nyci
national youth council of ireland
COMHAIRLE NÁISIÚNTA NA NÓG

USING GAMES IN YOUTH WORK FOR DEVELOPMENT EDUCATION

A TOOLKIT

National Youth Council of Ireland

The National Youth Council of Ireland (NYCI) is the representative body for voluntary youth organisations in Ireland. We use our collective experience to act on issues that impact on young people.

This toolkit was produced through a collaborative project between NYCI's STEAM in Youth Work project, NYCI's Youth 2030 Development Education programme and Limerick Institute of Technology. It was funded mainly by the Science Foundation of Ireland with additional support from Irish Aid.

NYCI's STEAM in Youth Work project aims to support the youth work sector to use STEAM to improve the lives of young people. NYCI's Youth 2030 Development Education programme aims to support the engagement with and integration of Development Education and the Sustainable Development Goals in the youth work sector.

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SECTION 1: INTRODUCTION

1.1 Why Games?

Computer gaming is the world's fastest-growing entertainment medium and has become an integral part of global youth culture. There are over 100 million active gamers in Europe and twice that number in China. The European Commission estimates that 90% of European 11- to 14-year-olds play games online. Over 183 million Americans spend an average of 13 hours per week on their PCs, consoles and smartphones[1]. Young people are increasingly using computer games to play, to meet, to compete, to learn and to express themselves personally and creatively.

The extent to which young people play games has led to well-founded concerns about negative online behaviour, about the portrayal of women and ethnicity in games, and about addiction. As youth workers, it is important to be conscious of the dangers and challenges games present. However, for most young people, games are simply a way of having fun, playing with friends, expressing themselves and escaping into a space where they feel they have control.

1.2 Games in Youth Work

Games have long been used as a mechanism for engaging, motivating and encouraging collaboration and interaction in a youth work context. From energisers and icebreakers like Fuzzball and Pool, Scrabble and Draughts, to more purposeful games such as the Game of Life and the Trading Game, games are used to serve different purposes in a youth work context.

They can be used to get young people 'in the door', to occupy and entertain them, to reward them and perhaps to control behaviour. Games can also be used to develop and value particular skills and knowledge, whether technical, interpersonal or creative (think about Scrabble, Trivial Pursuit, Lego and Pictionary).

1 McGonigal, J (2011) *Reality is Broken : Why Games Make Us Better and How They Can Change the World.* London: Vintage Publishing.

"A GOOD GAME IS SIMPLE, CLEAR, STRAIGHT, CREATES A REFLECTIVE EXPERIENCE, IS INCLUSIVE, EVERYBODY CAN GET IT. IT SUPPORTS DEEP LEARNING AND BYPASSES THE RATIONAL."

"GAMES ARE A SAFE SPACE TO SHARE EXPERIENCES, THEY OFFER A SPACE FOR THINKING...CREATIVE THINKING."

"THROUGH THE GAME THEY EXPERIENCED THE 'SHARP-END', EVEN MOMENTARILY, AND BEGAN TO SEE SOME PEOPLE HAVE TO LIVE WITH THIS ALL THE TIME..."

Development Education and youth work practitioners in discussion, unpublished research, Paul Keating, LIT

Under the guidance of a youth worker, games can become the basis upon which relationships are built, issues discussed, emotions discovered, expressed and acted upon. They can provide a space in which young people are exposed to simulated experiences of injustice and oppression. They can help build awareness, empathy, understanding and provide the impetus to act and to contribute to changing their global world.

Games can therefore play a significant role in helping young people develop personally and in achieving the outcomes intended for youth work in relevant national policy and strategy, such as 'Better Outcomes, Brighter Futures' by the Department for Children and Youth Affairs[2].

NATIONAL OUTCOMES FOR CHILDREN AND YOUNG PEOPLE, 'BETTER OUTCOMES, BRIGHTER FUTURES'

1.3 About this Toolkit

The objective of this toolkit is to provide youth workers with an understanding of games and practical guidance on how to use them in a considered way within their practice. It was developed as part of the 'Games in Youth Work: Engaging Young People in Development Education' project. This project sought to engage young people with climate action and Development Education using games.

There are many resources available on using games-based activities in a youth work context. However, designing games can be a much more powerful experience for young people than simply playing them. The teamwork, technical and creative skills needed to design games make it a positive youth work activity.

