



Peipsi
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Co-operation

Using Environmental LARP in Education

**Practical Guidelines
for the Integration of Environmental LARP
into the Formal and Non-formal Education
in Estonian-Russian border area**

Tartu 2020

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Practical Guidelines for the Integration of Environmental LARP into the Formal and Non-formal Education in the Baltic Sea Countries

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Tartu 2020

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1 Introduction

The students of today will most likely start working in occupations that do not yet exist. The need to constantly adapt and to solve emerging problems has put educators, teachers and learners in a new situation where they need to constantly review and change their practices. In addition to subject knowledge and skills, there is a need to develop general competencies (critical thinking and problem-solving skills, creativity, communication and collaboration skills) which enable learners to solve the complex issues they will face (OECD/CERI 2008; Binkley et al., 2014).

Indeed, today's primary and secondary school students' school experience in most of the world is quite different from that of their parents' generation. The learning process and the methods used are now more focused on learner's personal and social development, learning skills, creativity and initiative. Classes have become multicultural, students of different abilities and skill levels learn together, there are countless information channels available to both students and teachers. The teacher's role at school is first and foremost to act as a mentor supporting the learner, helping them to orientate in an information-saturated world, construct new knowledge, relate it to the existing one, reflect on experiences and create a meaningful "big picture".

Given the increasingly active role of the learner in the learning process and the use of inclusive learning methods in schools, learning through play is also gaining popularity. The use of the games in education has become the interest of many practitioners and researchers (Qian & Clark, 2016). Well planned usage of games for learning enables students to develop problem-solving and critical thinking skills, creativity, communication and teamwork skills. The use of games in the learning process allows to give learners personalized tasks and concentrate their attention (HITSA, 2020).

In addition to educational computer games in the digital environment, it is also possible to use educational live action role play (LARP) in order to diversify learning experiences, explain different topics, play through situations and scenarios, and to simulate the consequences of one's decisions.

2 Games and Gamification in Education

Social media, computer and video games with their varied content and instant feedback are engaging for learners, offering strong competition to traditional teaching methods. This has led both educational practitioners and researchers to consider using games for learning at school. Game-based learning creates new opportunities to attract students' attention, to get them involved and to explore different topics (HITSA 2020).

It is generally acknowledged that learning takes place during the activities that are engaging and memorable (Ardriyati & Unisbank 2009). Gamification is mostly used to increase students' interest in subject matter and learning process. Playing games can also influence students' attitudes and behaviour, increase class attendance, prevent bullying, and encourage participating in extracurricular activities. Thought-out gamification can make learning environment more inclusive and promote good relations between students. It has also become apparent that gamification and game-based learning positively affect learning outcomes (HITSA 2020).

In order to better understand what an educational role play is, we will use the terms as they are explained in HITSA Education Technology Compass.

A game is an activity that takes place in a fictional environment where agreed rules must be followed to achieve goals (Adams 2009).

Gamification is the application of game elements in a non-gaming environment (Deterding et al., 2011). These elements can be parts of the game design, such as characters, graphics, game challenges, etc., or play related emotions, such as engagement, curiosity, competitiveness, etc. (Marczewski, 2013).

Game-based learning is the application of both serious and entertainment games for learning purposes. An educational goal can rely in the content of the game as well as the activity.

Serious games are games that are specifically designed to serve a serious purpose, like education, national defence, health, security, science, and so on. The best-known serious game is probably America's Army, which aims to recruit soldiers. Another example of serious games is various large exercises (cyber security, rescue and evacuation, etc.).

Learning or educational games are a subset of real games – games that support the achievement of specific learning goals.

There are many reasons for using games in education. A game satisfies learners' curiosity and develops their imagination, increases motivation to participate and allows for active

communication with classmates. A game that does not have a linear structure develops problem-solving and decision-making skills. Games offer diversity in the learning process. Simulations enable learners to engage in processes that might be too dangerous or too expensive to be evoked in real life. A game allows for personalized approach – for example, there may be many ways to solve a single task. Games make it possible to involve marginalized students and those not favoured by the traditional school system. Gamification has a potential to reduce boys' dropping out of school. Games also help to concentrate the students' attention that can be easily distracted by different media.

3 Definition of LARP and EduLARP

LARP is an acronym for Live Action Role Play – an adventurous role-playing game. According to the website of Tallinn LARP Festival, “role-playing is any activity where the players pretend to be someone else”. A simple example is a childhood game of Cops and Robbers, more advanced role play is featured in impro- and participatory theatre.

