for the curricula

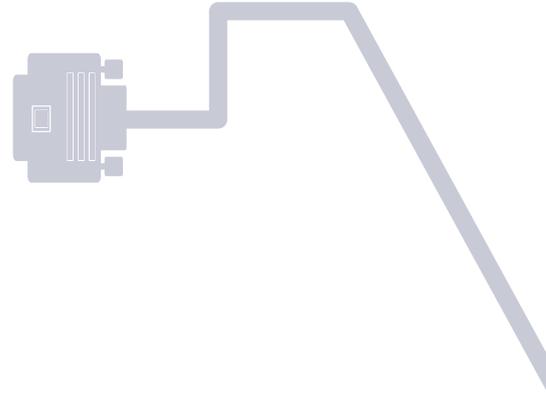
Lastly, another element of the design of skills training curricula is the type of training. A report from the Creative and Cultural Skills (2009) in the UK presented a survey about the most common types of training for the Performing Arts sector.

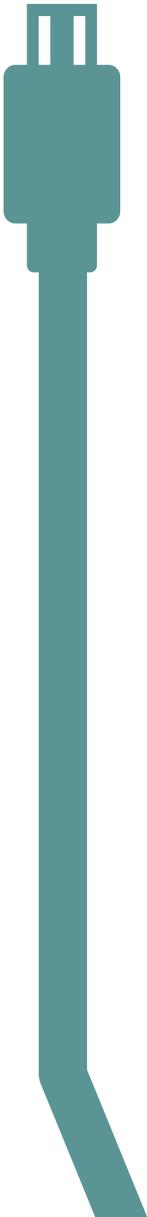
Table 8. Most common types of training for the Performing Arts sector (2009)

On-the-job coaching	49%
Attending conferences	42%
Networking	39%
Personal knowledge development e.g. reading	38%
Skill-based sessions delivered by an external provider	33%
Mentoring	29%
Knowledge-based sessions delivered by an external provider	25%
Industry-accredited training	19%
Training developed internally by your business	14%
Structured CPD based on organisational needs	12%
Other vocational training	6%
Postgraduate level training	3%
An Apprenticeship	3%
Graduate-level training	1%
NVQs or SVQs	1%
Specific Union Learning	0%
Other	6%

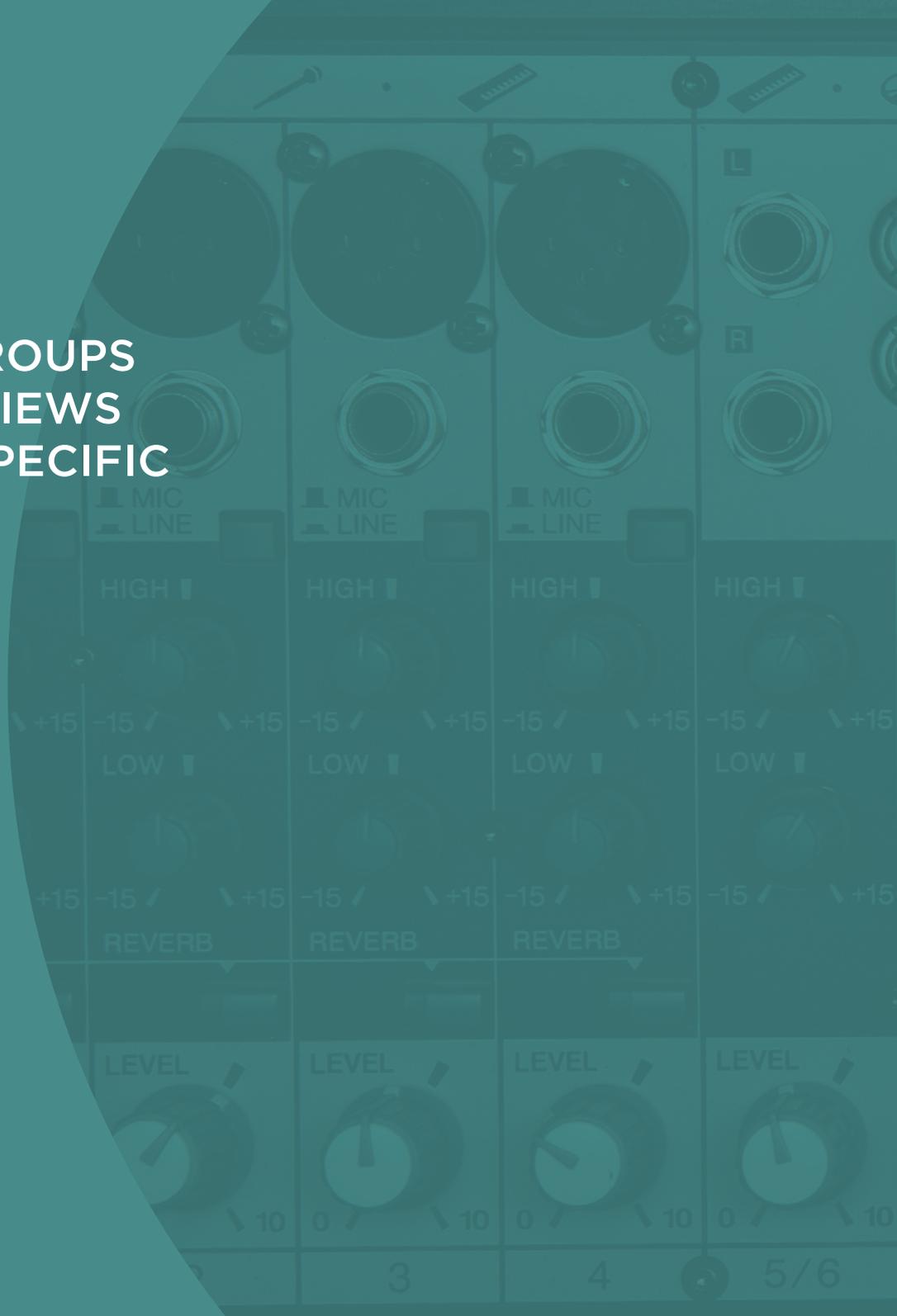
In the very first positions we find modes of atypical training, such as “on-the-job training”, networking, personal development, mentoring, while typical modes of training, such as skill-based and knowledge-based sessions organised by external providers, industry accredited training etc. are in lower positions. Another common form of training that many studies emphasise is apprenticeships. However, it seems that for employers of the creative industries, who are often faced with tight production schedules and increasingly complicated financial situations, it can be a challenge to host interns or apprentices. There is a growing recognition, however, that for employers to benefit from a pool of skilled and job-ready technical professionals in the future, investment and proximity to education providers are necessary. The right balance must be found in a worker’s creative training between the time spent in school classrooms and workshops and the time spent learning in the workplace. ■







4. FOCUS GROUPS AND INTERVIEWS COUNTRY-SPECIFIC REPORTS





4.1 Focus groups and interviews country-specific reports

These country reports were prepared in the context of Task 2.3: Country-specific validation of findings, which included qualitative research through structured interviews and focus groups with stakeholders and experienced practitioners in Bulgaria, Greece, Romania, and the UK.

The research task was implemented according to the practical guide for the scoping analysis developed by IME GSEVEE.

This research sought to understand more about the audio visual and live performance (AV and LP) sectors in the four countries. In particular, it sought to understand where the strengths lie, but more importantly where the challenges exist within the sector, and what could be done to resolve these challenges. We sought to understand these challenges through speaking with a variety of individuals working across the sector.

The aim of the research is to lead to the development of modules as part of the Live Skills programme which respond to the needs of the sector.

It is worth mentioning that due to disparities in the composition of the focus groups in the four countries and also in the processes that were followed, the reports from the four countries do not follow exactly the same format. In this respect, the results presented are not fully comparable.

4.2 Bulgaria

In the implementation of the first phase of the study, BAROK organised and conducted six semi-structured interviews with experienced practitioners of the sector and three focus groups in Sofia with relevant key stakeholders in Bulgaria. The second partner from Bulgaria PSOFSA also organised eight interviews with practitioners. The two partners merged their results and provided a joint report.

Trends set to affect the sectors of AV and LP over the coming years

In Bulgaria after the political changes in the 90's and the transition to the free market economy, the model for development of the arts has changed from "state funding" to "mixed model of funding". The state funding of the cultural industries is reduced but it is still the main source of income. The art organisations face the necessity of raising additional funds through ticket sales, external resources, sponsors, patronage and charity. Prior to the transition, the functions of the art managers were strictly administrative, but the transition from centralised state funding and management of the arts into the market economy required the art managers to build more robust and competitive skills.

Regardless the huge weight of the economic activity of the creative and cultural industries, there are no serious researches and publications on the economics of the arts until the mid-60's.

Strengths and challenges of the sector

There seems to be a weak market environment for cultural and creative professions in Bulgaria. A major employer for people practicing performing arts is the Ministry of Culture. In this respect, the audio and musical education and establishment of an attitude towards the audio and international environment are of critical importance from the earliest age in the audio-visual target sector. Understanding the sound and musical environment is therefore fundamental for the development of competences in the field of the audio-visual sector, thereby predetermining the genres of music.

One major rising trend is visualisation of formerly voice transmitted communication (e.g. radio), which as early as in 2020 hold a leading role and the in way in which the content reaches the audience. The traditional verbal live transmission is gradually supplemented with on demand broadcast recorded preliminary in the studio.

Another trend is the gradual transformation of radio productions into audio visual productions that are broadcasted in live stream and on demand.

A couple of years ago, events were not even promoted on Facebook. Nowadays, anyone can easily synchronise any information with their own mobile phones and that is just part of our modern everyday life. Moreover, as a podcast, a good product might have an added value.

In this respect there is a growing need for digital promotion. Every event must be well advertised, and therefore there is need for the respective skills.

Problems for the freelancers who create independent products are linked with the application criteria when assessing the broadcast of outsourced productions, especially when they are highly important for the public and do not aim at making profit (a problem of regulating the relationship with national media, having a public role).

For instance, for a documentary of major importance for the society to become public, the interviewed operator (being at the same time the author, scriptwriter, producer, director, sound engineer, and film editor) would have to deny any copyrights in favour of the Bulgarian National Television to allow the film to be broadcast and reach an as large audience as possible. However, the personal resources remain in this way non-refundable except for the moral satisfaction from appreciation of the public and three international prizes. Skills identified as missing in Audio Visual sector especially for freelancers are fundraising, product advertising, production and new technologies. Another special problem, essential for the status of the target sector, whose development since the political changes in Bulgaria in the beginning of the 90s until today, lead to the degradation of the profession of of the camera operator. The opening of a huge market as a result of the system liberalisation (more than 120 private TV channels immediately after the political changes) led to a diversion in the profession. Regulation of the profession, as well as control on the requirements of education qualifications are still missing and professional standards are not met. The Artists' Union (the Union of the Bulgarian Film Makers) offers no protection of the profession and has only representative club functions. The Association of Bulgarian Radio and TV Operators unites the private interests of the cable operators. Trade unions are active in the television sector but not in the film-making industry. Professional education and training produce only staff for the performing arts since assistant operators, light and sound engineers, and assisting workers are not appointed. The more severe problem is the unsupervised appointment of staff - without any vocational training, without even any requirement for an educational qualification.

Skills and competences - crucial for an entrepreneurial venture to grow

The 21st-century skills are a set of abilities that students need to develop in order to succeed in the information age. The Partnership for 21st- Century Skills lists the following types: Flexibility, Initiative

Social Skills, Productivity, Leadership, Critical Thinking Creative Thinking, Collaborating, and Communicating.

A major skill for people working in national media is the adequate and quick communication of content. The content is usually communicated to the audience through the use of mass social networks such as Facebook, Twitter and other modern forms of internet-based communication. In this respect, there is need for the respective digital skills. It seems that modern social media channels lack heavily the connection that allows people to communicate on a daily basis. Such channels would normally connect the radio with the audience. In this respect, professionals working in the radio must develop additional skills, linked with the new technological equipment.

A need for developing additional digital entrepreneurial skills is underpinned by decreasing budgets and the “do more with less” policy. This requires professionals to undertake more tasks and functions, such as producer activities, postproduction, distribution, principles, and practices in the governance, which previously had not been within the required competences.

Crucial Skills and competences for an entrepreneurial venture to grow in the Creative and Cultural Sector and specifically in the Audio Visual and Live Performance subsectors

There is a necessity for specific technical knowledge and skills, financial management of arts, as well as knowledge of administrative management, human resources management, marketing, good communication and communication skills at all levels, and professionalism. There is lack of music managers and producers. There is a necessity for compulsory higher education in the field of specialisation, a desire for work, inspiration (obligatory for every artist) and work on more valuable projects. It is necessary for people working in this sector to have constant flexibility and adaptation in the usage of new technology and professional software. The level of teaching by competent teachers, which are in line with new trends and training methods, is also important. There is no media in Bulgaria that reflects every event on the local scene.

Specific skills shortages with regard to the Creative and Cultural Sector and the Audio Visual and Live Performance sub-sectors specifically

In the Live Performances subsector, it seems that there is lack of knowledge and respective skills in staff management: negotiation, contracting, financing of cultural events – research for sponsors and organization. In the Audio Visual subsector, there is shortage of skills in 3D projection mapping (which is a rising trend), collaboration skills with professionals from various fields and also creativity and imagination.