2 Department for Children and Youth Affairs (2014) *Better Outcomes, Brighter Futures: The National Policy Framework for Children and Young People, 2014 – 2020.* Dublin: The Stationary Office.

The most profound impact relates to the level of understanding the process requires game designers to have of the issue being addressed. The stories, the achievements, the challenges, the causes and the effects of injustice on the lives of people can all be expressed and related in a game.

The toolkit introduces the concept of Development Education in section 2. This provides the context for the use of games; the issue is the starting point and provides the purpose for the use of games. If you intend to use and develop games in your practice, you will need to understand the basics of how games are structured and described. This is the same whether talking about board games or computer games and is dealt with in section 3. This toolkit makes the distinction between gamification and using games in your practice. Section 4 explains that gamification is about integrating elements of games into youth work activities (e.g. badges, leaderboards, game cards and so on). Using or making games is, however, different; the focus becomes playing the game and what can be achieved or learned through such play. Section 5 provides a step by step overview of how to design a game with a Development Education theme. The final section 6 deals specifically with computer games and how they can be used in your practice.

SECTION 2: GAMES AND DEVELOPMENT EDUCATION

2.1 Using Games in Development Education

As with youth workers, Development Education practitioners have been using games extensively since the 1970s. The Trading Game has long been one of Christian Aid's most accessed resources[3]. Role play games such as the Minorians and Majorians[4], are often used within youth work and Development Education to promote interculturalism and deliver global education.

NYCI[5], The Irish Development Education Association[6] and DevelopmentEducation.ie[7] have extensive resources providing games-based activities, icebreakers, motivators and short games to introduce development issues.

In recent years, computer games are also being used in Development Education. Games such as Papers Please and Clouds Over Sidra highlight issues of conflict and migration. Not-for-profit organisations and initiatives like Games for Good[8] and Games for Change[9] are well-established for raising and addressing social issues.

Trócaire uses and develops games such as Project Honduras and the Exploitation Game to address issues like resource exploitation and climate justice. Trócaire also encourage young people to make games about development issues through their Game Changers initiative (see Appendix 5 for further information).

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3 The Trading Game can be accessed at www.christianaid.ie/schools/trading-game

4 There are many handbooks easily available online to support youth workers and other educators to use Minorians and Majorians within their practice.

5 https://www.youth.ie

6 https://www.ideaonline.ie

7 https://developmenteducation.ie/

8 Games for Good is a US-based not-for-profit charitable organisation which raises funds and products from within the entertainment industry and donates them to youth-centric partners.

9 http://www.gamesforchange.org/

In 2017, Trócaire launched a new strategy game which educates young people in Ireland about the impacts of climate change overseas. Project Honduras[10], which won the International Educational Game Competition in 2018, is the first online Development Education game of its kind in Ireland. It is a strategy game where the primary goal is to show how important it is for communities to work together to combat climate change. Aimed at 10–14 year olds, the game is based on the real-life experiences of two young Honduran climate activists, Javier and Andrea, who featured in Trócaire's 2017 Lent campaign on climate action.

The game was designed by digital agency Eightytwenty and Trócaire in consultation with Trócaire's Honduras office. Trócaire is now exploring the possibility of a translation into Spanish to use with local communities in Honduras to support emergency preparedness.

Children and young people can play the game online on at **www.trocaire.org/education/project-honduras.**

Trócaire have also developed the following Development Education games that are ideal for a youth work setting:

1. Human Rights Defenders: In this board game, players gather evidence of the damage that big business is causing in Honduras and help local people fight for their rights.

2. The Exploitation Game: In this board game, players engage with the challenges communities and activists face when trying to protect their land and resources from an oil company[11].