Simulations of the parliament or the elections can be viewed as role play, as well as storytelling games like Dungeons and Dragons), computer games (e.g. Witcher, Mass Effect), etc. Most of the time the players improvise, trying to act and react as they imagine their character would. There is no audience and acting skills are not required.

LARP has been known as a learning method for some time, but it has been used quite modestly in Estonian educational institutions. This is not a standardized method that fits all shapes and sizes. Using LARP in classroom can be challenging for a teacher, as it needs considerable preparatory work. However, the possibilities it offers for identifying problems, sharing experiences, finding solutions, discussion and analysis make the effort worthwhile. From a pedagogical and psychological point of view, the positive features of role play are focusing on learning, self-awareness, changes in attitudes and behaviour.

LARP for educational purposes, or an EduLARP, is an opportunity to integrate traditional and playful ways of teaching and learning.LARPs are often associated with historical sword fighting games, but there are numerous other possibilities: laboratory-based role-playing games for science classes, environmental and socio-economic conflict games for biology and geography, etc.

When using role play as a learning method, it should be remembered that this method is not inherently result-oriented but focuses foremost on a process. The creator and manager of the game creates a framework for the game to take place in and for the players to improvise, create, and experience. Therefore, the first attempts at role playing in classroom may seem chaotic and unstructured.

However, it has been confirmed by research that learners memorize content better when they are actively involved in the learning process, as in the case of dramatizations, simulations and role play. LARP is an active and engaging method that creates intrinsic motivation. A different reality helps to distract the players from their everyday problems and stimulates their interest in the topic. All the senses are activated, physical and emotional engagement support deep learning. Role play develops empathy and the ability to see other perspectives. By connecting the topics learned in classroom with real-life situations, the student can more easily relate them to their own life and make connections between different subjects. Role play can improve students' communication skills, and for the shy students, role play provides a safe way to interact from behind a mask and thus develop their confidence. Therefore, the share of role-playing and other active learning methods in schools should be even higher than it is today.

4 National Education Strategies' Approach to Gamification and Role Play in School Curriculum

4.1 Estonia

Estonian Lifelong Learning Strategy 2020 describes the learning process and its results with the following keywords: learner-centredness, integration of subject domains, teamwork, creative and critical thinking, self-expression skills, active mindset, key competencies, and problem-solving skills (Estonian Lifelong Learning Strategy, 2014). The Ministry of Education and Research, in cooperation with universities and stakeholders in the field of education, has created a framework of Contemporary Learning Paradigm that is reviewed periodically and offers a foundation for all stakeholders in education (Learning Concept and its Changes, 2017).

High expectations have been set for the educational system for the near future: learning shall be learner-centred and offer a variety of choices for the learner who shall have smooth and flexible transitions between levels and types of education. The Estonian National Development Plan for Education 2021-2035 emphasizes the learner's right to high-quality and inclusive education: education shall be available; learning shall be supported, and learning opportunities shall correspond to the learners' abilities and needs. It has also been pointed out that there is a need for a comprehensive framework which would enable non-formal and informal learning experiences (incl. youth centres and programs, hobby schools, etc.) to be incorporated into formal learning. More emphasis needs to be placed on practical learning, in order to make learning tasks more meaningful and develop the learner's ability to solve the challenges in their personal life, learning process, local community and wider

society creatively, collaboratively and innovatively (Estonian National Development Plan for Education 2021-2035, 2020).

Estonian schools base their curricula on national guidelines: national, regional and local development plans in the field of education, national curricula and the Basic Schools and Upper Secondary Schools Act. Every Estonian school is free to design its school curriculum and students' individual study plans in such a way that they consider the needs and interests of students as well as the specifics of the region, while being in compliance with national legislation. The Basic Schools and Upper Secondary Schools Act defines the task of a basic school as contributing to the growth of a student as a creative and rich personality who is able to fulfil themselves in various family, career-related and societal roles, and choose a learning path according to their interests and abilities. Basic school must create an age-appropriate, safe, positive and developing learning environment which supports the learner's interest in learning, development of learning skills, self-reflection and critical thinking, cognitive and affective qualities, creative self-expression, and social and cultural identity. The main aspiration of upper secondary school is to support the students in their finding a field of activity appropriate to their interests and abilities, and in choosing a further educational path (Basic Schools and Upper Secondary Schools Act, 2010).

The national curriculum of basic school identifies eight horizontal, or transversal topics in instruction and one of them is the environment and sustainable development. The objective is that a student become a socially active, responsible and environmentally conscious person who protects the environment and values sustainability and is ready to find solutions to environmental and human development issues (Basic School National Curriculum, 2011).