4.3 Greece

IME GSEVEE in collaboration with the Regional Development Institute of Panteion University implemented two focus groups with the most prominent stakeholder organisations representing the cultural and creative sector in Greece. In parallel, four interviews with selected high-profile practitioners of the Audio Visual were implemented.

Trends that will affect the sectors of AV and LP over the coming years

Participants of the focus groups noted that the cuts in public funding during the years of the economic crisis highly affected the creative sector, since before the crisis in Greece, many projects in the creative sector were co-financed by the government budget. In terms of national and especially EU funding, there is a trend in funding for creative sector projects to be cut above multiple programmes (innovation, clustering, entrepreneurship etc.) and not only for programmes targeting the creative sector. However, creative sector professionals have also shown a lack of awareness of national and EU funding programmes.

Moreover, the focus group participants noted that due to the financial crisis the market has tremendously shrunk, and the stock of practitioners is currently exceeding by far the actual market demand. On the other hand, and from the supply side, most of the small and medium companies in the creative sector have shut down and many practitioners are now unemployed or work occasionally as freelancers. Therefore, shifting to self-employment is a major trend in Greece, as it is globally. The remaining companies in the sector tend to merge into joint schemes. There is also an increasing trend in the EU and in Greece as well, in creating cooperative schemes and atypical clusters, and especially intersection clusters (value chains). On the other hand, one of the interviewees highlighted the increasing precariousness of many creative professions. Precariousness affects almost all freelancers and it is associated with an individualisation of risk for freelancers.

Some participants highlighted the fact that there is an increasing interest from the EU on the protection of copyright. Greece is lagging far behind in this field, while other EU countries are more advanced. Especially in the UK, it is a standard for the artists to put their future copyrights as guarantee in order to get funding for future projects. There is also an increasing trend in the EU towards social-specific efficiency of projects and not only towards financial efficiency.

Moreover, there is a trend for crossover of professions and skills (multitasking). For example, actors should also sing, and dance, and also new professions have emerged such as drama therapy and music pedagogy. However, the formal educational system in Greece responds very slowly to the trends of new skills needs.

One participant noted that one major problem in Greece is that there is inefficient cooperation between the authorised cultural organisations.

In terms of perceptions, there is a widespread belief that professionals of the creative sector are not (and cannot become) entrepreneurs. This belief is not totally baseless, since many creative professionals are very negative towards entrepreneurship.

Especially for the AV and LP subsectors, the participants of the focus groups noted that big companies in the two subsectors never existed, only small and very small ones. Many of these companies have shut down during the crisis or tend to merge into joint schemes. Also, along with the companies and professionals on the two subsectors, there is a great deal of leasing technical equipment. Two other major trends among the remaining professionals on the two subsectors include the tendency to cooperate in order to combine their skills and improve their effectiveness and those that prefer to work individually usually shift to multitasking, in order to shrink their production costs, especially for small projects. These trends, and especially multitasking, are prevalent among young professionals, in contrast to older professionals who prefer to work in a more traditional way.

Furthermore, and in terms of technical trends in the LP sector, the participants of the focus groups and the interviewees noted that there are two major (diverging) trends. The first trend is the growing use of elaborate high-tech stage machinery used in set design. The second trend is the gradual total elimination of physical sceneries that are now replaced by digital sceneries. Moreover, the emergence of digital television has also created new needs for skills.

There is also a growing interest (caused by national and EU institutional and legal context and also funding) for improving accessibility of persons with disabilities, not only to the place of delivering the cultural product but also to the content of the product.

In the AV sector there is a growing tendency for multiple- simultaneous audio-visual projections in different places. As for the field of copyrights the participants focused on the fact that many platforms share multi-territorial licensing. Currently, there are discussions in the EU regarding the handling of copyrights. Moreover, platforms such as YouTube have also changed the way artists promote their work. With almost zero costs, artists nowadays are able to reach millions of viewers,

thus overriding the need for P.R., advertising etc. However, this new trend has further intensified the need for artists to acquire entrepreneurial and arts management skills. Lastly, one focus group participant and one interviewee noted that today services, such as film and sound editing can be produced everywhere, and geographical distance has almost no effect. In this respect, there is a growing tendency among foreign producers to use Greek professionals, through the outsourcing of certain activities.

Strengths and weaknesses of the sectors

Regarding the issues of strengths and weaknesses of the creative sectors of AV and LP, there was an agreement between the focus groups that the technical level of Greek professionals in the two sub-sectors is very high. This is accompanied by the fact that Greek professionals are also relatively cheap in comparison to other EU professionals and this is mirrored in the increasing level of subcontracting that Greek professional gain from other European and US markets. However, this was the one and only strength mentioned for the AV and LP sectors.

On the other hand, the focus group participants and the interviewees highlighted the weaknesses of the two sectors in several fields and levels. In the institutional level there is a major mismatch between vocational and professional licenses in the two subsectors, since only the Aristotle University of Thessaloniki has a relative department. Besides that, there is a universe of unclassified, unrated curricula provided by private vocational schools. Moreover, participants noted that creative professionals are very weak at describing their ideas for projects in a technical format that is needed when applying for funding. Thus, there is a lack of presentation, communication, and promotion skills among the creative professionals and also there is big gap in basic knowledge and skills in the safety field.

In more details, the participants highlighted a group of skills needed for drafting funding proposals. In this group of skills there are major weaknesses on:

- identifying business opportunities
- ability to produce new innovative ideas
- grant and proposal writing
- drafting business plans and technical plans
- basic budgeting
- basic knowledge of economics and business environment
- updated knowledge on new technologies
- communication, intercultural, and networking skills
- pitching and presentation skills

Furthermore, and especially for the AV sector, an interviewee noted that film editors have to adapt to the new software technologies and the need to belong in communities and networks in order to “market themselves”. Another interviewee highlighted the fact that schools of film editing produce editors but no assistants to the editor. In his view, in order for someone to become film editor, they should start as assistant film editor where they should know very well how to command the software and then throughout the years they should upgrade into a film editor. For the LP sector, the interviewees pointed to the shortage of good communication of sound managers with their “clients” and to the right orientation of vocational guidance for the profession of sound manager/ engineer. Moreover, they underlined the new trend of multitasking in the AV sector and consequently they pointed to the shortages of adequate skills.

Moreover, through the process of interview with sound managers and film editors, we have highlighted a number of skill shortages in the fields of arts management, digital and new technologies, and cultural entrepreneurship.

Arts management

In the field of arts management, the interviewees noted that there are major shortages of fundraising and grant writing skills and of skills about people and time management, general management skills, self-management skills and employability skills, while they also noted the shortages of identification and definition of a viable market niche (through market analysis) and employability skills.

Digital and new technologies

In the field of digital and new technologies, the interviewees highlighted the shortage of skills for social media - use of social networks, digital marketing and software development technologies - while they also noted the shortages of skills in the fields of specialised tools for the AV and LP sector, VR/AR tools, and digital art and general design skills.

Cultural entrepreneurship

Both interviews highlighted the shortage of skills about new business models, while they also noted the shortages of skills about sustainability, spotting opportunities, financial and economic literacy, motivation and perseverance, risk and trust, and intercultural and networking skills.

The questionnaires of the research (especially for the interviews section) included a comprehensive list of skills of high significance for the AV and LP sector in three distinct areas, that is arts management, new and digital technologies, and cultural entrepreneurship. The respondents, along with the participants of the two focus groups, were asked to indicate the skills from the list that they believe to be significant for the two sectors. Moreover, the participants of the focus groups and the interviewees were asked to add further skills that they believe to be essential but are missing from the list.

Very important skills

Arts Management

Key skills in the area of arts management are general skills in different management fields, such as:

- self-management skills
- project management skills
- people and time management skills

Other very important skills are the *presentation and communication skills, marketing and audience development skills*.

Some participants also noted that a skill missing from the list is that of *safety of audience and of the employees in theatres and other venues*.

Digital and new technologies

Skills of high significance in the area of digital and new technologies are *digital art and design skills, digital marketing, Introduction to computer, networks and, internet animation and digital editing software*, while an interviewee highlighted the significance of skills on handling *VR/AR tools, social media-use of social networks and sharing economy and selling through global marketplaces and platforms*.

Moreover, important skills that have not been covered in the questionnaires include: skills on the use of drones, video mapping, live cinema, video dance, new connection technologies, such as HDMI, Digital Rights Management and also wireless connections, 4K resolution, lampless projection.

Cultural entrepreneurship

Areas of importance for the category of skills in cultural entrepreneurship include *creativity - idea generation, inspiring others, adaptability, ethical and sustainable thinking, strategy, innovation and planning*. Interviewees also focused on the importance of *vision skills, adaptability, working with others' skills* and skills towards *learning through experience*.

Delivery methods

Regarding the delivery methods of training activities, participants showed a preference for workshops and seminars and in general for methods that involve physical presence in a classroom.

4.4 Romania

The two focus groups were moderated by specialists from NIRCT (research department) and the interviews were carried out under the methodological coordination of NIRCT to ensure compliance with the specific research requirements.

Participants: managers and employees of public cultural institutions (National Centre of Cinematography, museums and theatres), representatives of the Ministry of Culture – Project Management Unit, representatives of the academic environment – Caragiale Academy of Theatrical Arts and Cinematography, AV/LP freelancers, representatives of NGOs and of professional associations.

Trends that will affect the sectors of AV and LP over the coming years

The cultural sector in Romania faces common problems identified at the level of the European Union (ageing population – e.g. a feature that characterises the cultural public sector is the workforce ageing, with the vast majority of the employees being in the age group 36-60 years), but also with specific problems resulting from the structure and operations of the sector (e.g. the occupational culture public sector is mainly characterised by low workforce mobility, which explains the rather poor interest in lifelong learning) and from cultural consumption practices.

In the hierarchy of the European countries which participated in 2014 EU's research "A Profile of Current and Future Audio-Visual Audience", Romania is ranked last with only 71% of the respondents stating that they watch films at the movie theatre, as compared to Poland (94%) and the United Kingdom, Spain and Denmark (93%); but on the other hand, Romania stands out with a percentage of 40% as regards the practice of watching films within film festivals and clubs.

Studies conducted at national level on cultural occupations and training needs for public cultural institutions have led to the identification of the following NICRT's objectives and strategic directions in the field of vocational training:

- improve the relevance of vocational training systems for the labour market
- increase participation in and facilitate access to vocational training programs
- improve the quality of training
- develop the national and international networking and cooperation for innovation

In terms of training needs related to the project area, the following were highlighted:

- Master classes in performing arts: Lighting design/ Sound design/ Stage management
- Courses delivered by foreign lecturers in various modern cultural sub domains: Digital Storytelling in museum context/ Cultural management/ entrepreneurship/ administration/ Museum education specialism/ Lighting design/ Sound design/ Stage management

The use of new technologies in everyday life requires rapid and continuous updating of the education system, in order to maintain the relevance of the skills gained for the labour market.

Participants agreed that besides formal institutionalized education, new technologies allow a rapid individual education (self-education) that sometimes exceeds the capacity of the public education system, as it faces underfunding.

Also, the participants pointed out that the structure of the existing educational programmes is rather outdated, missing communication skills (including self-presentation and public speaking rated as very important) and also insufficient practical teamwork modules - even distinct training programmes that could, within common practice hours, provide training for various professions involved in implementation of a single project (e.g. a theatre show, concert, live cinema etc.) and can help to develop organisational skills and the ability to work with others.

The fact that functions such as career counselling and guidance are not given the necessary attention, directly influences the so-called *soft skills* (people skills - communication, networking, working with others etc.).

Also, the dynamism and complexity of the AV&LP fields and the multitude of external factors make it necessary to develop the ability to solve problems.

Internships and mentoring have also been highlighted as very important.

Finally, the emergence of the internet has made essential to protect intellectual rights in cultural areas, so the participants have highlighted the need for sufficient legislation knowledge.

Strengths and challenges of the sector

Strengths: When asked about strengths of the AV&LP sectors, respondents agreed that there was an abundance of artistic talent and a lot of passion and dedication. As strengths they have identified:

- acting school
- film production
- IT industry
- advertising industry
- fashion and crafts

Challenge: The lack of human resources is conditioned by the lack of financial resources.

Solution: Developing entrepreneurial skills for professionals, as well as developing financial management skills for managers and decision-makers. Identifying new sources of funding, developing European projects, optimising organisation costs etc. are vital in the context of insufficient public funds for culture.

Challenge: the need for a new ethical climate in Romania - at the moment there is an antagonism between the independent and the public cultural operators - both independent operators and public institutions have the impression that others "steal" their money, being in continuous competition for national funds.

Solution: The structure of the curricula must contain both business models, attracting and managing funds (financial management) etc. for both public and private organisations - whether they are self-employed or legal entities, so that the few existing resources are used more efficiently.

Challenge: It requires a continuous process of training, not a sporadic process due to insufficient funds.

Solution: Awareness of the need to invest in human resources means a good managerial capacity - managers of cultural organisations (public and private) need to be educated about the benefits of the curricula that will be projected.

