

E-SPORT IN SCHOOL

Experiences of using e-sports as an elective course package within the framework of the basic vocational education, Finland

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INTRODUCTION

As we're the first ones trying to bring e-Sports to the schools in Finland we have already some experience of it. It can be described both working uphill and at the same time be out of a quagmire, everyone thinks it's interesting but no one can give us any feedback.

The goal is to bring it, the e-Sport mindset, to every interested educational organization in Finland, no matter if it's a Swedish or Finnish spoken school. Therefore we write this documentation in a common language.

Björn Nylund

Björn is working as sport coordinator at Yrkesinstitutet Practicum, he's responsible for the school's sport profiling and school sports. He has served as coach of various sports in 25 years and at different levels. Besides his work in school he also school coaches for the Finnish Handball federation.

Björn is **not** a gamer and has never been

Karl Ögland

Karl is working as a remedial teacher at Yrkesinstitutet Practicum. He has used games in education since 2012, since 2013 Minecraft and last school year he had a project how to learn Economics through World of Warcraft.

Karl has been a gamer since 1984.

THE SCHOOL NEWS OF THE YEAR 2015!

Sweden 2015

The Swedish e-Sport federation has been advisors to Swedish schools during a year or so, with the goal to make it possible to have e-sports on the schedule, in school. With other words, how to become an e-Sport professional. Within the Swedish upper secondary school you obviously can make courses to fit the education at national sports schools or sport colleges.

Media covers the news from the very beginning and even during the planning stage.

Finland 2015

We have no chance in the world to add an e-sport course with a Finnish curriculum as you can in Sweden. But, what comes to the vocational program you learn 135 points connected to your work, 35 points guarantee you access to higher education and 10 points courses free of choice.

Within this 10 points field (200 lessons) we have a chance to actually use the power of gaming and e-Sports.

In autumn 2015 no news media believe this would be something newsworthy, to offer e-sports as a freely selectable course package in a school.

How do we connect it to our curriculum?

It's hard, especially in a vocational institute as you can't replace any qualification module. But, we have an ace up our sleeve: we have a block of free elective courses that will strengthen the professional role. There in the curriculum and chapter 4 we believe we have the support. It says

"The elective exam part (10 credits) supports the requirements for professional skills and goals for skills in the exam and may consist of one or more modules. Degree parts may be:

4.1 Vocational qualification modules that deepen or expand professional skills

4.2 modules based on local requirements for professional skills, or goals for skills"

It takes a mindset, to be able to see the possibilities. Students of today anyway play computer games; will it be possible to connect their interest with skills that is important in their future work life?

Ammatillisen perustutkinnon perusteet, Tieto- ja viestintäteknikan perustutkinto 2014 page 158

4 VAPAASTI VALITTAVAT TUTKINNON OSAT AMMATILISESSA PERUSKOULUTUKSESSA

Vapaasti valittavat tutkinnon osat (10 osp) tukevat tutkinnon ammattitaitovaatimuksia ja osaamistavoitteita ja ne voivat koostua yhdestä tai useammasta tutkinnon osasta. Tutkinnon osat voivat olla seuraavia:

4.1 Ammatillisia tutkinnon osia

Tämä voi sisältää ammatillisia tutkinnon osia oman tai jonkin muun koulutusalan ammatillisista perustutkinnoista, ammattitutkinnoista tai erikoisammattitutkinnoista.

4.2 Paikallisiin ammattitaitovaatimuksiin perustuvia tutkinnon osia

Tämä voi sisältää työelämän alueellisten ja paikallisten ammattitaitovaatimusten ja opiskelijan ammattitaidon syventämistarpeiden mukaisia tutkinnon osia, joiden tulee vastata laajemmin paikallisiin ammattitaitovaatimuksiin kuin pelkästään yhden yrityksen tarpeisiin. Nämä tutkinnon osat nimetään työelämän toimintakokonaisuuden pohjalta ja niille määritellään laajuus osaamispisteinä. Lisäksi määritellään tutkinnon osien ammattitaitovaatimukset, osaamisen arviointi ja ammattitaidon osoittamistavat Opetushallituksen määräyksen (Osaamisen tunnistamisen ja tunnustamisen mitoituksen periaatteet ja arvosanojen muuntaminen ammatillisessa peruskoulutuksessa 93/011/2014) liitteessä olevan arviointitaulukon mukaisesti.

