

TEACHING PHILOSOPHY WITH INVESTIGATIVE ADVENTURES: FROM INSTRUCTIONAL DESIGN TO GAME DESIGN (AND BACK!)

INSEGNARE FILOSOFIA CON LE AVVENTURE INVESTIGATIVE: DALLA PROGETTAZIONE DIDATTICA AL *GAME DESIGN* (E RITORNO!)

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ABSTRACT

The article presents the design of a game-based learning (GBL) educational activity centered around a philosophical investigative adventure created for this purpose, *Socrates on Trial*. It demonstrates how careful instructional design allows to align learning and game objectives. With appropriate training, teachers can take on the role of game designers and develop impactful educational games supporting the acquisition of both disciplinary (philosophy) and transversal knowledge and skills.

L'articolo presenta la progettazione di un'attività educativa di *game-based learning* (GBL) incentrata su un'avventura investigativa filosofica creata allo scopo, *Socrate a processo*. Mostra come una progettazione didattica accurata consenta di allineare obiettivi di apprendimento e obiettivi di gioco. Con un'adeguata formazione, gli insegnanti possono sviluppare giochi educativi efficaci a supporto dell'acquisizione di conoscenze e competenze sia disciplinari (filosofia) sia trasversali.

KEYWORDS

Game-based learning, game design, teaching philosophy, constructive alignment, Socrates
Game-based learning, game design, didattica della filosofia, allineamento costruttivo, Socrate

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1. Introduction¹

Game-based learning (GBL, Plass et al., 2020) promotes the idea that games can provide a favorable context for meaningful learning (Li et al., 2024). In fact, several studies show that playful learning environments increase students' active participation, improve content retention, and strengthen transversal skills (Barz et al., 2023).

However, many issues limit the effectiveness and adoption of GBL practices in the classroom. To begin with, effective GBL activities must strike a delicate balance between engagement and educational value (Plass et al., 2015). This raises two concerns: first, that they provide an engaging, immersive, open, and stimulating experience rather than relying on simplistic or reductionist mechanics (Nicholson, 2011); and second, that learning is a structural component of the game experience. Moreover, the replicability of GBL interventions represents another challenge: to ensure their effectiveness, it is essential to provide teachers with clear models on how to integrate playing into educational activities (Hanghøj & Brund, 2010).

This article attempts to answer these concerns. In particular, it is motivated by the assumption that a specific category of board games, that is, investigative adventures, holds great potential for addressing the first challenge. Investigative adventures—such as *Sherlock Holmes: Consulting Detective* (Edwards et al., 1982), *Detective: A Modern Crime Game* (Laport et al., 2018), and *Chronicles of Crime* (Cicurel, 2018)—are collaborative board games in which players take on the role of detectives who must solve complex cases by analyzing clues, questioning witnesses, and connecting pieces of information. They combine traditional storytelling (e.g., reading paragraphs, branching narratives, or map exploration) with deduction mechanics and other innovative features (like thematic and detailed physical components, hidden details, and digital apps that enhance the gameplay experience).

Many intrinsic features of investigative adventures make them particularly effective for designing GBL experiences. First, they offer an active, engaging, and

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immersive play experience, which builds on and expands the detective genre's potential to spark interest, curiosity, and a love of discovery through an engaging storyline (Ju & Wagner, 1997) by requiring players to actively lead the investigation through their choices and deductions.

Second, these adventures are characterized by direct interaction among players around the table and the use of physical materials. The first element naturally encourages social engagement. In addition, the use of physical materials supports forms of situated (Brown et al., 1989) and socially distributed cognition (Hutchins, 1995): the game materials are seen, touched, and exchanged among players, supporting the processing of visual and spatial elements within a shared material and social context (Malafouris, 2013).

Third, the collaborative nature of these games allows all participants to feel included and valued. On one hand, the story context can be difficult for a single person to process, naturally encouraging the involvement of multiple players. On the other hand, each player can contribute based on their own abilities and rely on the group for overall success—a dynamic that enhances inclusivity. These elements are especially relevant in educational settings, where teamwork fosters shared learning and the development of relational skills.

Finally, it is important to consider the variety of knowledge and skills required to solve the cases. On one hand, the setting of the adventure enhances players' immersion and taps into their prior knowledge of the theme. On the other hand, solving an investigation requires attention to detail, analytical skills, critical thinking, logical reasoning, and problem-solving abilities, as well as skills in argumentation, negotiation, and communication.

Therefore, the game mechanics used in commercially available investigative adventures lend themselves to being implemented in educational games on disciplinary topics, supporting the development of academic knowledge as well as academic and transversal skills. Doing this requires addressing the two remaining concerns identified above: clarifying how investigative adventures can be used to promote disciplinary learning, and explaining how to train teachers to use them in the classroom.

Regarding the first point, Nousiainen *et al.* (2018) distinguish four different ways to use games for educational purposes: (i) applying gamification techniques, using (ii) educational games, or (iii) Commercial-Off-The-Shelf (COTS) games, or having students create the game themselves through a project-based learning activity focused on game design. With respect to investigative adventures, using existing

commercial games for educational purposes appears impractical because the available games are far too limited. Moreover, designing an adventure from scratch is very complex, which rules out the idea of having students do it. Thus, the remaining possibility is for the teacher to take on the role of game designer, creating an educational game that combines the strengths of both instructional and game design.

In showing how to tackle this challenge, the article discusses the design of a philosophy-themed investigative adventure, *Socrates on Trial*, which uses the rules and game mechanics of *Sherlock Holmes: Consulting Detective* (henceforth SH:CD, Edwards et al., 1982, see the Information Sheet in the Appendix) to recreate the narrative context of Athens in 399 BCE. In this setting, players freely explore the city in search of evidence to exonerate Socrates during the trial depicted in Plato's dialogue *Apology of Socrates*. By describing the various stages of instructional and game design, the article aims to show how—by adhering to the principles of constructive alignment (Biggs, 1996)—it is possible to create games where the goals of the gameplay align with the intended learning objectives and assessment methods. GBL thus becomes not only a complement to traditional teaching but also an enhancement of it.

Looking further ahead, this work represents the first step in a broader project aiming to evaluate the effectiveness of investigative adventures in supporting learning, and to define a training path for teachers to help them acquire the necessary skills to create their own adventures. With proper training, teachers can take on the role of game designers and develop impactful educational games.

2. From instructional design to game design: a round trip

This article represents the first step in a project aiming to evaluate the hypothesis that investigative adventures can effectively promote learning. In this section, I describe how I came to create a philosophy-themed investigative adventure, *Socrates on Trial*, starting from a carefully structured instructional design process intended to ensure the achievement of specific disciplinary and transversal learning objectives. The section outlines the design of the entire activity—including that of the investigative adventure—following the five phases of the ADDIE model (Larson & Lockee, 2019; Molenda, 2003).