Challenge: there is still a difference in perception between generations about cultural jobs - they do not enjoy the social prestige of other professions (such as doctor, lawyer, etc.) and are considered to have a lower level of income that cannot ensure a decent living.

Solution: creativity and “creative” jobs must be encouraged, especially among young people, who may have retention in pursuing a career in culture, either because of family restrictions or because of income-related doubts. Research (studies related to occupations, income, CCS etc.) should be encouraged and results should be disseminated more aggressively.

Challenge: Problems pertaining to the outdated legal documents regarding the occupations in Romania. Difficulties in recruitment and employment due to the mismatch between the Classification of Occupations in Romania and the reality on the labour market.

Solution: Externalisation of activities via collaboration with freelancers. Working with colleagues is a frequent practice in the world of performing arts and it is practised for highly-specialised activities. Furthermore, the collaborations also take place in the case of projects on limited periods of time or for the execution of punctual activities of a larger project.

Challenge: Imbalance in the relation between the skills existing in the labour market and the need or demand of the employer.

Solution:

- Professional training courses
- Strengthening the practical training component of the educational process (internships and mentoring)
- Updating occupational standards according to the new competence requirements

4.5 UK

An introduction to the research

The research aimed to be representative of the UK as a whole; however, during the fieldwork it became apparent that the scope of the research did not allow us to explore geographic differences in as much detail as we would like. Research participants highlighted that courses are not necessarily available at nationwide level. Based on the assumptions that the programmes will initially be developed in Belfast and will therefore attract students predominantly from Northern Ireland, around half of research participants were based in and around Belfast. The remaining sample were either working in London, where a significant proportion of AV and LP establishments are based or working at a nationwide level.

There is a number of relevant organisations that are involved in training in the AV and LP sector, and as the programme develops, it would be important to reach out to these organisations to ensure avoidance of duplication of courses, and to seek advice or consider partnership opportunities available, should this be possible. The paragraph below provides a snapshot of a handful of organisations providing training or advice in the sector.

SkillsScene is an organisation which, while it does not provide training, it provides a forum for representatives of industry and education to meet, with the aim of developing industry technical training standards for the performing arts. BECTU (the Broadcasting, Entertainment, Cinematograph and Theatre Union) represents staff and freelance workers in the AV and LP sector, as well as offering a number of training opportunities to its members. Training is, in the main, aimed at current professionals to allow them to build and develop new skills to progress with their career. Training cours-

es are largely offered as short courses, are unaccredited, and the majority are offered in London. Courses are focused and specific, ranging from IT essentials, to production management, editing and first aid. The Association of British Theatre Technicians (ABTT) offer a number of accredited courses up to educational level five. The courses are flexible in terms of location and can be carried out in host theatres to meet regional demand. Courses cover topics such as lighting, sound, health and safety and electrical installation. The Professionals Lighting and Sound Association (PLASA) offers its members the opportunity to gain a level 3 recognised qualification in rigging; the National Rigging Certificate. This certificate mainly covers only technical topics, such as risk, calculations for load estimates, and health and safety and legal requirements.

The Association of Lighting Designers (ALD) is the professionals' body that represents those working in lighting, video and projection design for live performances. While it does not provide training courses itself, it provides extensive information, particularly for those interested in working in the sector, relating to the different options available to them, job roles, and educational options. The Society of British Theatre Designers offers similar information on its website also.

Trends that will to affect the sector over the coming years

Research participants highlighted that across the whole of the creative and the cultural sector there have been huge changes in technology in the past five to ten years, and this has affected the audio visual and live performance sector in particular. The development and evolution of new technologies is only going to continue in the coming years, particularly in areas such as virtual reality, which not only impacts on technical roles, and the need to understand how to use the technology, but also on audiences, as different ways of consuming culture have developed.

Today, anyone with a smartphone has the capacity to be a filmmaker. Younger people, who have grown up with ever-evolving technology, seem to be more able to adapt to these changes, and it seems more natural for these people figuring out how to technically use new technology. However, research participants highlighted that while technology may be available to everyone, sometimes there is a gap in people understanding which platform or tool to use and understanding which technology is most appropriate for the task required.

The way people consume culture is changing; participants working in the film industry in Belfast indicated that there was an increasing appetite for film festivals, as filmmakers valued the immediate response to their films from the audience. By contrast, in recent years, theatre, which naturally enjoys this immediate response from its audience, has been streamed in cinemas, in an attempt to make national theatre available to a more geographically and socio-economically diverse audience. Participants highlighted that this streaming was often only possible for large-scale, big-budget productions, and that while it might reach a wider audience, theatre professionals would always want to make live theatre.

One respondent indicated that, as funding cuts continue to increase, the need to incorporate and highlight social responsibility has increased, and it is becoming harder and harder to fund art for art's sake. This trend is likely only to increase as funding cuts increase. Funding cuts also seem to have made funding more polarised; more of the funding available is going towards large-scale organisations, meaning that small and medium organisations, particularly those operating at local level, are seeing greater challenges.

Research participants pointed out that one key challenge for the cultural sector, including AV and LP, was that the sector supported a number of 'non-traditional' roles, which may not be familiar to careers advisors or parents. As such, young people do not have a good understanding of what is available to them. This gap has been narrowed in recent years, as the sector has worked to become more in touch with the education providers, but there is still much to do.

One research participant who works in education in the sector highlighted that academic insti-

tutions were under pressure to adapt to the rapid pace with which technology is evolving. By focusing on the practical skills that change in line with the latest technology, these institutions do not necessarily have capacity to provide support for the development of the softer skills; they can be difficult to train people in such skills, and they are often not included within the official curriculum. However, all participants agreed that these skills, generally, were learnt faster through real-world experience, which is why apprenticeships and intern programmes had the capacity to be so effective. The apprenticeship levy (in England only) is a policy that came into force in April 2017, which places a greater focus on work-based learning and provides support for employers looking to provide apprenticeship opportunities.

One of the most pressing trends noted by participants was the tendency to communicate less and less through face to face means. Social media platforms, along with email and text messaging, make face-to-face communications less essential, and participants highlighted that this was a key-challenge for young people entering into the sector. More and more people do not like to communicate face-to-face. One participant went on to highlight the problems associated to this; namely, the need to understand body language, and things like tone and intonation; things that can be easily missed through non-verbal communications. These skills remain an essential part of professional life in order to avoid key misunderstandings.

A number of participants discussed the challenge faced regarding expectations of young people entering into careers in the sector versus the reality. It was suggested that young people leave college and want to start at the top, rather than start at the bottom and work their way up. One respondent illustrated this by talking about how students will leave college describing themselves as lighting designers when they have only done one course in college and have no practical experience. In order to be employed as a lighting designer it is necessary to work through a number of junior roles beforehand, but young people seem increasingly less willing to go through those steps. This respondent suggested that this trend has come about as a result of the society we live in; things like reality TV talent programmes only support this unrealistic idea that someone can shoot to the top without doing all of the work to get there.

Strengths and challenges of the sector

The dominant aspect of this research concerned challenges and weaknesses in the AV and LP sector. Respondents were asked to highlight the strengths, but this was not explored in too much depth. When asked about strengths of the sector, respondents unanimously agreed that there was an abundance of artistic talent in the UK. Individually, respondents also highlighted areas such, as production programming and management, journalism, engineering and content creation that were all strengths of the sector. It was also mentioned by one respondent that generally speaking, programmes at level five were very effective, but the programmes providing students with level three qualifications do not provide sufficient training. In particular, these lower level vocational courses tend not to provide sufficient training in business acumen.

Professional presentation and behaviour

When asked about weaknesses of the sector in the UK, overwhelmingly respondents described a significant lack of understanding among those new to the sector in how to present themselves and behave appropriately. Participants gave examples of students studying courses in the sector not knowing what to take with them to a networking event (whether to take a business card or a portfolio) or how to dress appropriately. Dress was discussed in particular given the casual feel of the sector much of the time; those who are not accustomed to working in the sector, do not necessarily understand exactly when to be casual and when it is necessary to be more formal.

Participants felt that those entering into the sector, and young people in particular, were not sure how to present themselves and did not have the confidence to do so. One respondent countered this by highlighting that many academic courses prepare students that they may need to work unpaid in order to 'get their foot in the door'. However, the respondent felt that it was inappropriate

to normalise the idea of working for free; it should be something that is not acceptable and training institutions should not promote this. Instead, they should be working to equip students with the confidence to feel that their work is valuable and with an understanding of how much they should charge. The issue of knowing how much to charge is discussed further in 'business skills'.

Respondents also highlighted the need to provide students of training courses with better guidance around venue and set etiquette. Those new to the workplace do not know how to act appropriately in a professional environment.

Partly related to this is the need to act appropriately across different social media platforms. While social media is second nature to many young people, respondents felt that many did not know how to use it in a professional sense, that is to say they were not confident using it to promote their own work, and they did not understand the importance of behaving in a professional way on such platforms, possibly because they were platforms where they felt comfortable being themselves, and perhaps they did not apply any kind of filter to the content they shared.

Soft skills

Related to the previous point about personal presentation, research participants found that young people in particular tended to lack a range of soft skills which were often not explicitly covered by training programmes. These skills' gaps included organisational skills, people skills and the ability to work with others. Some suggested that this gap that has emerged was due to young people being too overprotected, meaning they did not have to practice these skills in their day-to-day lives before entering the world of work. One respondent anecdotally discussed the situation whereby graduates of filming courses are looking to practice their skills but struggle to find actors to be involved in projects for no cost. At the same time, students graduating in drama from the same training institution are struggling to find work and looking for any opportunities. The development of networks that allow these two groups of graduates to collaborate requires communication and organisational skills, as well as requiring students to be proactive in finding one another.

Communication skills

Considered as soft skill by some, communication skills were identified universally as lacking in those entering into employment in the sector. Research participants mentioned that young people did not know about basic tasks, such as writing professional emails, were uncertain about networking and how to initiate a conversation, and for many, an unwillingness to communicate face to face. Some suggested that this unwillingness to communicate face to face or even over the phone might be down to the rise in different online platforms, which allow people to communicate somewhat anonymously through text. However, while this kind of non-verbal communication may be on the rise as habits and behaviours change globally, research participants indicated that it was still essential to develop these skills, particularly for things like moving up eventually into managerial positions.

Business skills

Respondents highlighted business skills as a key area that needs improvement in the AV and LP sector. As aforementioned, young people entering into the sector do not always know how much they should charge for their services, and they are uncertain what they should and should not charge for. One respondent highlighted that with regards to performing in the music sector, it was important to address the issue of people assuming that exposure was enough of a payment. This generally accepted practice does nothing to boost young people's confidence levels in relation to valuing their own skills.

Respondents identified a number of specific tasks related to business skills which people coming into the sector at entry level struggled with. Tasks surrounding finance, such as how to write a grant application and how to write an invoice were considered key, along with things like how to set oneself up as a sole trader for tax purposes.

One respondent highlighted that, by comparison to film and TV, the theatre and live events sectors are significantly less advanced. In film and TV, it is unsurprising that these skills are more advanced generally since film and TV are big budget industries.

Resilience and adaptability

Respondents repeatedly called for people looking to enter into the sector to be more resilient. The cultural sector as a whole can be very competitive and knock backs are not unusual. It is essential for those wishing to enter into the sector to be prepared for these knock backs and not be too disheartened by them. It was suggested that it would be helpful for people to have an understanding of the work done by those who have 'succeeded' in the industry, so that they can see that it does not happen overnight. One respondent highlighted in particular that the rise of shows like "The X Factor" and other talent shows has given people unrealistic expectations of what it is like to work in the sector.

This need for resilience also came about in relation to the unsociable hours that are often required of those working in the sector. Respondents stressed that it is not a standard 9-5 job, and that it was essential for people to know this as they entered into the sector, so that they were prepared for what might be asked by them.

Respondents also raised the need for people to be adaptable; a skill they found to be essential when working in the sector. They discussed the need to undertake a number of different roles when working in the AV and LP sectors; one day you might be performing on the stage but the next you are moving props or selling tickets.

Furthermore, respondents talked about the need to be adaptable for those looking to make it as performers but who had not succeeded. There is a range of different job roles available across the sector but often people, especially those coming straight out of education, may not be aware of all the different options, so they do not know what they might be best suited to with the skills they have. This lack of awareness of different roles was highlighted consistently as an issue that could only be solved through working with schools and careers advisors throughout the educational spectrum.

Key skills

The research explored three subject areas in depth: arts management, new and digital technologies, and cultural entrepreneurship. The skills list that was developed prior to the research (see Appendix 1) was tested and respondents were asked to indicate areas of greatest need, areas of greatest importance, and to highlight any essential skills missing from the lists provided. One key finding of this exercise was that specific skills are applicable across all three topic areas. For example, communication skills are essential to arts management, but this also comes in to using different platforms within digital and new technologies to promote work. Similarly, fundraising and grant writing could be equally at home sitting within the topic of arts management as it could within cultural entrepreneurship. This finding suggests that the three topic areas could complement one another well if taught separately, but as parts of a whole course. If the three courses were to be developed independently, as standalone programmes, this may result in repetition across the three programmes.

