



INTRODUCING INTELLECTUAL PROPERTY RIGHTS TO ENTREPRENEURSHIP EDUCATION

Summary

The project "Introducing trademark and designs to the Finnish education system" has been executed as a part of the co-operation agreement between EUIPO and PRH no. 4020190007 (Project ID: 13) 1.4.2019 - 31.3.2020.

Vaara Lauri
lauri.vaara@tat.fi

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Introduction

Realisers of the project:

The Finnish Patent and Registration Office (PRH): The Finnish Patent and Registration Office (PRH) is a state agency that maintains the trade register, register of enterprise mortgages, register of associations and register of foundations in Finland. It oversees auditors and monitors foundations and the collective management of intellectual property rights. PRH grants patents, utility models, design rights, trademarks and LEI codes. In addition, PRH maintains the Business Information System YTJ. PRH is under the administrative sector of the Ministry of Economic Affairs and Employment (MEAE).

Economy and youth TAT: Economy and youth TAT is a national influencer in Finland that is more than 70 years old. TAT helps young people develop their skills in economics and working life and get excited about entrepreneurship. In 2019, TAT's different operations reached more than 520,000 adolescents in Finland. TAT supports entrepreneurship education in primary and upper secondary schools by offering educational tours, events and different teaching activities for schools. Examples of these include the Me & MyCity learning game for basic education and Business Courses for upper secondary schools and vocational institutes. Economy and youth TAT's vision is to create courageous and skilled Finnish youth.

Project objectives and background

The significance of intellectual property rights is increasing in business operations. Already up to 42% of Europe's GDP is created in IPR-intensive companies. It has been calculated that, at the same time, Europe loses in annual exports up to 85 billion euros because of neglecting intellectual property rights and frauds. (EUIPO, 2018.) In addition to protecting valuable intellectual property, managing and utilising intellectual property rights grant companies significant business opportunities. An example of this is selling and leasing creative work and innovations as well as selling licences.

When you look at this information, you start to ask why intellectual property rights haven't been included better as part of entrepreneurship training or education before. In general, studying intellectual property rights plays a surprisingly small role at school, especially when thinking of their significance. The Finnish curricula (national core curriculum for basic education, 2016; Curriculum for Upper Secondary Schools 2019) only features a few off remarks about copyright, and these are mostly found under native language teaching.

The project objective was to improve the situation and strengthen the teaching of intellectual property rights, especially when it comes to trademark and design right, as part of the entrepreneurship education organised in basic education, upper secondary schools and vocational institutes. In order to reach the objective, the project developed in cooperation with the Finnish Patent and Registration Office PRH learning materials discussing intellectual property rights. The materials were piloted as part of the entrepreneurship education provided to schools by Economy and youth TAT. These operations included the Me & MyCity concept offered to primary and secondary schools and the Business Course concept targeted at upper secondary schools and vocational institutes. In addition to these, contents related to intellectual property rights were introduced as part of the Opopassi website designed for guidance counsellors of upper secondary schools and teacher training provided by TAT to different

levels of education. The learning materials developed in the project reached approximately 45,000 learners between August 2019 and March 2020.

Learning objectives

Project actions vs execution

Project actions: Defining learning objectives that support learning about intellectual property rights by educational level and drawing up a pedagogic script that supports these objectives.

Execution: 100%. The learning objectives were defined based on curricula and other official educational guidelines for three different levels that support each other (primary school, secondary school, upper secondary schools and vocational institutes). The pedagogic practices that support the objectives have been mapped, described and utilised in the development of these learning materials concerning intellectual property rights.

Execution in further detail

The development of teaching and training solutions must be based on carefully defined learning objectives. The objectives must be concrete and appropriate so that they can steer the teaching and learning and support in assessing the learning outcomes, among other things. In addition, the objectives must be justified and reasonable from the perspective of national curricula and other official educational guidelines. Based on the learning objectives, it's natural to come up with learning methods and environments that support learners to achieve the learning objectives.

In the project, the aim was to merge the learning objectives of intellectual property rights to the more extensive learning objectives of entrepreneurship education. This was decided so that studying intellectual property rights wouldn't feel unconnected but rather be integrated into existing teaching in line with the curricula. Combining the theme with entrepreneurship education also enabled a more diverse approach to intellectual property rights, and the themes discussed included the benefits of intellectual property rights in business operations, among other things. The project wanted to emphasise the benefits and opportunities of intellectual property rights, not only the right to prohibit others from using similar marks.

Entrepreneurship education organised in Finnish schools must support the teaching and learning objectives set in the national curricula. From the perspective of teaching intellectual property rights, the challenge is that the basic education and general upper secondary school curricula only introduce intellectual property rights in a very limited manner. This does not create a great foundation for extensively discussing the matter.

The National Core Curriculum for Basic Education (Finnish National Agency for Education, 2014) only mentions the copyright of all intellectual property rights. However, it is introduced as a fairly vast concept that generally refers to respecting and complying with copyright. Thus, it may be interpreted

that discussing also other intellectual property rights specifies and complements the national curriculum's objectives related to intellectual property rights. Intellectual property rights are highlighted more in the European Union's Lifelong learning – key competences publication (European Commission, 2018; 2019) in which knowledge of intellectual property rights is strongly raised in connection with digital competence, in particular.

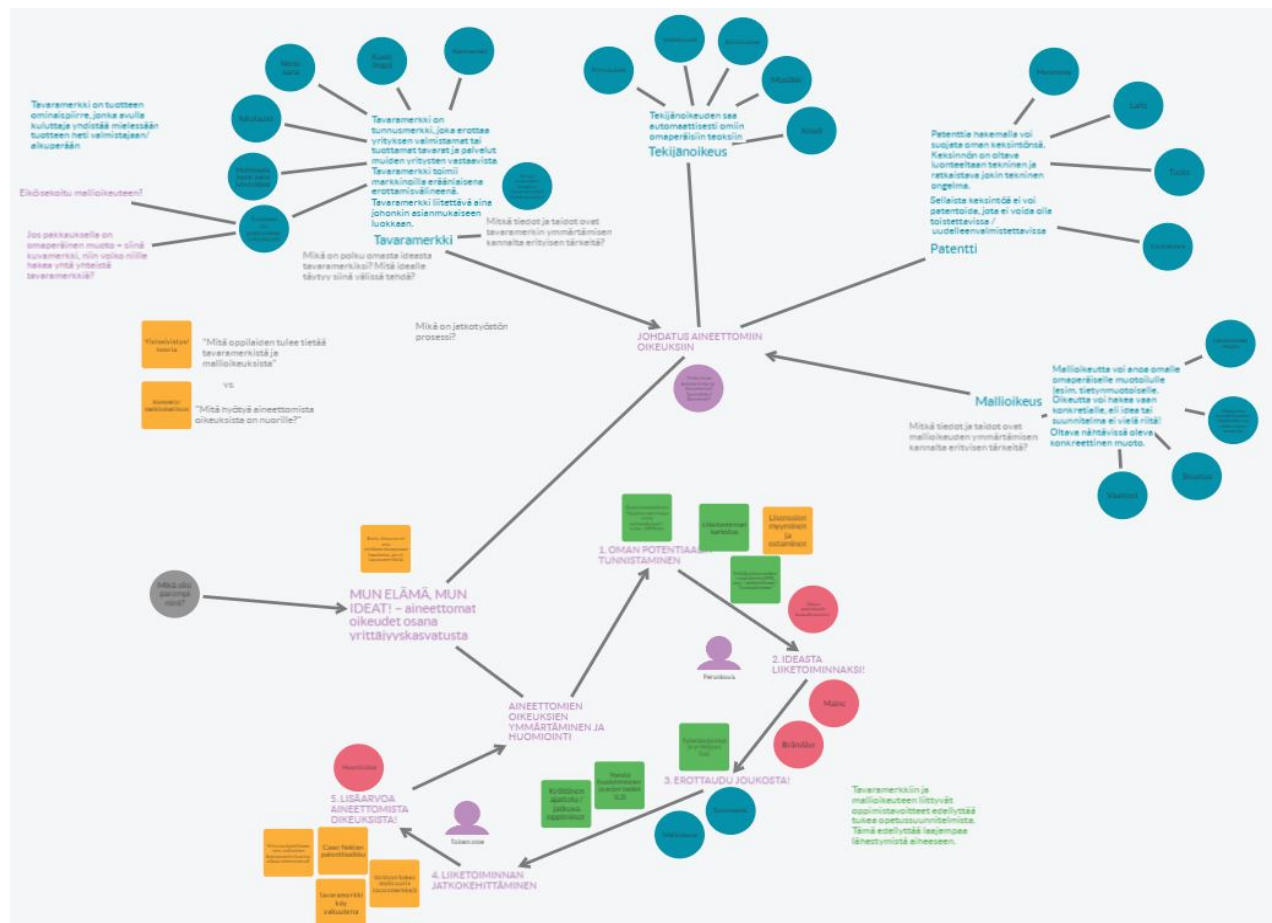


Figure: Learning objectives and key contents were mapped in cooperation with the Finnish Patent and Registration Office PRH at the beginning of the project.

