

EduKIT

**A Guide on Educational Role-Play Game
“Management of heritage sites”**

KIT for teachers



Developed within project

***EduGame: Innovative Educational Tools for Management in Heritage
Protection - gamification in didactic process***

**Co-funded by the Erasmus+ Programme of the European Union
Key Action 2: Strategic Partnership Projects**



Play is the foundation of learning, creativity, self-expression, and constructive problem-solving.

It's how children wrestle with life to make it meaningful.

Susan Linn
Contemporary American psychiatrist

PREFACE

"**Edugame Role-Play**" was born from the collaboration of **Politecnico di Milano (Italy)** with **Politechnika Lubelska (Poland)**, **Universidade da Beira Interior (Portugal)**, **Unione Fiorentina Museo Casa di Dante (Italy)**, **José Monteiro Municipal Archaeological Museum in Fundão (Portugal)**, **Muzeum Kresów w Lubaczowie (Poland)** in the field of EDUGAME Project ("Innovative Educational Tools for Management in Heritage Protection – Gamification in didactic process") implemented in frames of Erasmus+ Programme.

The subject of the game is the **process** in which the **protection of historical objects** takes place. This process is characterised by a **conflict** because the **stakeholders** (owners of historic buildings, users of historic sites, heritage conservators, local community, tourists, authorities of various levels) can have different and even **conflicting goals** and have to reach a compromise.

"**Edugame Role-Play**" is an useful tool to let the players (students) **familiarise with the different stakeholders' roles** (powers, competences, needs), to **apply specialistic knowledge** acquired through the university curriculum, but also to "**bring into play**" **negotiation, team-working, conflict management and communication skills.**

*I don't know the role I'm playing.
I only know it's mine, non-convertible.*

Wisława Szymborska
poetess

INTRODUCTION

This manual is aimed at **teachers and instructors** who wish to engage their students in a Role-Play, in order to enhance their **interest and motivation** in the content, to improve their **analytical and decision-making skills**, to change **views or attitudes toward issues or people**, to achieve **longer-term learning advantages**.

“**Edugame Role-Play**” is especially designed to be used in **Heritage Protection** courses, involving students who have completed the **Bachelor of Science's Degree in Architecture or Engineering**.

Although we consider the design of an educational experience as a fundamental and unavoidable phase (therefore we invite you to design in detail your Role-Play), this manual does not propose an in-depth reflection on the design, but offers:

- in the first section, the **guidelines to adopt Edugame Role-Play** and to **adapt** it for your students,
- in the second section, three “full package” **Role-Plays**, set respectively at **Museum Casa di Dante di Firenze (Italy)**, **Museum Kresów w Lubaczowie (Poland)** and **José Monteiro Municipal Archaeological Museum in Fundão (Portugal)**, complete with all the necessary documentation, which can be used immediately with your own students.

WHAT IS A ROLE-PLAY?

*“A role-play [...] is a situation in which an individual is explicitly asked to **take a role not normally his own**, or if his own in a setting not normal for the enactment of the role”.*

Mann, 1959

*“Roleplaying is the **art of experience**, and making a roleplaying game means **creating experiences**”.*

Pettersson, 2006

*“A role-play simulation game is a **dynamic artificial environment** in which human 'agents' interact by playing roles with **semi-defined characteristics, objectives and relations** (social rules) to one another and within a **specified scenario** (set of conditions)”.*

Llinser, Ree-Lindstad, Vold, 2008

*“Key features of simulations are that they represent **real-world systems**; they contain **rules** and **strategies** that allow **flexible** and **variable** simulation activity to evolve; and the cost of error for participants is low, **protecting** them from the more severe consequences of mistakes”.*

Crookall, Saunders, 1989

*“Role-playing is an **interactive process** of defining and re-defining the state, properties and contents of an imaginary game world. The power to define the game world is allocated to participants of the game. The participants recognize the existence of this **power hierarchy**. Player-participants define the game world through personified character constructs, **conforming to the state, properties and contents** of the game world.”*

Zagal, Deterding, 2018.

Game-based learning is a type of game with defined learning outcomes

Shaffer, Halverson, Squire, Gee, 2005

WHY A ROLE-PLAY? (LEARNING OUTCOMES)

- To **engage the students**, enhancing learner **interest and motivation** in the content.
- To put them in a situation in which they have to **make decisions** both **applying knowledge**, and **considering values, perceptions, decision options**, and responding to feedback, improving cognitive learning.
- To apply theoretical concepts to **real life situations**.
- To improve **analytical and decision-making skills**.
- To **change views or attitudes** toward issues or people, and **empathy** toward others.
- To achieve **longer-term learning advantages**.

The Role Play implemented within Edugame Project represents an opportunity for students to **develop a set of skills** and to **become aware of the complexity** of the actions behind the **Cultural Heritage Management, Protection and Use**, because of:

- the **plurality of issues and interests**;
- the **existing conflicts of interests** among stakeholders;
- the quantity and complexity of national and international **legislations**, in the area of culture, heritage, architecture and territory.

Playing the game students can realise **which are the roles they could have to play in the future** as real participants and executors of the heritage protection process, **the new roles emerging** along the way, and **the different stakeholders involved**. They can also put into practice **communication skills**.

Through Edugame Role-Play students will be able to:

- identify:
 - the **stakeholders** involved in the process;
 - their **roles, powers, limits, action restrictions, fields of action, interests, goals**;
 - the **dynamism** among the stakeholders.
- apply:
 - knowledge of **Theory of Architecture and Urban Design**;
 - **Communication and Negotiation skills**.
- experience:
 - a new **learning methodology** (active, interactive, in team);
 - a **scenario** they will eventually explore in their professional activity;
 - a **team building and communication activity** - drawing up a project in a team (meeting the requirements and looking for all the necessary information) and presenting the project to the stakeholders, calibrating and adapting information and communication according to the objectives;
 - a **negotiation activity** among all the stakeholders to find suitable and innovative solutions: accepting proposals for improvement and criticism in a constructive manner, and demonstrating their project is well designed;
 - a **conflict situation** to make them experience something they might face in their future activity as architects. In fact, stakeholders pursue different objectives, follow their own personal logic, have divergent opinions, and are subject to (often not known) limits and restrictions.
- test:
 - their level of **knowledge** and **awareness** of:
 - **problems** connected with the Protection and Management of Cultural Heritage;
 - **relationships** among the stakeholders involved;
 - the **timing** of the stakeholders' involvement, since they won't appear at the same time;
 - their ability to:
 - **be real participants** in the heritage protection process,
 - **observe and argue**,
 - **communicate**,
 - **negotiate**.