Arts Management

The areas highlighted as of key importance are *arts financial management, project management*, including budget management and logistics management, *intellectual property management and protection*, including both performance rights and rights management, *marketing and audience development*, including *front of house customer care*, and *presentation and communication skills*. It was noted that presentation and communication skills are essential to all sectors.

Areas highlighted as skills gaps are *arts financial management, project management, intellectual property management and protection, marketing, and fundraising, and grant writing*. Respondents

indicated that knowledge of intellectual property and copyright laws was essential, both for retaining rights of one's own work, but also for understanding how to use things like music, product placement etc. in developing work without risk.

The areas suggested that needed to be added to the list of skills include developing confidence, raising awareness of health and safety and health and wellbeing – including hearing and vocal health where appropriate, as well as working towards an appropriate work-life balance. Business management was also mentioned, with a particular focus on freelancer workers, as it was the need for students to be taught to deal with criticism.

New and Digital Technologies

Within the topic area of new and digital technologies, research participants highlighted the need to learn about the fluidity between the digital and physical world. Areas of importance include *social media and use of social networks*, particularly how to use them for promotion and how to use them appropriately, the *sharing economy and selling through global marketplaces and platforms*, and *new technologies in arts management*. They also highlighted the *software development technologies* as an area of importance. Given the speed with which technological developments are taking place, respondents agreed that it is not essential to teach people how to use a specific piece of equipment. Instead, it is more important to help individuals understand why and when they might use a specific technique or piece of equipment or platform.

Areas of need, or specific skills gaps within the sector, include *digital art and design skills*, *security issues*, and *privacy*. It was highlighted that security issues and privacy is still in its infancy and there would be lots for us to learn as things develop.

One topic not covered within this list but highlighted by several respondents is editorial guidelines associated with the use of new technologies. Respondents highlighted the importance of being aware of regulatory practices and considering the audience. It is important to consider that we are no longer governed by what can be shown after a particular time on TV since most things are available any time of day online. Given the ease of accessibility which has come with the advancement of the internet, it is up to producers to take greater responsibility for what they are putting out there. Similarly, with things like the rise of fake news stories, it is essential that those producing content to have an understanding of the reach of their content, and the impact and repercussions that it could have.

Cultural Entrepreneurship

Key areas of importance within the topic of cultural entrepreneurship include *new business models* and *sustainability*, *creative idea generation*, *strategy*, *innovation and planning*, including techniques for pitching and storytelling, *financial and economic literacy*, *planning and management*, *inter-cultural skills and networking*, and *collaborative skills*. Response to the suggestion of creativity as a 'skill' was mixed as respondents were unsure about what this referred to. Some believed that it meant the skill of honing and developing ideas, while others believed that it meant how to communicate their creative ideas and the results of their creativity. Generally, respondents felt that creativity was important but felt that within the context of a list of skills relating to cultural entrepreneurship, the term needed honing and better defining.

Areas identified as skills gaps included *financial sustainability* (linked, respondents highlighted, to fundraising and grant writing under arts management) and *inter-cultural skills*, *networking and collaborative skills*.

Overall, respondents felt that the list of skills within cultural entrepreneurship was comprehensive and could not identify other skills that needed to be included. However, one respondent stressed that young people are generally well-equipped with skills associated to cultural entrepreneurship, such as adaptability, marketing themselves, coping with risk, etc., but that these skills need to be given the credit and recognition they deserve.

Delivery methods

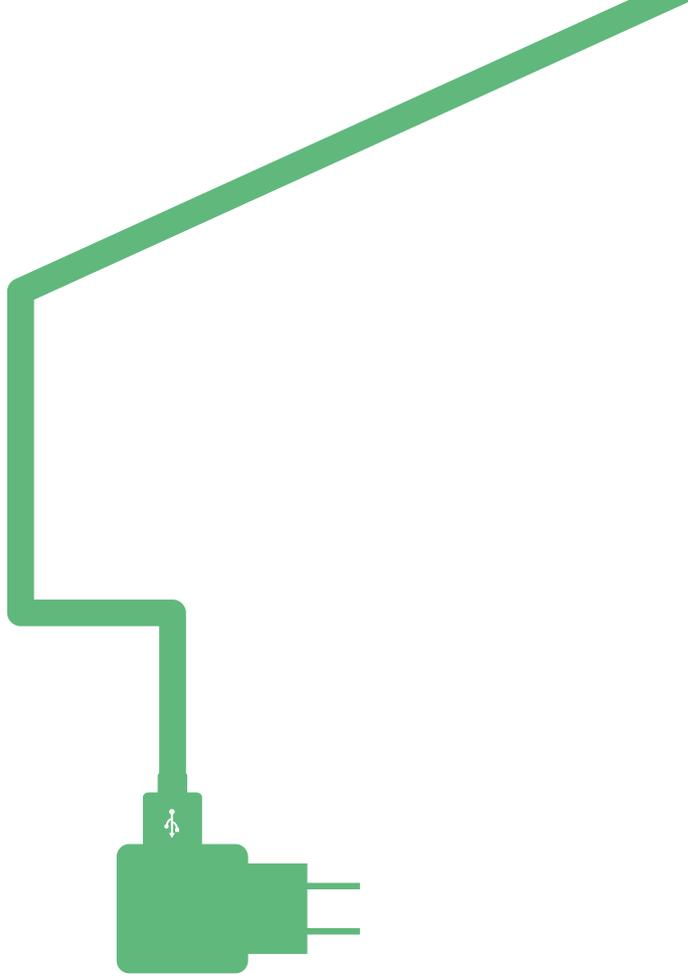
A clear consensus emerged among respondents when asked about the most suitable delivery methods. Respondents could see the value of remote learning through platforms like webinars but felt overwhelmingly that nothing could compete with face-to-face interaction between trainer and student. It was suggested that resources could be made available online but that the teaching itself should mainly take place face-to-face. However, respondents suggested that this face-to-face interaction did not necessarily have to take the form of traditional classroom teaching; it could be made through seminars, workshops, or, an option favoured by almost all respondents, through work placements. It was highlighted that engagement and exposure to the sector was essential. Respondents suggested a number of ways to do this, in addition to work placements, including guest speakers and live projects.

There was some discussion about work placements; while all agreed that they could provide good experiences for students, several respondents highlighted that they often required high levels of person-time in order to provide a good quality experience, which many arts venues were simply unable to commit to. One respondent suggested teaming up with venues which already offer training programmes, to provide this real-life experience to a wider audience.

There was some discussion about the use of online tools, and when relevant, participants felt that online tools could be useful. Things like Facebook Live provided a low-cost way of sharing sessions with a wider audience. Other tools, such as webinar platforms were also considered useful. However, respondents stressed that this should be an additional resource, and not a core part of the course. Respondents did, however, see a key opportunity to use these platforms to link up across the four countries where the Live Skills programme will take place. They felt this international aspect would expose students to the wider world and provide something that other courses might not be able to.

A blending learning approach was suggested by several respondents who had developed successful programmes using this approach in the past. Overall, respondents felt that the format should comprise face-to-face learning as the main teaching component, with online resources, and online communications with the other four countries. They felt that one aspect of the course should include exposure to the industry and suggested that the most feasible way of doing this would be through a live project which would bring industry experts in, perhaps to judge a project or to provide mentoring and guidance to students. ■





LS live skills
Image Sound & Performance

5. ANALYTICAL RESULTS OF THE WORKFORCE SURVEY.



5.1 Demographics

The workforce survey was conducted between 13.7.2017 - 31.12.2017 through an online brief and anonymous questionnaire. The study collected 240 answers from practitioners within the AV and LP sectors in four countries. The following table illustrates participants per country:

Table 9. Responses per country	
Bulgaria	55
Greece	73
Romania	74
UK	38
Total	240

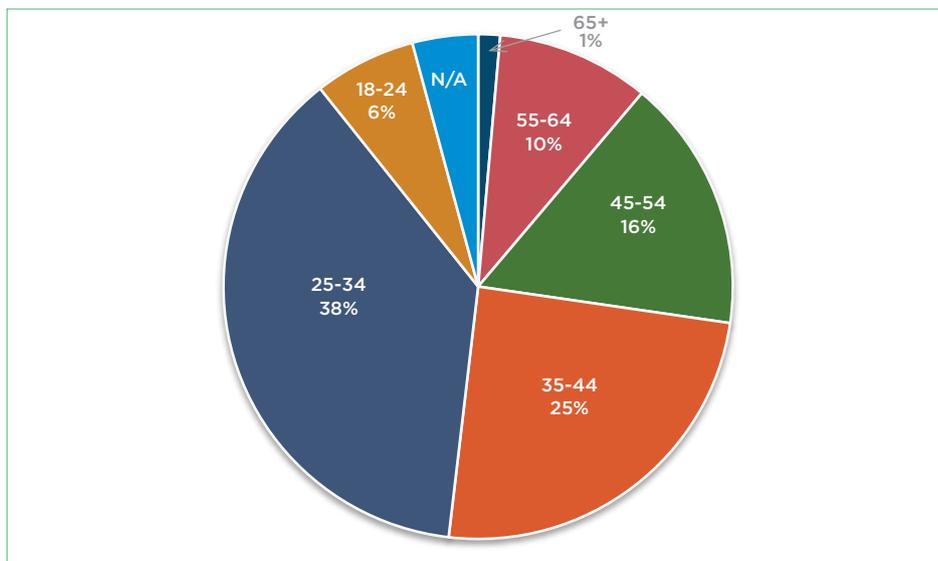
The survey was disseminated by the partners and their networks to practitioners of the AV and LP sub sectors, especially focusing on the selected professions and broader professional categories. Regarding the selection of the participants, there was not any representative sample design and snowball sampling was chosen as the most effective way to collect responses. In this respect and taking into account the small sample of 240 subjects for the four countries, we do not assert any widespread representativeness of the survey and its results.

Most respondents are working as film editors (18.33%), sound managers (15.83%), director/ cinematographer/ filmmaker (10%) and also at managerial activities closely related with the AV and LP subsectors (6.25%).

Table 10. Respondents' profession	
Film/ Video editor	44
Sound manager	38
Director / Cinematographer/ Filmmaker	24
Managerial activities related to the AV and LP subsectors	15
Musician/ composer	11
Artistic consultant/ expert/ adviser	10
Film-video Producer/executive producer	9
Sound designer/ engineer	9
Performer	8
Actor	6
Stage manager/ crew	6
Communication officer/media officer/ PR/ Festival organizer/ event promoter	6
Music editor/ journalist	5
Technician	4
Photographer	3
Academia/ researcher	3
Artist	3
Visual artist	3
both - Film/ Video editor and Sound manager	2
Agent	2
Theatre director	2
Script Supervisor	2
Student	2
Music Video Producer	2
Conductor	2
Trainer	2
Other	16
N/A	1
Total	240

The majority of respondents were young people, aged 25 to 44 years old (63%). This is more or less expected since, as already identified in our literature review, the performing arts workforce is predominantly young and has high levels of qualifications.

Graph 8. Age groups



Regarding gender allocation this has almost been equal with 44% and 56% of women and men respectively.

Table 11. Gender	
Female	105
Male	124
Prefer not to say	11
Total	240

5.2 Education and training

Concerning the educational level of respondents 68% of the sample are university graduates and 32% hold a Master's Degree or PhD (12%).

Table 12. Level of education		
University	88	36.67%
Master's Degree	76	31.67%
Upper Secondary	29	12.08%

Ph.D.	25	10.42%
Secondary Education	9	3.75%
Postgraduate	3	1.25%
Primary Education	3	1.25%
Undergraduate	1	0.42%
N/A	6	2.50%
Total	240	100%

This rather high concentration of respondents on the higher educational levels is caused by an extremely high concentration of MScs and Ph. Ds in Bulgaria and Romania, which is not reflected in the sample in Greece or the UK. It is therefore not possible to draw conclusions relating to the educational level for the sample as a whole due to the differences identified across the four countries.

Table 13. Education by country								
	Bulgaria		Greece		Romania		UK	
Undergraduate		0.00%	1	1.37%	0	0.00%	0	0.00%
Primary Education		0.00%	3	4.11%	0	0.00%	0	0.00%
Secondary Education	1	1.82%	4	5.48%	0	0.00%	4	10.53%
Upper Secondary		0.00%	21	28.77%	5	6.76%	3	7.89%
Master's Degree	25	45.45%	13	17.81%	30	40.54%	8	21.05%
Ph.D.	11	20.00%		0.00%	12	16.22%	2	5.26%
Post graduate	2	3.64%	1	1.37%	0	0.00%		0.00%
University	15	27.27%	26	35.62%	26	35.14%	21	55.26%
N/A	1	1.82%	4	5.48%	1	1.35 %	0	0.00%
Total	55	100%	73	100%	74	100%	38	100%

Most of the respondents (75.42%) stated that they have received education relevant to their creative profession in the past. Especially in Greece, the rate was significantly higher (84.93%) compared to the other three countries.

Table 14. Have you received any education relevant to your creative profession?