2.1. Analysis

The "A" in the ADDIE model stands for "Analysis." This phase is the starting point of the instructional process and involves an in-depth examination of the context, learning needs, target audience, educational goals, and available resources, with the aim of defining the objectives and specifications of the instructional activity yet to be designed. In this phase, essential information is gathered to guide future decisions: the skills to be developed are identified, the gaps between what learners know and what they should know are assessed, and the characteristics of the target audience (such as age, background, and learning styles), available resources, and any organizational or technological constraints are analyzed. The analysis phase thus provides a solid and realistic foundation for designing an effective, tailored, and contextually appropriate learning intervention.

Discipline. As to the case of this article, the choice of philosophy as the subject area was immediate and driven by my professional expertise. In addition to my academic role as an Associate Professor in Philosophy and Theory of Language (SSD MFIL05), I am also qualified to teach philosophy in secondary schools (Teaching Qualification Class A019). Since I wanted to demonstrate how GBL can support the teaching and learning of disciplinary—not just transversal—skills, it was natural for me to refer to my own field when selecting the subject area.

Topic. Having the intention of testing the designed GBL activity in the classroom, I considered it useful to work on a philosophical text widely used by philosophy teachers in Italian schools. I therefore selected *Apology of Socrates* (in the 2020 edition edited by Giovanni Reale), a Platonic work often read in full during the third year of upper secondary school.

Target audience. The choice of the *Apology* identified the target audience as third-year students in Italian upper secondary schools, raising two immediate considerations. The first concerned the need to include students with disabilities, specific learning disorders (SLDs), and special educational needs (SENs) among the intended users of *Socrates on Trial*.

The second was whether to design a game for students who had already read the text or for those who had not yet done so. I chose the first option for three main reasons: (i) to avoid limiting the potential user base of the adventure; (ii) to keep open the possibility of using *Socrates on Trial* in educational settings where the game could serve as a *system of content*, a *reflection prompt*, as well as an *exercise and evaluation activity* (following the differentiation of GBL game scenarios by Tinterri & Andreoletti, 2024); and finally, (iii) to preserve the possibility of

evaluating the impact of *Socrates on Trial* on student learning compared to more traditional teaching methods.

This choice thus imposed a specific constraint on the game design: to create an investigative adventure that could be solved not only by those who had already read the *Apology*, but also by those with no prior knowledge of the Platonic text.

Educational context and resources used. My intended goals to create *Socrates on Trial* required that the adventure would be playable under conditions similar to those of traditional philosophy teaching. This, together with the considerations made during this phase, led to the identification of a number of constraints, to be taken into account in the subsequent design phases.

	CONSIDERATION	SPECIFIC DESIGN REQUIREMENT (section 2.2.2)
1	Need for the total duration of the GBL activity to align with the time availability in a philosophy class.	GBL activity must be completed within a maximum of 2 hours.
2	Possibility for a teacher to create all educational and game materials at low cost.	All materials must be printable in black and white (Print and Play, P&P).
3	Possibility for a teacher with limited experience and time to easily create all necessary game materials—replicability by teachers.	All materials must be entirely printable, with no additional processing required.
4	Flexibility for a teacher to adapt the GBL activity to classes of any size.	GBL activity must be adaptable to groups ranging from 15 to 35 students.
5	Possibility to carry out both formative and summative assessments.	Creation of formative assessment rubrics and summative evaluation grids.
6	Inclusiveness of the investigative adventure.	Evaluation of the inclusive potential of the designed GBL activity.

2.2. Design

The first "D" in the ADDIE model stands for "Design." In this phase, the designer must take into account the characteristics of the target audience, the context, available resources, and time constraints earlier identified, and translate the identified instructional needs into a coherent, structured, and functional design. An effective way to manage the process is to follow the principles of constructive alignment (Biggs, 1996), which requires defining, in order, the learning objectives, teaching strategies, and assessment methods.

2.2.1. Learning objectives

As I aimed to create a GBL experience comparable in effectiveness to traditional methods, I defined the learning objectives as if they were those of a frontal lesson on the *Apology*, categorizing them into three groups: disciplinary knowledge, disciplinary skills, and transversal competences (see Winterton et al., 2006).

Learning objectives: knowledge. I derived the main themes discussed in the *Apology* from the reading of the text and its critical apparatus (introduction, notes) in the consulted edition (Plato, 2020, edited by G. Reale). I then identified the following knowledge-based objectives:

- Describe the cultural (existence of sophistic schools) and historical (conflict between pro-Spartan and pro-popular factions in Athenian society) context of Athens in the 4th century BCE;
- Summarize the content and structure of the *Apology*, distinguishing the different parts of the text;
- Explain the main accusations directed at Socrates;
- Describe some argumentative strategies used by Socrates in response to the accusations;
- Explain the purpose of life and the role of the philosopher within Athenian society according to Socratic philosophy.

To make these objectives measurable, I developed them into a more extensive list of questions, divided into primary (knowledge that must necessarily be acquired for successful learning) and secondary questions. Tables 1 and 2 in the Appendix summarize in three columns (i) the questions in progressive order, (ii) a short answer that summarizes the essential knowledge that students should express to demonstrate they have grasped the objective, and (iii) additional notes derived from the text or its critical apparatus, which may serve as inspiration for creating the adventure.

Learning objectives: philosophical skills. Regarding philosophical skills, I focused on the ability to argue, specifically on the more specific abilities to:

- Recognize an argumentative text;
- Reconstruct the structure of a philosophical argument from the text;
- Understand the conclusion of a philosophical argument as a response (counterargument) to another argument.

Learning objectives: transversal competences. Investigative adventures require playing in a group cooperatively, analyzing game materials in search of relevant information, and exchanging it among group members to solve a mystery. Therefore, like other forms of narrative (e.g., gamebooks, Fenici & Mosca, 2024), they lend themselves to developing the following transversal competences (see the introduction and Dickey, 2015):

- Collaboration: The ability to work effectively with others to achieve common goals;
- Communication: The ability to transmit and receive information, ideas, emotions, and intentions clearly, effectively, and appropriately to the context;
- Critical thinking: The ability to analyze information, situations, or problems objectively, reflectively, and rationally to formulate well-founded judgments and make informed decisions;
- Problem-solving: The ability to address and resolve problematic or complex situations effectively, finding practical and functional solutions.

It is noteworthy that these transversal competences are strongly aligned with the philosophical competences taught in philosophy education.