Man is most nearly himself when he achieves the seriousness of a child at play.

Heraclitus

WHO PLAYS THE ROLE? (THE TARGET GROUP)

The players are **university students** who completed the **Bachelor of Science's Degree in Architecture or Engineering**, attending **monographic courses** (1); and taking part in **studios** (2).

They acquired or are acquiring **specialistic knowledge** (3), **specialistic skills** (4) and **soft skills** (5).

(1) History of Architecture; Urbanism; Buildings Materials; Modern Construction; Geotechnics and Foundations; Aesthetics; Revitalization of Historic Towns; Propaedeutic of Heritage Protection; Mechanics and Design of Structures; Sustainability and Build Environment; Rural Planning, Contemporary Architectural Design Theory; Parametric Design BIM Oriented Through: Revit + Dynamo or Grasshopper + Rhino; Heritage Recovery and Urban Rehabilitation; Structural Design.

(2) Technological and environmental design; building physics and energy design, urban design and urban planning, architectural composition, architectural design, structure and earthquake resistance criteria, urban, architectural and landscape preservation survey and digital modelling.

(3) History and theory of architecture, Urban design, Structural design, Sustainable approach with new technologies in the architectural and urban design, Architecture and urban design related with problems of structural design, Conservation project connected with the abilities in the advanced methods of architectural survey, Techniques of preventative diagnostics for restoration Building material analysis, Main cultural heritage conservation and restoration methodologies used for different types of heritage.

(4) Analysis of the historic, technical, functional, environmental factors conditioning protection and use of historic buildings, Creation of building designs and highly detailed drawings both by hand and by using specialist computer-aided design (CAD) applications, Work around constraining factors such as town planning legislation, environmental impact and project budget, Specification of the requirements for the project, Basic programmes for architectural design, Evaluation of technical condition of historic buildings, Preparation of inventories, Search for historic sources and documentation, Approach of foreign cases of studies, Application for planning permission and advice from governmental new build and legal departments, Use of the BIM tools and methodologies, Managing the ICT instruments for the architectural design and the analyses of the existing buildings.

(5) Working in a group, managing the conflicts, Recognizing the main stakeholders involved in the urban, architectural, and conservation project/process, Acquiring the tools and the abilities useful to establish a good relationship with private architectural studios and to recognize the stakeholders.

HOW THE ROLE-PLAY? (STRUCTURE, PHASES, RULES)

Edugame Role-Play is structured in 8 phases:

// PHASE 0: Preparation:

- Characterisation of the monument/site and its conservation status
- Critical analysis of the condition of the site
- Summary of the analysis

// PHASE 1: “Who are you?”

Assignment of Roles, creation of Roles' groups, information collection

// PHASE 2: “Take part in the Tender”

Presentation of the Call for Tender, Public debate

// PHASE 3: “Get the ball rolling”

Creation architects terms, Information collection and Strategy development

// PHASE 4: “Over to the designers...”

Project design and Elaboration proposal for the Call

// PHASE 5: “Listen to the experts”

First evaluation by Expert Commission and Revision of the projects

// PHASE 6: “Finishing touches to projects”

Project submission accordingly to the requested requirements/templates

// PHASE 7: “The winner is...”

Final debate in the presence of the jury and best project Announcement

EDUGAME Role Playing asks students to play the roles of **key stakeholders**, typically involved in the processes of conservation and management of architectural heritage, but also the roles of **architects**, called to draft a proposal in response to a Call, launched in order to provide for the management or restoration of a building.

SECTION 1

// PHASE 0: Preparation: Characterization of the monument/site and its conservation status, Critical analysis of the condition of the site, Summary of the analysis

In this phase the teacher lets students acquire or find all the **information about the historical building**.

This phase 0 is **independent** from the development of the following seven phases, which are depending on each case study, object of the single game.

For this reason, the structure of phase 0 is general, and must be fitted to the specific laws, offices, stakeholders, etc. of the Country where the game is played.

Phase 0 has to be considered as the sequence of learning activities that lead learners to know the observed building from the historical, the architectural, the protection perspectives, in order to be able to 'play' their role.

Phase 0 can be quite long if the teacher decides to present the historical building and explain all architectural, historical, artistic aspects, but also the needs, the project about it during the class.

Phase 0 is not part of the Role-play, but a necessary preamble to it.

In Annex 1 a very detailed description of Phase 0 topics is reported.

// PHASE 1 - Assignment of Roles, creation of Roles' groups, information collection

Thanks to the in-depth study conducted during the Phase 0, students have a **complete knowledge of the building from the historical, artistic and technical points of view**, but also of the **involved stakeholders** and the **dynamics among them**.

It is time to play!

The first step in a Role-Play is to establish the roles.

Depending on the number of students, **all or only some students play**, in addition, the **roles of the stakeholders** and they have to study a specific strategy to maximise their personal goals.

Possible stakeholders are:

- **Building Owner**
- **Official supervisors**
- **Institutions Representatives**
- **Local Business Owners**
- **Museum Director**
- **Local Community**
- **Associated architectural firms, designers, Building manager**

Each student receives a **role** and a **role-description**¹, which illustrates the professional profile, the specific field, the objectives to pursue, and the space for manoeuvre. The role played by the student should be assigned by the game moderator or randomly selected. Players must follow the instructions about the role-profile, but at the same time they must "play" the character assigned, giving a face, a behaviour, a way of acting during the negotiation and collaboration phases.

Probably in some cases, according to the number of students it's not possible giving a role to every student. There should be, in that case, more than one student with the same role, or groups of few students which represent one role.

Students are organised into **groups**. There are no "real" individual roles, nobody plays alone: the museum director works together with the deputy director (or another internal expert with historical, artistic and architectural skills), the "Citizens' Committee" sees at least two representatives, as well as the "Merchants' Union".

Teachers give to students a **time** to understand the role and research the information needed to best interpret it.

