

Intellectual Output 1

A4 Module development
LESSON PLAN 1



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EA

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1.1 General Information

1.1.1 Brief description

This lesson plan is focusing on the concept of copyright. Through the educational activity we understand its importance in various fields of technology like robotics, electronics, electrical and mechanical engineering etc.

1.1.2 Learning objectives and IP topics

The learning objectives of this lesson plan are:

- To acquire practical understanding of what copyright is and how relevant and important copyright and in general IP property protection are in the fields of technology.
- To identify common wrong doings and bad practices of copyright violation but also best-practices on how to protect and acknowledge copyright.

1.1.3 Links to curriculum

This lesson plan can be linked to the following curriculum domains:

- Information technology
- Computer science
- Robotics and applications
- Entrepreneurship

1.1.4 Duration

About 45 minutes or equivalent of one standard classroom hour is needed to complete this lesson plan in a classroom of 20-25 students.

1.1.5 Extra materials required

Laptops or PCs with network connection. About 1 or 2 students per laptop or PC.

1.2 Step-by-step instructions



Image 1: Humanoid robot NAO of Softbank Robotics

Source: <https://www.softbankrobotics.com/>

The lesson plan is divided in four inquiry phases, namely introduction, preparation, investigation and conclusion. The last phase can be subdivided in subphases of presentation, discussion and reflection.

1.2.1 Introduction

In this phase the general topic to be studied or investigated is presented and interest about a problematic situation that can be resolved or answered is stimulated. As the focus of this lesson plan is copyright, the teacher can start for example by asking students what they know about copyright before he/she gives a formal definition of the term, how it is related to the

fields of technology like e.g. robotics, why it is important, what protection or violation is, etc. The teacher asks them also to think of a problematic situation they know or can imagine and discuss it briefly. It should be emphasized that the objective of this phase is to encourage students to express ideas, prior knowledge or thinking and questions about the topic, while promoting interaction and communication between them.

1.2.2 Preparation

In this phase the teacher describes the task that students have to work on during the investigation phase. Students can first be divided in small working groups of 2 to 3 persons.

The task is as follows:

Imagine that you work in a company that develops and builds robotic equipment and various components including small educational robots that assist kids to learn basic programming. As an individual or team the task to complete is to search and propose ideas on how this little robot could look like. You may utilize resources that you can find in public repositories on the internet, commercial or corporate websites, news items etc. Your final proposal should be put in a single ppt slide. Do not forget that one or more proposals could be selected by the management board of the company and will be manufactured as a new product in the coming months!

Any definitions, clarifications, explanations, theoretical knowledge or other prerequisite background information can be presented here. Then students start their work for the task.

1.2.3 Investigation

In this phase students work individually or collaboratively in small groups. From time to time and depending on progress, the teacher reminds students that this activity is related to copyright and in general to IP. In this context he/she may pose questions or provoke their thinking whether what they are doing is according to copyright rules or what they would have done differently if there was no copyright law.

1.2.4 Conclusion

In the conclusion phase each student team presents its slide and discusses it briefly. When all teams finish their presentations then an around-the-classroom discussion can start. The discussion points are presented by the teachers and are as follows:

- Are the presentation slides of all teams containing acknowledgement of copyright, e..g. by clearly stating the source of visual materials like photos, videos etc?
- If not what could be the consequences?
- Can the management of the robotics company select one of the proposals and build a robot just like the one shown on the slide?

- Is this legitimate action? Is this violation of copyright or other IP entity like design, trademark etc?
- How this illegitimate action can be avoided or IP be protected?
- How would you feel about a situation, company, organization or individual where or who is violating copyright? Imagine that the IP property is yours, what would you do?

Through this discussion and their reflection on opinions expressed and related arguments students understand better the aspects of a problematic situation and therefore conclusion on why this is wrong or how it can be improved may come naturally.

At the end the lesson plan can be completed with a short wrap-up of its main topics addressed, steps or tasks and objectives, and final conclusions drawn.

1.3 Key questions for knowledge testing

The lesson plan can be accompanied by a short quiz of key questions that can be used to check the learners' knowledge acquisition. Correct answers are marked in bold.

Question 1: Copyright is a legal term [No] [Sometimes] **[Yes]**

Question 2: Copyright law protects creators' works [No] **[Yes]** [Maybe]

Question 3: We can use or copy materials protected by copyright as we like **[No]** [Yes] [Maybe]

Question 4: Copyright violation is not harmful [True] **[False]**

1.4 References or additional resources

World Intellectual Property Organization

<https://www.wipo.int/about-ip/en/>

Hellenic Copyright Organization, Ministry of Culture (HCO)

<https://www.opi.gr/> <https://www.opi.gr/index.php/en/>

Greek Copyright School Project of the Hellenic Copyright Organization (HCO)

<https://copyrightschool.gr/index.php/en/information>

<https://copyrightschool.gr/index.php/en/news>

<https://copyrightschool.gr/index.php/en/teachers>

<https://copyrightschool.gr/index.php/en/elementary-school-pupils>

<https://copyrightschool.gr/index.php/en/highschool-pupils>