2.2 Development Education

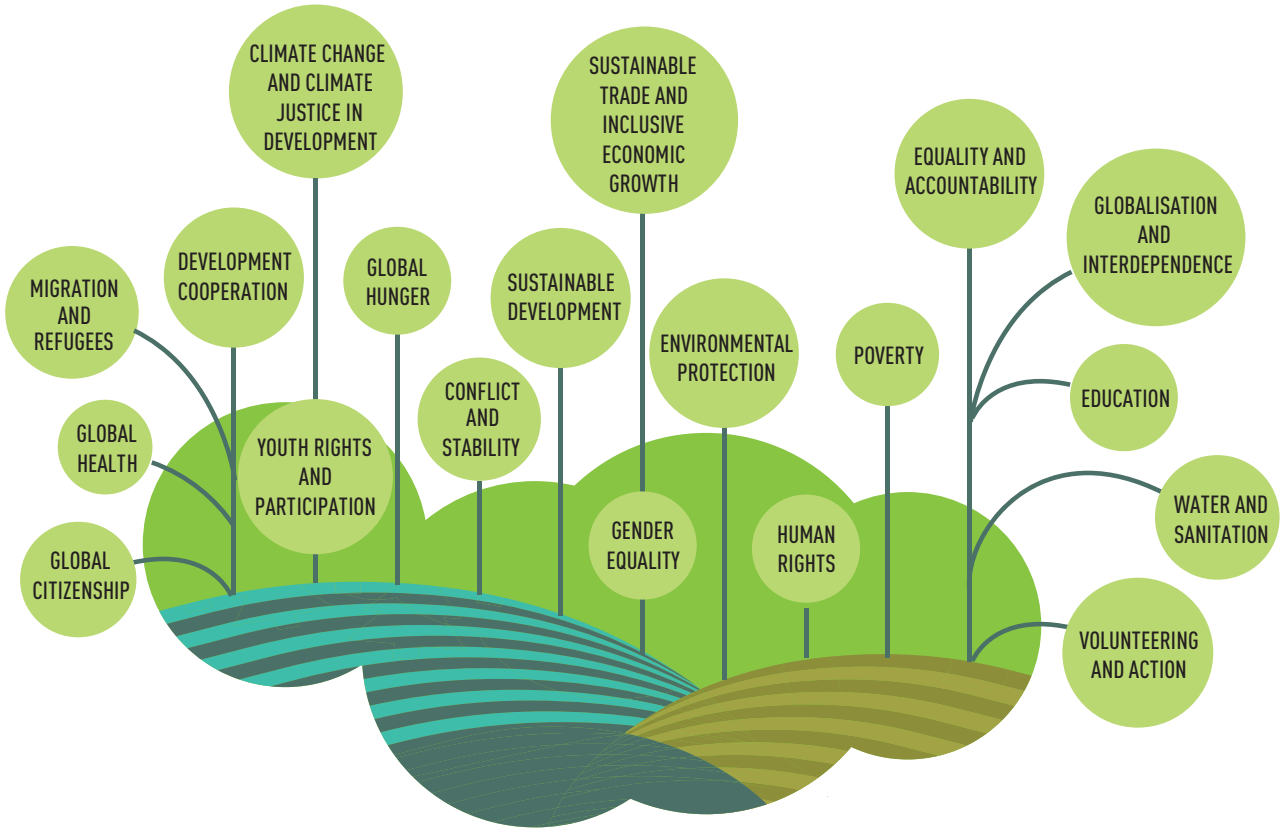
In this section, we will look at what is meant by Development Education and explore how and why games are used in this context.

The terms 'Global Citizenship Education' (GCED), 'Global Education', 'Education for Sustainable Development' (ESD) and 'Development Education' are often used interchangeably, even though they have come to mean slightly different things. The common characteristics among all definitions and approaches to Development Education are that: they look at development within a global context; there is an emphasis on critical reflection (how global justice issues interlink with their everyday lives); and within the Development Education process, there is a call to action, through games.

NYCI encourages youth workers to adopt a Global Youth Work and Development Education approach, which is based on the principles of youth work/non-formal education. Global Youth Work and Development Education explores global justice issues with young people (such as the causes and effects of poverty, inequality, hunger, feminism, injustice, racism, colonialism, militarism, migration, the Sustainable Development Goals and climate change) through non-formal education.

10 Project Honduras can be played at https://www.trocaire.org/education/project-honduras.

11 Human Rights Defenders can be downloaded at https://www.trocaire.org/education/gamechangers; Exploitation board game can be downloaded at https://www.trocaire.org/education/gamechangers.



Themes and Issues explored in Global Youth Work and Development Education
(Source: Irish Aid Development Education Strategy, 2017-2023, p.7)

Global Youth Work and Development Education explores the role young people have in their local community as well as their connection to the broader, globalised world. It recognises that globalisation increasingly influences young people's lives and environments (including the food they eat, the clothes they wear, the air they breathe, the gadgets they use and the political systems in which they live), creating new opportunities, challenges and concerns.