2.2.2. Teaching strategies

The choice of GBL with investigative adventure as the main educational strategy was made in advance of this phase, precisely because one of the aims of the study is to evaluate the effectiveness of investigative adventures in promoting the learning of knowledge and skills (see section 1). However, it became clear in this phase how appropriate this specific choice was for teaching philosophy. In fact, both investigative inquiry and philosophical inquiry seem to have more than one point in common (Eco & Sebeok, 1983). Both the investigator and the philosopher work within a complex context, trying to unravel puzzles, identify connections, and arrive at well-founded conclusions by sifting through clues and testimonies, verifying evidence, and proceeding by inferences and deductions. As evidence of these structural correspondences between investigative and philosophical activity,

the gameplay dynamics that develop around the table while playing an investigative adventure (see section 1) seem to stimulate those very same social and cognitive dynamics typical of philosophical activity (see section 2.2.1). Therefore, although the choice of investigative adventures as a GBL activity had been preordained, it also turned out to be well-suited to the design needs that emerged during the analysis phase (section 2.1).

Specifically, I chose to use the rules and mechanics of SH:CI, and adapted the setting to Athens in 399 BCE. This required some more specific evaluations to define the structure of the GBL activity and establish how to support students in achieving the various learning objectives just defined.

Structure of the educational game activity. Taking into account the considerations made previously (section 2.1), I identified design specifications and defined the structure and timings of the GBL activity. In particular, I followed a standard framework consisting of an introduction to the GBL activity, the game, and debriefing (see, e.g., Ligabue, 2023), allocating 15 minutes, 70 minutes, and 35 minutes for each phase, respectively.

Additionally, in this phase, supported by research demonstrating the inclusive potential of GBL (p.e., Tlili et al., 2022), and considering the cooperative nature of investigative adventures as a factor of inclusion, I left to the classroom experimentation the opportunity to verify the actual inclusive capacity of the designed GBL activity (see section 2.5 for an evaluation).

Strategies for supporting knowledge acquisition. I established that the teacher could address the secondary objectives only during the debriefing phase, while the primary objectives had to be acquired by students through reading and discussing the texts of *Socrates on Trial*.

Strategies for supporting philosophical skills' acquisition. I decided to hide philosophical arguments in the text of *Socrates on Trial*, which the students/players would have to discover and reconstruct.

Strategies for supporting transversal competences' acquisition. Considering that free group play and the search for a solution to the mystery naturally lead investigative adventures to activate the identified transversal competences, I did not design specific strategies for the development of students' transversal competences.

2.2.3. Assessment methods

In this phase, I determined how to assess the knowledge, philosophical skills, and transversal competences acquired by students through the GBL activity, and specifically which type of assessment (formative and/or summative) to use for each of them.

Summative assessment of acquired knowledge. One of the advantages of investigative adventures is that the determination of the final score is very similar to filling out an evaluation questionnaire with open-ended questions (see the Information Sheet in the Appendix). This makes it possible to assess the knowledge acquired during a GBL activity with investigative adventures through the evaluation of the questionnaire that concludes the game session, provided the learning objectives of the activity are aligned with the game objectives within the adventure itself (see section 2.3.1 for more details).

Summative assessment of acquired philosophical skills. Regarding the learning objectives for the philosophical skills, I selected two arguments presented by Socrates in the *Apology*, and formalized them. I then created an exercise by randomly mixing the order of the premises. To demonstrate that they have developed the philosophical skills identified earlier, the exercise requires the student to rearrange the statements constituting the argument in their logical order. Tables 3 and 4 in the Appendix present, respectively, an example of a formalized topic and the presentation of the exercise to the students.

Formative assessment of transversal competences. Regarding the assessment of transversal competences, I decided that this would simply be the subject of reflection by students during the debriefing activities, as well as during the final evaluation of the experience (see section 2.5).

2.3. Development: from instructional design to game design

The second "D" in the ADDIE model stands for "Development." This phase involves the concrete production of content, tools, activities, materials, and learning resources that were designed in the previous phase. It is an operational moment in which the project ideas are translated into tangible and usable resources, while maintaining consistency with the learning objectives and the needs of the target audience.

This phase often includes preliminary tests or intermediate revisions to ensure the quality, effectiveness, and usability of the materials before the implementation

phase—indeed, the project described in this article is currently in this phase, as the game materials are still experimental. In this phase, I created all the educational materials, including the game materials.

2.3.1. Creation of final questions and calculation of the final score

In close alignment with the learning objectives defined earlier (for knowledge and skills, section 2.2.1), I created a list of Final Questions that players must answer at the end of *Socrates on Trial* (Table 5 in the Appendix; note that, since I planned to answer questions 12 and 13 in the epilogue of the adventure, I did not include the corresponding questions in the list).

In designing this tool, I implemented several precautions. First, where an exhaustive answer required more information, I included a numbered list (a, b, c, ...) in the answer field to suggest the appropriate amount of information required. Furthermore, to prevent players from finding the answers through alternative strategies (e.g., online research), I included a request for each answer to indicate which paragraph of the adventure was used to obtain the required information. Finally, anticipating the use of the game with students who had already read the *Apology*, I included a third column requiring students to add the text passages that provide the same information.

Associated with the Final Questions, I then created a corresponding grading rubric (Table 6 in the Appendix), which defines the correct answers, and for each one, the score associated with it (based on its relevance to the understanding of the primary learning objectives, see section 2.2.1). The rubric also includes the paragraphs from *Socrates on Trial* related to the sought information (a necessary condition for assigning the score), and indicates the passages of the *Apology* where the same topic is discussed (bonus score).

Using the rubric allows for calculating the players' score in *Socrates on Trial* and, based on the alignment between the final questions and the learning objectives (section 2.2.1), the level of learning generated by the activity (Level 2 of Kirkpatrick, Kirkpatrick & Kirkpatrick, 2006).

2.3.2. Creation of game materials

This phase was the most challenging part of the work because it required recreating original materials functionally corresponding to those found in *SH:CI*. This required deepening many aspects of the *Apology* as well as the historical context of the city of Athens and ancient Greece.

I ultimately identified the following list of game materials, which I will then detail.

<i>Socrates on Trial</i>	<i>Sherlock Holmes: Consulting Detective</i>
Instruction Sheet	Rules
Paragraph Book	Casebook
Map of Athens and Map of the Agora	Map of London
Citizen Register	London Directory
List of Socrates' Friends	List of Informants
Rumors from the Agora	Copies of the <i>Times</i>

Map of Athens and Map of the Agora. To help players visualize the movements of their characters within Athens, I recreated a historically accurate map of the city, dividing it into seven main neighborhoods (demes), including the Agora with its own map. I then numbered the houses of each neighborhood progressively to accurately locate the characters and buildings mentioned in the Paragraph Book, with the highest level of historical accuracy permitted by the available documentation.

Citizen Register. I reconstructed the *London Directory* from *SH:CI* as a possible Citizen Register used to identify those entitled to vote (though no historical documentation of such a register exists). I generated a list of about 300 Athenian names, drawing from characters in Plato's dialogues as well as other common Greek names from the period.

List of Socrates' Friends. Based on the *List of Informants* from *SH:CI*, I created a list of Socrates' friends, available to meet the characters and provide them with support or information.