In conclusion, the strategic documents that regulate education in the Estonia as well as the national curriculum fully support the implementation of active teaching methods, interdisciplinary integration, learner-centredness and the development of key competencies. Educational role play (LARP) is one of the learning methods that enables the active participation of the learner in the learning process.

5 Present Situation of Educational LARPS

5.1 Sweden

LARP Traditions

In the early 1980s, a group called Gyllene Hjorten started the first LARP campaign – one that is still ongoing today. The Nordic LARP traditions differ from those of the UK and Germany, characterized by scepticism towards game mechanics, a tendency to limit combat and magic,

and putting an emphasis on immersive environments where anachronisms and out of play elements are avoided. The setting and roles may be given to the participants by the organizers or suggested by the player themselves. In either case it is usually negotiated in a dialogue and the character sheets which are common in tabletop RPGs are rarely used. Once a game starts, it is wholly directed by the players, even though some events can be scheduled beforehand. A typical Swedish game lasts 2–5 days and has anywhere from fifty to hundreds of participants (Wikipedia 2020).

LARP in Education

It is not unusual in Sweden for schools, church activities and similar organisations to use roleplaying with an educational purpose, but most often these are drama exercises with a limited scope, rather than full-fledged LARPs. There are only a few organisations that work with EduLARP in Sweden. LajvVerkstaden is the biggest and with the longest experience; a similar association operates in Göteborg, called Lajvbyrån. Studieförbundet, an adult educational association, has started a project (2020-2023) involving EduLARP; their focus is on using some drama methods in regular courses.

EduLARPs in Sweden have a clear pedagogical aim and are often combined with the school curriculum so that the participating students learn about different school subjects during a game. Extracurricular EduLARPs are organized by libraries, museums and other organisations and are mostly focused on their topics of interest.

Cooperation Between Schools and Game Producers

Schools in Sweden use a lot of active, creative and cooperative learning activities, as well as cultural experiences to enrich learning at school. One school has officially adopted LARP as an educational method, but it is mostly up to individual teachers to bring roleplaying into their classroom. Schools can apply for funds from the Cultural Council of Sweden in order to make creative and cultural experiences (including LARPs) available to all students. This funding makes it possible for LajvVerkstaden to work with approximately 40-50 schools each year.

Educational LARPs in Sweden usually combine a school subject and a value-based topic. For example, a game for a primary school (10-13-year olds) may focus on Swedish judicial system during the 1200s. In this LARP the students learn facts about the historical period, but they can also experience injustice which happens when a justice system treats citizens differently. Another popular LARP for this target group focuses on the English language: players are taken on an adventure where they must speak English with some other characters. When being in character and solving clues, the players forget that foreign language is difficult. For Upper Secondary School (14-16-year olds) there are several value-based LARPs, for example a game in sci-fi setting that allows students to explore gender, identities

and related societal norms. There are LARPs about important historical events such as the First World War or the French Revolution where the topics revolve around ideologies, conflict, dehumanization, propaganda etc.

National Support Systems

Several reports support the use of "learning by doing", cooperative learning and other active and immersive methods at school (see References).

LARP or more generally roleplaying is not yet a well-established learning method, as it is often viewed as another form of drama/theatre rather than a distinct art form or educational method, despite the efforts of the LARP community to achieve such recognition. Therefore, it is also not explicitly mentioned in official recommendations to schools.

5.2 Estonia

LARPing in General

LARP was first introduced in Estonia in 1999 and its popularity peaked in the years 2005-2007. Currently, there are about 100 players who attend the games at least once a year, and about a dozen game creators. The average age of the community is 30-50 years, and there are only a couple of clubs where younger people are actively engaged. A typical game takes place on a weekend, lasts one day (5-15 hours), and the number of participants ranges between 15 and 45. Typical themes are fantasy, science fiction, adventure and horror, as the games are intended for entertainment purposes, even though sometimes various political or philosophical issues are explored. There is a briefing before the game and a debriefing after the game. Players and those interested mostly communicate in Facebook groups. There is also a dedicated website dragon.ee and LARP festivals take place every year.

The public image of role-playing is formed by its media coverage, so LARPs are generally perceived as adventurous fantasy themed ("sword and sorcery") games. Some teachers and educators may have encountered specialized roleplaying (e.g. simulations) through their studies or work, and recent seminars have shown that the interest of educators in role-playing is growing (14.06.19 Environmental and mythological role-playing and training, 15.01.20 Educational Conference "Learning Time", 31.01.20 Training Seminar "Educational Role Play").