A very important role is moderator, played by teacher/teachers. According to the necessity/to the participation of the students/to the characteristics of the classroom, the moderator

¹ The role description can be digital or printed; it contains all the information necessary for the player to make decisions consistent with his/her role (see the Role Plays in the second part of this Manual). The assignment of roles can be random, or the teacher can decide to whom to assign a specific role: this choice has a very strong impact on the outcome of the simulation. If not all students can "play", some of them can be observers, with an observation grid. The classroom must be organised so that observers and actors are clearly separated; observers can be divided into subgroups in order to observe distinct phenomena or individual actors (in this way each participant can say something original, because they have observed something particular); they must be perfectly silent.

supports the discussion, restarts the debate when it languishes, introduces elements that can be discussed, redirects the discussion to the relevant issues - without appearing as an evaluating teacher.

An **example** can help better understand the role assignment.

The basilica of San Vitale in Ravenna is one of the most representative buildings in the history of art and architecture of the Byzantine period founded by the emperor Justinian I in the mid-sixth century. The building that can be seen today is also the result of the modifications and restorations that affected it in around 1400 years of its existence.

The building, still consecrated to the Catholic religion, is in the meantime, a church and a museum of itself.



Exterior of San Vitale - Rear view
CC-BY-SA-4.0
Source: Wikimedia



San Vitale -
CC-BY-SA-4.0
Source: Wikimedia

The property belongs to the Archdiocese of Ravenna-Cervia, and to the Vatican.

The control of the works is subject to both the CEI (Italian Episcopal Conference), an Institution of the Roman Church and the Soprintendenza, Office of the Italian State.

The case is particularly interesting for its remarkable historical, artistic and religious values.

It also represents an excellent example for understanding the dynamics of the management and restoration of the Italian monumental heritage, belonging to the World Heritage List.

Finally, the building is located in the historical centre of Ravenna, representing a symbol and an asset primarily for local citizens.



Mosaic of Teodora
CC-BY-SA-4.0
Source: Wikimedia

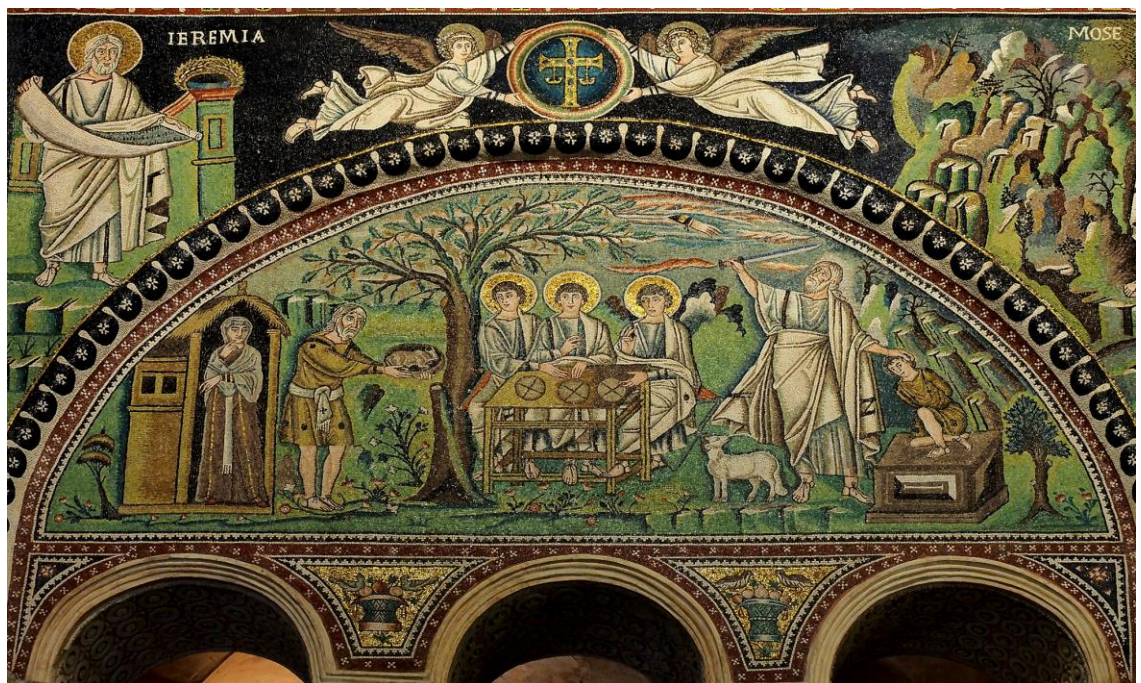
The Director of the Museum of the Basilica di San Vitale in Ravenna was obliged to close the Museum to the public, due to the restriction of Italian Government, DPCM November 3rd, 2020, to avoid the spread of Covid-19 pandemic.

He decides to take this opportunity to develop a virtual visit to the museum, available, as soon as possible, on a web platform.

He decides to announce a call for the assignment of a project for the virtual valorisation of the monument.

The stakeholders for this particular scenario are:

- **Museum Director** (in collaboration with the Deputy Director, has to find an alternative solution to let his museum be visited during the Covid-19 pandemic)
- **Building Owner** (who has specific characteristic, objectives and interests)
- **Superintendence** (who have to guarantee the correct preservation, valorisation and management of CH, according to the law in charge for each country)
- **Local Business Owners** (i.e. owner of food shops, tour guides, etc. whose work is strictly related to the monument. If the museum goes virtual because of the pandemic, the tourists don't visit the museum and don't buy touristic-guides, souvenirs, don't drink and eat near the monument...and the local business have to close down)
- **Local Community** (who perceives the monument and, especially, the surrounding area as an important asset of their daily life and still wants to use the monument as a common resource, without paying for the ticket for the surrounding area)
- **Diocese delegate** (in charge to safeguard the spiritual value of the place)
- **Associated architectural firms** (which develop the technical project)



Mosaic of the Hospitality and Sacrifice of Abraham

CC-BY-SA-4.0

Source: Wikimedia

// PHASE 2 - Presentation of the Call for Tender, Public debate

The Edugame Role play is based on the necessary intervention on the historic building. This intervention can be financed by a private subject or by a public financing, but it foresees the presentation of several projects among which to choose: for example, **an online or in-presence public conference** is organised, with the aim to present the building needs and to launch the tender.