Rumors from the Agora. Since there was no printed media at the time, I replaced the *Times* copies from *SH:CI* with two images of the Agora (generated using AI apps), in which people are shown exchanging abundant information on topics such as politics, war, commerce, art, religion, and, to a lesser extent, Socrates' trial. I generated these rumors based on events of the era.

Paragraph Book. The most demanding part of the work was undoubtedly creating the Paragraph Book, which describes all the investigative possibilities the players will follow in *Socrates on Trial*. This required developing engaging characters, setting, and plot that allowed players to progressively discover the necessary information to answer the Final Questions, and thus understand—by moving through a playful yet accurate reconstruction of Athens in 399 BC—the same arguments Socrates presents in the *Apology*.

The argumentative nature of the dialogue provided the basis for the structure: the players take on the role of Socrates' followers who, in Athens in 399 BC, attempt to acquit their master. To do this, they must reconstruct the circumstances leading to the accusation, discovering his accusers, the arguments they will use in the trial, how to refute them (the learning objectives defined previously, section 2.2.1), and how they might fund a potential escape (an additional gameplay element).

The structuring of the narrative architecture required considering the specifics of the adventure genre (Dickey, 2015, Chapter 4). Reading paragraphs in a game like *SH:CI* does not follow a predefined order, which prevents telling a story in a linear fashion. Additionally, the exploratory nature of GBL activities requires giving players freedom of movement and not forcing their choices into a mandatory path. I thus organized the writing of the paragraphs around a mind map, created using the Miro app, which allowed me to structure the possible paths of information acquisition by the players in a flowchart and organize the writing of individual paragraphs coherently.

The most intricate part of the game design involved how to hide the different pieces of information necessary to answer the Final Questions in various locations around the city, associated with characters to be interrogated and places to be visited. In doing so, I used several strategies. First, I made sure not to place the information in obvious locations that players might want to visit based on prior knowledge (e.g., finding important information about Anytus by going to his residence).

Additionally, I often scattered a piece of information across multiple clues to be identified by reading a variety of paragraphs and other materials (e.g., Crito asks the players to find money to assist Socrates in the trial, but does not specify how to do so; however, a Rumor from the City mentions a banquet attended by Socrates and his “wealthier” and more influential friends, who can thus be interrogated at their homes).

Finally, following the same strategy, I also scattered the individual components of the arguments Socrates could use to respond to the accusations in different coordinates of the city (see Tables 3 and 4 in the Appendix). By collecting all the statements, players are then in a position to reconstruct the argument and thus try to acquit Socrates.

For writing the individual paragraphs (narration), I used AI-assisted digital writing tools (ChatGPT 4). It's worth noting that [SPOILER!] the adventure ultimately ends with its real ending: regardless of the score achieved by the players, Socrates is

sentenced to death. This is narrated by the character of Plato, who appears in the epilogue to be read after calculating the final score.

2.3.3. Instructions for the facilitator to support the GBL activity

To support the facilitation of the GBL activity, as well as to prepare other facilitators in case of a large-scale field experiment, I have outlined the necessary procedures to guide a GBL activity with *Socrates on Trial* in a one-page format (see the Instructions for a GBL Activity in the Appendix). These instructions clarify what to do to (i) introduce the activity, (ii) manage the player groups during the gameplay phase, (iii) conduct the debriefing, and (iv) collect data on the players' experience to improve the experimentation.

2.3.4. Creation of tools for evaluating the GBL experience

To collect data on the players' evaluation of the experience (Level 1 of Kirkpatrick, Kirkpatrick & Kirkpatrick, 2006), I created a questionnaire using Google Forms, which is distributed anonymously to the players at the end of the session by showing a QR code. The questionnaire includes 13 items, scored on a Likert scale from 1 to 5, designed to assess (i) the degree of enjoyment and engagement in the gameplay experience (items 1-2 and 11-13), as well as the players' perception (ii) of the educational value of the gameplay experience (items 3-4), (iii) of how much the experience activated transversal and social skills (see section 2.2.1, items 5-8), and finally (iv) of how much they learned through the gameplay experience (items 9-10; see section 2.5 for further details on the questionnaire structure and a preliminary analysis of the data collected).

I also created a second sheet for the facilitator titled "Tracking the Work of the Groups" (see the sheet with the same title in the Appendix), which allows the facilitator to track each group's search for clues and thus collect important information on the gameplay dynamics to validate the optimal design of the adventure (e.g., to understand if no group is able to solve certain clues).

2.4. Implementation

The "I" of the ADDIE model stands for "Implementation." This phase involves the actual execution of the training path designed and developed in the previous stages with the participants of the intervention (in this case, the students). It is essential to manage the logistical organization (timing, spaces, tools), prepare the trainers or teachers involved, and ensure everything functions correctly. Additionally, during

the implementation, learning dynamics are observed, and any feedback or issues are gathered, which are useful for evaluating the effectiveness of the intervention and making adjustments.

Currently, I have personally tested (beta-testing) the activity with 3 groups of players, one group of teachers (as an example of training on GBL), and two third-year secondary school classes (23 and 24 students in the two sessions, divided into 5 groups). These sessions were conducted according to the guidelines established during the development phase (see section 2.3.3) for a total duration of 2 hours. A colleague, a philosophy teacher, also proposed the adventure (without having played it in advance) to a group of students (18 students, 2 groups) involved in extracurricular activities. This session lasted approximately 3 hours.

2.5. Evaluation

The "E" in the ADDIE model stands for "Evaluation." It refers to the assessment of the effectiveness of the training intervention and can include tests, questionnaires, observations, participant feedback, and analysis of results. It is divided into two phases: (i) formative evaluation, which takes place during the design and implementation stages to understand what worked, what needs improvement, and how to optimize future interventions, and (ii) summative evaluation, which occurs at the end of the program to measure the achievement of the learning objectives.

In this section, only the data collected from the three sessions held in third-year secondary school classes through the GBL experience evaluation questionnaire (see section 2.3.4) are presented. The data (image at the bottom of the next page) are too limited for quantitative analysis but still allow for a preliminary qualitative assessment of the students' experience and an estimate of their learning.

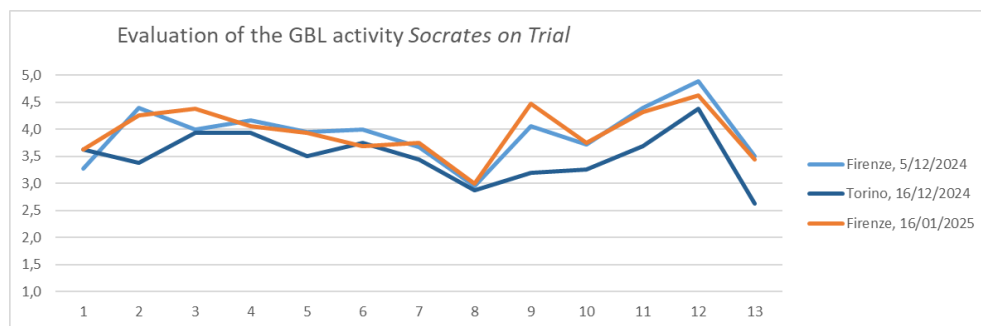
Specifically, the average score for item 1 (3.5, lower than the others) suggests that some students struggled to engage with the game. As a facilitator, I observed this issue and provided additional support to the groups that needed help understanding how to search for clues in the texts and recover new paragraphs to read.