	Bulgaria		Greece		Romania		UK		Total	
No	18	32.73%	11	15.07%	18	23.75%	10	26.32%	57	23.75%
Yes	36	65.45%	62	84.93%	55	75.42%	28	73.68%	181	75.42%
N/A	1	1.82%		0.00%	1	0.83%		0.00%	2	0.83%
Total	55	100.00%	73	100.00%	74	100.00%	38	100.00%	240	100.00%

The question above was followed by an open question “Please specify the kind of education you have received relevant to your creative profession”. Although there seems to be some misconception of the terms education and training and the difference between them, according to the compiled responses, in general the education the respondents received is closely related to their creative profession. While the response rate to this question was low (less than 50%), the majority respondents who did answer this question indicated that they held a bachelor/ university degree and the next largest group had received post-secondary education on their field. There is also a significant number of respondents who hold a Master’s degree, while some of them also hold a PhD. Some respondents also stated that they have not received any formal education, but they had on-the-job training. The results of the responses regarding prior education on the field are heavily biased because many of the participants in this survey are graduates of the partners of the Live Skills project which are VET providers.

Regarding the training the respondents have received, the most common method of delivery is workshops followed by seminars, while many of the participants had received both. This was not the case for Bulgaria at which seminars are by far the most prevalent method unlike workshops. E-learning as a sole method of delivery seems to compile a very low proportion in all the four countries.

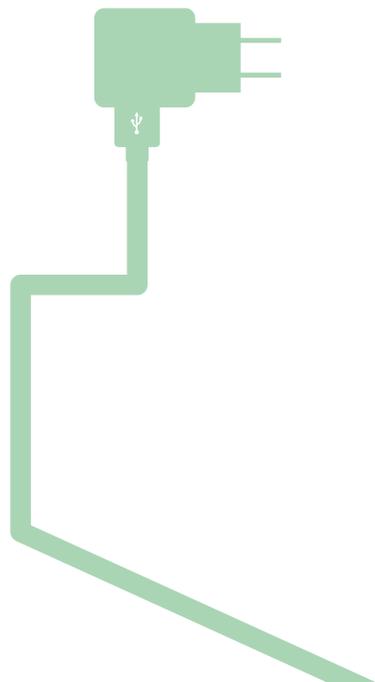


Table 15. Have you ever received training for your creative profession in the form of

	Bulgaria		Greece		Romania		UK		Total	
Workshop	5	9.09%	17	23.29%	19	25.68%	7	18.42%	48	20.00%
Seminar	13	23.64%	17	23.29%	9	12.16%	3	7.89%	42	17.50%
Workshop +seminar	11	20.00%	12	16.44%	15	20.27%	2	5.26%	40	16.67%
Workshop +seminar +e-learning	5	9.09%	10	13.70%	11	14.86%	9	23.68%	35	14.58%
N/A	5	9.09%	10	13.70%	6	8.11%	7	18.42%	28	11.67%
E-learning	4	7.27%	2	2.74%	5	6.76%	1	2.63%	12	5.00%
Other	6	10.91%	3	4.11%	2	2.70%		0.00%	11	4.58%
E-learning +other	1	1.82%		0.00%		0.00%	5	13.16%	6	2.50%
Workshop +e-learning	1	1.82%		0.00%	2	2.70%	2	5.26%	5	2.08%
Seminar + e-learning	2	3.64%	2	2.74%		0.00%		0.00%	4	1.67%
Workshop +seminar+other	1	1.82%		0.00%	3	4.05%		0.00%	4	1,67%
Workshop +seminar+ e-learning+other	1	1.82%		0.00%	1	1.35%		0.00%	2	0.83%
Seminar+other		0.00%		0.00%		0.00%	1	2.63%	1	0.42%
Workshop +e-learning +other		0.00%		0.00%		0.00%	1	2.63%	1	0.42%
Workshop +other		0.00%		0.00%	1	1.35%		0.00%	1	0.42%
Total	55	100.00%	73	100.00%	74	100.00%	38	100.00%	240	100.00%

5.3 Income

A very interesting finding is that, regarding their gross annual earnings, it seems that the relative majority (above 40%) of respondents in Bulgaria, Greece, and Romania get below €5,000, which means that they cannot be economically independent. In Romania the greatest concentration of earnings fell into the lowest range of €0-€5,000 (44.59%) like the other countries, but it also has a relatively high concentration in the highest range of €50,001-€100,000 (25.68%). Presumably, this finding is due to the fact that respondents were largely graduates of the VET providers, and therefore more likely to be people who are just starting out in their careers, therefore likely to be on lower salaries.

Table 16. Gross annual earnings (BG, GR, RO)						
	Bulgaria		Greece		Romania	
€0-€5.000	23	41,82%	35	47,95%	33	44,59%
€5.001-€10.000	14	25,45%	18	24,66%	1	1,35%
10.001€-15.000€	5	9,09%	11	15,07%	10	13,51%
15.001€-20.000€	4	7,27%	1	1,37%	2	2,70%
20.001€-25.000€	2	3,64%	1	1,37%	1	1,35%
50.001€-100.000€	1	1,82%	1	1,37%	19	25,68%
100.001€-above	1	1,82%	4	5,48%	4	5,41%
N/A	5	9,09%	2	2,74%	4	5,41%
Total	55	100.00%	73	100.00%	74	100.00%

In the UK the allocation of earnings is more even. One fifth of the respondents declared that their earning is £15,001-£20,000 which is considerably low, taking account of the cost of living in the UK. A notable finding similar, but not as extreme, as in Romania is a rather high concentration of 18.42% in an upper range of £30,001€-£50,000.

Table 17. Gross annual earnings (UK)		
£0-£5.000	2	5.26%
£5.001-£10.000	5	13.16%
£10.001-£15.000	7	18.42%
£15.001-£20.000	8	21.05%
£20.001-£25.000	4	10.53%
£25.001€-£30.000	3	7.89%
£30.001€-£50.000	7	18.42%
£50.001€-£100.000€	1	2.63%
N/A	1	2.63%
Total	38	100.00%

The findings above gave us the incentive to look deeper for correlation between earnings and the age of the respondents. It seems that for Bulgaria, Greece, and Romania the majority of young respondents, aged 18 to 44 years, earn the lowest level of €0-€5,000. This pattern is different for older respondents who seem to gain higher income.

Table_18. Annual Earnings (gross)							
	65+	55-64	45-54%	35-44%	25-34	18-24	Total
€0-€5.000	2	5	7	17	38	22	91
€10.001-€15.000	0	3	5	7	10	1	26
€100.001-above	0	0	1	0	0	0	1
€15.001-€20.000	0	4	3	2	3	0	12
€20.001-€25.000	0	0	2	1	2	0	5
€25.001-€30.000	0	1	0	0	0	1	2
€30.001-€50.000	0	0	0	1	0	0	1
€5.001-€10.000	0	7	10	9	20	5	51
€50.001-€100.000	0	0	1	1	0	0	2
N/A	0	1	1	2	1	6	11
Total	2	21	30	40	74	35	202

The above finding is partially met in the UK where young respondents from 18 to 24 years old are concentrated at lower earnings range while respondents of older age earn significantly more.

Table_19. Annual Earnings (gross)							
	65+	55-64	45-54	35-44	25-34	18-24	Total
£0-£5.000	5		1	0	0	1	7
£10.001-£15.000			1	1	2	3	7
£15.001-£20.000			1	2	0	5	8
£20.001-£25.000			0	3	1	0	4
£25.001-£30.000	1		0	1	1	0	3
£30.001-£50.000			0	4	3	0	7
£5.001-£10.000			0	0	0	0	0
£50.001-£100.000			0	1	0	0	1
N/A			0	1	0	0	1
Total	0	0	3	13	7	9	38

The above finding of generally low earnings is not aligned with the working experience of respondents on their creative profession. It seems that 25% of respondents have 10-20 years of experience and an almost equal rate (23.68%) has 5-10 years of experience.

Table 20. How many years of experience do you have on your creative profession?										
	Bulgaria		Greece		Romania		UK		Total	
0-5	5	9.09%	34	43.59%	23	30.67%	10	21.28%	72	31.58%
5-10	8	14.55%	21	26.92%	10	13.33%	15	31.91%	54	23.68%
10-20	17	30.91%	14	17.95%	16	21.33%	10	21.28%	57	25.00%
20+	16	29.09%	0	0.00%	17	22.67%	3	6.38%	36	15.79%
N/A	9	16.36%	9	11.54%	9	12.00%	9	19.15%	9	3.95%
Total	55	100.00%	78	100.00%	75	100.00%	47	100.00%	228	100.00%

5.4 Professional status

Regarding the professional status of the respondents, the relative majority are working as full-time (40.83%) or part-time (7.92%) paid employees or are working voluntarily (8.75%). There is also a high proportion of freelancers (33.75%) and only a few enterprise owners (4.17%). In a subsequent question addressed only to the freelancers regarding their motivation for becoming freelancers, freedom of choice in the selection of projects and flexibility seem to be the most prevalent response, while the difficulty in finding a paid employee job on the sector is also a very popular response.

Table 21. What is your professional status?										
	Bulgaria		Greece		Romania		UK		Total	
Owner of enterprise with employees	3	5.45%	0	0.00%	6	8.11%	1	2.63%	10	4.17%
Paid employee/ Full-Time	38	69.09%	11	15.07%	35	47.30%	14	36.84%	98	40.83%
Freelancer	8	14.55%	39	53.42%	22	29.73%	12	31.58%	81	33.75%
Voluntary employee	1	1.82%	9	12.33%	5	6.76%	6	15.79%	21	8.75%
Paid employee/ Part-Time	3	5.45%	10	13.70%	2	2.70%	4	10.53%	19	7.92%
N/A	2	3.64%	4	5.48%	4	5.41%	1	2.63%	11	4.58%
Total	55	100.00%	73	100.00%	74	100.00%	38	100.00%	240	100.00%

Most of the respondents stated that they work at least 20 hours per week, while there is also a non-negligible rate of 21.25% who work up to 20 hours a week. Another finding is that Greece has the highest rate of part-time employees, working up to 10 hours per week.

Table 22. How many hours do you usually work per week?

	Bulgaria		Greece		Romania		UK		Total	
0-20	5	9.09%	26	35.62%	13	17.57%	7	18.42%	51	21.25%
21-40	23	41.82%	19	26.03%	21	28.38%	13	34.21%	76	31.67%
41-50	14	25.45%	19	26.03%	25	33.78%	12	31.58%	70	29.17%
51-above	11	20.00%	8	10.96%	10	13.51%	6	15.79%	35	14.58%
(blank)	2	3.64%	1	1.37%	5	6.76%	0	0.00%	8	3.33%
Total	55	100.00%	73	100.00%	74	100.00%	38	100.00%	240	100.00%

Most of the respondents (40%) find new jobs and projects through traditional channels such as their social and professional networks (40.00%) and through suggestions from previous customers (27.92%). Modern channels, such as crowdsourcing, seem to be unknown to them since only 2.08% use them.

Table 23. How do you find new jobs/projects?

	Bulgaria		Greece		Romania		UK		Total	
Other	3	5.45%	5	6.85%	3	4.05%	4	10.53%	15	6.25%
Via competitions	4	7.27%		0.00%	4	5.41%		0.00%	8	3.33%
Via crowdsourcing	1	1.82%	2	2.74%	2	2.70%		0.00%	5	2.08%
Via my reputation at the market	12	21.82%	7	9.59%	12	16.22%	9	23.68%	40	16.67%
Via my social and professional networks	21	38.18%	24	32.88%	31	41.89%	20	52.63%	96	40.00%
Via promotional actions		0.00%		0.00%	1	1.35%		0.00%	1	0.42%
Via suggestion from previous customers/projects	12	21.82%	33	45.21%	17	22.97%	5	13.16%	67	27.92%
N/A	2	3.64%	2	2.74%	4	5.41%		0.00%	8	3.33%
Total	55	100.00%	73	100.00%	74	100.00%	38	100.00%	240	100.00%

5.5 Level of satisfaction on their skills

The respondents' satisfaction on their level of skills in Arts management is not very high, since only half of them expressed satisfaction (very satisfied 14.17% satisfied 33.33%). Surprisingly the lowest levels of satisfaction were in the UK, while the highest levels of satisfaction were in Bulgaria.

Table 24. How satisfied are you with the level of your skills in Arts management?										
	Bulgaria		Greece		Romania		UK		Total	
Very satisfied	13	23.64%	11	15.07%	5	6.76%	5	13.16%	34	14.17%
Satisfied	16	29.09%	23	31.51%	29	39.19%	12	31.58%	80	33.33%
Neutral	15	27.27%	30	41.10%	15	20.27%	7	18.42%	67	27.92%
Not satisfied	6	10.91%	6	8.22%	17	22.97%	10	26.32%	39	16.25%
Not satisfied at all	2	3.64%	2	2.74%	4	5.41%	4	10.53%	12	5.00%
N/A	3	5.45%	1	1.37%	4	5.41%		0.00%	8	3.33%
Total	55	100.00%	73	100.00%	74	100.00%	38	100.00%	240	100.00%

The situation is even worse with the level of skills in Cultural entrepreneurship, since less than half of the respondents stated satisfaction (satisfied 29.17%, very satisfied 10.83%); once again the highest levels of dissatisfaction coming from the UK and the lowest level from Bulgaria.