Grunder för yrkesinriktad examen, Grundexamen i informations- och kommunikationsteknik 2014 page 155

4 FRITT VALBARA EXAMENSDELAR INOM DEN GRUNDLÄGGANDE YRKESUTBILDNINGEN

De fritt valbara examensdelarna (10 kp) stöder kraven på yrkesskicklighet och mål för kunnandet i examen och de kan bestå av en eller flera examensdelar. Examensdelarna kan vara följande:

4.1 Yrkesinriktade examensdelar

Dessa kan vara yrkesinriktade examensdelar från det egna utbildningsområdet eller från yrkesinriktade grundexamen, yrkesexamen eller specialyrkesexamen från något annat utbildningsområde.

4.2 Examensdelar som grundar sig på lokala krav på yrkesskicklighet

Denna kan innefatta examensdelar som tillgodoser de regionala och lokala kraven på yrkesskicklighet och studerandes behov av att fördjupa sin yrkesskicklighet. Examensdelarna bör svara mot mer omfattande lokala krav på yrkesskicklighet än endast mot behoven hos ett enskilt företag. Dessa examensdelar nämns utifrån en verksamhetslighet inom arbetslivet och omfattningen på dem bestäms utifrån kompetenspoäng. Dessutom bestäms för examensdelarna kraven på yrkesskicklighet, bedömningen av kunnandet och sätten att påvisa yrkesskickligheten enligt bedömningstabellen i bilagan i Utbildningsstyrelsens föreskrift (Principerna för dimensioneringen av identifiering och erkännande av kunnande och omvandling av vitsord i grundläggande yrkesutbildning 93/011/2014).

4.1 Vocational qualification modules that deepen or expand professional skills

WHAT DO YOU LEARN FROM COMPUTER GAMES?

First we have to solve this question: What do you learn from computer games? And this is the opposite to when you use "games in education" like learn Economics while play World of Warcraft, Math while play Minecraft and so on. Something is happen automatically while you play computer games and when you see it, it's also obvious.

You learn to

- define and analyze a problem
- search for information of your problem
- plan a solution
- test the solution
- evaluate your solution
- do documentation
- report the solution

Two examples

1. **World of Warcraft**; I run into a mysterious quest with no answer and I have a problem. Already there I've defined my problem, I google it, I find lots of answers, I value the information, I test in game (did I found the drop giver?), I put notes (I have more characters that will run into the same problem) and if I found the wanted drop on another coordinate I report it.
2. At Sunday evening, your team will have an important **CS:GO** match and it turns out you will play a new custom made map. How do you solve the problem? You have a problem, a new map. You search every possible forum of any threads or clues until you get the map. If possible you install it on a local server and you gather your team, you play and explore, you evaluate the teams experience. Maybe you even write down your thoughts and game plan.

Despite to real world or in the classroom, you never give up in a computer game. So, **what if we** use this formula, **confirm it** in a safe environment, **will our students be able to take this out in real life?**

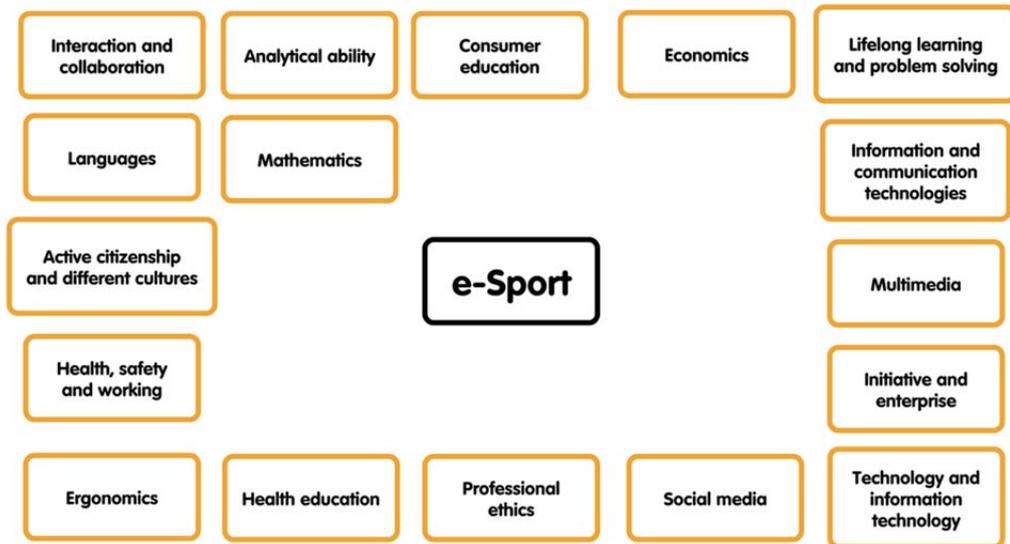
This problem solving is definitely something useful as a professional skill. It's also in the "key competences for lifelong learning" field