Regarding the gaming experience, students rated it as engaging and stimulating (item 2: 4.0) and expressed satisfaction with the experience (item 11: 4.1). The sincerity of this statement seems confirmed by items 12 and 13: a high percentage of students stated they would be willing to repeat a similar experience in class (item 12: 4.6), and even outside of school hours (item 13: 3.2).

On the self-assessment of transversal skills (section 3.2.2), students reported that the game stimulated their problem-solving and creativity skills (item 5: 3.8), communication and negotiation of common strategies (item 6: 3.8), as well as their ability to organize themselves as a group (item 7: 3.6). This self-assessment suggests that the GBL activity activated the transversal skills identified during the design phase (section 2.2.1).

On the learning front, students appear to have grasped the educational value of the experience (item 3: 4.1) and the balance between the gaming experience and the educational content (item 4: 4.1). They also report that the debriefing helped them understand how they could have scored higher (item 9: 3.9), suggesting they acquired new knowledge and philosophical skills. Moreover, having played the investigative adventure led students to state that they feel more motivated to acquire new knowledge about Socrates and the *Apology* (item 10: 3.6), indicating an increased interest in the topic.

Significant differences were also noted between experiences facilitated by the author of this article versus another facilitator who had not played the adventure (item 2: 4.35 vs. 3.4; item 5: 3.9 vs. 3.5; item 9: 4.3 vs. 3.2; item 10: 3.7 vs. 3.3; item 11: 4.35 vs. 3.7; item 12: 4.75 vs. 4.4; item 13: 3.45 vs. 2.6). This data suggests that



1	It was easy for me to understand the instructions for playing and then to follow them.	3,5
2	The gameplay experience was engaging and stimulating.	4,0
3	I found the gameplay experience interesting, and I understand its value for study and learning.	4,1
4	The game successfully balanced the presentation of historical and philosophical content with player engagement.	4,1
5	The game stimulated my ability to solve problems and seek creative solutions.	3,8
6	The game stimulated my ability to communicate with others and negotiate a common strategy.	3,8
7	The game stimulated my ability to organize a group activity by dividing tasks and coordinating together.	3,6
8	The game provided an opportunity to get to know my classmates better.	2,9
9	The debriefing helped me better understand how my group could have achieved a higher score.	3,9
10	The game encouraged me to acquire new knowledge about Socrates and the text of the <i>Apology</i> of Socrates.	3,6
11	Overall, I am happy with this game-based learning experience.	4,1
12	I would like to repeat the experience with another investigative adventure during school hours.	4,6
13	I would like to repeat the experience with another investigative adventure outside of school hours.	3,2

facilitator preparation is crucial for maximizing engagement and learning, although the activity can function at a more basic level with different facilitators.

Finally, regarding the inclusivity of the proposed GBL activity, teachers involved in the classes observed a good level of engagement from students, including those with disabilities, specific learning disorders (SLD), and special educational needs (SEN). In terms of social interaction, students report that the activity did not provide an opportunity to get to know their classmates better (item 8: 2.9). This is understandable, as the activity took place in already-formed classes.

3. Discussion

I note that the GBL activity with *Socrates on Trial* has met some significant design specifications identified during the analysis phase (section 2.1): the materials for playing are inexpensive and easy to prepare, and the activity can scale linearly with the number of students in a class—simply, the teacher can create more groups and game materials depending on the number of students. Additionally, the students' self-assessment suggests that the GBL activity promotes learning about Socrates and the *Apology*, and activates transversal skills, while teachers' subjective judgment regarding the inclusiveness was positive. The creation of rubrics to evaluate behaviors displayed in class will help improve the measurement of these elements in the future.

A critical factor remains the total time allocated for the activity: two hours are not sufficient to complete the adventure. A corrective action to implement is to rewrite the paragraphs and modify the adventure (e.g., by eliminating some false leads) to make it playable within a shorter time frame. Indeed, the current "width" of the gameplay space—similar to that in SH:CI—is not actually necessary for a classroom experience. Shortening the texts and simplifying the resolution path should still be done in a controlled way, to avoid excessively highlighting crucial information and making the leads too obvious, thus reducing the value of the gameplay and learning experience (section 2.2.2).

Among the strategies for speeding up the students' ability to progress in the game, I have also considered the following options:

- Distribute the Paragraph Book to the students. However, this prevents the facilitator from tracking the groups' progress and from monitoring if they are cheating.

- Limit the number of Socrates' Friends to those who actually contribute (perhaps adding a penalty). This could help blocked groups, but would guide players toward the solution.
- Indicate some Final Questions (especially 4 and 5) as “optional” instead of “essential.”
- Diversify two GBL activities. The first, lasting 2 hours, could focus solely on formative assessment. The facilitator should lead the debriefing in a way that clarifies the solution of the adventure and brings out its themes in the *Apology*. The second, lasting 3 hours, should focus on summative assessment as designed in this article.

The experimentation in the classrooms will help determine which of these strategies proves most effective.

4. Conclusions

The use of game-based learning (GBL) activities in the classroom faces three critical elements: (I) maintaining focus on student learning, (II) using engaging and immersive game activities, and (III) addressing the need to train teachers on how to integrate games into teaching activities.

In this article, I have shown how the careful design of a GBL teaching activity based on a philosophical investigative adventure, *Socrates on Trial*, can address and respond to these challenges. The detailed explanation of the various stages of instructional design and game design demonstrates how, by adhering to the principles of constructive alignment (Biggs, 1996), it is possible to create games where the goals of the gaming experience (section 2.3.1) correspond to the learning objectives and the predefined assessment methods (sections 2.2.1 and 2.2.3). Furthermore, the article also illustrates how investigative adventures are particularly well-suited for teaching philosophy as a discipline, because the activities students engage in during the game (section 1) stimulate the same cognitive and social dynamics typical of philosophical activity (section 2.2.2).

The preliminary evaluation of the GBL activity with *Socrates on Trial* (section 2.4) in several classrooms yielded encouraging results: students demonstrated an appreciation for the gaming experience, an understanding of its educational value, and the ability to learn through the game both disciplinary and transversal content and skills (section 2.5). This work thus represents the first step of a broader project aiming to confirm the effectiveness of investigative adventures in supporting learning.

The careful description of the various stages of instructional and game design can also contribute to defining a clear training path for teachers who wish to create their own investigative adventures for their classrooms. If adequately supported, teachers can take on the role of game designers, creating impactful learning games that support student learning, collaboration, and inclusion.