Even though the role of intellectual property rights is limited in Finnish curricula, they emphasise entrepreneurship education, especially as part of extensive competence titled “Working life skills and entrepreneurship”. This focus on so-called intrapreneurship can be interpreted so that the aim is not to separate working life skills and entrepreneurship from each other but rather to give general entrepreneurship education that teaches skills and preparedness that will be relevant not only as an entrepreneur but more generally in working life. Since the aim was to integrate intellectual property rights as part of the entrepreneurship education taking place in schools, taking into account this emphasis in the curricula was important when defining the project’s learning objectives. In addition, the project participants felt that combining intellectual property rights to the curricula was the most fruitful through entrepreneurship education because its detailed content has not been separately defined in the curricula, with the exception of degree requirements in vocational education.

Based on the framework described hereinabove, learning objectives related to intellectual property rights that grow deeper by the educational level were developed for the project. In addition to the

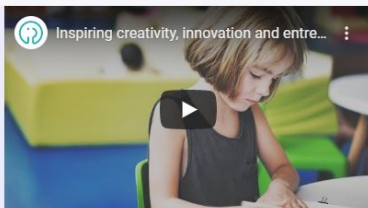
national curricula, the objectives take into account the objectives of entrepreneurship education (EntreComp, 2016) and more general competence needs in future working life (Key Competences for lifelong learning, 2019).

1. Identify your potential! A basis for identifying your own intellectual property is created by supporting the learner to identify their strengths and encouraging innovative actions at the learner's own initiative. The objective is that the learner becomes aware of their own potential and understands the value of their work, and can utilise these as part of entrepreneur-like operations. (Basic education, children aged 7–12)

2. From an idea into a business model! Innovations and ideas created alone or together are refined so that they assume concrete shapes that strengthen business operations and can be protected with intellectual property rights. This level highlights the role of intellectual property rights as part of a company's brand construction, distinguishing from competition and responsible business operations, in particular. (Basic education, youth aged 13–15)

3. Added value from intellectual property rights! Learning to utilise the opportunities created by intellectual property rights in business operations versatily. The objective is that the learner understands what financial added value intellectual property rights can bring to business operations through appropriate planning and execution. In addition, the learner learns to see intellectual property rights as important tools of business operations that can be used to protect, strengthen and develop business operations. (Upper secondary education, youth aged 16–19)

A2 Aineettomat oikeudet (tavoite)



MODUULIN TAVOITE & TUTKIMUSKYSYMYKSET

TAVOITE: Opiskelija ymmärtää, mitä aineettomat oikeudet ovat ja miten niillä voidaan vahvistaa yrityksen liiketoimintaa.

Tavoite on saavutettu, mikäli opiskelija pystyy moduulin päätteeksi vastaamaan riittävän hyvin tavoitteeseen liittyvään tutkimuskysymykseen.

Tarkoituksena on, että tutkimuskysymykseen vastataan jo tässä vaiheessa alustavasti oppimisprosessin lähtötilanteen kartoittamiseksi. Moduulin lopussa samaan kysymykseen vastataan uudestaan hyödyntämällä moduulin aikana opittuja asioita.

TUTKIMUSKYSYMYKSET: Miten aineettomat oikeudet voivat vahvistaa yrityksen liiketoimintaa?

VASTAUSOHJE: Mieti tämänhetkisen tietämyksesi valossa, miten aineettomia oikeuksia hyödyntämällä voitaisiin parantaa yrityksen liiketoimintaa. Koita miettiä vähintään kolme asiaa. Mieti huolella, mutta pidä mielessä, että tässä kohtaa kartoitetaan vasta alustavia aiheeseen liittyviä pohjatietoja ja käsityksiä.

(Pisteytys: 1 p. / asia, yht. maks. 3 p.)

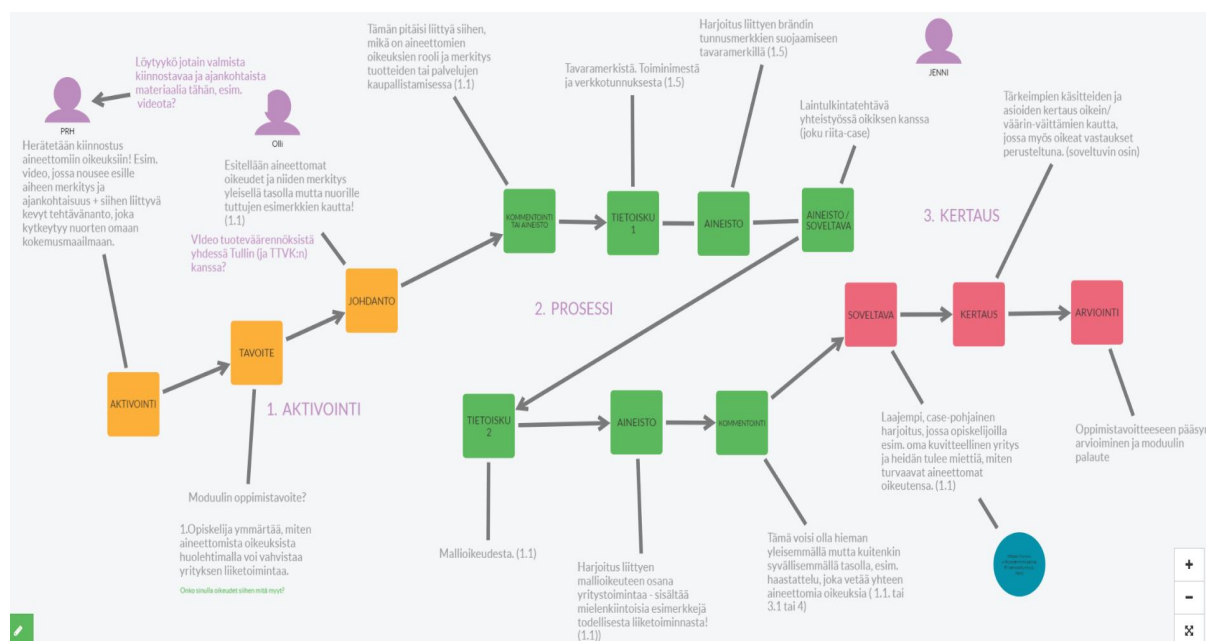
Photo by Riccardo Annandale on Unsplash

Video by EUIPO, Ideas Powered: Inspiring creativity, innovation and entrepreneurship in schools

ESIKATSELU

Kirjoita vastauksesi tähän

Based on the objectives, the project developed pedagogic models for supporting the achievement of the objectives. A key pedagogic objective was to create such content and assignments discussing intellectual property rights that could be naturally integrated as part of the entrepreneurship materials of Economy and youth TAT and even create added value to other themes – by adding a key perspective that wasn't included before. The aim was to ensure that intellectual property rights wouldn't become an entity separate from other entrepreneurship studies. In addition, the goal was to make the content discussing intellectual property rights interesting and relevant for the daily lives of adolescents. In pedagogics, this can be concretely seen in the assignments where connections were actively made to children and youths' own experiences and lives. The facts discussed the topic through familiar examples and companies. At Me & MyCity and on the Business Courses, the contents were merged as part of the existing pedagogic script by complementing it. In addition, the project created a whole new separate learning module for studying intellectual property rights and an optimised pedagogic script for that. This module is sort of a summary of all learning solutions developed in the project.