- The Finnish ones, Elinikäisen oppimisen avaintaidot, you'll find here
 - <http://goo.gl/gztloH>
- The Swedish ones, Nyckelkompetenser för livslångt lärande, you'll find here
 - <http://goo.gl/WHL1rC>

Also, if you use e-sport as an inspiration source you can connect it to a wide area of subjects and competences. To show you how that would be possible, we've made up a mind map

- <http://popplet.com/app/#/2666072>

POTENTIAL LEARNING AND E-SPORTS



For example

After the first in game training our students realized they needed communication and Skype wasn't enough. Together with the teacher who had a server course they installed a TeamSpeak server which they now are responsible for (to document, problem shot and also maintain). Their teacher hasn't played any computer games on his lesson, all he did was to use the interest of a game for more and deeper learning.

HEALTH EDUCATION

To become a professional e-sport gamer you need to understand it takes more than just play a computer game. One other very important thing is gym exercise for better blood/air circulation (to relieve the stress like example) but also for the prevention of occupational injuries (which by the way, is the same kind of injuries they will have in their profession).

It has also emerged that other vitally important skills are structure in everyday life, fixed routines, diet, health and sleep. Skills that young people doesn't usually see because they usually doesn't see the connections.

4.2 modules based on local requirements for professional skills, or goals for skills

“This may include modules that cater to local and regional requirements for professional skills and students need to deepen their professional skills.”

WHAT DO YOU LEARN FROM E-SPORT?

This fall we have been on field trips to various local businesses and where they both sat up and shared demands for the kind of people they want to hire. New employees must be

- Positive
- Team players
- Loyal
- Developable
- Able to take initiative
- Jack of all trades

Also; “people who can take in and do almost anything” and “who are flexible and can be moved to a position where they are needed at the moment”.

This is exactly what happens when you are dealing with e-sports. For example, you play League of Legions and the team's two tanks (striker) turned out so formed, the remaining group (three players) and you end up on a new position. In a computer game you never give up!

It's e-Sport all the way. So, what happens if we confirm the skills in a safe environment...?

CONTRACT

With every participant in this project we've done a contract, a written agreement where they understand our rules and what they obligated to do. Just because we're using their interest it's not any free give away study points. You have to earn the points!

Among other stuff they agree to do is

- Students commit to a sporting lifestyle. Students taking a healthy diet and adequate sleep. Students try to own timetable provides enough space for training, study and rest.
- When representing the school at competitions, trainings, social media or visiting it schooldays. The contract also covers such events.
- Substance abuse and doping is not conducive to a young athlete's development and do not belong to a purposefully-training athlete's lifestyle. The school will react sharply if students are using intoxicants during school hours or during school trips and events. At the misuse of the rules will be the consequences in terms of the exercise rights withdrawn.
- E-Sports: s are required to submit training diaries according to the agreed directives

THE E-SPORT CHAIR

When we talk about e-Sport everyone assume we only talk about gaming and so far in this document we've also been doing that. But the deeper we dig into e-Sport the more we understand e-Sport is so much more than just gaming. We had to visualize our thought and came up with this chair

If you look at it from above, all you see is e-Sport. If you look from the side you see more, like four legs

- Coaching
- Gaming
- Education
- Workout

You also have a backrest called "Management", some organization that will help you; for example SEUL, a game house (Team Menace, Rctic) or a school.



Education

Subjects we can connect to the e-Sport. For example, either you talk Finnish or Swedish as a mother tongue you might have some problems produce text and stories in the other language. When you tell your students to describe e-Sport it's hard to get them quiet. When they started practice in game (after school, from home) they realized they need a way to communicate. In a server course one of the classes could set up and maintains a TeamSpeak server. [Look at the mind map.](#)

Gaming

This is something you do from home, in the evenings, either yourself or with the team. We know they're playing games during classes (they try to hide it with ALT+TAB) but we have never in this course have them to play during class.

They train two times a week, from home, together with the other students within this project. For this they will later get credits/points, also see the training diaries.

Coaching

When we visited DigiExpo2015 we saw a lot of professional players but not much team spirit. We believe this leg, the coaching leg, is limping or at least in Finland. If you're in a team you should be dressed as a team and you should be proud to wear your team

colors. Here's one of the legs where we can see the school, or the sport world, could add a lot of experience and thinking. In our project this is Björn's field. How do you build a team? Well, when we got funding we now can equip our e-Sport's with a jacket, a fleece, a training/match shirt and training pants. We can dress them up as a team. We can start do teambuilding.