References

- Barz, N., Benick, M., Dörrenbächer-Ulrich, L., & Perels, F. (2023). The Effect of Digital Game-Based Learning Interventions on Cognitive, Metacognitive, and Affective-Motivational Learning Outcomes in School: A Meta-Analysis. *Review of Educational Research*.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32(3), 347–364.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, 18(1), 32–42.
- Cicurel, D. (2018). *Chronicles of Crime*. Lucky Duck Games.
- Dickey, M. D. (2015). *Aesthetics and design for game-based learning*. Routledge.
- Eco, U., & Sebeok, T. (Eds.). (1983). *The Sign of Three: Dupin, Holmes, Peirce*. Indiana University Press.
- Edwards, R., Goldberg, S., & Grady, G. (1982). *Sherlock Holmes Consulting Detective: The Thames Murders & Other Cases*. Sleuth Publications.
- Fenici, M., & Mosca, I. (2024). Gamebooks and branching narratives in education: Fostering sustainability competences to promote positive social change. *Frontiers in Education*, 8.
- Hanghøj, T., & Brund, C. E. (2010). Teacher roles and positionings in relation to educational games. *Proceedings of the 4th European Conference on Games Based Learning*, 116–122.
- Hutchins, E. (1995). *Cognition in the Wild*. The MIT Press.
- Ju, E., & Wagner, C. (1997). Personal computer adventure games: Their structure, principles, and applicability for training. *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, 28(2), 78–92.
- Kirkpatrick, D., & Kirkpatrick, J. (2006). *Evaluating training programs: The four levels*. Berrett-Koehler Publishers.
- Łapot, J., Rymer, P., & Trzewiczek, I. (2018). *Detective: A Modern Crime Board Game*. Portal Games.
- Larson, M. B., & Lockee, B. B. (2019). *Streamlined ID: A practical guide to instructional design*. Routledge.
- Li, Y., Chen, D., & Deng, X. (2024). The impact of digital educational games on student's motivation for learning: The mediating effect of learning

- engagement and the moderating effect of the digital environment. *PLOS ONE*, 19(1), e0294350.
- Ligabue, A. (2023). *Didattica ludica: Competenze in gioco*. Edizioni Centro Studi Erickson.
- Malafouris, L. (2013). *How Things Shape the Mind*. The MIT Press. <https://mitpress.mit.edu/books/how-things-shape-mind>
- Molenda, M. (2003). In search of the elusive ADDIE model. *Performance Improvement*, 42(5), 34–37.
- Nicholson, S. (2011). Making Gameplay Matter: Designing Modern Educational Tabletop Games. *Knowledge Quest*, 40(1), 60–65.
- Nousiainen, T., Kangas, M., Rikala, J., & Vesisenaho, M. (2018). Teacher competencies in game-based pedagogy. *Teaching and Teacher Education*, 74, 85–97.
- Plass, J. L., Homer, B. D., & Kinzer, C. K. (2015). Foundations of Game-Based Learning. *Educational Psychologist*.
- Plass, J. L., Mayer, R. E., & Homer, B. D. (Eds.). (2020). *Handbook of Game-Based Learning*. The MIT Press.
- Platone. (2020). *Apologia di Socrate* (G. Reale, Ed.). Bompiani.
- Tinterri, A., & Andreoletti, M. (2024). A mapping of instructional scenarios for game-based learning. In T. Minerva & A. De Santis (Eds.), *Proceedings of the Italian Symposium on Digital Education* (pp. 131–143). Sle-L, Società Italiana di e-Learning, University of Modena and Reggio Emilia.
- Tlili, A., Denden, M., Duan, A., Padilla-Zea, N., Huang, R., Sun, T., & Burgos, D. (2022). Game-Based Learning for Learners with Disabilities—What Is Next? A Systematic Literature Review from the Activity Theory Perspective. *Frontiers in Psychology*, 12, 814691.
- Winterton, J., Delamare-Le Deist, F., & Stringfellow, E. (2006). *Typology of knowledge, skills and competences: Clarification of the concept and prototype* (Vol. 64). Office for Official Publications of the European Communities Luxembourg.

Appendix

Information Sheet — *Sherlock Holmes: Consulting Detective*

The box of the game *Sherlock Holmes: Consulting Detective* (Edwards et al., 1982) includes ten different cases to solve, similarly structured and arranged in chronological order and increasing difficulty. Let's look at the various components of the game, all necessary for playing a session.

Case Booklet. Each investigation is associated with a different Case Booklet, dedicated to the specific case, organized into numbered text paragraphs that are not meant to be read in sequence. The game begins with the reading of the narrative introduction found in the opening paragraph of the Case Booklet. This initial paragraph, rich in detail, introduces players to the mystery—usually a crime such as a murder or theft—that they must solve. It sets the stage for the investigation, providing context, initial suspects, and possible leads to follow.

Unlike many board games, the game does not follow a rigid turn-based structure. Players reflect on the text, discuss together, and decide which “leads” (places to visit, witnesses or people to question) to pursue. Each lead is represented by a new paragraph in the Case Booklet containing fresh information, which might offer further clues, suggest new leads, or clarify elements of the mystery.

The real uniqueness of the game lies in the freedom it offers players. The paragraphs in the Case Booklet do not explicitly list the available leads. Instead, players must determine which paragraphs to read based on the information they've gathered and by critically using four essential tools that expand the possibilities for investigation and discussion.

Map of London. The first tool to expand the investigation is the Map of London (in A2 format), a detailed graphic reconstruction of late 19th-century Victorian London, divided into five districts. It helps players locate key places during the investigation, understand distances and geographical connections between crime scenes, and verify characters' travel times and alibis. Notably, each location on the map is associated with a numerical coordinate, which corresponds to a potential paragraph in the Case Booklet. Once players identify a location of interest on the map, they can choose to explore it by reading the corresponding paragraph in the Case Booklet.

London Directory. A second tool is the London Directory, a booklet that contains a fictional alphabetical listing of all inhabitants of Victorian London, as well as a list of civic, commercial, and industrial establishments that players might want to explore, along with their addresses/numerical coordinates on the map. If players wish to speak with someone, the Directory provides the corresponding paragraph number in the Case Booklet where they can read that person's interview.

Informants List. A special group of people to meet are the informants—recurring characters across multiple cases who possess specific expertise potentially useful for the investigation. The list includes forensic doctors, Scotland Yard inspectors, archive directors, public registry officials, and similar figures. Their names appear—like all citizens’—in the London Directory, but are also repeated on the back cover of the game manual.

Copies of The *Times*. Thirdly, the game box includes ten pages (printed double-sided, A2 format) that reproduce copies of *The Times*, the historic London newspaper, published on the very days of the ten crimes. Each issue always includes information related to the case the players are currently investigating, cleverly hidden among news articles, advertisements, editorials, and letters to the editor. A key part of the gameplay experience is therefore to carefully comb through the newspapers in search of clues that can lead to new leads or confirm a theory about the case. It's up to the players' skill to figure out which articles are truly important and which ones are just red herrings meant to waste time and mislead the investigation.