Citizens, municipality representatives, local organisations, architects and all those who desire to point out some aspect can attend the event.

During the public debate the Museum Director illustrates the situation/the problem, the Superintendence describes the constraints and opportunities, the Owner explains its position and sets out his/her clauses and the other stakeholders declare their needs, proposals and interests: all the actors involved can ask questions, so that different points of view and perspectives can emerge.

This check translates within the game into at this stage, **stakeholders have the possibility to meet one another** for the first time as individuals (and not just on paper).

The speakers (director, owner, superintendent) give a **short overview on the most critical aspects** of the tender and express a **list of priorities**; the public (citizens, local community, business owner) proposes **all the perspectives**; the architects, representing their ateliers, ask **technical questions** but try to perceive the different needs emerging during the debate.



During the online or in presence conference the stakeholders can apply their **communication strategy**, asking questions to sound out the position of stakeholders or to push final decisions towards a direction: it is a matter of playing the game.



Thanks to PHASE 2, the players understand which is the scenario along which to move and begin to get an idea of the multiplicity of instances.

In this phase the subgroups start reasoning together to understand what their role implies, to define priorities, to devise a strategy and to evaluate the related risks.

During this in-presence activity the students deal with the institutions, where in the future they can undertake a professional career, and become **aware of the roles, needs, goals and obligations** of each stakeholder. The students start thinking about the project also in terms of **feasibility** with respect to the different needs.

In our example of San Vitale in Ravenna, during the public event the Museum Director explains his idea to create a virtual museum to let the museum earn money even though it has to be physically closed to the public, due to the pandemic, to avoid firing staff, to seize the opportunity to implement the virtual communication of the museum, to guarantee the cultural vocation. The Call for Tender is presented and discussed.

The local community is worried: it still would like to use the monument as a city place, avoiding paying for the ticket, in particular referring to the surrounding garden, which represents a safe place for children to play.

Also the owners of shops and restaurants are worried: without tourists interested in the museum, nobody will get that area and they will close their activities.

At the end of this phase of the game, all players have:

- created the groups and identified the characteristics, the powers, the interests of the roles they are playing,
- took part in the public event,
- worked in the subgroups to develop a strategy.

// PHASE 3 - Creation architects terms, Information collection and Strategy development

All students during the game play the role of **architects expert in Cultural Heritage Management**, who work in an atelier/in a firm of associated architects (the number of them depends on the number of involved students).

All the ateliers/firms of associated architects take part in a tender/are involved in a technical studio for a specific historical building and independently collects all the necessary information and develops its own strategy.

In this way, each student participates in the technical design studio, according to the tender/project specifications the teacher has launched.

The **teachers play**, too, the role of **experts who judge the competing projects**.

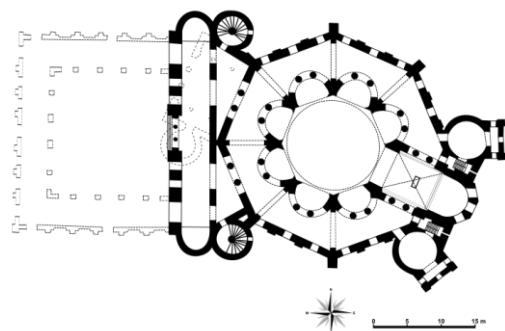
In this phase students approach **team working**, which they have already experienced during their studies, and apply skills such as **collaboration, active listening, mediation and division of work**.

Thanks to this documentation-research activity, students get involved **realising the complexity of the restoration project** (that goes beyond technical, structural, historical, artistic constraints) and apply the acquired knowledge.

In the case of San Vitale, students' teams have studied all the artistic and architectural aspects in depth during the semester and the teacher gives access to some documents that would be difficult to access (such as, for instance: documents coming from the superintendents, private archives), but let the students identify and find the information they need to respond to the call for tenders.



San Vitale - Floor
CC-BY-SA-4.0
Fonte: Wikimedia



Plans of San Vitale (Ravenna)
CC-Zero
Fonte: Wikimedia

At the end of this phase of the game all players have:

1. created new teams;
2. shared ideas and points of view;
3. collected the necessary information;
4. discussed the strategy to adopt.

// PHASE 4 - Project design and elaboration proposal for the Call

The teams of specialists draft their projects according to the model provided by the call or the technical documents. Students, in addition to **template filling**, prepare for the **presentation** of the project to the commission of experts, composed of the course teachers in order to highlight the **strengths of their proposal**.

The proposal must be in line with the skills acquired by the students throughout the curriculum.

Each teacher manages this phase in the most suitable way for her/his students, in reference to available spaces and times, having in mind the intended learning outcomes. It may last more than the previous ones.

At the end of this phase of the game all teams have:

1. completed the first release of their project;
2. filled in the required templates.

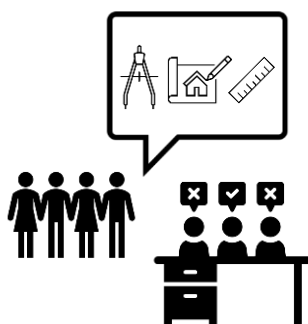
// PHASE 5 - First evaluation by Expert Commission and Revision of the projects

In order to orient the students and allow them to play their role, an **intermediate check** with the teachers is necessary, from the didactical perspective, the Commission of experts, made up of course teachers, receives and reviews the proposals.

This is an **intermediate design review**.

Proposals are assessed on the correctness of the project in all its phases (geometrical survey, photographic survey, bibliographical research, archive research, project, etc.).

Thanks to this evaluation, students receive **useful feedback** for the last phase of project implementation.



Teachers do not assign a numerical grade of the paper, but offer a **formative assessment**, with feedback geared towards understanding possible errors and improving the work.

Teachers can send to students their revision or invite them to an (online or in-person) session to discuss any important issues.

At the end of this phase of the game all teams have:

1. received comments and questions about their project;
2. implemented changes.