The pedagogic script of the separate module comprises three phases:

1. **Activation:** The first assignment of the module increases learners' interest in the topic by discussing a topical case that adolescents are familiar with. The case highlights the significance of intellectual property rights as part of modern business operations.
2. **Goal:** In the next assignment, the module's learning objective is presented to the learners. This is the goal they should achieve by the end of the module. In addition, the objective has been transformed into a question or a so-called "research question". The purpose of this is to

turn the objective into a form that is easier to understand and that could better steer both learning and evaluation. At this point, learners already respond to the research question based on their existing knowledge. The point of this is to map the starting point of the learning.

3. **Introduction:** After setting the goal, the topic is presented on a general level, using as clear and visual content as possible, such as videos. The most important pedagogic objective of the introduction is to create general understanding of the topic for the learner and create connections between the learner and the topic. Examples and cases familiar to everyone from daily life are perfect here.
4. **Assignments of the learning process:** After the introductory assignment (activation, goal, introduction), there are several different assignments with the objective of transmitting to the learner all the competences they need in order to reach the learning objective. There are three different assignment types: 1. In the comment assignment, students discuss together content related to the topic based on the question steering the discussion and the comment tool of the learning platform; 2. Facts present new themes and concepts through familiar examples, or the objective of the facts is to strengthen the theoretical base of understanding the topic; 3. Material assignments consist of material related to the topic and related assignments – material assignments are individual tasks that emphasise understanding what you read, see or hear.
5. **Applied assignments and learning evaluation:** At the end of the learning module, there are three assignments with the purpose of bringing together everything that has been learned during the module, strengthening the transfer and offering tools for evaluating your own learning and giving feedback. The first of the conclusive assignments is an applied assignment that has been created in this project in cooperation with the University of Helsinki's Faculty of Law and the Finnish Patent and Registration Office PRH. In the applied assignment, the learner is presented with a case related to a trademark that they should solve by utilising what they have learned during the module. The aim is that the learner can utilise what they have learned before in a new kind of a situation that is based on real business. This will strengthen the transfer and significance of what has been learned. After the applied assignment, the key concepts of the module are revised through multiple-choice questions. Finally, the learner evaluates how well they achieved the learning goal by responding to the research question (*How can intellectual property rights strengthen the business operations of a company?*)

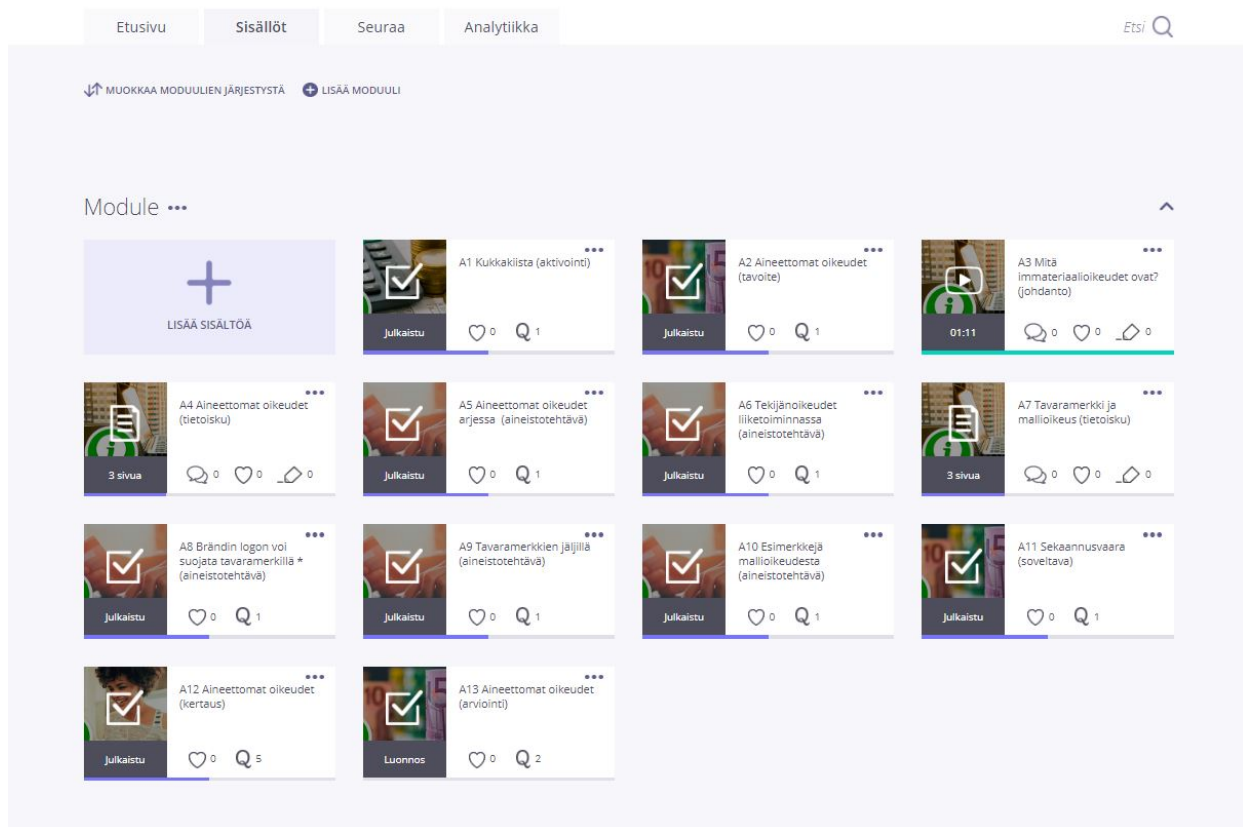


Figure: The separate module on intellectual property rights on the Claned learning platform is among the key outcomes of the project. The content is best suited for learned aged 15–19, but they are also suitable for teacher training as a basic training of intellectual property rights.

Intellectual property rights as part of entrepreneurship education in basic education

Project actions vs. execution

Project action 1: Developing pedagogic procedures that enable studying intellectual property rights, and trademark and design right in particular, as part of the entrepreneurship education at Me & MyCity.

Execution 1: 100%. The learning objectives, materials and methods of Me & MyCity were analysed from the perspective of learning intellectual property rights and trademark and design right in particular. Based on this, new assignments were developed for learning intellectual property rights or existing assignment were merged with new ones.

Project action 2: Developing learning materials related to intellectual property rights and trademark and design right in particular in line with pedagogic practices and integrating the learning materials as part of the Me & MyCity Secondary School learning process.

Execution 2: 100%. The learning materials were developed in cooperation with the Finnish Patent and Registration Office PRH. They were included as part of the Me & MyCity Secondary School's advance materials and content of the actual game day. Based on the preparations, it was decided that the content would emphasise trademarks.

Project action 3: Piloting the learning materials developed in the project in at least one Me & MyCity Secondary School and training head instructors required by the pilot.
Execution 3: 100%. The learning material developed in the project were piloted in the advance materials of all nine Me & MyCity Secondary Schools in Finland (a reach of 15,000 students) and as part of the actual game day of three Me & MyCity Secondary School (a reach of 6,000 students).

Project action 4: Charting the preconditions for studying intellectual property rights as part of the learning game of Me & MyCity Primary School and the development of related possible execution models.

Execution 4: 100%. A report was drawn up at Me & MyCity Primary School in autumn 2019. The conclusion of the report was that the most sensible execution method would be to set up a separate miniature Patent and Registration Office as part of Me & MyCity.

Execution in further detail

The operations of Economy and youth TAT in basic education is based on the Me & MyCity Primary School and Me & MyCity Secondary School concepts and the supporting training tours and individual pedagogic tools, such as mobile applications. The project charted the suitability of studying intellectual property rights as part of the entrepreneurship education in basic education through the Me & MyCity concepts. After the charting and discussions with Me & MyCity representatives, the result was that studying intellectual property rights would be better suited for the learning objectives and practices of Me & MyCity Secondary School. This is why the development work of the learning materials and piloting took place primarily on the secondary level. Digital advance materials, focus on business operations and the consistency of Me & MyCity Secondary School's learning contents favoured Me & MyCity Secondary School. All Me & MyCity Secondary Schools use the same content, whereas the contents of Primary Schools vary from school to school.