Gameplay Experience and Victory Conditions. Investigative freedom is at the heart of the game. There is no predetermined sequence: each group can approach the investigation in their own way, making each gameplay experience unique. However, following too many leads can be a disadvantage, as the final score depends on the number of paragraphs read in the Case Booklet.

When players believe they have gathered enough information, they can decide to close the investigation and answer the final questions—found in a dedicated section of the Case Booklet. These questions pertain to the details of the case (such as the identity of the culprit, the motive, or how the crime was committed) and may include secondary questions to assess the players' full understanding of the story. The solution is then compared with that of Sherlock Holmes, presented in the final section of the Case Booklet, the “Epilogue.” Players receive a score based on the accuracy of their answers and their efficiency, as they try to match—or surpass—the unattainable standard set by Sherlock, who always solves the case following the fewest possible leads.

Table 1 — Primary learning objectives (questions)

Question	Answer	Notes
1. Who are Socrates' accusers?	• Meletus • Anytus • Lycon	• The speech of the accusers “was delivered by Polyeuctus, written by the sophist Polycrates, according to Hermippus, or by Anytus, according to others.” — Diogenes Laërtius (II, 38). • According to Xenophon, Socrates had publicly criticized Anytus for wanting his son to inherit the family business and for having educated him for that purpose.
2. What are the three official charges brought against Socrates?	1. Socrates does not believe in the gods in which the City believes. 2. Socrates believes in different and new divinities. 3. Socrates corrupts the youth.	
3. How can each of the three official charges against Socrates be discredited?	• Counterargument to 2.1: If Anytus believes that Socrates is an atheist, he contradicts himself. • Counterargument to 2.2: The Socratic <i>daimon</i> expresses the voice of a god. • Counterargument to 2.3: Meletus does not know what it means to corrupt the youth.	• Logical argument against the charge of atheism. • “What manifests in me since childhood is like a voice that, whenever it appears, always dissuades me from doing what I am about to do, but never encourages me to do anything.” (107) • Every form of education requires precise knowledge of the person to be educated and of the purpose of the education. For this reason, true educators are few.
4. Which two old rumors are	1. Socrates is a sophist because he makes the weaker argument appear	• In Aristophanes' <i>The Clouds</i>, Socrates is portrayed as a

reconsidered to accuse Socrates?	stronger, and charges money for his wisdom. 2. Socrates is a natural philosopher because he claims that the Sun is stone and the Moon is earth.	natural philosopher and a sophist. Socrates was accused because he had been a disciple of Archelaus of Athens, who held that infinite air was the principle of all things, and his opponents based their accusations on this.
5. How can each of the two old rumors against Socrates be discredited?	- Counterargument to 5.1: Socrates never charged for his philosophical teachings. - Counterargument to 5.2: Socrates does not concern himself with questions of physics, as Anaxagoras did.	- Callias, one of the wealthiest Athenians (and a squanderer of his wealth), a fanatical admirer of the Sophists, paid a great deal of money to Evenus of Paros to educate his two sons. - Natural philosophers investigated nature, believing they could discover the principle of all things.

Table 2 — Secondary learning objectives (questions)

Question	Answer	Notes
6. Who offers to provide money to help Socrates during the trial?	• Critobulus • Apollodorus • Xenophon	"Athenian citizens, Plato here, and Crito, and Critobulus, and Apollodorus urge me to propose a fine of thirty minas, and they themselves will act as sureties." (38B)
7. Why did the Oracle of Delphi say that no one is wiser than Socrates?	Because Socrates knows that his wisdom is worth nothing.	"Men, the wisest among you is the one who, like Socrates, has recognized that in truth he is worth nothing when it comes to wisdom." (23B)
8. What is the purpose of life according to Socrates?	To care for the soul so that it becomes as good as possible.	"You must care for... the soul, so that it may become as good as possible." (29E) "If it is a lack of perception, like a sleep... then death would be a wonderful gain." (40D)
9. What mission does Socrates feel the god has assigned to him?	To go around persuading the citizens of Athens not to care about the body or wealth, but to care for the soul so that it becomes as good as possible.	"I will obey the god... and I will not stop... teaching anyone I meet: 'O excellent man, you who are an Athenian... are you not ashamed to care so much about money, reputation, and honor, and yet care so little about wisdom, truth, and the soul, so that it may be the best possible?'" (29D)
10. Why does Socrates have many enemies in Athens?	Because by pretending not to know, he encouraged politicians, poets, and craftsmen to express their wisdom, only to refute them and show that they too were ignorant.	"I tried to show him that he thought himself wise, but was not. And so I became hateful to him and to many of those present." (21D–23A)
11. In what sense was Socrates' trial a political one?	The trial took place during a time of great social tension, when the city's new democratic government was persecuting many supporters of the previous regime of the Thirty Tyrants. Socrates was not one of them, but he was still associated with	"The Thirty... that government, though so powerful, did not frighten me into doing something unjust... perhaps for this I would have been put to death, had that

	them because he had been the teacher of Critias and Alcibiades, important members of that regime.	government not been quickly overthrown." (32C–E)
12. Why does Socrates not fear death?	• Because no one truly knows what death is • Because, whatever it may be, death still represents a gain.	"To fear death is nothing other than to think one is wise when one is not, that is, to believe one knows what one does not know." (29A)
13. Why does Socrates not escape from prison?	To respect the laws of the city.	In the <i>Crito</i> , Socrates refuses to escape from prison to avoid the death sentence, arguing on ethical grounds and out of consistency with his principles, as well as to respect the laws and justice.

Table 3 — Formal argument

Meletus believes that those who do not know the laws corrupt the youth.
If Meletus knows who corrupts the youth, then he also knows who improves them.
Meletus believes that those who do not corrupt the youth—that is, those who improve them—know the laws.
The laws are known by the judges, the counsellors, all the members of the assembly, and all Athenians.
Meletus believes that those who improve the youth are all Athenians.
Knowing how to improve something is a prerogative of the few, not the many.
Meletus’ reasoning leads to absurd conclusions.
Meletus does not know who corrupts the youth.

Table 4 — Exercise reconstructing the structure of the argument

Meletus believes that those who do not know the laws corrupt the youth.
Meletus does not know who corrupts the youth.

 The laws are known by the judges, the counsellors, all the members of the assembly, and all Athenians.
Meletus believes that those who do not corrupt the youth—that is, those who improve them—know the laws.
Knowing how to improve something is a prerogative of the few, not the many.
Meletus believes that those who improve the youth are all Athenians.
Meletus’ reasoning leads to absurd conclusions.
If Meletus knows who corrupts the youth, then he also knows who improves them.