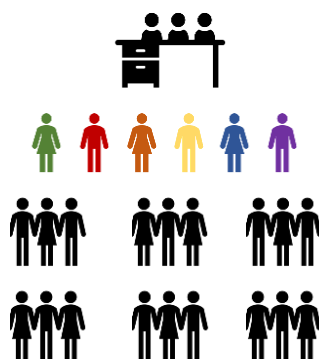
// PHASE 6 - Project submission accordingly to the requested requirements/templates

After the feedback received by the expert commission, each architectural atelier has to **complete the project**, to arrange the **final presentation** and to design its **communication strategy**, in order to respond to the specific requests of the experts and the other stakeholders.

The Call official documents indicate the slot of time for each presentation and the format to be used (slides, video, poster...).

// PHASE 7 - Final debate in the presence of the jury and best project Announcement

This phase represents the “real” Role Play, because it is “live” and it is the last round: the architects must make the most of their project, the stakeholders must get the best project that meets their specific needs.



In this phase it is necessary to ensure that:

- **each design team** elects a **representative** to present and "uphold" the project;
- **each stakeholders group** is represented by at least **one member** who can advocate for the group's interests.

The complexity represented by double roles is functional to ensure that all students have the opportunity both **to play a role** (which can also be that of observer), and to try their hand at

designing an architectural intervention.

The discussion involves the entire classroom and each student is responsible to compare its own idea to the ones proposed by the other students.

In this phase:

- some students (**representatives of design teams**) undertake the **presentation of a project** using a **specialised, but not exclusionary, vocabulary** and a **linguistic register** suitable for the interlocutors present, to **answer the questions completely and exhaustively**, without to go into a detailed description, understanding the real meaning of the question, but also to understand how to **master their emotionality**, how to **manage non-verbal language** (all elements that observers can note in the evaluation grid);

- some students (**representatives of stakeholders groups**) have to be able to **let the interests of the party they represent prevail**, without unbalancing themselves or leaning towards the project in which they took part as designers. The **institutions' representatives**

must read, under the lens of their simulated “public role”, each project elaborated by each team and have to compare each proposed idea with the needs and the constraints.

- some students (**all, the observers**) should be able to **grasp key points** of the discussion and the **dynamics** between the actors, to understand what determines the final result.



ANNEXES

Annex 1

STAGE 1

Characterization of the monument/site and its conservation status

1.1 General characteristics of the property (as a historical object)

- localization
- short history and description
- boundaries
- function
- ownership

1.2 Characterisation of historic values - indication of what should be protected - first of all, official materials containing an assessment of values

Directions for participants in the game. Use, analyse and summarise:

- declaration of the object as cultural heritage, starting from the list of national Cultural Heritage;
- museum transformation and adaptation;
- Management Plan UNESCO (if applicable);

[The most important institutions whose resources should be used].

1.3 Characteristics of the condition and use of the asset

Tips for game participants:

- briefly characterise the technical condition of the building and individual elements of the ensemble (description of the vertical and horizontal structures; arches and volutes; roof structures; wooden material; foundations. Analyses of the structural behaviour. Survey of installations and services (as heating; electrical, security systems, etc.);
- briefly characterise the condition of the surroundings (driveway or pedestrian road; presence of public services; accessibility for all the categories of users; description of the arrangement of streets and paths; presence of tourist services;
- briefly describe the condition of historic buildings and objects in the surroundings
- list/describe the existing devices and systems serving the safety of particular objects of the complex (e.g., fire protection, burglary prevention, monitoring, etc.).

[Assessment of condition during on-site visit and information obtained from the Property Manager]

1.4 Analysis and characterisation of the protection and management system (ownership, financing, protection regime)

Ownership and the protection system. Guidance for participants in the game:

The characterisation and analysis should take into account the form of ownership and use and the resulting formal and legal conditions.

- Briefly describe the form of ownership of the ensemble and the scope of responsibility, rights and competences of the manager of the Museum ensemble;

- Specify the status and forms of protection of the site;
- Consider the relationship between the Museum and the Management Plan of the UNESCO site (if applicable);
- the relationship between the National Museums Management and Private Museums Management.

List the functioning legal forms of protection of the complex with the description of the boundaries-national level:

- Monument of History (give name, date and number of the Decree, etc.);
- decisions on entry in the register of immovable monuments, decisions on entry in the register of movable monuments; check also whether there are any archaeological objects listed in the area of the entry borders and the buffer zone.

List the functioning forms of protection of the complex:

- historical, artistic, monumental, demo-ethno-anthropological or archaeological heritage;
- Briefly characterise the scope of duties and competences of conservation services;
- Briefly characterize the conditions of protection of the private museums in Italy;
- Briefly characterize the conditions of protection of the private museums in Italy.

List and briefly characterise the conditions for the protection and management of the Museum between public and private relationships.

List the basic sources and amounts of funding relating to:

- ongoing maintenance - the museum's subject subsidy, own income from ticket sales and activities, other
- maintenance and conservation work carried out in the last three years - own funds and funds obtained from various sources, private and public (owner(s); donors/benefactors, public institutions as Municipality, Government, European funds, etc.)

[The data should be obtained from the manager of the Museum complex.]

1.5 Characteristics of activities for the presentation, provision and development of tourism based on the good

Guidelines for participants in the game:

- Describe the most important activities related to the presentation and promotion, accessibility, education and tourism development based on the Museum undertaken by the Manager, i.e. organisation of exhibitions, maintaining a website and disseminating information on social media, organising or co-organising cultural events (including national and international events,), scientific conferences, publishing activities, organising museum lessons for children and youth, lectures, painting and photo competitions, etc.;
- Describe the most important activities related to the presentation and promotion, accessibility, education and development of tourism of the historic Museum establishment undertaken by other stakeholders. This applies primarily to local government units of all levels.