Table 25. How satisfied are you with the level of your skills in Cultural entrepreneurship?										
	Bulgaria		Greece		Romania		UK		Total	
Neutral	13	23.64%	27	36.99%	23	31.08%	12	31.58%	75	31.25%
Very satisfied	12	21.82%	6	8.22%	4	5.41%	4	10.53%	26	10.83%
Satisfied	15	27.27%	26	35.62%	23	31.08%	6	15.79%	70	29.17%
Not satisfied	6	10.91%	8	10.96%	14	18.92%	15	39.47%	43	17.92%
Not satisfied at all	2	3.64%	5	6.85%	5	6.76%	1	2.63%	13	5.42%
N/A	7	12.73%	1	1.37%	5	6.76%		0.00%	13	5.42%
Total	55	100.00%	73	100.00%	74	100.00%	38	100.00%	240	100.00%

The situation seems to be much better for all the four countries regarding the respondents' satisfaction on their level of skills in Digital and New Technologies with 42.08% stating "satisfied" and 13.33% "very satisfied". Respondents from Bulgaria and Greece are much more satisfied than respondents in Romania and the UK.

Table 26. How satisfied are you with the level of your skills in Digital and new technologies?

	Bulgaria		Greece		Romania		UK		Total	
Very satisfied	6	10.91%	17	23.29%	3	4.05%	6	15.79%	32	13.33%
Satisfied	26	47.27%	27	36.99%	34	45.95%	14	36.84%	101	42.08%
Neutral	11	20.00%	15	20.55%	17	22.97%	15	39.47%	58	24.17%
Not satisfied	8	14.55%	12	16.44%	12	16.22%	3	7.89%	35	14.58%
Not satisfied at all	1	1.82%		0.00%	5	6.76%		0.00%	6	2.50%
N/A	3	5.45%	2	2.74%	3	4.05%		0.00%	8	3.33%
Total	55	100.00%	73	100.00%	74	100.00%	38	100.00%	240	100.00%

5.6 Skills to be improved

The final and most crucial round of questions referred to the needs of the respondents for improving certain skills (derived from the qualitative research) in the three skills categories.

Arts Management Skills

Regarding arts management skills most respondents asked for improvement in project management, arts financial management, fundraising and grant writing, and presentation and communication, while areas such as intellectual property management and protection, principles and practices in arts management and teams governance and leadership had least interest.

Bulgarian respondents stated that they would like to improve mainly management skills for project management, arts financial management, international and intercultural arts management, self-management and marketing, and audience development skills. Less important skills training areas (in terms of demand) are those that have to do with employability skills and green skills⁵.

Survey participants from Greece would like to improve marketing and audience development, fundraising, grant writing, and also management skills connected to arts financial management, project management, self-management and presentation, and communication skills. Less important skills training areas were about regulatory practices and market analysis.

Romanian participants would like to improve mainly management skills connected to project and arts financial management, international and intercultural arts management, and also skills on fundraising and grant writing, presentation and communication skills, and marketing and audience development skills. Less important skills training areas were those that related to market analysis and skills on regulatory practices.

⁵ Green skills (skills for sustainability), are the technical skills, knowledge, values and attitudes needed in to develop and support sustainable social, economic and environmental outcomes in business, industry, and the community.

Participants from the UK would like to improve fundraising and grant writing skills, project management, arts financial management, regulatory practices and knowledge on the protection of intellectual property (Figure 13). Less important skills training areas are those that have to do with principles and practices in arts management and market analysis.

	Bulgaria	Greece	Romania	UK	Total
Project management	31	37	43	18	129
Arts financial management	28	38	36	16	118
Fundraising and grant writing	15	37	35	22	109
Marketing and audience development	21	39	34	12	106
Presentation and communication skills	19	34	38	9	100
Self-management	23	32	28	12	95
International and inter-cultural arts management	26	24	32	11	93
Intellectual property management and protection	18	25	26	14	83
Principles and practices in arts management	16	19	29	9	73
Teams Governance and Leadership	19	24	20	10	73

Digital and new technologies skills

Regarding digital and new technologies skills most respondents asked for improvement in understanding which new technologies are best for what purpose, digital art and design skills, social media - use of social networks, digital marketing and Live cinema. Less important skills training areas have been security issues and privacy, software development technologies, and safety of audience in venues.

Bulgarian respondents greatly valued the improvement of skills that help understanding which new technologies are suitable for which purpose, digital art and design skills, digital marketing skills, new technologies in arts management, skills about the use of social media and networks, and skills about protection of intellectual property. Less important skills training areas were associated with software development, skills about VR/AR tools and introduction to computer etc.

In the case of Greece, respondents asked for improvement of understanding which new technologies are suitable for what purpose, digital art and design, skills about the use of social media/ networks, skills about live cinema, skills on sound and lighting equipment and controls and animation and digital editing software. Less important skills training areas were those associated with safety of audiences, web technologies and intellectual property protection skills.

Romanian respondents greatly valued skills to develop live cinema, digital marketing, new technologies in arts management, and skills about animation and digital editing software. Less important skills training areas were those associated with software development, security issues and safety of audience and professionals.

In the case of the UK, the participants greatly valued improvement of understanding which new technologies are suitable for what purpose, skills on sound and lighting equipment and controls, the use of drones and specialised tools for the AV and LP sector. Less important skills training areas were associated with the introduction to computer, networks and internet, intellectual property and piracy and live cinema.

Table 28. Which of the following digital and new technologies skills would you like to improve?

	Bulgaria	Greece	Romania	UK	Total
Understanding which new technologies are best for what purpose	28	39	25	19	111
Digital art and design skills	27	34	29	8	98
Social media - use of social networks	20	33	27	12	92
Digital marketing	21	25	34	10	90
Live cinema	14	31	36	7	88
Animation and digital editing software	17	29	27	12	85
Sound and lighting equipment and controls	16	29	21	16	82
New technologies in arts management (e.g., Web 2.0, Social Media, Websites, Videos, Podcasting, Livestreaming, Mobile Technology)	20	21	31	10	82
Drone use	10	24	24	16	74
Specialized tools for the AV and LP sector (sound and video processing, lights, etc.)	14	28	18	13	73
Sharing economy and selling through global marketplaces and platforms (Collaborative consumption, Crowdsourcing)	11	22	21	10	64
Web technologies and site builder tools	14	14	20	12	60
Intellectual property and piracy	19	14	18	6	57
Safety of professionals	14	20	11	9	54
Introduction to Computer, Networks and Internet	10	17	19	3	49
VR/AR tools	7	16	13	12	48
Security issues and privacy	13	15	10	10	48
Software development technologies	7	17	10	9	43
Safety of audience in venues	10	13	11	9	43

Cultural entrepreneurship skills

Regarding cultural entrepreneurship skills, most respondents asked for improvement in creativity and idea generation, strategy, innovation and planning, new business models, vision, and crisis management. The less popular skills training areas were financial and economic literacy, entrepreneurship and intra-preneurship, and mobilising resources.

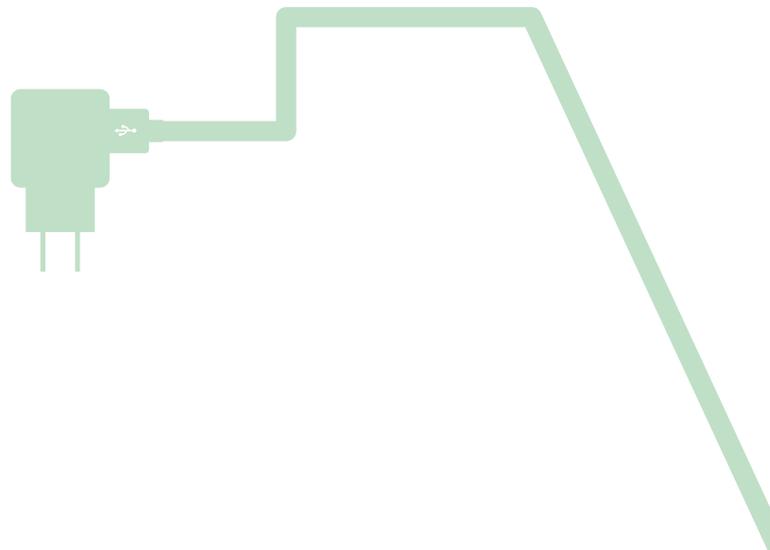
Table 29. Which of the following cultural entrepreneurship skills would you like to improve?					
	Bulgaria	Greece	Romania	UK	Total
Creativity	25	42	36	10	113
Creativity-idea generation, strategy, innovation and planning	27	36	41	8	112
New business models	27	26	33	22	108
Vision	20	39	32	10	101
Crisis management	20	32	27	15	94
Negotiation	21	32	32	10	95
Planning and management	23	28	32	8	91
Working with others	24	32	24	6	86
Inspiring others	19	26	19	13	77
Spotting opportunities	17	23	21	14	75
Ethical and sustainable thinking	13	23	27	12	75
Sustainability	13	22	27	12	74
Self-awareness and self-efficacy	16	22	24	12	74
Adaptability	17	27	25	5	74
Art history	15	27	26	5	73
Motivation and perseverance	13	27	25	8	73
Learning through experience	15	28	22	5	70
Inter cultural skills and networking skills	17	14	23	15	69
Coping with uncertainty, ambiguity and risk	11	22	19	11	63
Collaborative skills (team leader, communication, partnership establishment)	17	17	22	7	63
Making the initiative	17	19	18	9	63
Financial and economic literacy	13	20	21	13	67
Entrepreneurship and intra-preneurship	12	10	22	11	55
Mobilising resources	12	13	21	7	53

In Bulgaria survey respondents stated that they would like to improve knowledge about generating new, creative ideas, skills on new business models, skills on effective working with others, planning and management skills, and negotiation skills. Less important were skills, such as coping with uncertainty, ambiguity and risk, entrepreneurship and intra-preneurship, and mobilising resources.

In Greece respondents would like to improve skills on generating new creative ideas, skills on creativity and vision, skills on crisis management, effective working with others, and negotiation skills. Skills that were not found so popular in terms of training needs were entrepreneurship and intra-preneurship, mobilising resources and inter cultural skills and networking skills.

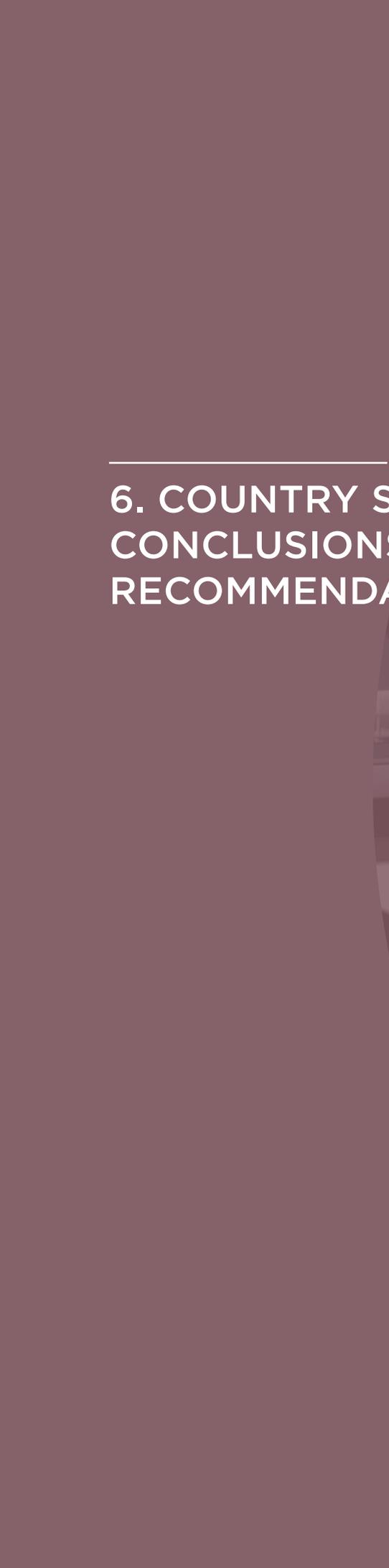
In Romania the survey participants would like to improve generating new, creative ideas, skills on new business models, negotiation skills, development of creativity and vision, and planning and management skills. Among the least selected skills were making the initiative, inspiring others and coping with uncertainty, ambiguity and risk.

In the UK, survey participants would like to improve skills related to developing new business models, skills on crisis management, skills on networking, e-leadership and empowerment, financial and literacy skills, and skills on spotting opportunities. Less important skills training areas were found to be learning through experience, adaptability, art history. ■





6. COUNTRY SPECIFIC CONCLUSIONS AND POLICY RECOMMENDATIONS



BULGARIA

- The Audio-visual and Live Performance sectors need to be further developed and supported in Bulgaria, by strengthening the institutional mechanisms, structures and programmes to supporting the sectors' actors, which in turn can lead to increased collaboration with European stakeholders and enhanced engagement with European policies.
- In an ongoing era of digitalisation and recognising the added-value and potential that new technologies have in the development of the AV & LP sectors (including through their considerable dissemination & outreach potential), their use and promotion should be further increased at all levels while paying particular attention to intellectual rights.
- As sectors able to act as economic drivers at country level (promoting innovation, supporting the development of SMEs, upskilling professionals and young learners, increasing cultural exchanges and many more), the AV & LP sectors ought to be further supported and developed, ensuring a regular pace of development that can contribute to the economy of the country with jobs creation, innovation, social cohesion, and cultural exchanges.