Table 5 — Final Questions in *Socrates on Trial*

Fundamental questions	
1. Who are the accusers of Socrates?	•
2. What are the three official charges brought against Socrates?	a) b) c)
3. How is it possible to discredit each of the three official charges against Socrates?	a) b) c)
4. Which two old rumors are reconsidered to accuse Socrates?	a) b)
5. How is it possible to discredit each of the two old rumors against Socrates?	a) b)
Optional questions	
6. Who provided the money to help Socrates during the trial?	•
7. Why did the Oracle of Delphi say that no one is wiser than Socrates?	•
8. What is the purpose of life according to Socrates?	•
9. What mission does Socrates feel the god has entrusted to him?	•
10. Why does Socrates have many enemies in Athens?	•
11. In what sense was Socrates' trial a political trial?	•

Table 6 — Evaluation Grid for the Final Questions of *Socrates on Trial*

Fundamental questions	Game paragraph	Text reference*
1. Who are the accusers of Socrates? (15 PT) • Meletus (5 PT), Anytus (5 PT) e Lycon (5 PT)	Diom. 12, Cer. 75	24A
2. What are the three official charges brought against Socrates?? (15 PT) a) Socrates does not believe in the gods in whom the City believes. (5 PT) b) Socrates believes in different and new divinities. (5 PT) c) Socrates corrupts the youth. (5 PT)	Ag. 1 / Ag. 7	24C
3. How is it possible to discredit each of the three official charges against Socrates? (50 PT) a) Counterargument: If Anytus believes Socrates is an atheist, he contradicts himself. (25 PT) b) The Socratic daimon expresses the voice of a god. (10 PT) c) Counterargument: Meletus does not know what it means to corrupt the youth. (15 PT)	Diom. 12, Cer. 25, Cer. 75, Acr. 41	27A — 25C [+25E]
4. Which two old rumors are reconsidered to accuse Socrates? (10 PT) a) Socrates is a sophist because he makes the weaker argument stronger and charges money for his wisdom. (5 PT) b) Socrates is a natural philosopher because he claims the Sun is stone and the Moon is earth. (5 PT).	VdA; Acr. 16	19C 26D
5. How is it possible to discredit each of the two old rumors against Socrates? (10 PT) a) Socrates never charged money for his philosophical teachings. (5 PT) b) Socrates does not concern himself with physical matters, unlike Anaxagoras. (5 PT)	Mel. 36, Ag. 19 / Acr. 16, Diom. 64	31C 26D
Optional questions	Game paragraph	Text reference*
6. Who provided the money to help Socrates during the trial? (30 PT) • Critobulus (15 PT), and Apollodorus (15 PT)	Scam. 26, CeC. 31	38B
7. Why did the Oracle of Delphi say that no one is wiser than Socrates? • Because Socrates knows that his wisdom is worth nothing.	—	23B
8. What is the purpose of life according to Socrates?	—	29E

The purpose of human life is to care for the soul, to make it ever better.		
9. What mission does Socrates feel the god has entrusted to him? To go around persuading people not to care for the body or for wealth, but to care for the soul so that it may become as good as possible.	—	29D 30B
10. Why does Socrates have many enemies in Athens? Because by pretending not to know, he urged politicians, poets, and craftsmen to express their wisdom, only to refute them and show that they were also ignorant.	—	21D-E 22B-D
11. In what sense was the trial of Socrates a political trial? The trial took place during a time of great social tension, when the city's new democratic government was persecuting many supporters of the previous regime of the Thirty Tyrants. Socrates was not one of them, but he was associated with them because he had been the teacher of Critias and Alcibiades, important members of that government.	RftA; Mel. 33	—

* Correct reference to the *Apology* text doubles the associate answer's score.

Instructions for a GBL Activity – *The Trial of Socrates*

Preparation (15 minutes)

- The teacher should play through the adventure at home! Materials: paper and pen for notes, scissors, glue.
- Set-up (5 minutes)
 - Divide the class into homogeneous groups of 4–5 students each.
 - Have each group sit around a table (a pair of desks).
 - Explain that they are about to play an adventure set during the time of Socrates' trial.
 - Read the prologue aloud to the whole class, then distribute the text.
- Explain the goal of the game (5 minutes)
 - It's a cooperative group game. They will investigate leads, study the information they have, and request one new paragraph at a time (give an example using the prologue).
 - Game time: 70 minutes. There will be no break.
 - When they feel ready, they will ask for a questionnaire and answer it as best they can based on the information gathered. They may no longer investigate further leads.
 - The answers on the questionnaire will determine the final score. The case can be solved by reading a limited number of leads. Each additional lead requested beyond a certain number will result in a score penalty.
 - The team with the highest score wins!
- Rules (5 minutes). Each group elects a spokesperson, who will request paragraphs from the teacher, and a chief investigator, who rotates after each request. Explain the rules while distributing materials:
 - Map of Athens divided into neighborhoods (demes), each with progressive numbering.
 - Map of the Agora (zoomed in), with buildings numbered.
 - Paragraph Book: each relevant address on the map has a corresponding paragraph.
 - Citizen Registry: lists each resident or public building and its corresponding address on the Athens map.
 - "Rumors from the Agora": rumors useful to solve the case.
 - "Friends of Socrates": a group of Athenians willing to help you complete the mission.

Game (70 minutes)

- When a group wants to investigate a lead (60 minutes):
 - The spokesperson goes to the teacher and states the paragraph number (one at a time!) they want to read.
 - The teacher records the group's request.
 - If the paragraph exists in the Book, the teacher cuts it out (if necessary) and gives it to the spokesperson.

- If not, the group has simply wasted a lead.
- After one hour of gameplay, questionnaires with questions on how to solve the case will be distributed. (10 minutes)

Debriefing (35 minutes). Combine the questionnaire writing with the debriefing to save time. Show the flowchart summarizing the most effective investigation path for solving the adventure.

- What happened? (5 minutes)
 - Was it easy or difficult to play?
 - Were there any bottlenecks in the game flow?
 - What aspects of the rules/game caused problems or didn't work?
- What did you learn? (20 minutes)
 - The teacher shows the solution flowchart for the adventure.
 - Go through the final questions together, one by one.
 - Calculate the final score and determine the winning group.
- Reaction / Experience (5 minutes)
 - Did you like / not like the game? Why?
 - How was playing as a group?
- What to do with this experience (5 minutes)
 - Are there other similar adventures? Would you like to know about them?
 - Evaluate the activity using your phone with a QR code.

Tracking Group Work

Group	Leads explored	Penalties*	Partial score	Extra score	Final score
1			1. 2. 3. 4. 5.		
2			1. 2. 3. 4. 5.		
3			1. 2. 3. 4. 5.		
4			1. 2. 3. 4. 5.		
5			1. 2. 3. 4. 5.		
6			1. 2. 3. 4. 5.		
7			1. 2. 3. 4. 5.		

*Every lead beyond the thirteenth adds 10 points of penalty.