[Use information obtained from the Manager and available on websites and social media]

1.6 Stakeholder characteristics (completeness of stakeholders and identification of their objectives and opportunities)

Guidelines for participants in the game:

Identify the key stakeholders and then define their role in the process of protecting and managing the asset. In characterising the key stakeholders who have a real influence on the management of the site, you should:

- list the most important stakeholders;
- briefly describe the range of their key tasks and activities, responsibilities and competencies and their ability to influence the protection and management of the asset;
- briefly describe their ability to respond to possible threats;
- determine if and what influence they have on the current use and development (including promotional activities, education, tourism development, etc.);

In the characterisation of stakeholders, the following should be taken into account first of all:

1. Regions
2. Provinces
3. Superintendences
4. Municipalities
5. Public Bodies
6. Associations
7. Tourism Offices
8. Universities
9. Research Institute
10. Cultural Associations
11. No profit Associations
12. Enterprises
13. Fire Fighters
14. Public Offices in charge of controlling the structural behaviour (also for the seismic evaluation)

[Also indicate any other active or passive stakeholders]

STAGE 2

Critical analysis of the condition of the site

2.1 Critical assessment of the state of recognition, preservation and protection of the monument value

Directions for participants of the game

On the basis of the analysis of the object (items 1.1.-1.3.), make an assessment of the condition of the object by analysing the following issues:

- Whether the value of the Museum complex is well recognized.
- Whether it is necessary to carry out further studies and scientific research concerning recognition of the object and its value. If yes - specify what kind of research should

be conducted (with respect to architectural objects also in the respect of safety and accessibility).

- On the basis of the characteristics of the technical condition and the description of the existing protections, formulate the most important needs and recommendations for the current maintenance and necessary repair/conservation works in relation to Museum.
- Assess whether the existing security equipment and systems for the individual facilities of the complex (e.g., fire protection, burglar alarm, monitoring, etc.) provide sufficient protection against existing hazards (e.g., vandalism, weather, natural disasters); whether the condition of this equipment is satisfactory, whether it is in working order, serviced and monitored.
- Assess whether the building's safety system functions well - whether procedures have been developed to ensure the permanent safety of the building, e.g., regular inspections of the technical condition of the building and the condition of installations carried out by authorised bodies and emergency procedures.
- Assess whether emergency services in case of random and social threats (flood, fire, terrorist acts, devastation) have prepared procedures and response methods. In case of a complex of wooden objects, potential fire hazards are particularly important.
- Control of the safety of the employers in the Museum (check, also, the Trades Unions).

[Information from the property manager and check the required procedures for permits, the Building Book, inspection protocols and the implementation of any post-inspection recommendations]

2.2 Critically evaluate the management system of the monument (ownership, protection system, funding, condition, use)

Critically assess whether:

- The current ownership/manager and the scope of responsibility, rights and competences of the manager of the Museum are sufficient to ensure protection and efficient management (positive aspects and perceived deficiencies).
- Whether the forms of legal protection of the place are adequate to the values /national and local level/; whether the current forms of protection and the resulting need to obtain opinions and permits are actually implemented in practice.
- Whether the protection system functions properly in all dimensions of the rights and obligations of the manager and institutions responsible for protection.
- Whether it is reasonable to introduce additional forms of protection.
- Whether the site is sufficiently taken into account in the strategic documents of local government units at all levels - if not, indicate in which documents and in which aspects there are shortcomings .
- Whether the current level of funding is sufficient for ongoing maintenance, value preservation and development.
- Whether the manager uses all available sources of funding.
- Whether the manager is effective in raising funds.
- Whether new activities could increase funding for maintenance, use and development (if so, indicate what these activities are).

- whether the activities and interactions between the key stakeholders are correct (owner - conservation services). If not, indicate what problems occur in these relationships.

2.3 Critical evaluation of stakeholder activities (also lack of inclusion of potential stakeholders)

Evaluate the activities and involvement of the key stakeholders characterised in chapter 1.6. Answers to the following questions can be used to assist in the assessment:

- Do the key stakeholders play roles in the process of protection and management of the property that are adequate to their responsibilities, tasks and competencies; are they really involved in the issues concerning the Museum?
- In which of the following areas of cooperation do you rate the activities of stakeholders positively:
 - o National preservation system (including funding)
 - o Local system of protection (including financing)
 - o Preservation status of the asset and its environment
 - o Risk response and monitoring of the asset
 - o Presentation and accessibility, education, tourism
 - o Learning about and researching the asset
 - o Use and development

Briefly justify your assessment in each of these areas.

- Are there stakeholders whose actions you judge negatively? If so, please identify them and briefly justify your assessment.
- Do you consider that other stakeholders, who are currently inactive, should be involved in the process of protection and management of the property? Which stakeholders should cooperate with the manager?

2.4 Critical evaluation of the use and development of the property

- Assess whether the current use of the Museum is appropriate to protect the historic asset.
- Evaluate whether the current manager of the property correctly performs tasks related to the presentation and promotion, accessibility, education and development of tourism based on the Museum. These issues are an important part of the activities of any museum unit, as making a historic object accessible belongs to the basic tasks of museums. It is conditioned by specific tasks and objectives of a museum unit, in accordance with the provisions of Public and Private Museum rules.
- Assess the museum's activities and capacities to date in the following aspects:
 - o information and promotion - whether information about the facility is easily accessible and widely disseminated, including on the internet (including social media); whether the main access routes are provided with signage informing about the facility as a UNESCO site;
 - o accessibility - whether the site is accessible and information on opening times and visiting rules is easily available (e.g., on websites);
 - o presentation of good values - whether it is interesting and addressed to various groups of recipients; whether a variety of tools and methods, including modern technologies, are used in the presentation;

- the educational offer for children and young people - whether it is creative, exploratory and tailored to the audience;
- whether the cultural events offered are attractive and competitive. Whether they can attract tourists;
- whether the existing infrastructure in the site and its surroundings is sufficient for the development of this type of activity (e.g., car parks, toilets, venue for meetings, lectures, exhibitions, organisation of major cultural and entertainment events);
- whether the current number of tourists visiting the Museum is satisfactory, whether aiming at increasing the tourist traffic is justified with the assumption that it cannot negatively influence the values of the place.

In your evaluation, indicate the positive aspects of the Museum's activities to date and of its performance in this area, as well as any shortcomings or deficiencies.

- Evaluate the current activities of other stakeholders in the area of promotion, presentation, interpretation and tourism development, whose responsibilities and competencies include such tasks. This applies primarily to the stakeholders listed in point 1.6. Do the stakeholders support the Museum in its activities (various forms of support should be considered, e.g., organisational, financial, promotional and informational)? As in the case of evaluating the activities of the Museum, indicate the positive aspects of their activities to date and any shortcomings, weaknesses, etc.

In your opinion, indicate the most important needs and opportunities related to the presentation and accessibility of the property and development of tourism.