Of intellectual property rights, the trademark in particular can be introduced as a natural part of the existing Me & MyCity Secondary School content. This is why the project developed separate learning materials and supporting pedagogic practices that were integrated as part of the Me & MyCity Secondary School concept so that all contents became part of the advance materials of all Me & MyCity Secondary Schools with a reach of 15,000 students and part of three Me & MyCity Secondary School game days with a reach of 6,000 pupils. The head instructors facilitating the game day were separately trained in the topic to ensure that they have the sufficient competence to include intellectual property rights as part of the learning game in Me & MyCity. In addition, a fact on intellectual property rights has been introduced as part of the training materials offered to teachers by Me & MyCity.

The possibility to integrate intellectual property rights to the Me & MyCity Primary School game day was charted in autumn 2019. The challenge for the integration was identified. It was that the contents of the game days of Finnish Me & MyCity Primary Schools vary between schools and, in addition, every miniature company within every Me & MyCity has its own game script. This means that it would have required miniature company-specific game scripts that would have largely also affected the advance material that, unlike in Me & MyCity Secondary School and on the Business Courses, are in print at Me & MyCity Primary School. This does not support fast pilots. In addition, the content would have had to be separately agreed upon with the organisations representing the miniature companies. Because of this, the pilot for studying intellectual property rights at Me & MyCity Primary School was

not seen as realistic within the temporary and financial framework of the project. When looking ahead, setting up a separate Patent and Registration Office miniature company in the Me & MyCity Primary School learning environment was selected as the most functional solution. This way, it could serve other miniature companies and their game scripts versatily and this way, achieve a natural and impactful role as part of the Me & MyCity Primary School concept.

Next, the learning entity of Me & MyCity Secondary School and studying intellectual property rights as part of it is presented. The solutions developed in the project are introduced through separate screen captures and highlighted with a purple font.

Execution at Me & MyCity Secondary School

LESSON 1: Creating management groups (done at school in the supervision of own teacher)

Me & MyCity Secondary School and its key competence areas – economy, society and working life – are presented to students. Based on this, students set more detailed learning objectives for themselves and chart their own interests by selecting from the ready alternatives.

Pupils identify their own strengths by selecting positive adjectives that describe them.

Pupils are divided into teams. Each of the teams represents the management team of a certain company (Me & MyCity Secondary School utilises descriptions and materials of real companies). Within the management team, pupils assume the one of the following roles: CEO, Director of Corporate Social Responsibility, Production Manager, Sales Manager, Marketing and Communications Manager.

The pupils tell the other members of their team their own learning objectives, interests and strengths they charted at the beginning of the lesson. This way, they can get to know each other better and commit more strongly to the team and their studying.

LESSON 2: Getting to know business operations (done at school in the supervision of own teacher)

Based on their team number, the teams receive a company. The companies represent real partner companies of Me & MyCity Secondary School. In teams, the pupils get to know the company's business operations and find the answers to the following questions, and the last of these is also an introduction to taking intellectual property rights into account: 1. What does the company make or sell? 2. In which countries does the company operate? 3. What is the company especially known for?

Pupils get to know the areas of sustainable business operations because Me & MyCity Secondary School highlights the significance of sustainable business operations behind successful business and great reputation. Intellectual property rights and trademark, in particular, are introduced as part of financial responsibility.

VASTUULLISUUDEN OSA-ALUEET

TALOUELLINEN VASTUU

Taloudellisesti vastuullinen yritys pitää huolta omasta kannattavuudestaan. Yritys arvioi toimintaansa liittyviä riskejä, maksaa työntekijöillensä palkkaa ja yhteiskunnalle verot.

Taloudelliseen vastuullisuuteen kuuluu myös yrityksen aineettomista oikeuksista huolehtiminen. Aineettomia oikeuksia, kuten yrityksen brändin tunnusmerkkejä tai keksintöjä voi suojata eri tavoin. Esimerkiksi erikseen haettavalla tavaramerkillä yritys varmistaa yksinoikeuden käyttää brändinsä tunnusmerkkejä. Tunnusmerkkejä voivat olla yrityksen tai sen tuotteen nimi (Makia), slogan (JUST DO IT) tai logo (Adidaksen kolme raitaa). Tavaramerkin omistaminen on usein rahoituksen saannin ehtona, sillä se auttaa erottautumaan muista, ehkäisee tuoteväärennöksiä sekä tarjoaa uusia liiketoiminnallisia mahdollisuuksia.

YMPÄRISTÖVASTUU

Ympäristöstä vastuuta kantava yritys huomioi toimintansa ympäristövaikutukset mittaamalla ja raportoimalla niistä. Yritys pyrkii säästämään luonnonvaroja sekä vähentämään kasvihuonekaasupäästöjä ja jätteitä.

SOSIAALINEN VASTUU

Sosiaalisella vastuulla tarkoitetaan sitä, että yrityksen toiminnassa otetaan huomioon sen vaikutukset eri ihmisryhmiin, esimerkiksi omaan henkilöstöön, asiakkaisiin tai paikallisiin asukkaisiin. Yritys myös noudattaa oikeudenmukaisia toimintatapoja sekä huolehtii työntekijöidensä työoloista. Työntekijöistä kannattaa pitää huolta, sillä tyytyväinen työntekijä pysyy yrityksen palveluksessa pitkään.

Figure: Intellectual property rights are introduced as part of financial responsibility at Me & MyCity Secondary School. The background materials emphasise trademarks, in particular.

First, the pupils get to know the areas of sustainable business operations and then, they complete a short revision that is based on multiple-choice questions. The revision consists of different statements. The pupils must select an area of sustainable business operations the matches the statement.



Figure: In a multiple-choice revision assignment, pupils discuss to which area of sustainable business operations taking care of intellectual property rights pertains.

At the end of the second lesson, pupils get to know circular economy in a versatile manner and look into the business models of circular economy as part of sustainable business operations. This focus is based on the extensive cooperation of Economy and youth TAT and the Finnish Innovation Fund SITRA.

LESSON 3: Running a company (done at school in the supervision of own teacher)

The third lessons starts with a quiz that revises things learned on previous lessons. The quiz consists of ten statements with multiple-choice answers. One of the statements concerns trademark.

Yritys voi suojata tällä brändinsä tunnusmerkin (esim. logon tai sloganin), jotta kilpailevat yritykset eivät voi käyttää sitä.



Figure: assignment related to trademark as part of the quiz.



PELIN TAUSTATARINA

Alku

Pelin yrittäjänä toimii Eppu, jonka harrastusmielessä valmistamat kangaspipot saavuttavat suuren suosion hänen kavereidensa keskuudessa. Pipot päätyvät myös tunnetun vloggaajan videolle ja yhtäkkiä kyselyitä pipoista alkaa tulla ympäri Suomen. Nopeasti kiirivä, positiivinen maine on edesauttanut Eppua niin, että jo moni nuori tunnistaa Epun pipot ja pitää niiden uniikista ulkonäöstä. Jatkuvien kyselyiden innoittamana Eppu päättää perustaa yrityksen ja myydä valmistamiaan pipoja nettikaupan välityksellä. Eppu on myös päättänyt suojata piponsa tunnusmerkkinä käyttämänsä logon hakemalla sille tavaramerkkiä. Näin Epun asiakkaat tunnistavat Epun pipot entistä paremmin kilpailijoiden pipoista, eivätkä Epun kilpailijat saa käyttää samaa logoa.

Figure: “Beanie game” is an assignment in which young entrepreneur Eppu is turning making and selling unique beanies into business operations. The assignment emphasises that Eppu has applied for a trademark for his beanie’s logo.

LESSON 4: Working life skills lead to victory (done at school in the supervision of own teacher)

On the fourth lesson, pupils will learn important competencies and skills related to working life, such as negotiating skills, conflict resolution and sales skills. The perspective of intellectual property rights is highlighted in the sales arguments so that distinguishing your company and product from others becomes one of the key arguments.

MYYN TI ARGUMENTTEJA OVAT ESIMERKIKSI SEURAAVAT:

- Tuotteen tekninen laatu (raaka-aine, kestävyys)
- Käyttöperustelut (toimivuus, helppokäyttöisyys)
- Arvostusperustelut (erottautuminen muista, uutuusarvo)
- Taloudelliset perustelut (pitkä käyttöikä, edullisuus muihin verrattuna)
- Vastuullisuus (eettisyys, avoimuus, ympäristöystävällisyys)
- Toimitustakuu (luotettavuus, ennakoitavuus)

Figure: Distinguishing your company and product from others is a key sales argument

After this, the pupils complete an assignment in which they must select the best out of two quote by using the sales arguments listed above in their assessment. After the assignment, the pupils create a business plan for their company. They must think of the team's slogan and how their company or product will stand apart from others in the market.