On a daily basis, young people's lives are shaped by what Dr Momodou Sallah says are the five faces of globalisation[12]:

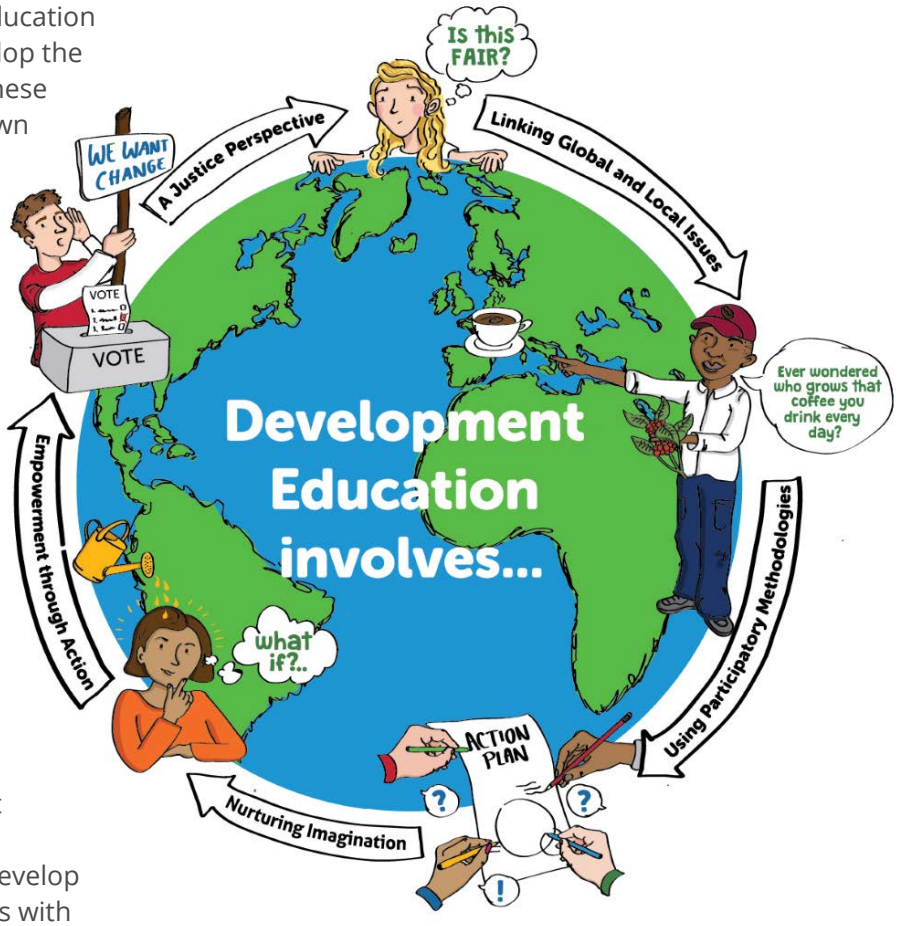
1. **Economic:** Trade, economics, transnational corporations
2. **Environmental:** Carbon emissions, ozone layer, rain forest, water, global warming, flooding, quality of air, etc.
3. **Cultural:** People's way of life, food, beauty and body image, music, media, internet, etc.
4. **Technological:** all means of communication that brings the world together – internet, mobile phones, newspapers, magazines, air travel, etc.
5. **Political:** Democracy, right and wrong, world views, world order, what is and what is not human rights abuse, UN, etc.

12 Sallah, M (2014) Global Youth Work. *Provoking consciousness and taking action.* Russell House Publishing.

Global Youth Work and Development Education aims to empower young people to develop the knowledge and skills needed to tackle these global justice issues and explore their own values, beliefs and connections with the wider world. It empowers young people to engage in individual and/or collective action to bring about a positive difference in the world as active global citizens.

Global Youth Work and Development Education supports greater knowledge and understanding of the rapidly changing, interdependent and unequal world in which we live. It supports young people and the youth work sector to critically explore how global justice issues interlink with their everyday lives.

NYCI believes that youth work at its best is rooted in a developmental approach where young people are supported to develop the competences to face their challenges with resilience and to strive towards their potential with confidence. The role of youth workers and youth leaders is central to young people in youth work.



(Source: National Youth Council of Ireland)

Through the Youth 2030 Programme, NYCI is working to support young people, youth workers/leaders, academics and policy makers to engage more with Global Youth Work and Development Education[13].

Development Education in Youth Work aims to support young people to increase their knowledge, understanding and awareness of the interdependent and unequal world in which we live, through a process of interactive learning, debate, action and reflection. Development Education challenges perceptions of the world and encourages young people to think critically and act consciously for a more just and equal society at a personal, local, national and global level. This can be done by adopting a Global Youth Work approach.