STAGE 3

Summary of the analysis

In the summary of the analysis, list the most important identified problems and possible threats, deficiencies or inadequacies and rank them in order of importance for the monument (its protection and management). On the basis of the characteristics and analyses made in the 1st and 2nd Stage of the game, formulate programme concepts in relation to the following issues:

3.1 Concept of the protection of historic values (the scope and form of protection + acceptable scope of interventions/transformations)

In the concept include, among others, conclusions, recommendations and guidelines indicating the actions defining the way of dealing with the complex and its particular elements: e.g., preservation in the present form or restoration or recomposition or possible changes and interventions or conservative conservation or conservation preceded by research or equipment additions or better exposition of selected elements in relation to:

- the immediate surroundings (within the perimeter of the fence),
- surrounding area (within the buffer zone),
- further surroundings,
- spatial composition,
- external architectural form

- internal architectural form,
- materials and construction
- decoration,
- equipment,
- historic and contemporary greenery,
- function and use.

[It should be borne in mind that none of the proposed activities must adversely affect the pre-defined historic values of the complex (primarily the Outstanding Universal Value) and its authenticity and integrity].

3.2 Management programme concept (manager, finance, organisation, etc.)

Formulate the concept of the management programme taking into account the conclusions and recommendations concerning

- form of ownership, number and competence of museum staff.
- the level and sources of funding - assess whether the current level and sources of funding ensure the correct maintenance of the team (and its values) and ensure development. If not - try to formulate a proposal for a more effective financing plan for the complex than the existing one, taking into account: current maintenance, necessary repair and conservation works, accessibility, presentation and promotion, as well as the need for new initiatives to intensify and extend the existing activities
- conservation supervision
- forms of protection.

3.3 Concept of utility programme (what we want to do with the object)

Make an attempt to formulate a target concept for the utility programme of the Museum complex. The following solutions can be proposed in the concept:

- continuation of the existing utility programme (justifying why the existing programme is the most appropriate for the object)
- continuation of the existing utility programme with extension into new areas (justifying why such a concept would be more beneficial)
- change to the existing utilisation programme - description of the proposal justifying the need for change.

3.4 Concept of activities with stakeholders (their tasks) and forms of convincing them to create conditions for programme implementation and enabling its acceptance

Based on the assessment/analysis of the stakeholders' activities, formulate a concept for cooperation with the stakeholders, their activation and areas of cooperation with the Manager. If, in your opinion, it is justified to involve the so far inactive stakeholders, formulate recommendations to what extent it is justified and how it can positively influence the protection and management of the property.

3.5 Concept of promotion, presentation, tourism development, educational measures

Formulate a promotion concept taking into account the needs and opportunities for presentation and provision of the asset and tourism development.

The following can be proposed in the promotion concept:

- continuation of existing activities in these areas (justification of why existing activities are appropriate and sufficient);

- continuation of the existing activities in these areas with an extension into new activities (explaining why such a conception would be more beneficial);
- modification of the existing programme - characteristics of the proposal justifying the need for modification.

Annex 2

Methodological decisions: learning spaces, times, and tools

- Synchronous/asynchronous, online/in person

When a teacher is introducing a Role-Play in her/his teaching, regardless of the specific learning objectives, she/he most likely has in mind an **in-person activity**, within a classroom large enough to allow players to move and to interact in the **space**.

In the specific case of the Role-Play Edugame teachers and instructors should organise the following **spaces**:

1. a **large conference room** for public debates, with a table for the speakers (at least 5 seats) and chairs for all participants in the meetings, with a projector or an exhibition wall (for phase 7, when the projects are presented by the designers).
2. **small classrooms**, equipped to search for online information, to allow architects teams to get together to draft the project and stakeholders to elaborate their needs and strategies.

However, the recent pandemic has taught us that the **online dimension** cannot now be forgotten and should be integrated from the very beginning of design.

This opens the way to three further “**scenarios**”:

1. Role-Play **partly online, partly in person** (“**blended Role Play**”),
2. **Fully online** Role-Play,
3. Role-Play, with some students always attending, others always online (“**Extended classroom Role Play**”).

We don’t investigate here the motivations that might lead a teacher to adopt one scenario over another, but to see the implications and the attention to be paid.

In the case 1, **Role-Play partly online, partly attending in physical spaces**, teachers can organise the activities so that students meet in classroom:

- only in the “**critical**” situation: **PHASE 7 - Final presentation in the presence of the jury and the stakeholders**, when players are called to **play the roles**, responding to criticism, defending their interests;
- in all the **interaction situations**: **PHASE 3 - Public debate, PHASE 7 - Final presentation in the presence of the jury and the stakeholders**;
- at the **beginning** and at the **end**: **PHASE 1 - Launch of the activity and assignment of roles, PHASE 7 - Final presentation in the presence of the jury and the stakeholders**.

according to specific **needs, restriction, limits**.

During the last 18 months students have shown a great adaptability to different learning situations, however it is necessary to ensure:

- **information** on **scheduling** and **duration** of each activity,
- **access** to shared files archive,
- **contact** during asynchronous activities.

In case 2, a **fully online Role-Play** takes place, teacher has to pay attention to (in addition to the specifications for the previous scenario):

- '**loneliness**' of students in front of their monitors,
- **problems** of connection, audio, video,
- low **engagement**,
- a good **management** of live discussions.

However, this scenario is no less valid or effective than the face-to-face one: if students must experience a situation as close as possible to the one they will experience once they enter the world of work, then **they must also be prepared for online presentations**, participating in debates through synchronous platforms, etc.

We give to the case 3, **Role-Play with some students always attending in person, others always online**, the name of “**Extended class**” and we consider it as a didactic set of methodologies, technologies, spaces that can be used to facilitate and promote good teaching practices that extend student learning beyond the boundaries of classroom and online spaces, creating a single community, independently of physical presence².

The challenge is to ensure that all students have **equal access** to the different stages of the activities, using interactive sharing tools accessible and filling in both by in-presence and online students (i.e. Padlet, Miro, ...).

In this situation the classrooms must be equipped with **audio-video systems integrated with the virtual classrooms** that can be used by both students.

- Supportive Technologies

Role-play is a very flexible teaching approach because it requires no special tools, technology or environments. However, technology can provide significant advantages.