LIIKETOIMINTASUUNNITELMAN TEKEMINEN

Tiiminne tehtävänä on tehdä johtamallenne yritykselle liiketoimintasuunnitelma. Täyttäkää alla olevaan liiketoimintasuunnitelman pohjaan tarvittavat tiedot.



Käyttäkää tässä tehtävässä vain yhtä laitetta per tiimi!

TIIMI:



1. Tiimin slogan eli iskulause

2. Kuvaus yrityksestä ja sen toiminnasta

- Mitä yrityksenne tekee?
- Mitä tuotetta tai palvelua myytte?
- Minkälaisia ominaisuuksia tuotteessa/palvelussanne on?

Figure: Pupils think of their company's slogan right in the beginning of drawing up their business plan.

5. Miten tuotteenne/palvelunne erottuu kilpailijoiden tuotteista/palveluista?

6. Mitkä ovat tiiminne vahvuudet?

Figure: Pupils discuss how the products or services provided by their company are different from competitors' offering.

After the creation of the business plan, pupils pitch their business ideas as teams. After this, they are ready for the actual game day at the Me & MyCity Secondary School learning environment.

Lesson 5: game day

Next, pupils take part in the actual learning game in the Me & MyCity Secondary School learning environment. In the game, pupils act in teams as the management teams of the companies on an international market, competing against the other management teams. Each member of the management team has their own role. Roles have been assigned before the game during the first lesson.

The objective of the management teams is to accumulate reputation and ensure that the business operations are profitable and sustainable. At the beginning of the game, management teams calculate a price for the product they sell. As the game advances, they attend sales negotiations with customers in different countries, visit the bank for different meetings and manufacture and deliver products to their customers. In addition, they respond to different challenges regarding their reputation and react to surprising events. At the end of the game, it is revealed which management team has led their company in the most successful manner.

The game day starts with teams filling in the “account opening form”. There, they first fill in the basic information: 1. Company name and product to be sold, 2. Names and areas of responsibility of the management team’s employees, 3. Sector in which the company operates. *After this, the team will design a trademark for the company according to the following instructions:*

“What is your company recognised by in the market? Plan an identifier here that will set your company or its individual product or service apart from the competition. These may include the name, logo and slogan of your company, product or service. Prepare to present your identifier to the bank. It’s a good idea for a company to trademark its identifier. This allows the company to set itself apart from its competitors and gain a competitive edge over them.”

After this, the teams register their trademarks in practice so that a head instructor trained for the evaluation assesses the trademarks designed by the pupils from the following perspectives:

- The trademark must be distinguishable, or unique, and the pupil must be able to explain this.
- The trademark cannot be confusingly similar to other trademarks (in practice, this means that pupils cannot be too much influenced by trademarks of other teams or generally familiar trademarks).

After the assessment, the instructor sends a separate sign-off to the team in the game system. The team receives 50 reputation points for this.

Header: Trademark granted

Description: The Patent and Registration Office has approved your company’s brand identifier. The identifier is now trademarked. This means that your competitors are not allowed to use your identifier. Your customers are also able to better recognise your

products and services in the market, giving you a competitive edge. Remember to share the news with your entire team! Your reputation grows by 50 points.

Impact on reputation: 50 p

A registered trademark can be utilised in different game situation at Me & MyCity Secondary School, for instance, when applying for a loan at the bank or in business negotiations. In addition, teams receive reputation points for registered trademarks. The Me & MyCity instructors are trained to enquire about matters related to trademarks from the pupils. These matters include the following (only as headers here, explained in more detail in the instructor's guidelines):

- A financially responsible company takes care of their intellectual property rights used to protect the company's immaterial property.
- A registered trademark forbids competing companies from using the said trademark without permission.
- A company with a trademark appears more trustworthy in the eyes of the bank, making it easier to get a loan.
- A trademark also gives you an edge in sales negotiations because it sets you apart from the competition. In addition, it is a sign of responsible business operations that are aware of the company's brand value.

Introducing intellectual property rights to entrepreneurship education in secondary education

Project actions vs execution

Project action 1: Developing learning materials discussing intellectual property rights and trademark and design right in particular based on learning objectives and a pedagogic script as well as integrating these as part of the digital Business Courses of Economy and youth TAT at a minimum of 50 upper secondary schools.

Execution 1: 100%. The contents were integrated as part of the digital Sales, Marketing and Commercialisation course and as the Planning Business Operations course designed for vocational education. Between August 2019 and March 2020, the contents were used by 96 classes in upper secondary schools and vocational institutions with a reach of 2000 students.

Project action 2: Adding contents discussing intellectual property rights and trademark and design right in particular as part of the digital Opopassi website that is especially meant to support student guidance counselling taking place in upper secondary schools.

Execution 2: 100%. In August 2019, the contents were added as part of the shared entrepreneurship content available to all at Opopassi website. Between August 2019 and March 2020, they have reached in all 25,000 students.

Project action 3: Collecting learning materials discussing intellectual property rights and trademark and design right in particular into a digital learning module that follows a pedagogic script and is scalable.

Execution 3: 100%. A separate learning module that utilises the project's results and brings together the themes was completed on the Claned learning platform on 27 February 2020. An easily scalable PDF version was completed in March 2020.

Execution in further detail

Economy and youth TAT offers versatile and free-of-charge trainings and learning materials related to entrepreneurship and working life for upper secondary schools and vocational institutes. This entity consists of school tours, digital Business Courses designed for upper secondary schools, digital entrepreneurship courses designed for vocational education and the Opopassi website designed for guidance counselling at upper secondary schools. In addition, Economy and youth TAT provides teacher training related to these. In the project, the learning material discussing intellectual property rights, and trademark and design right in particular, was integrated as part of the digital Business Courses, the Opopassi website and digital entrepreneurship courses, reaching approximately 27,000 students between August 2019 and March 2020.

Intellectual property rights on Business Courses and entrepreneurship courses

The Business Courses continue on the path of entrepreneurship education in secondary education started by Me & MyCity. The Business Courses comprise four courses and related separate materials. Business Courses are completed on the digital Claned learning platform. Alternatively, teachers can transfer the course materials as PDFs on their own platforms. It has been estimated that during the academic year 2019–2020, approximately 6,000 students will complete Business Courses. The learning materials developed in the project were integrated as part of the existing course materials so that intellectual property rights are generally presented on the course *1. Sales, Marketing and Commercialisation* in the module *1. Commercialisation* and trademark and design right on the same course's module *5. Branding*. The added content includes both facts and separate assignments that have been naturally blended in with the course content so that they bring added value to other course content, too. Between August 2019 and March 2020, a total of 72 courses of *1. Sales, Marketing and Commercialisation* were distributed to institutions, and in all approximately 2,000 students studied on them.

1. KAUPALLISTAMINEN ...

Moduulin tavoitteena on oppia ymmärtämään, mitä kaupallistamisella tarkoitetaan ja mitkä tekijät siihen tänä päivänä olennaisesti vaikuttavat.

Figure: On the Business Courses, intellectual property rights are presented as part of the core questions of commercialisation through a separate fact and a supporting assignment

5. BRÄNDÄYS ...

Moduulin tavoitteena on oppia tunnistamaan brändäyksen merkitys osana tuotteen tai palvelun kaupallistamista.

Figure: On the Business Courses, trademark and design right is discussed later together with branding. In addition, the material includes a 360 image where students can see how trademarks are visible in the cityscape.

In 2019, separate entrepreneurship courses were created on the basis of the Business Course to match the curricula of vocational education. This was completed in cooperation with the largest vocational institutes in the Helsinki metropolitan area (Varia, Omnia, Stadia, Live). Studying intellectual property rights in these courses was seen as extremely important, which is why all the contents of the Business Courses discussing intellectual property rights were also added in the entrepreneurship courses. The contents emphasise taking into account intellectual property rights as part of planning your business operations and running your company.