Youth 2030 Programme, National Youth Council of Ireland, 2020

13 You can find out more about NYCI's Global Youth Work and Development Education programme at https://www.youth.ie/programmes/development-education/.

2.3 Values at Play

In using games in Development Education, as a practitioner, it is important that you begin by reflecting on your own values, views and feelings about development issues and how you think they should be responded to. Where do you stand on issues relating to climate change, injustice and the violation of human rights? This seems like a very serious starting point in a toolkit on the use of games. However, while the games themselves might be fun, creative and exciting, their purpose within a youth work and Development Education context is to draw attention to serious issues, to engage players emotionally with the people affected by these issues, and to move players to action.

Values in games

"GAMES ARE SYMBOLIC OF MANY DIFFERENT THINGS - VALUES, COURAGE, RISK TAKING... GETTING IT WRONG."

"ONE THING ABOUT THE SKILLS OF THE DESIGNER... THEY WILL BAKE THEIR VALUES INTO THE GAME."

"IT IS FUNNY HOW COMPETITIVE PEOPLE CAN GET IN GAMES. DEVELOPMENT EDUCATION IS VALUES BASED AND IF THE GAME IS VERY COMPETITIVE, IT CAN UNDERMINE SOME OF THESE VALUES SUCH AS SOLIDARITY."

Development Education and youth work practitioners in discussion, unpublished research, Paul Keating, LIT

Paulo Freire (1921 – 1997), the Brazilian educationalist, has left a significant mark on thinking about progressive practice in youth work and Development Education. For Freire, the educational process is never neutral – people can either be passive recipients of knowledge or they can become active participants in change. Freirean training, or 'Critical Pedagogy', is typically undertaken in small groups with lively, inclusive and respectful discussion. It involves a cycle of dialogue, reflection and action which addresses issues of common concern within a community. This process can address local or global issues but must be firmly rooted in a shared commitment to justice and equality.

CRITICAL PEDAGOGY – PAULO FREIRE

NO EDUCATION IS POLITICALLY NEUTRAL

CRITICAL PEDAGOGY SHOULD AWAKEN PEOPLE'S CONSCIOUSNESS ABOUT OPPRESSION IN THEIR LIVES, IN THEIR COMMUNITIES, IN THEIR COUNTRIES AND AROUND THE WORLD

CONVERSATIONS BUILT ON RESPECT, TRUST AND LOVE ARE FACILITATED IN CRITICAL PEDAGOGY

CRITICAL PEDAGOGY ACTIVELY ENCOURAGES CONSIDERED AND EFFECTIVE ACTION

CRITICAL PEDAGOGY PROVIDES A MEANS TO MOBILISE PEOPLE TO CHALLENGE OPPRESSION

Paulo Freire (Photo: Paulica Santos, flickr)

The techniques Freire developed and presented in his book, *Pedagogy of the Oppressed* (1972), encourage the use of creative media to present, explore and analyse issues of justice and equality. Since the 1960s, Freirean practitioners have been using dance, photography, video, poetry and other visual and performance arts, crafts and digital media to represent, analyse and respond to oppression in their lives and those of others.

One of Freire's principal collaborators, Augusto Boal, wrote *Games for Actors and Non Actors* (Boal, 2002), as a guide to using theatrical techniques to encourage social mobilisation and change. Hope and Timmel's three handbooks for community educators, *Training for Transformation* (based on Freire's work), could be described as playbooks for social change in three areas – personal, group and societal. Partners *Companion to Training for Transformation* (2001) and McNeill's *Connecting Communities* (2006) are other examples of where games are used in the application of Freirean theory.

The use of games is therefore well-established in youth and community work and Development Education practice. What is new in this toolkit are the possibilities presented by using games as a Development Education process.

SECTION 3:
INTRODUCING GAMES

3.1 What is a Game?

Before you begin to design and develop games with young people, or use aspects of games within your practice, it is important to think about what we mean by games and how they work. As a player, you are absorbed in the game and don't need to know how to describe the experience. We know the games we enjoy and the ones we don't. We can distinguish the simple games from complex ones. We understand the difference between card games, board games, computer games and field sports but we know they all share common characteristics as games. Most importantly we know how it feels to play a game and to experience the sense of immersion, joy and frustration that games can evoke.