² See “Designing learning Innovation” on www.pok.polimi.it

At the most simple level, technology such as **voice recorders, video cameras** and **smartphones/tablets** allow traditional face-to-face role-play exercises to be **recorded** and **stored** online for later **reference, analysis and reflection**.

Other tools that can be used with this traditional style of role-play are an **electronic voting system** or **Twitter**, both of which would allow a group of students to **observe** the role-play and **evaluate** the situation and conversation as it develops. This information could be retained and, coupled with a recording, provide another resource for later **analysis** and **reflection**.

However, technology can be used to create role-play exercises beyond what is possible in a face-to-face session. Asynchronous technologies, such as **online forums** and **discussion boards, Social Networks** allow Role-Play to take place **over longer periods of time** and in a more considered way. This means that role-play can take place **outside of timetabled sessions** and in situations where students are **unable to physically meet at the same time**.

Another advantage of using technology is that it can **enable external participants** to take a part in the role-play. **Web-conference** tools all provide an online space where **live conversations**, including **video**, can take place. This means that a person with experience or expertise in the area being role-played can take one of the parts, producing a much more realistic experience for the student. All of these tools can be accessed freely over the internet and only require a microphone and speakers/headphones, meaning the **technical barriers are quite low**. The tools typically have **recording facilities** that would allow the interaction to be permanently captured. These tools are also useful for role-playing among students where they are all available at the same time but can't physically meet, such as on distance learning courses or during placement periods.

We leave out the discussion about digital and virtual role-playing games.

Annex 3

Final Debriefing: peer and formative assessment

After the end of the Role-Play, a **debriefing** is necessary to let all students understand what happened. The word “debriefing” refers to the methods used to **combine participants’ reflections** on their experiences with **assessment** of mental (cognition, emotion, etc.), social (action, communication, etc.), and systems processes (change of resources, structures, etc.) **to deduce applications** for real situations beyond the gaming simulation experience. Long-term application of new attitudes, knowledge, and social competencies, acquired through use of gaming simulation, needs suitable methods **to guarantee the transfer** of what has been learned to the usual life and routines of participants.

The debriefing can become an extraordinary occasion of **peer assessment** and **formative assessment**, with predetermined **learning objectives**, which provide the **desired performance level** and allow for **clear feedback**. Debriefings are rewarding and interesting and lead to higher levels of retention when trainees actively think about, analyse, and discuss what happened.

Researchers argue that **feedback from the peer assessment** process enhances student learning (Pelaez 2002; Timmerman & Streickland 2009; Topping, 1998), as it allows them **immediate application of new ideas and different perspectives**. Receiving feedback from a colleague triggers a process of **self-assessment** and **development of critical thinking** in the learner (Geithner & Pollastro, 2016).

According to Cho, Schunn, and Roy (2006) and Mulder, Pearce, Baik, and Payne (2012), the main benefits of using peer-review on the learning process are:

- exposure to **different perspectives in the analysis of a topic**;
- **improvement** of the initial input;
- increased **stimulation to reflection**;
- development of **evaluation skills**;
- development of **critical thinking** and **problem solving skills**;
- greater **responsibility** of the learner in the **learning process**.

Peer-review is not always possible, nor is it always easy to implement: sometimes students do not have such in-depth knowledge of the subject matter that they can evaluate the work done by others, so the reliability of their evaluations may be poor. Some scholars draw attention to the possible distortions resulting from friendships among students (Cho et al., 2006): this could easily occur in the case of the Role Play Edugame, if students during the debriefing phase are not able to detach themselves from the role played during the game and to see all projects as outputs of the activity to be evaluated objectively.

Formative assessment, which in the Edugame Role Play can take place both during the intermediate project review and during the final debriefing, responds to specific learning objectives that provide the desired level of performance and allow for clear feedback; an assessment is formative if it does not merely reinforce or punish a performance, but allows

the student to **understand how** to improve their work, guiding them **toward a deeper understanding** (Hattie & Temperly, 2007).

Hughes, Smith, and Creese (2015) propose a framework for coding feedback that try to take the **perspective of the student receiving it**, rather than of the teacher/tutor, and identify the following levels:

1. **appreciation** for work done, in order to motivate students;
2. **recognition** of progress, specifying the type of improvement achieved;
3. **critique**, broken down into correction of errors; critique of the content; critique of the approach adopted in the assignment;
4. specific **suggestion**, with respect to the **task**; more general, with respect to the **process**; broader, connected to the possibility of **transfer** to future learning;
5. **question**, to **clarify** to the students not clear points and to involve them in a **dialogue**.

A rewarding and interesting debriefing leads to a higher level of knowledge: students think actively and become responsible for their actions and knowledge.

Debriefing usually includes the following steps:

- **reactions**: trainees “blow off steam” and the instructor gets a first glimpse of what is most concerning to trainees,
- **analysis**: the instructor and trainees discuss and analyseanalyze trainees’ performance,
- **summary phase**: trainees distildistill lessons learned for future performance.

A simple and effective model for guiding this process divides the debriefing process into six phases:

Phase 1: *How did you feel?* Participants are invited to describe their emotions after completing the simulation game and to recall and recount their feelings during the game.

Phase 2: *What has happened?* In this phase, participants are encouraged to talk about their perceptions, observations, and current thoughts about the activity itself.

Phase 3: *In what respects are events in the gaming simulation and reality connected?* In this phase, the relationship between experiences and reality are thoroughly examined, to begin a transfer of the experience and knowledge to participants’ own lives

Phase 4: *What did you learn?* In this phase, participants identify their most important learning and report conclusions they can draw from the experience in regard to personal insights, experiences of group dynamics, and new factual knowledge gained.

Phase 5: *What would have happened if . . . ?*

Phase 6: *How do we go on now?* The last phase focuses on the purpose of committing to clear, realistic, and measurable goals for future actions of all involved. In the case of our

Role-Playing Game, this could be the time when we take in the most significant insights and work them into a common project.

Following **Kolb's model** of learning, we can say that debriefing represents the **key junction** towards learning: **experience** is the game phase; **reflection** is what is stimulated during debriefing; **learning** is the final result. Reflection implies the passage to generalization, to the analysis of the action, to alternatives, feelings, acquired knowledge; reflection allows the passage from playing to learning. Hence the importance of debriefing.

Annex 4

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