Intellectual property rights as part of the Opopassi website

Opopassi is a national, free-of-charge website accessible to all that has been designed especially to support guidance counselling at upper secondary schools. The website has been available since autumn 2018, and it has been estimated that during academic year 2019–2020, it will reach more than 30,000 users. The website is divided into the common section for all completing the Opopassi and a voluntary section. Economy and youth TAT does not own Opopassi, it is owned by the guidance counsellors Anniina Järvinen and Satu Alatalo who initially developed Opopassi. TAT is an official partner of Opopassi and actively participates in developing and spreading the content.

Opopassi is not a learning platform where you sign in *per se*, it's a website that includes different background materials, facts and exercise tips that can be carried out as you see best. Assignments and exercises cannot be completed on the website. An introduction to intellectual property rights was developed in the project. It was added on the Opopassi section on entrepreneurship open to all. In Opopassi, intellectual property rights are described in their own chapter with a focus on trademark. The chapter also acts as the background materials for the related assignment.



Figure: On the Opopassi website, intellectual property rights are discussed as part of entrepreneurship that is compulsory for all completing the course.

Separate module on intellectual property rights

The separate module on intellectual property rights is a summary of the pedagogic solutions, content and assignments developed in the project. It creates its own individual and comprehensive learning process that supports interest, interaction and the transfer of learning. The entity also includes an applied assignment created in cooperation with the University of Helsinki's Faculty of Law. The assignments also include example responses the students see after they have completed the assignment. In addition, they are of help when evaluating the assignments.

The layout of the separate module's content has been designed to be more visually accessible, and the module has also been translated into English. The contents are available on the Claned learning platform and as a separate PDF file that enables the transfer of the content to other platforms and websites. The aim is that the separate module can be easily distributed in both Finland and within the European Union.

The separate module was completed as an outcome of the project only in March 2020, which is why there has not been time to collect wider user feedback. The separate module can be distributed to educational institutes and schools as additional material to the Business Courses or as an individual education module.

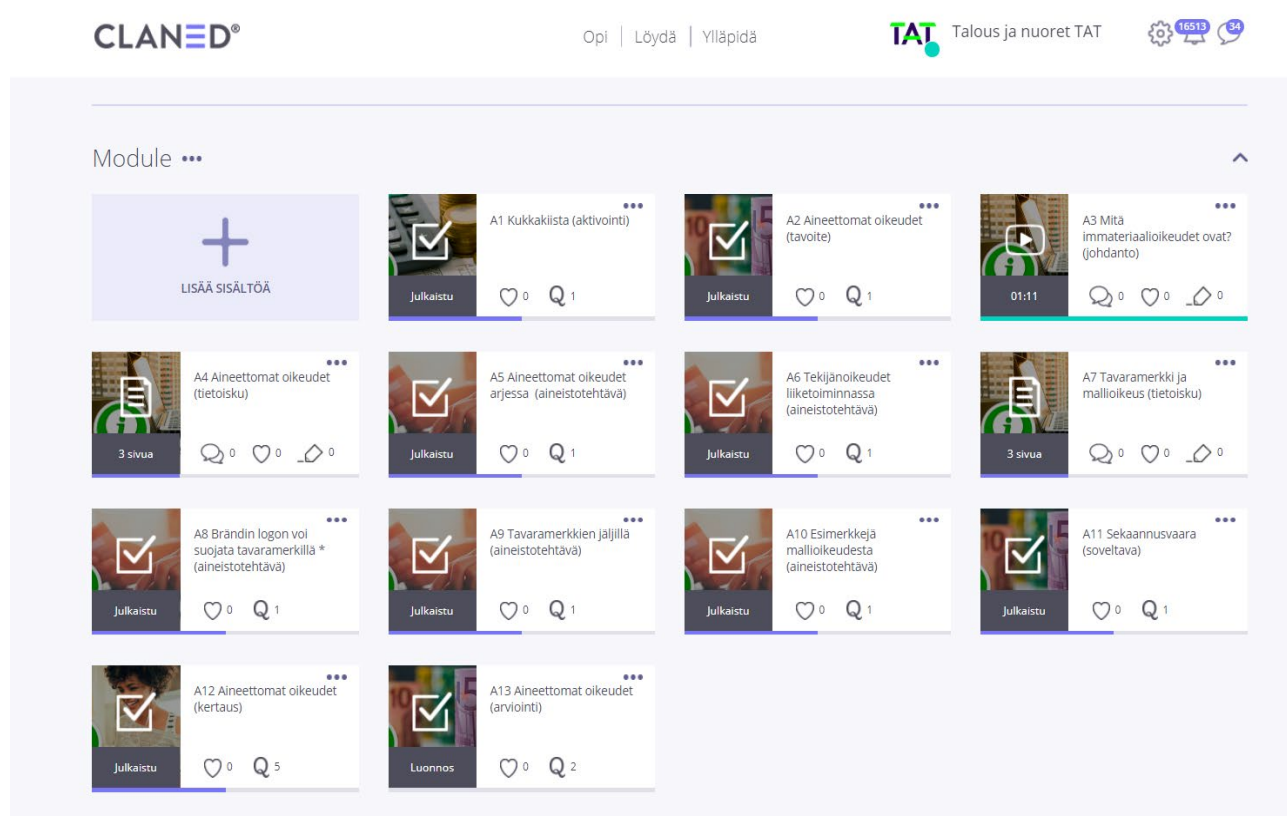


Figure: The separate module of intellectual property rights contains 13 individual contents discussing intellectual property rights that together create an inspiring and meaningful learning process.

The layout of the separate module's content has been designed to be more visually accessible, and the module has also been translated into English. The contents are available on the Claned learning platform and as a separate PDF file that enables the transfer of the content to other platforms and websites. The aim is that the separate module can be easily distributed in Finland and within the European Union.

Introducing intellectual property rights to teacher training

Project actions vs execution

Project action: Including intellectual property rights to the teacher training organised at Economy and youth TAT and integrating intellectual property rights through entrepreneurship education as part of teacher training at universities and institutes of higher education.

Execution: 90%. Intellectual property rights were introduced as part of the content training organised for Business Course teachers every two months and as part of the Me & MyCity Secondary School teacher's materials. Intellectual property rights have been introduced to the University of Helsinki's teacher training's course "Extensive competence and phenomenon-based projects" as part on the section on *Working life skills and entrepreneurship*. However, the integration is still ongoing.

Execution in further detail

A separate, more extensive fact on intellectual property rights was introduced as part of the training materials designed for Me & MyCity Secondary School teachers. In addition, the Me & MyCity Secondary School instructors were trained on the topic in separate training events. On the Business Courses, intellectual property rights were included as part of the monthly trainings designed for the teachers of Business Courses. In addition, example answers were drawn up for assignments discussing intellectual property rights to facilitate learning and evaluating. The example answers were also included in the Business Courses' teacher's guide.

In the project, intellectual property rights have been introduced also to the University of Helsinki's teacher training's course "Extensive competence and phenomenon-based projects" as part on the section on *Working life skills and entrepreneurship*. Here, intellectual property rights are presented as part of a key competence area and perspective related to entrepreneurship and working life. The aim is to still supplement and develop this content during the follow-up project so that the supplemented content will be available as of September 2020.

Teacher training was not among the key objectives of this project and was included in the project as an important section supporting the operations. More extensive separate materials for teacher training have not yet been created but, on the other hand, teachers can benefit from the digital intellectual property rights separate module developed for students in the project. In the follow-up project during 2020, the aim is to pay more attention to teacher training and develop the related support materials further.

Communications and events

The project was reasonably communicated online and on social media. In addition, the project participated in a few larger events that reached in all more than 500 adolescents. Below is a summary of the releases, online articles, separate presentations and events created during the project.