EduLARPs in Estonia

Estonian schools are increasingly using teaching methods that actively involve learners, and these include drama, simulation and role play. In a simulation, the players' task is typically to find a solution in a challenging situation. In a role-playing game the players must put

themselves into someone else's role (president, doctor, friend) for a short period of time and later reflect on the experience. LARP is typically more complex, has a wider backstory, and more complex characters with different and/or conflicting intentions.

An EduLARP is usually short, lasts 2-4 hours, takes place in one room and involves a limited number of players (typically one class). It does not require preparation (costumes, props) from the player and often uses non-traditional rules to achieve a more compelling story (e.g. game time may advance more quickly and/or in leaps). The target group of EduLARPs is young people aged 7-19 in both formal and non-formal education. It is easier to involve students of the same age at a time. Tuning-in activities and post-game reflection are key to creating a better learning experience.

Game Creators and Resources

Currently the games are typically one-off projects led by enthusiast teachers, intended to handle current topics (e.g. the refugee crisis) or for specific situations (e.g. as a part of a museum program). Sometimes these tools are created within the framework of a youth project and made available to public, but there is no overview whether it will reach the target group. National Youth Agency has funded such projects. NGO Mondo has created games related to democracy and human rights, with support from European Parliament. NGOs Valge Karp and Karu Klubi create educational role-playing games. In Tarvastu High School role-playing is led by teachers, it is possible to choose LARP as an elective and there have been related workshops, funded from various projects.

Examples of publicly available games and domains:

- Civic education simulations: United Nations, European Parliament, International Criminal Court;
- Business and Entrepreneurship: "Entrepreneurial Village";
- History: "History: The Slave's Journey to Freedom", "Wartime Children", "Battle of Madisepäev";
- Arts: "Kalevipoeg";
- Environmental education: environmental awareness games by Peipsi Cooperation Centre;
- Museum games: Estonian Maritime Museum's role play "Back by Christmas" (museum lesson + downloadable follow-up materials).

5.3 Russia

LARP Community

One of the world's largest and diverse LARP communities exists in Russia where the total number of players is estimated to be between 50,000 and 100,000. The largestLARPs have more than 1000 players. LARP started in the 1980s, drawing from the traditional fantasy genre, but expanded quickly to other topics, including historical re-enactment (“battles and balls”). LARPs are played indoors and outdoors. Newer topics include catastrophe and post-apocalyptic survival, which are sometimes promoted as environmental awareness raising. Information about the games is disseminated through social media.

LARP as an Educational Activity

Games are often used in the educational process: for getting acquainted, for team-building, self-regulation, etc.). LARP is different from other games in that it has a game master and defines roles with specific rules and restrictions for players. Such games are rarely used in class; they are somewhat more common as extracurricular activities. Examples of LARP in classroom activities may feature history (“The Trial of Joan of Arc”), literature or foreign language. Possible benefits from LARP include practice of hands-on activities and exploration or development of group dynamics of the class.

Opportunities and Obstacles: Russian Experience

Federal Educational Standards require for arranging project activities of students. Teachers are actively looking for new innovative approaches to ensure effective learning and achievement of the required competencies by the students. Students are willing to get involved into the new forms of learning. LARP is already quite popular as a pastime activity, and there are various examples of LARP scenarios in social networks.

However, there is a lack of systematic information and methodological materials for the teachers on LARP. No generally accepted definition of LARP exists among the teachers, and so a variety of methods can be marketed to them under this title. LARP is mostly associated with history and literature, there is a lack of well-developed scenarios for different subjects and topics. The schools’ learning processes tend to be subject-centred, lesson-based and curriculum dependent; with a focus to achievement at graduation tests. There are also strict regulations for all out-of-school activities.

6 Recommendations for using EduLARP

Setting up the Game

The first and most important task of a LARP master is to define the objective of the game: entertainment, group forming, building knowledge, practicing a skill, exploring values, etc.

After defining the objective, the game creation can take place:

- What is the main idea and concept of the game?
- What is the main conflict (communities, cultural forms, social norms etc.)?
- What are the possible storylines?
- Description of the worlds/communities and their respective rules.

Integration of pedagogical elements may take place at the stage of scenario development already. Further attention will be paid to them during assignment of roles, pre-game briefing and post-game reflection.

Pre-game preparation includes distribution of roles among the players and getting the players immersed in the game. The game master will allocate leading and secondary roles, taking into consideration the characteristics of the team members. A leading role in a game may be given to someone who acts as a leader in the group. However, from a pedagogical perspective it may be worthwhile to assign complex roles or tasks to less experienced or seemingly unfit players as well. This can be a valuable learning experience to the organizers; however, they should be prepared to implement changes, should the game take an unexpected turn.