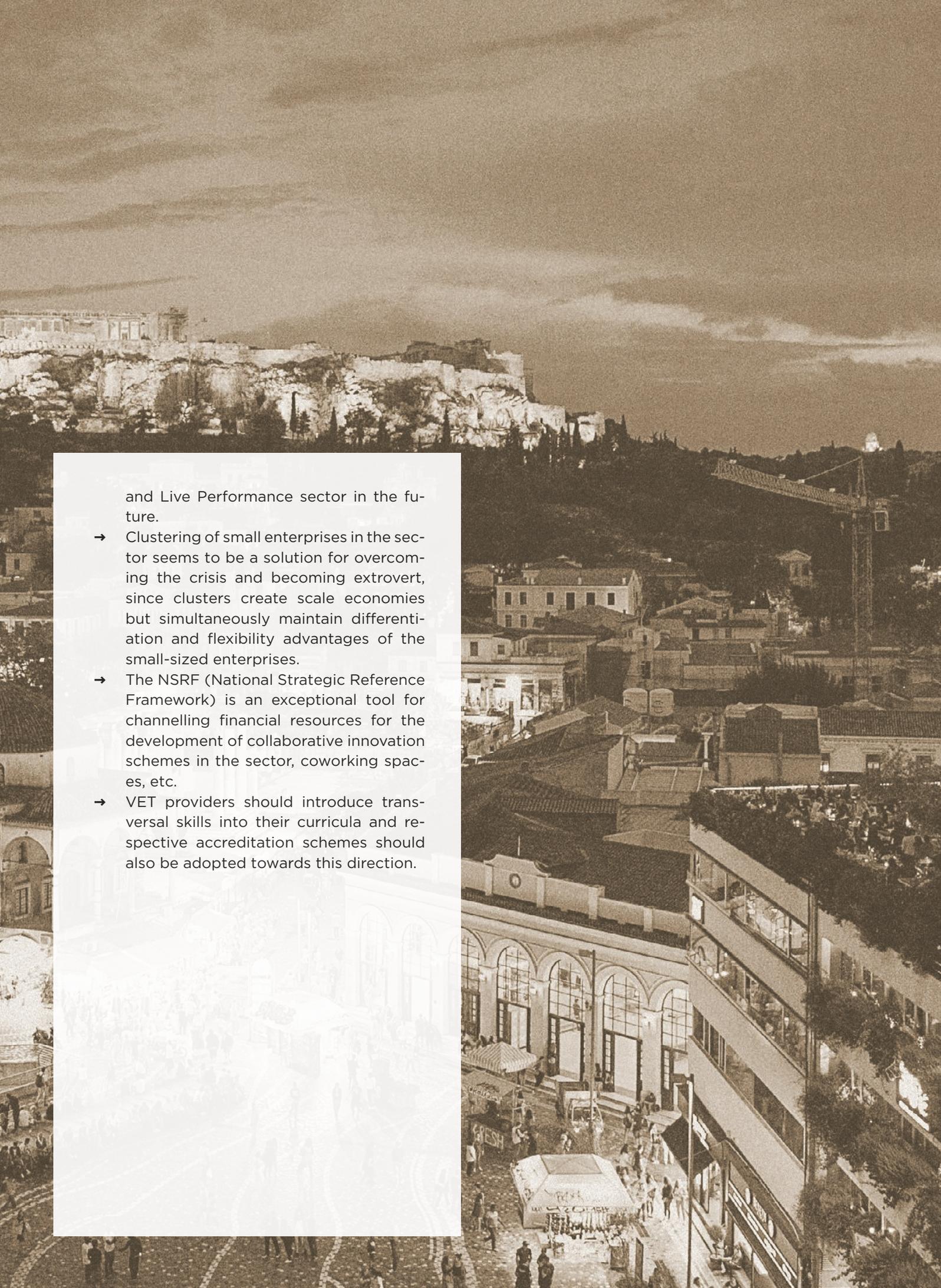


GREECE

- The overall outlook of the Audio-visual and Live Performance sector in Greece shows that the cultural and creative sector was affected in a more intense way from the recession in the Greek economy.
- The sector in Greece was highly dependent from public funding and was affected by governmental budget cuts.
- The fall in consumption as a result of an almost 30% downturn of GDP had also a negative effect on the demand side for creative and cultural products and the respective fall in advertising and media productions was the final blow in the sector.
- Since 2016, the Ministry of Education has been conducting major reform of the VET system, considering challenges raised by the financial crisis, and started the implementation of a coherent national strategic framework for upgrading VET and apprenticeships (NSF, April 2016), with the aim to promote and enhance the social role of VET; to upgrade and expand apprenticeships; strengthen links between VET and the labour market; increase VET quality; and promote VET attractiveness.
- Vocational education and training in the sector, provided mainly from the private

sector, is a fast-growing industry and manages to respond in the rising demand.

- However, development of transversal digital and entrepreneurial skills in the vocational training is underperformed.
- Increasing the provision of work-based learning schemes, with a special focus on apprenticeships, is a good basis towards the acquisition of the required knowledge, skills, and competences by young people to perform under the new cultural and creative era that is being shaped. This process also requires closer communication between the VET providers and the industry/ employers in order to increase ownership and commitment.
- Since 2016 a reform has established a new pathway, a one-year apprenticeship programme at post-secondary level to offer upper secondary VET graduates the chance to acquire labour-market-relevant skills and to support labour market entry.
- Formal on-the-job training is provided as part of vocational training courses, but it seems that trainees are not always occupied on their field which leads to low adding value of the traineeship.
- Based on the quantitative and qualitative research we conducted in Greece, an essential step has been taken towards a more thorough evidence-based design of policies and action in the Audio-visual



and Live Performance sector in the future.

- Clustering of small enterprises in the sector seems to be a solution for overcoming the crisis and becoming extrovert, since clusters create scale economies but simultaneously maintain differentiation and flexibility advantages of the small-sized enterprises.
- The NSRF (National Strategic Reference Framework) is an exceptional tool for channelling financial resources for the development of collaborative innovation schemes in the sector, coworking spaces, etc.
- VET providers should introduce transversal skills into their curricula and respective accreditation schemes should also be adopted towards this direction.

ROMANIA

- In Romania although the workforce is highly educated from state or private universities, there seems to be a lack of vocational training of technicians. The few existing VET programs do not give enough attention to transversal skills, such as communication, collaboration, problem solving skills, risk management and teamwork.
 - In this respect, such skills are usually obtained through informal on-the-job training therefore lacking any certification.
 - It is found that the necessary attention is not paid to counselling and career guidance.
 - The need to protect intellectual rights has become essential in the cultural field, so there is a need for deep knowledge of the legislation in the field.
 - Promote more intense, systematic and wider cooperation between artistic, academic, and scientific institutions and public-private initiatives in support of creative projects.
- Supporting investments in the digitisation of cultural resources and their aggregation and accessibility for the general public and users.
 - Managers of cultural organisations (public and private) must be educated about the benefits of continuing vocational training.
 - Developing creativity skills through life-long learning and education programs in response to the challenge of preparing workforce specialized in specific crafts.
 - Training programs must cause the annihilation of the imbalance between the skills existing on the labour market and the need or demand of the employer.
 - They must include an important component of practical training (traineeships and mentoring).
 - Training programs should also target the formation of skills, such as Arts Management, Cultural Entrepreneurship and New Digital Technologies.
 - Expanding collaboration, at least for the technical support and distribution activities between public institutions and freelancers in the field of performing arts. Collaborations can take place for highly specialised activities.

- 
- An aerial photograph of a city, likely Bucharest, Romania, showing a mix of architectural styles. In the center, a large, classical-style building with a prominent portico of columns is visible. The surrounding area is filled with various residential and commercial buildings, some with red-tiled roofs. The sky is overcast with grey clouds. A semi-transparent white box is overlaid on the left side of the image, containing a list of three points.
- They can take place in the case of projects with limited periods or to carry out more specific activities of a larger project.
 - Revitalising cultural infrastructure that delivers high value-added cultural goods and services and incorporating them into the public consumption circuit: cinemas, entertainment and concerts, as spaces that can become cultural and creative knots and business incubators.
 - Periodic updating of the Romanian Occupation Code and of the occupational standards in line with the evolution of the labour market and the new skills requirements.

UK

- In view of the well-established and rapidly growing Audio Visual and Live Performance sectors in the UK, training opportunities should be developed for both entrant and established practitioners. Such courses should focus on soft and transferable skills, whilst complementing existing courses that cover technical skills.
- In line with the above recommendation, it is important to support the development of entrepreneurial skills for both entrant and established film editors and sound engineers in the UK, inspiring them to set up and manage their own businesses, as well as encouraging them to be more intrapreneurial within established businesses.
- It is recommended that free access to training and learning materials should be available across the Audio Visual and Live Performance sectors and that unions and other stakeholders should be able to guide individuals to these learning materials.
- Life-long learning opportunities should be increased and promoted through flexible modes of delivery that can reach existing practitioners..







7. EU SPECIFIC CONCLUSIONS AND POLICY RECOMMENDATIONS





7. Conclusions

- The creative and cultural economy can be seen as pioneers in the service sector and they can act as drivers of growth in the local and national economies.
- Funding programmes and supporting structures in the creative sector, both at European and National level, are insufficient or non-existent and this is a challenge faced by all countries.
- During the last decade, the European economy faced, and some national economies still face, a very difficult and turbulent economic situation due to the financial crisis of 2008. Most countries have implemented severe financial cuts, concerning both public and private cultural operators. Moreover, despite the fact that studies of arts, culture and humanities flourish in universities, the findings of research are of little interest to governments.
- As a result, the cultural and creative sector is underfunded, which has severely affected the Cultural and Creative Industries.
- From the country-specific research, it resulted that the UK has a rather mature creative and cultural industry totally integrated into the market economy and holds a significant share of the economic activity. On the contrary, Creative and Cultural industries in Greece and especially in Bulgaria and Romania still try to cut off from state funding and find their way into the market.
- The overall context described above led to a heavy decrease of private consumption of cultural and creative products. This has been a main reason behind the closedown of many big enterprises in the sector.
- As a reaction to the above trends, there is an increase in the birth of new small enterprises and an increased number of self-employed practitioners; a trend which is now becoming the prevailing mode of operations since 2009.
- Moreover, state budget cuts led to an exploration of alternative sources of funding, such as crowdfunding, commercialisation of some operations, and seeking of private investment.
- Collaborative communities and spaces (in the form of creative hubs, incubators, labs, etc.) also emerged in order these small firms and self-employed practitioners to develop scale economies, but at the same time being more flexible, sustainable, and adaptive compared to big enterprises. This has been a new collective approach to cope with uncertain economic environments by collaborating and networking and has played a key-role in urban regeneration and redevelopment.
- The sector is rapidly being digitalised with the appearance and the application of new technologies, in both production and distribution, and also generated new forms of artistic and creative expression.
- The sector is characterised by a diversity of sources of funding and business models. The workforce is predominantly young and has high levels of qualifications, but the majority is underpaid and cannot be economically independent. The choice to become freelancers or business owners in the sector is usually imposed by the difficulty to find a job position with satisfactory field work and compensation.
- Technicians and other professions in the sector who need technical skills are educated mostly theoretically. In addition, there is a clear lack of apprenticeships and other work-based learning programmes. As a result, skills required are learned on-the-job rather than during training.

- All these transformations in the sector impose the development of t-shaped skills of professionals and in particular of entrepreneurial and digital skills. These skills fall into three broad categories: Arts Management Skills, Digital and New Technologies Skills and Cultural Entrepreneurship Skills. Our research has pointed specific skills into the above categories that are important and should be included into the professional curricula of the selected broader professional categories (see section 5.7)
- In some countries, private foundations and other stakeholders are partially filling the gap of national and public policy in relation to skills development, but this is not enough in order to fill the gap of skills in the sector.
- There are also differences between sectors and subsectors, as well as between employment practices, e.g. there is even less funding available for skills development for freelancers vs employees.
- In this context, the current research has identified a wide range of entrepreneurial and digital skills that should be prioritised and recognised, linking it to the wider European context of the knowledge economy and digitalisation.
 - In the field of arts management, arts financial management project management and fundraising and grant writing, presentation and communication skills are the top skills.
 - In the field of digital and new technologies, understanding which new technologies are best for what purpose, marketing and audience development, digital art and design skills, social media - use of social networks, and digital marketing are the most important.
 - In the field of cultural entrepreneurship, creativity, creativity-idea generation, strategy, innovation and planning, new business models, vision, negotiation and crisis management.
- Regarding modes of delivery of the curricula, it seems that new digital technologies and on-line learning are increasingly and widely introduced into the teaching process with significant gains for its adding value. However, traditional face-to-face class lessons are still the most preferable mode of delivery.