Publication date	Name of publication and publication channel
	Logo visibility of the Finnish Patent and Registration Office and EUIPO https://bisneskurssit.fi/yhteistyossa/
	Logo visibility of the Finnish Patent and Registration Office and EUIPO Business Courses brochure
	Logo visibility of the Finnish Patent and Registration Office and EUIPO PowerPoint templates
10–11 April	IP in Education - Me and My City implementation - presentation working group of the Observatory/Alicante/Spain (Lauri Vaara, Olli Ilmarinen)
28 May 2019	News article on the Business Courses website: "Aineettomat oikeudet osaksi yrittäjyyskasvatusta" ("Introducing intellectual property rights to entrepreneurship education"), only in Finnish https://www.prh.fi/fi/uutislistaus/2019/P_18281.html
29 May 2019	Blog post: Aineettomat oikeudet läsnä nuoren arjessa ("Intellectual property rights present in the daily life of youth"), only in Finnish https://bisneskurssit.fi/aineettomat-oikeudet-lasna-nuoren-arjessa/
29 May 2019	A news article about the cooperation between the Finnish Patent and Registration Office and TAT (only in Finnish) https://www.tat.fi/tat-ja-prh-tuovat-aineettomat-oikeudet-osaksi- yrittajyyskasvatusta/
18 June 2019	Jenni Mattila's introduction on the Business Courses website (only in Finnish) https://bisneskurssit.fi/esittelyssa-assistenttimme-jenni-mattila/
7 August 2019	Introducing intellectual property rights to Business Courses' content (only in Finnish) https://bisneskurssit.fi/paivitykset-bisneskurssien-sisaltoihin-ja-claned-alustaan- lukuvuodeksi-2019-2020/
28 May 2019	"Aineettomat oikeudet osaksi yrittäjyyskasvatusta" ("Introducing intellectual property rights to entrepreneurship education"), only in Finnish https://news.cision.com/fi/patentti--ja-rekisterihallitus/r/aineettomat-oikeudet- osaksi-yrittajyyskasvatusta,c2826002
29 August 2019	Introducing intellectual property rights to Business Courses (only in Finnish) Released in the Business Courses' newsletter.
August 2019	The cooperation project between the Finnish Patent and Registration Office and TAT started in educational institutes (only in Finnish) https://www.prh.fi/fi/tietoa_prhsta/utiskirjeet/ipr-teemakirje/ipr- teemakirje_12019/tat-yhteisty.html
11 September 2019	The Finnish Patent and Registration Office's news article: "The cooperation project between the Finnish Patent and Registration Office and TAT started in educational institutes" (only in Finnish) https://www.prh.fi/fi/tietoa_prhsta/utiskirjeet/ipr-teemakirje/ipr- teemakirje_12019/tat-yhteisty.html
19–20 September 2019	Intellectual property rights as part of entrepreneurship education presentations on both days of the Dare to Learn event in the TAT's stand's "living room" training premises (Lauri Vaara) http://www.daretolearn.fi
24–25 September	1024 OBS IP IN EDUCATION NETWORK MEETING Copenhagen: Presenting the operations of the project and Economy and youth TAT (Lauri Vaara, Essi Lehtovaara).
9 October 2019	Presentation of the Finnish Patent and Registration Office's Takeoff workshop (only in Finnish). https://bisneskurssit.fi/opiskelijoiden-brandiraati-purkaa-tavaramerkit-osiin- takeoffissa/

October 2019	Takeoff haastaa nuoret katsomaan tavaramerkkejä pintaa syvemältä ("Takeoff challenges adolescents to take a deeper look into trademarks"), only in Finnish https://www.prh.fi/fi/uutislistaus/2019/P_19081.html
24 October 2019	Welcome to Takeoff newsletter for participants, a link to the Finnish Patent and Registration Office's workshop presentation in the letter. https://mailchi.mp/ac34f6a4989b/welcome-to-takeoff-2019
20 November 2019	Takeoff Info - The event is getting closer! newsletter for participants, the letter includes a presentation of the Finnish Patent and Registration Office's workshop and a link to the website article. https://mailchi.mp/tat/takeoff-info-the-event-is-getting-closer-2505593
21 November 2019	Takeoff challenges young people to study trademarks https://news.cision.com/fi/patentti--ja-rekisterihallitus/r/takeoff-challenges-young-people-to-study-trademarks-beneath-the-surface,c2968937
2 December 2019	Intellectual property rights training at the IngmanEdu vocational institute in Toivola for both teachers and students. Approx. 50 participants. Trainer: Lauri Vaara
3 December 2019	Takeoff photos are here newsletter with a link to Takeoff photos (including the Patent and Registration Office workshop) https://mailchi.mp/tat/takeoff-2019-photos-are-here
5 March 2020	Takeoff after movie in the Business Courses' newsletter. https://mailchi.mp/tat/bisneskurssien-uutiskirje-3-lv-19-20
28 April 2020	An upper secondary student's blog post: "Aineettomat oikeudet nuorten arjessa" ("Intellectual property rights in the daily lives of the youth").

Takeoff

Takeoff is the largest business event in Europe for young people, and it is annually sold out within days. The event is organised by Economy and youth TAT, Slush and TAT's partner organisations. In 2019, the event was participated by 322 students and 43 teachers from Finland, Sweden and Estonia. The one-day event introduces the world of startups and future working life skills to upper secondary school students. Experts organise workshops for the youth, and at the end of the day, the youth can get to know the actual Slush startup event free-of-charge. The youth go around the event in teams including students from different schools and communicate in English.

The project participated in the Takeoff 2019 event (22 November) with the trademark-related workshop ***"Trademark is the Backbone of Every Brand"***. In the workshop, it was discussed what a trademark is and how a trademark can be registered. Finally, participants were instructed to design their own clothing-related trademarks in groups.

The workshop lasting approximately 30 minutes was executed five times during the day with the same content for different participants. Its moderators included Tuulimarja Myllymäki and Olli Ilmarinen from the Finnish Patent and Registration Office with the assistance of TAT's personnel. The workshop received positive feedback: the approach was concrete and the key aspects to be taken into account when planning a trademark were understood well through the practical exercise.



Photograph: Olli Ilmarinen

Tunne Työ @Redi

Tunne Työ @REDI was a working life event aimed at students of upper secondary organised on 7 November 2019. In the event, 2,500 upper secondary school students used the Seppo.oi game and completed working life assignments executed by different partners. In the event, students in teams went around different checkpoints to complete assignments. At the checkpoints, they were familiarised with different companies, jobs as well as career and studying opportunities. At the checkpoints, the youth met their possible future employers and, on the other hand, company representatives were able to meet their possible future employees.

The Finnish Patent and Registration Office had its own stand at the event where 264 adolescents actively participated in the activities. At the Patent and Registration Office's stand, the students were tasked with designing their own trademark. For help, they had written instructions on what a trademark can be and what must be taken into account in the design. Our experts were also present to help the youth in the designing as well as to answer their questions. Our experts were surprised at how well the young target group understood the matter at hand even if they hadn't been in contact with trademarks or certainly designed them before.



Photographs: Olli Ilmarinen

Lessons learned

Project actions vs execution

Project action 1: Collecting user feedback of the learning materials and pedagogic practices developed in the project as well as preparing an impact study verifying the learning outcomes.

Execution 1: 80%. User feedback has been collected from the instructors of Me & MyCity Secondary School and from the teachers and students of the Business Courses. The method of the impact study is completed, and the learning outcomes related to intellectual property rights can be verified with the method at the latest in June 2020. More user feedback will be collected at the end of the academic year 2019–2020.

Feedback from the head instructors of Me & MyCity Secondary School

In late autumn 2019, we interviewed the head instructors of two Me & MyCity Secondary Schools that participated in the pilot (13 instructors). The aim of the interviews was to collect information on how content discussing trademark have worked as part of the game day, how pupils have utilised trademark during the game day and what kinds of challenges the instructors have encountered in their instruction work. The information will be utilised in the follow-up project to develop the trademark content and support the work of the head instructors. Next, brief summaries of the feedback from the head instructors are presented:

- According to the experience of the head instructors, pupils have had a positive attitude towards trademark as part of the Me & MyCity Secondary School learning entity.
- In the Me & MyCity Secondary School learning game, pupils are to design a trademark, and according to the instructors, the assignment has been best understood when the example of a trademark has been a logo or a slogan.
- There have been great differences in the pupils' ability to make use of the trademark in the sales negotiations of the learning game. According to the views of the head instructors, student groups who have studied the four-lesson advance material at school have been better at utilising the trademark in the sales negotiations as a tool for distinguishing themselves from the competition.
- The pupils who had studied the advance material have understood the significance of trademark well in business operations especially as a tool for constructing a strong brand and a matter affecting financing.
- Approximately half of the interviewed head instructors felt that the trademark in itself was a challenging theme, which is why the actual instruction work in the learning game was perceived to be difficult at times.
- Introducing the trademark as part of the discussions in the sales negotiations proved to be challenging, and the instructors wished for more practical dialogue guidelines for this.
- The head instructors who felt that the trademark content integrated well as part of the learning game felt they received sufficient additional training from their own supervisor when necessary and had been able to solve challenges that arose in the game.