After the roles are distributed, the plot and the initial settings are introduced to the players. The general setting is information available to all players, sets the backstory and the boundaries of the world, and the actions available to players. Personal setting is the information, set of actions and knowledge about the world, game tasks and interpersonal relationships that is only available to each character themselves.

The text of the settings should be very clear. Along with the introductory text, some form of short provisional acting with a situational plot will allow people to immerse themselves in the LARP world.

The players should understand that the course of the game and its result are not predetermined, and that the fate of the fictional world can be changed through any of their activities, actions or inactions. The teacher should also understand that LARP is an act of collective creativity and its outcome can be totally unpredictable, which may be pedagogically counterintuitive.

While teachers generally feel the need to control the situation in the classroom and to monitor discipline, they should not intervene in the course of the game. The mechanics of the game should be sufficient to encourage or discourage certain behaviour.

Developing a role-play plot for children and teenagers, it is important to consider what kind of a worldview we want to introduce. For instance, in order to teach the students to search for sustainable solutions for Earth, we probably shouldn't use catastrophe scenarios where the destruction of the planet is already inevitable.

It is also very important to properly finalize the game with some exercise or a story which leads the players out of the game world and into the real world, leaving all the in-game conflicts behind.

Obstacles and Solutions: Estonia's Experience

Obstacle	Solutions
A school lesson lasts for 45 minutes while a game typically lasts for 1-2 hours.	<ul style="list-style-type: none"> ● Using two consecutive hours; ● sharing preparation, the game and follow-up discussion over several lessons, integrating subjects; ● organizing special project days.
Creating a new game requires a lot of work.	<ul style="list-style-type: none"> ● Using already existing games (a lot is available in English); ● ordering a game from a specialized partner; ● starting with a simple game and co-operative participants.
Teachers are not sure about their skills.	<ul style="list-style-type: none"> ● Teachers already have many necessary skills: active learning method implementation, reflection, group work, supporting learners. ● Drama and improvisation skills can be improved.
Students are passive and do not play along.	<ul style="list-style-type: none"> ● In LARPs, there are different roles with different level of activity. ● Engagement can be enhanced by clear instructions and safe and supportive environment. ● Most students can adapt with just a little preparation.
Students are too insecure to immerse in the game.	<ul style="list-style-type: none"> ● This applies to any learning method where the students need to leave their comfort zone. Possible problems (in-group tensions, bullying, mutual distrust, inappropriate space) need to be addressed. ● New environment, props and costumes help to create an immersive experience,
The game is too chaotic.	<ul style="list-style-type: none"> ● Unpredictability is a feature, not a bug – this is where the strength of the method lies. ● General framework and anchors in the game structure help prevent the game from getting too unfocused.
Participants learn something other than the purpose of the game.	<ul style="list-style-type: none"> ● Clearly defined goals, transparency and framing of activities help to reach the objective.

7 Three Scenarios

7.1 NOA 2424

The game will take participants 303 years into the future. The situation on Earth is poor due to climate change. Many species have already become extinct and humanity is looking for a new home on Mars. Spaceship NOA can take only a limited number of resources on board. Different stakeholder groups – food producers, natural scientists, government, corporations, cultural figures – need to agree on which species to bring. Since everyone has their own interests, desires, motives, different personal characteristics, it is not so easy to reach the common decision.

7.2 Sunpunk

The game takes place in the future. Life on Earth is only possible with orbital mirrors that reflect excessive solar radiation away from the planet. As there is too much space debris, an orbital mirror has suffered some damage. To restart it, someone must be sent to repair it, but human lives are at stake. The aim of the game is to make participants think about environmental issues as well as human relations and social inequality.

7.3 A Year Without a Summer

The game is set in the year 1816 when due to a massive eruption of Mount Tambora there was a lot of volcanic dust in the atmosphere and very little sunlight. The players are invited to explore what life was like.

The scripts of all three games have been made available on the website <http://www.ctc.ee/trukised/mangud> and their testing will continue in 2020-2021 in schools of Estonia and Pskov Oblast.

8 Acknowledgments

This report was prepared within the project “Building capacity to use role-play games in Peipsi Lake border region as a new tool for increasing the environmental awareness in education”, implemented during 2019-2020, led by Peipsi Centre for Transboundary Cooperation and financed by Nordic Council of Ministers NGO Baltic Sea Region program.

Project partners:

Peipsi Centre for Transboundary Cooperation (Estonia)

LajvVerkstaden Sverige Ekonomisk Förening (Sweden)

NGO Chudskoye Project (Lake Peipsi Project, Pskov) (Russia)

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