Policy recommendations

- Policy-makers and decision-makers should encourage the development of the relevant policy frameworks at Member-State level, that will set the basis for the establishment of the adequate structures to support and accompany the AV and LP sectors, recognising their contribution at sectoral level, their added-value at social level (job creation, business development and economic growth) and their role in the promotion of cultural relations.
- There is also a clear need for increasing funding and developing further sustainable support structures and mechanisms, which meet the needs of the sector and improve the exchange of good practices among countries.
- More attention needs to be paid to change both employers' and employees' perceptions on continuous professional development, by raising the valuing and appreciation of life-long learning and skills development and provide the employers with incentives to engage more and invest in training.
- Advocacy to the governments and decision-makers is key, but other means of advocacy and policy work shall not be neglected, such as the role of Civil Society and social partners, as well as their contribution to public consultations mechanisms (i.e. related to the Multi-Annual financial framework of the EU etc., that have not received the necessary attention from the wider cultural and creative sector).
- Policy work and change can and should be made within the sector and with a wide range of stakeholders and actors across the civil society and not just with government, applying a bottom-up approach.
- In a more general manner, policy recommendations can include the following guidelines:
 - Develop national strategies for the AV and LP industries to provide the strategic foundation for ongoing development of policies and plans.
 - An industry-education/ training forum should be established to bring together the demand and supply sides of skills development in the AV and LP sectors. Moreover, these platforms, composed by the relevant representatives of sector stakeholders (employers, unions, national skills bodies, professional associations, education and training organisations) could open up possibilities for practical decision-making that will respond to sectoral needs.
- Acknowledging the digital shift, European and national policy-makers should address the **digital gap between generations of young learners and more experienced professionals**, by prioritising the up-skilling of experienced professionals already in the labour market with digital, new technologies, and social media skills. In parallel, it is of utmost importance to develop and maintain adequate policy frameworks to accompany and equip young learners with digital & new technologies skills.
- Current and future policies at European and national level in the AV and LP sectors should pay particular attention to the **interlinkages between the learning processes and work-based learning opportunities**, by establishing and securing an enabling environment that supports learners to acquire new skills and knowledge through such experiences, but also encourages and incentivizes cultural organisations and employers to take part in apprenticeship schemes. To this end, funding schemes or incentives to employers for committing to training programmes are needed, along with better publicity to advertise training opportunities for a greater take-up by businesses and individual workers.



- A detailed census should be undertaken across the industry in every country, similar to the work undertaken by Creative Skillset for the creative industries in the UK.
- Along with the collection of relevant, harmonised and comparable statistics from national statistical agencies, this census could help identify trends and skills needs in the creative and cultural industries and provide useful feedback for designing EU and national policies on the field.
- Create an online Pan-European professional learning network for freelancers, paid employees and employers, where these groups will exchange information about new jobs, new technologies, and network each other. Through such spaces, like sustainable and informed platforms, AV and LP professionals can benefit from meeting and exchanging views on potential opportunities and design joint initiatives that are crucial for the professional training procedure within the two subsectors.
- More opportunities for on-the-job learning should be developed through partnerships between educational and professional executives that develop learning schemes suitable for each organisation.
- Finally, collaborative schemes such as clusters should be boosted through the establishment of creative hubs and coworking spaces in the CCI. For a collaborative scheme to be developed, apart from creating the needed facilities, it is also equally important to have empowered facilitators, who will coordinate the collaborative schemes and also provide support services to their members. ■

BIBLIOGRAPHY

a-n The Artists Information Company. (2014) *Paying Artists: Valuing Art, Valuing Artists*.

Armstrong, A. and Page, N. (2015) *Creativity and constraint: leadership and management in the UK creative industries*. London. Creative Skillset & Ashridge Business School. Available at: https://creativeskillset.org/assets/0001/5933/Creativity_and_constraint_leadership_and_management_in_UK_2015.pdf

Athens Chamber of Tradesmen. (2015) *Mapping the Greek Cultural & Creative Sectors Skills*. Athens. ARTs - Skills for the Creative Economy project. Available at <http://arts-project.eu/wp-content/uploads/2015/10/R2.2.Mapping-the-Greek-Cultural-and-Creative-Sectors-Skills.pdf>

Beyers, W. B. and Lindahl, D. P. (1996) 'Lone eagles and high fliers in rural producer services'. *Rural Development Perspectives*, 11(3), pp. 2-10.

British Council Cultural Skills Unit. (2014) *Examining the cultural skills gaps and shortages in Germany, Greece, Poland and Romania*. London. British Council. Available at: https://www.britishcouncil.org/sites/default/files/europe_-_research_summary_final.pdf

Coulson, S. (2012) 'Collaborating in a competitive world: musicians' working lives and understandings of entrepreneurship'. *Work, employment and society*, 26(2), pp. 246-261.

Creative & Cultural Skills. (2013) *Building a Creative Nation: Evidence Review*. UK. Creative and Cultural Industries Ltd. Available at: https://ccskills.org.uk/downloads/Building_a_Creative_Nation_Evidence_Review.pdf

Creative & Cultural Skills. (2015) *Building a Creative Nation: the Next Decade - What the current literature tells us about the future skills needs of the creative and cultural industries*. UK. Available at: https://ccskills.org.uk/downloads/CCS_BUILDINGACREATIVE-NATION_WEB_SINGLES.pdf

Creative & Cultural Skills. (2016) *Building a Creative Nation: Putting Skills to work - creating jobs, apprenticeships and work opportunities in the creative and cultural industries*. UK. Creative and Cultural Industries Ltd. Available at: https://ccskills.org.uk/downloads/Building_a_Creative_Nation_-_Current_and_Future_Skills_Needs.pdf

Creative Skillset and Creative & Cultural Skills. (2012) *Creative Media and Entertainment: Sector Skills Assessment 2012*. Briefing paper. UK. Commission for Employment and Skills Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/306379/briefing-paper-ssa12-creative.pdf

Creative Skillset. (2014) *Creative Media Workforce Survey Report 2014*. UK. Creative Skillset. Available at: https://creativeskillset.org/assets/0001/0465/Creative_Skillset_Creative_Media_Workforce_Survey_2014.pdf

Creative & Cultural Skills. (2007) *The Creative Blueprint: The Sector Skills Agreement for the Creative and Cultural Industries - Skills Needs Assessment*. UK. Creative & Cultural Skills. Available at: https://ccskills.org.uk/downloads/1321190281-CCSkills_Northern_Ireland_SSA_2010-11.pdf

Creative & Cultural Skills. (2007) *The Creative Blueprint (Stage 2): The Sector Skills Agreement for the Creative and Cultural Industries- Understanding Supply*. UK. Creative & Cultural Skills.

Creative & Cultural Skills. (2008) *Sector Qualifications Strategy*. Creative & Cultural Skills. UK. Creative & Cultural Skills. Available at: <https://webarchive.nationalarchives.gov.uk/20110118225210/http://ccskills.org.uk/Qualifications/SectorQualificationsStrategy/tabid/135/Default.aspx>

Creative & Cultural Skills. (2010) *The Creative and Cultural Industries: Impact and Footprint 2010/2011*. Creative & Cultural Skills

Creative & Cultural Skills. (2009) *Creative and Cultural Industries Workforce Survey*. UK. Creative & Cultural Skills.

Creative & Cultural Skills, e-Skills UK and Skillset. (2010) *Strategic Skills Assessment for the Digital Economy*. UK. Creative & Cultural Skills, e-Skills UK and Skillset. Available at: <http://blueprintfiles.s3.amazonaws.com/1319716512-Strategic-Skills-Assessment-for-the-Digital-Economy.pdf>

Creative & Cultural Skills. (2010) *The Performing Arts Blueprint: An analysis of the skills needs of the performing arts sector in the UK*. UK. Creative & Cultural Skills. Available at: <http://creative-blueprint.co.uk/library/item/the-performing-arts-blueprint-an-analysis-of-the-skills-needs-of-the-perfor>

Creative & Cultural Skills. (2011) *The Music Blueprint: An analysis of the skills needs of the music sector in the UK*. UK. Creative & Cultural Skills. Available at: <http://creative-blueprint.co.uk/library/item/the-performing-arts-blueprint-an-analysis-of-the-skills-needs-of-the-perfor>

Creative & Cultural Skills, Arts Council England and Nesta.(2013) *Publicly-Funded Arts as an R&D Lab for the Creative Industries? A Survey of Theatre Careers in the UK*. UK. Creative & Cultural Skills. Available at: https://ccskills.org.uk/downloads/1370851494-A_Survey_Of_Theatre_Careers.pdf

Christopherson S. (2013) 'Hollywood in decline? US film and television producers beyond the era of fiscal crisis'. *Cambridge Journal of Regions, Economy and Society*, 6 (1), pp. 141-157.

De Propriis L. (2013) 'How are creative industries weathering the crisis?' *Cambridge Journal of Regions, Economy and Society*, 6(1), pp. 23-35.

Department of Business, Innovation and Skills. (2010) *Skills for sustainable growth*. London. Department of Business, Innovation and Skills. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/32368/10-1274-skills-for-sustainable-growth-strategy.pdf

Department for Culture, media & Sport. (2015) *Creative Industries Economic Estimates*. London. Department for Culture, media & Sport. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/394668/Creative_Industries_Economic_Estimates_-_January_2015.pdf

European Commission. (2009) *Creative Content in a European Digital Single Market: Challenges for the Future*. European Commission. Available at: http://ec.europa.eu/internal_market/consultations/docs/2009/content_online/reflection_paper%20web_en.pdf

Florida, R. L. (2002) *The rise of the creative class: and how it's transforming work, leisure, community and everyday life*. New York, , Basic Books.

Frenette, A. (2013) 'Making the intern economy: Role and career challenges of the musicindustry intern'. *Work and Occupations*, 40(4), pp. 364-397.

Gill, R and Pratt, A (2008) 'In the social factory? Immaterial labour, precariousness and cultural work'. *Theory, Culture and Society*, 25(7-8), pp. 1-30.

Gottfredson, M, Puryear, R and Phillips, S. (2005) 'Strategic sourcing: from periphery to theCore'. *Harvard Business Review*, 83(2), pp. 132-139.

Hesmondhalgh, D and Baker, S. (2011) *Creative labour: media work in three cultural industries*. Routledge, London

European Commission (Directorate-General for Education and Culture). (2006) *The Economy of Culture in Europe*. European Commission Available at http://ec.europa.eu/assets/eac/culture/library/studies/cultural-economy_en.pdf

Mitchell, L. (2005) *Freelancing for television and radio*. Routledge, London

Moriset, B. (2013) 'Building new places of the creative economy. The rise of coworking

Spaces' *Territoire en Mouvement* . Available at: <https://halshs.archives-ouvertes.fr/halshs-00914075>

Mould, O, Vorley, T and Liu, K. (2014) 'Invisible creativity? Highlighting the hidden impact of freelancing in London's creative industries'. *European Planning Studies*, 22(12), pp. 2436-2455.

Nesta, Arts Council England and the Arts and Humanities Research Council. (2015) *Digital Culture 2015: How Arts and Cultural Organisations in England use Technology*. London. Available at <https://www.artscouncil.org.uk/sites/default/files/download-file/Digital-Culture-2015-Final.pdf>

Nesta, (2017) *A closer look at Creatives*, NESTA, UK.

O'Connor, J. (2007) *The cultural and creative industries: a review of the literature*. *Creative Partnership Series Arts Council UK*, Available at: (http://kulturekonomi.se/uploads/cp_litrev4.pdf)

Schiller, D. (1999) *Digital capitalism: networking the global market system*. MIT Press, Cambridge MA.

Spinuzzi, C. (2012) 'Working alone together: coworking as emergent collaborative activity'. *Journal of Business and Technical Communication* 26 (4), pp. 399-441.

Stanworth, C. and Stanworth, J (1997) 'Managing an externalized workforce: freelance labour-use in the UK book publishing industry'. *Industrial Relations Journal*, 28(1), pp. 34-55.

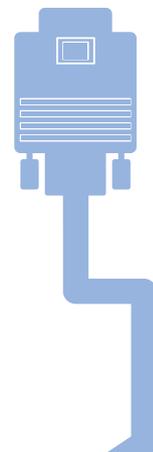
Creative & Cultural Skills. (2012) *Performing Arts 2012/13. Creative & Cultural Skills*. Available at:

<https://ccskills.org.uk/supporters/advice-research/article/the-creative-and-cultural-industries-performing-arts-2012-13>

European Skills Council for employment and training in the Audio-visual and Live Performance Sectors. 2016 *Trends and skills in the European audio-visual and live performance sectors. 1st ed.* Brussels. Available at: http://www.creativeskillseurope.eu/wpcontent/uploads/2016/06/CSE_final_report.pdf

UK Commission for Employment and Skills. (2015) *Sector insights: skills and performance challenges in the digital and creative sector*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/433755/Skills_challenges_in_the_digital_and_creative_sector.pdf

Young, J.S. (1997) *Not so lonely eagles*. Forbes.com. Available at: <https://www.forbes.com/1997/05/19/eagle.html#7dab8ea6a3f2>





“The European Commission support for the production of this document/report/publication does not constitute endorsement of the content which reflects the views only of the authors, and the Commission and EACEA cannot be held responsible for any use which may be made of the information contained therein.”