Feedback from upper secondary schools

More extensive feedback on the Business Courses will be collected at the end of the academic year. However, individual feedback discussions have been organised during the academic year regarding the intellectual property rights materials with both students (n=8) and teachers (n=12). The following conclusions can be made from the discussions:

- Students were not familiar with the topic beforehand but once they got to know intellectual property rights, they found it very interesting. A student felt that the content on intellectual property rights was the most interesting part of the entire course.
- Students found linking content on intellectual property rights to their further studies, daily life and future working life especially important.

- So far, the feedback from teachers has been only positive because they feel the topic is important.
- Teachers view intellectual property rights comprehensively and want to discuss all intellectual property rights.
- Teachers would like to connect themes such as trade secret, data privacy and consumer protection to studying intellectual property rights because these themes are discussed as “one package”, especially in the curricula of vocational education.
- Especially vocational education teachers have longed for learning materials related to intellectual property rights because they have students who become entrepreneurs right after graduation and intellectual property rights are supported much more in the curricula than in upper secondary school.

Generally speaking, integrating intellectual property rights to entrepreneurship education has been seen as a positive and interesting thing. The startup lines of universities (Aalto University, Tampere University) in particular have viewed the topic to be an integral part of entrepreneurship but also raised the issue that entrepreneurs do not have sufficient information on the matter. The results of the Business Courses’ student feedback also reflect the interest. In December 2019, students’ (n=475) learning module-specific interest on spring semester 2019 to autumn semester 2019 were compared.

In spring, the reported interest in the 1st course’s *Commercialisation* module, to which the content on intellectual property rights was added later in summer 2019, was 4.82/7. Content discussing intellectual property rights was added to the same module before autumn semester 2019, which probably contributed to the increase in interest of the module. At the end of autumn 2019, it was 5.41/7. At the same time, content on intellectual property rights was added also to the *Branding* module, and the interest in also that increased significantly (spring 2019: 5.17/7 vs autumn 2019: 5.90/7). Other factors may have affected the increase in interest but at least the result indicated that intellectual property rights were integrated to the Business Courses in a natural and interesting way for the most part.

The impact of the Business Courses’ learning materials discussing intellectual property rights will be verified in the future in the following ways:

- Teacher feedback surveys (5/2019)
- Learning outcomes 1st course, commercialisation module (5/2019)
- Learning outcomes, separate module of intellectual property rights (12/2020 because this requires a sufficient number of students who have completed the content)

A new kind of method that utilises learning analytics was developed for measuring the learning outcomes in cooperation with Claned Group that is behind the digital learning platform of the Business Courses. The method tracks and gives points to the occurrence of keywords for achieving the learning outcomes in students’ responses. The method was successfully piloted in December 2019 with one module (1st course, *Marketing* module). The result was that the students used in their own thinking 55% more key words essential to marketing at the end of the module than when starting the module. The aim is to expand this method in April 2020 to all the modules of the first course, which covers also the content on intellectual property rights.

A summary of lessons learned

Intellectual property rights are foreign to both teachers and students – only copyright is somewhat known. Because of this, the topic is often felt to be difficult, and combining it with the curriculum, own teaching or entrepreneurship education is hard. This results in the studying of intellectual property rights coming across as a separate thing. However, especially teachers felt that the topic is important, and learning materials related to intellectual property rights have been received well among teachers.

The more you know about something, the more relevant and interesting it will start to feel. However, this requires a carefully planned out, thought-provoking and gradually deepening approach to the subject. It's important to connect intellectual property rights in a natural and meaningful way as part of other contents, which doesn't make intellectual property rights feel unconnected but bring added value to discussing other topics, too.

It's very challenging to simplify and teach intellectual property rights without having a solid foundation of knowledge. In addition, intellectual property rights have a lot of questions that are left to interpretation, or even inconsistencies, and understanding these may be difficult. An example of this is the vagueness between the boundaries of trademark and design right in some situations. Often, students and others in the training get caught up in these unambiguities, which easily could result in uncertainty in the teacher, which again leads to not wanting to teach the topic.

Teaching trademark and design right especially in basic education is not natural if other intellectual property rights are not included. Understanding the foundation of trademark and design right is difficult if you don't understand the definition of intellectual property and the function of intellectual property rights in protecting it and utilising it on a more general level. In addition, curricula only support comprehensively discussing intellectual property rights, and there is not enough time in teaching for topics that don't naturally set in the content and objective framework of the curricula. However, curricula also have grounds for introducing intellectual property rights to schools as part of entrepreneurship education.

There is demand for intellectual property rights especially in the entrepreneurship studies of vocational education where the curricula, too, support the discussing of the matter more. In this case, too, the topic must be approached comprehensively and include in it other connected themes, such as consumer protection, trade secrets and data privacy. There is demand for these kinds of comprehensive trainings and learning materials, and if you can respond to it, you can also tell about trademarks and design right at the schools alongside other content.

"IP Office" would work well as part of a Me & MyCity type learning environment, or even more broadly: it could be a state agency where you can apply for different permits, intellectual property rights and matters related to taxation.

All in all, intellectual property rights was formed into a very natural perspective that bring added value to entrepreneurship education and learning working life skills in the project. Intellectual property rights can be studied in a versatile and meaningful way as part of entrepreneurship education.

Final words

The Finnish Patent and Registration Office PRH (Project Manager Olli Ilmarinen)

As a whole, we are fairly satisfied with how the project achieved the objectives set for it. However, we are especially pleased with the way they were achieved. Cooperating with TAT was new to us, and prior to starting the project, we didn't know for certain how practical cooperation would work when creating a new kind of IP training and spreading information about trademark.

It was clear during the project that Economy and youth TAT's national expert network together with schools and teachers created the critical factor with which the project would either sink or swim. Now, after a successful project, it's easy to say that we couldn't have done this without them. After the project, it's clearer than ever that integrating topics such as IP/IPR/trademarks as part of entrepreneurship education enables including these topics in the toolboxes of future entrepreneurs.

In this context, we also want to mention the financial support granted by EUIPO and their open-mindedness in including an operator outside a national agency. The resources of national agencies are not scaled to following through these kinds of national action programmes, and the activities conducted in the project will not be continuous without an established execution organisation.

Economy and youth TAT (Project Manager Lauri Vaara)

The project has been both challenging and rewarding. Challenging because the topic is unfamiliar to most working in the school field, and its connections to the surrounding society are hard to perceive without sufficient base knowledge. This has required opening up the topic and training both inside the house and outside. In addition, the fact about Finnish education is that it is simply full. There is more space for individual happenings with short-term effects but when integrating new content as a more permanent part of continuous teaching with long-term effects, you soon notice that you are working in a very limited space. In this, it's also challenging to assess the weight and the extent of the new content in relation to other content, and many factors affect this.

The project was also met with challenges related to the changes in the organisation structure of Economy and youth TAT and longer sick leaves, which resulted in challenges related to the utilisation of resources and schedules. We are very thankful for EUIPO that we had the chance to continue our work in 2020 and finalise the project. Thinking about the future, I find it very important that a person who is also a member of TAT's management team would be responsible for the project at TAT, or at least actively represent it. This is especially highlighted in projects with objectives that intersect all TAT operations and the partners of the project are nationally or internationally significant expert agencies and authorities specialised in intellectual property rights.

The project has been rewarding because it presented to us an important and interesting but previously too little known topic that during the project found its place as one of the key contents and perspectives of entrepreneurship education. The project has also strengthened our status as the frontrunner of entrepreneurship education in Finland. It's good to continue from here. It has been a pleasure to learn about the topic and develop related learning materials in cooperation with the experts of the Finnish Patent and Registration Office PRH and EUIPO. Encouraging feedback from

students and teachers has also been rewarding. On behalf of the entire TAT team, special thanks to the Finnish Patent and Registration Office's Olli Ilmarinen and Tuulimarja Myllymäki for the extremely smooth and constructive cooperation which has been both effective and fun.