Developmental psychologists and educators have been studying the processes involved in play and games for decades, and the process of game design itself has become a substantial field of research in recent years. There are degrees and masters programmes here in Ireland and across the world, training people to become game designers. This section will provide you with some of the fundamental concepts used in game design, outline how games work and describe player experiences. This will help you learn how to use certain elements of games within your practice, design games with young people and also provide you with an understanding of how and why people play the way they do.

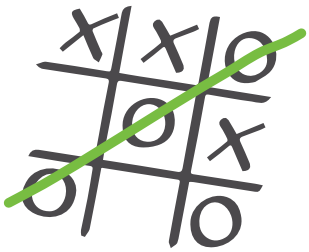
"A game is a system in which players engage in an artificial conflict defined by rules which result in quantifiable outcomes"

Salen, K. and Zimmerman, E. (2003) *Rules of Play. Game Design Fundamentals.* The MIT Press, 2003.

There are several different ways to look at games and to explore the various qualities which make a game, a game. Jane McGonigal identifies four characteristics shared by games:

- They have a clearly defined goal.
- They have rules guiding the players' actions.
- There is a feedback system whereby players know how they are doing.
- Participation in the game is voluntary.

If you think of any game, Hurling, Monopoly, Mario, Noughts and Crosses, they all have a goal (e.g. to get the first unbroken row of either noughts or crosses), rules (e.g. single consecutive turn-taking) and feedback (e.g. the game grid itself). You cannot be forced to play a game against your will. If you are, it is no longer a game. It is interesting to think about the synergies between the characteristics of games and those of youth work itself. As defined by NYCI, 'Youth work is above all an educational and developmental process, based on young people's active and voluntary participation and commitment' (www.youth.ie).



3.2 How People Play

People draw fun from different things in games – the narratives, dynamics or aesthetics. Some people love the competitiveness; others revel in the skills they develop. There are players who enjoy team-based rather than solitary games. Some people like accumulating resources while others get their kicks from being disruptive within the game. All of these are ways in which people experience fun in games and they can coexist. The aspect of a game which one person considers to be fun may leave another person feeling unsettled. This can cause conflict, and perhaps this conflict is exactly the dynamic you want within a game. The team games we enjoy playing together are ones which have space for different player types in a way that energises and moves the game forward rather than stifles it.

Playing games can therefore be a forum of expression for young people, can provide a space for inclusion and an opportunity to explore diversity and to do so while feeling safe and having fun.

"THERE NEEDS TO BE A FLOW BETWEEN THE EXPERIENCE OF THE GAME, THE REFLECTION, EXPLORATION, LEADING TO THE CORE LEARNING AND ACTION..."

"I LOVE THE IDEA OF HOSTING CONVERSATIONS IN GAMES."

Development Education and youth work practitioners in discussion, unpublished research, Paul Keating, LIT

Flow

Flow in games relates to the balance between challenge and skill. So, if at a particular stage in the game there is too much challenge, the unskilled player becomes disillusioned and might quit. Players with more skill than the game demands tend to become bored and may also quit. During a good game therefore, as the player develops their skills, the game gradually gets more challenging. In some games, this experience of flow comes from competing against other players who are at a similar, but perhaps, slightly higher competitive level than yourself.

Games are only really engaging for people if they feel that they are continually becoming better as individuals or as a team. It is this quality of flow in games which makes them compelling as a mechanism for self-motivated learning and skill development.

Agency in Games

There is also a quality in games whereby the player has control over how they play, giving them a sense of agency. In games, there are consequences to action and inaction. In team-based or collaborative games, poor decisions or performance on your part can undermine the progress of the team. Conversely, you can be the player that steps forward to score the vital goal, beat the boss or solve the puzzle. Because of the agency inherent in such games, players relate emotionally to what happens. It is this emotional engagement which makes games such a compelling medium.

The empowerment of young people to feel and take control in their lives is a core objective in youth work. For many young people, games are one of the few places where they feel such control, and can therefore be a helpful tool for use in youth work.

The Magic Circle

In reflecting on the way people play and the nature of competition and conflict in games, there is a concept called the Magic Circle. This is not a physical circle, even though it may have physical boundaries such as a pitch, a playing board or a computer server. Rather, the Magic Circle is a social and psychological space constructed when players agree to enter into a game.