Also, gamers are usually so odd, or nerdy, that they never had been into sports before and certain not any team sport. They need to be educated in Team Spirit. We do see this when it comes to trainings in game, suddenly they think it's up to them when they train, and it's not.

Important

It's free to join this course but voluntariness ends when you are accepted and e-Sports contract is signed (a written agreement).

Workout

During our journey we've come to understand you need a lot of workout. Teijo Sepponen at Team Menace shared his health results during the Nordic Champions on Battlefield 2 (2012?) and realized during that competition he prepared wrong, playing around 8-12 hours a day. He told us it would have been better if he had added some gym exercise for better blood/air and to relieve the stress.

Also, we need to prevent sports injuries which happen to be the same as you also get when you work with computers and we're back at "4.1 Vocational qualification modules that deepen or expand professional skills".

Again, thanks for funding, all our memebers of this e-Sport project now have a season ticket to the swimming pool in Porvoo and Björn is also their personal trainer every Thursday morning at the local gym. They will also get a starting grant to their own gym membership when Björn have had them for some times (he want to see they are ready first).

TEXTBOOKS

During a year twelve Swedish e-Sports organizations have worked together to develop Swedish e-Sports Code of Conduct. It includes ethical rules for e-sports events at all levels, for both players and organizers. That's our upcoming textbooks for this project.

THE RIGHT MINDSET

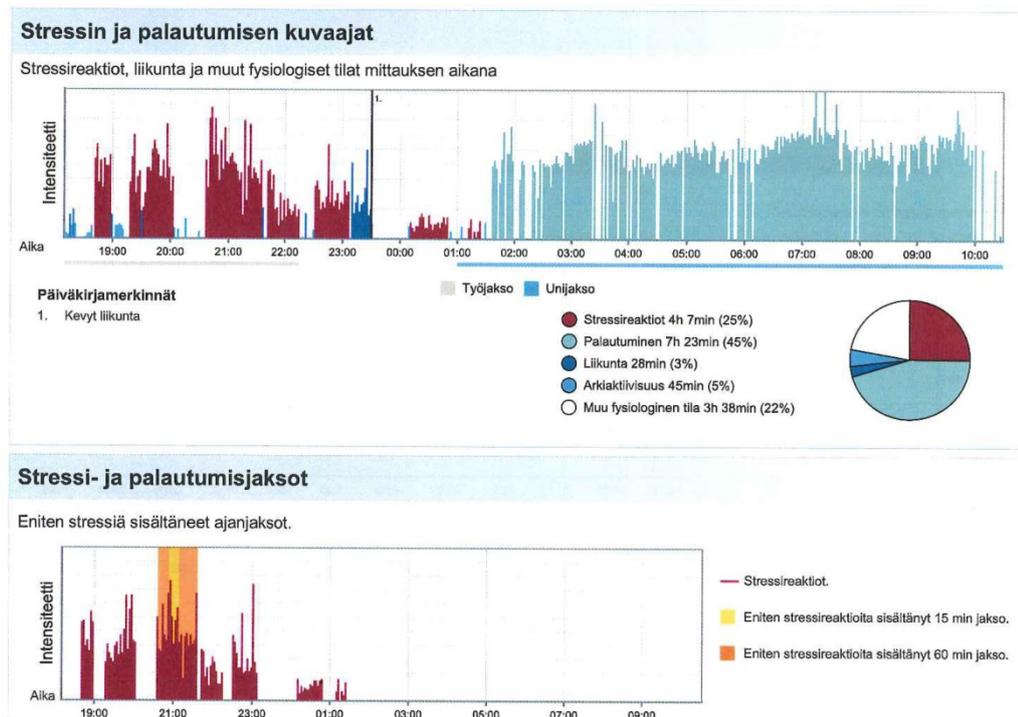
Obviously there is a wrong attitude too: there's no learning with e-sports! You can't have more wrong, but besides structure in everyday life, fixed routines, diet, health and sleep. What more?

When the Swedish E-Sport Association helped the Swedish sports schools one of their demands was sports psychology must be on the schedule. How do we solve that? In the absence of available resources (sports psychologists), we have tried to think differently but still try to reach the goal. There are several similarities between e-sports and professions where you have to make quick decisions under stress, such as fighter pilot, police, air traffic controllers, etc.