We are given permission by the group to behave differently, to share things we may not otherwise share and to take on roles which are literally 'out of character'. This may lead to us seeing friends, colleagues and young people with whom we work in a different light when they are playing, and of course they may also see youth workers differently.

While the Magic Circle gives certain licence for escapism, we do bring our moods, our energy and our distractions into the game. We cannot fully ignore the relationships which exist outside the game. You are still the youth worker and young people may moderate their game-play to reflect that outside relationship, to your advantage or perhaps not. A player may carry their vulnerabilities into the game, and will soon return to the context in which those vulnerabilities are real. Behaviour in games may exacerbate or alleviate such vulnerabilities, or it may temporarily provide some escape.

The idea of the Magic Circle as a consensual safe space in which we renegotiate relationships, behavioural norms and perhaps even identities, is useful. It can resonate with the spaces we want to create in youth work. Within games it is often the young people who are the experts – the more knowledgeable, skilled and powerful players. We can only create a Magic Circle with their consent and it is with their consent, through dialogue and our actions in the game, that we can establish norms and conventions that align with the values of youth work and Development Education.

3.3 Game Elements

For the purposes of analysing or designing games, you can break games into four different elements: the narrative, mechanic, dynamic and aesthetic.

- The narrative is the story of the game. This is what draws people in, what makes them care and what makes them choose to believe in the game. The story of the game is presented graphically or in words – you are a property tycoon represented by a top hat, a gun-toting banana dropped onto the island from a hot air balloon or a strategist in charge of an army of chess pieces. A good narrative is key and gives an opportunity for the story-teller in a group to shine.

- A game's mechanic defines its rules – a roll of the dice, the payment of specific rents, the pawn moves forward one square, shooting, running and hiding, etc. A game's mechanic needs a logical approach. If designing games with groups of young people, it helps if they are familiar with the mechanics of existing, well-known games (e.g. Monopoly or Snakes and Ladders).

- The game's dynamic describes the action of the game – a race to secure a particular row of property or the effort to avoid going to jail in Monopoly, to force your opponent to defend their king in chess, to build a protective tower in Fortnite. This element in games design requires some strategic thinking – 'if we do this, how will it affect that?' It also takes some negotiation and discussion within the games design team to anticipate how such changes will play out in the game.

- The game's aesthetics are the emotional response the game elicits from the players – excitement on getting off to a good start, relief at rolling the dice and not landing at the hotel on Shrewsbury Road, the panic of trying to escape an attack, the disguised emotion which is part of the game of chess, etc. This is often where you start; we want a game that creates feelings of empathy, anger, agency, etc. It can be difficult to achieve, requires emotional intelligence to do well and is extremely rewarding when it works out.

Simple games tend to have a very straightforward mechanic and dynamic. In Snakes and Ladders, the rules and how they are enacted are the same whether you are starting out or approaching the end of the game. In strategy games like Monopoly, new and more complex rules come into play as the game progresses.

SECTION 4:
USING GAMIFICATION

4.1 Introducing Gamification

Gamification is a concept which is increasingly becoming part of our everyday lives. Most of us may not be able to define it, but we will have experienced it, probably several times every single day. The apps on your phone use gamification to keep you hooked – the 'ping' of the notifications, the points rewarded for using the app and sharing it with friends, etc. But gamification reaches far beyond the phone. Supermarkets, petrol filling stations, coffee shops and so on, have well-established rewards systems that encourage us to keep track of our progress in securing free gifts or price reductions.

Whether they are aware of it or not, youth workers and educators use gamification extensively. They make a game of something which needs to be done or demonstrated. They keep young people engaged and motivated using stickers and rewards. They integrate quizzes, races and other competitions into their activities. In this section, we will look at how and why such approaches work so well, and introduce some new gamification techniques that can be tried.

> *Gamification is the application of typical elements of game playing to other areas of activity. These can be in solving problems, in developing teamwork or in motivating people to complete tasks and develop new skills. Gamification does not turn activities into games but rather uses parts of a game to make activities more interesting and fun.*

4.2 Gamification and Motivation

Gamification is used extensively because it does work. It increases individuals' motivation to engage with issues, products and learning experiences. Such motivation can be either intrinsic or extrinsic.

- Intrinsic motivation occurs when an individual participates simply because they are enjoying the activity. Intrinsic motivation is voluntary and is not dependent on external rewards.

- Extrinsic motivation involves some alternate or external goal that individuals are trying to reach. For instance, an individual is extrinsically motivated to complete a task when they want to receive a reward or prize.