So what if we get lecturers who are just that: the police and fighter pilot, would they be able to share their experience? It's worth a try.

The officers' stress levels

With my own experience from the (Swedish) Police force this could be my stress levels during a Saturday evening shift. Routine work until 21 o'clock when we alerted about knife fights and several injured.



But it's not one officers' stress levels,. It's actually one e-Sport gamers stress levels during Nordic Championship Battlefield 2.

But since there are obvious similarities between stress curves, police can learn how to mentally prepare for a situation that can mean more stress? It's worth a try.

Goals and goal fulfillment

One of the things the Swedish E-Sport Association told us you have to be much better at is goals and goal fulfillment. You might not do that enough in game but you actually do that in school pretty often. If we, for once, use the reverse tactic and confirms what we already do at school and then try to move it into the Games. Would this work?

You're not going to a test and try to be the worst student. Of course you try to be as good as possible and when you get back the test, you see what you could and could not. If the goal was to get 75% right, how did you manage?

APPENDIX

e-Sport contract, Yrkesinstitutet praktikum

- Student
- Education
- Started
- Sport

Yrkesinstitutet Praktikum provides, in collaboration with the Finnish e-sports federation SEUL ry, flexible educational and training opportunities for athletes aiming for the national and international top. The trainings are a privilege for Praktikums "datanomer" in Porvoo.

The choice of e-Sports package is done after admission and during the first period. Students can obtain exercise rights, if the conditions are, even at a later date. Similarly, exercise rights revoked if the student does not fulfill the requirements or if the exercise motivation is insufficient. The school's study guide provides additional information about the studies and e-sports profiling.

Athletes with e-sports profiling in Praktikum commit themselves with their signatures to follow the following contracts:

- Students commit to a sporting lifestyle. Students taking a healthy diet and adequate sleep. Students try to own timetable provides enough space for training, study and rest.
- Students enrolled in the classes, if the student has not applied for permission or agreed with the subject teacher's absences. If a student is wrongfully away from classes or gets behind in their studies, it leads to a discussion, which has implications for training opportunities.
- Students with exercise rights should make progress in their study plan and he/she should behave well and representative of yours and the school's best. Students should feel responsible for school materials and facilities and to follow the school's general rules.
- When representing the school at competitions, trainings, social media or visiting it schooldays. The contract also covers such events.
- Intoxicants and doping is not conducive to a young athlete's development and do not belong to a purposefully-training athlete's lifestyle. The school will react sharply if students are using intoxicants during school hours or during school trips and events. At the misuse of the rules will be the consequences in terms of the exercise rights withdrawn.
- e-Sportsmen are required to submit training diaries according to the agreed directives.

I have familiarized myself with the rules of the Yrkesinstitutet Praktikum's sports contract. I accept the rules and agree to follow them. At the misuse of rules is heard student, and after a decision is taken by the consequences of class managers, sports coordinator, e-sports coordinator or principal.

- Place and date Student's signature.
- Read and approved, legal guardian signature and name
- Personal trainer's signature and name
- Students are assigned to exercise rights: Date, Approved by (on the behalf of Yrkesinstitutet praktikum)

REFERENCES

Examensgrunderna (Swedish)

Enligt förändringarna i förordningarna gällande grundläggande yrkesutbildning för ungdomar och vuxna trädde de nya grunderna för yrkesinriktade grundexamina i kraft 1.8.2015.

http://www.oph.fi/download/167983_ge_i_informations_och_kommunikationsteknik_01082015_SA123.pdf

Tutkinnon perusteet

Säädösmuutosten johdosta uudistetut ammatillisten perustutkintojen perusteet tulivat voimaan 1.8.2015.

http://www.oph.fi/download/162233_tieto_ja_viestintatekniikan_pt_01082015.pdf

Swedish e-Sports Code of Conduct.

<http://www.respectallcompete.se/koden/>

Correspondence

Magnus Jonsson, Chairman of the Swedish E-Sport Association <http://www.sesf.se/>

Erkka Jouste, Chairman of the Finnish eSports Federation <http://www.seul.fi>

Teijo Sepponen, CEO Team Menace <http://www.team-menace.com/>

Mikko Meriläinen, PhD student Game education research Helsinki University

Picture list

Printscreens from the Datanom/Datanomi curriculum

e-Sport mind maps: Karl Ögland

e-Sport chair: idea Björn Nylund & Karl Ögland, graphics by Minna Ögland

Printscreen from a health report, provided by Teijo Sepponen.