Understanding extrinsic and intrinsic motivations is important in developing effective gamified activities and applications in youth work. Extrinsic motivations are good for getting young people interested in a new idea or topic, whereas intrinsic motivation is better for long-term engagement. Youth workers and educators use gamification strategies almost without thinking about it – races to get young people to complete tasks, leader boards for achieving particular goals, rewards for this, points for doing that in a particular way, and so on.

Most youth workers limit their use of gamification to certain mechanics, such as badges and leader boards. However, it is important to be aware of the dynamic you are looking to achieve through the use of these mechanics. Perhaps it is to encourage active participation and co-operation, to give feedback or to create a sense of challenge. You might well be looking to achieve a number of different dynamics. Badges and stickers can be helpful in encouraging participation, while leader boards can create a competitive dynamic. If you are considering more complex use of gamification it is also worth considering whether to include a narrative, a story or progression elements in addition to the basic mechanics.

Example: if you are bringing a group of young people together in a workshop for the first time, you might break them into teams to compete in a treasure hunt made up of a series of puzzles. It might only be possible to complete a puzzle if the team collaborates. The puzzles could have a significance to the subject of the workshop and each round should use a different type of puzzle (such as a large jigsaw, a quiz or Lego assembly). Ratchet-up the tension with a leader board or some commentary and add a storyline that relates to the subject of the workshop – about climate activists, superheroes or youth workers all trying to prevent a disaster.

Encouraging Curiosity: Curiosity can encourage young people's engagement by stimulating their sense of wonder. Curiosity will drive young people to want to know the answer to a question, solve a mystery or find out how to do something. This element can help drive intrinsic motivations by sparking their curiosity to engage with something new.

Sparking Imagination: Create an interesting story attached to an activity and build in a process of revelation – stopping a zombie apocalypse is always a good one.

Tracking Progress and Providing Feedback: Tracking progress can show young people how far they have come in their learning or towards achieving a particular goal. Youth workers can keep track of accomplishments and visually present them, which gives young people something to feel proud of. This can be done using badges, stickers and gamecards: It is advisable to customise your own badges rather than buy stickers sheets as these can feel too childish or schoolish.

Creating a Sense of Time Pressure, Urgency and Even Panic: Time pressure can help make an activity more fun by giving young people an objective. This can encourage them to focus on the activity at hand and make sure they get the project done in the time allotted. If young people are given unlimited time to work on a project, they are likely to take all the time and some may get distracted and bored. Using giant egg-timers or ticking timers are a great way of creating urgency.

Enhancing Competitiveness: Competition can make activities more fun and social. Young people are motivated to complete tasks before or better than their peers. This element can be used to make a task more enjoyable, but could alienate some young people who are not as skillful or competitive. Therefore, competition should not be used all the time, or should be balanced to put young people on an equal playing field. For example, team-based competition can balance out skill levels. Including a variety of individual and team competitions can help make sure you are responding to everyone's preferred ways to play games.

Encouraging Exploration and Adventure: Exploration is a good way to motivate young people with a sense of fun. This element allows young people to explore a certain topic or subject matter. Exploration could be added into a youth work activity through treasure hunts or field trips. This element gives young people some freedom to engage their own curiosity. Treasure hunts, field trips and scavenger hunts are ways of encouraging this dynamic. Geocaching[14] is a great outdoor activity in which participants use a global positioning system (e.g. on their smartphones) or other navigational techniques to hide and seek containers, called 'geocaches', at certain coordinates. Be creative and adapt existing resources to make them relevant to your youth work or Development Education project.

Enhancing Teamwork: Team-based competition can help with balancing skill levels, promoting collaboration and building teamwork skills. Teams can encourage young people to help each other learn, rather than independently compete against each other. To encourage collaboration within teams, young people can be assigned specialised roles to make each member integral to reaching their objectives. In building teams, you could establish guilds, teams and roles. Ideally, time should be given for the team to develop a name and identity and make themselves distinguishable, for example by making team armbands, hats or badges.

14 A simple internet search generates lots of useful Geocaching resources that could be used in youth work activities.

Sharing Knowledge: Sharing knowledge gives young people an outlet to share what they know and helps them learn from one another. Many young people enjoy and are motivated by helping others. Young people should be given a chance to answer their peers' questions in the group.

Group Problem Solving: One of the good things about using games and gamification is that there can be a range of skills and abilities needed to solve problems or complete tasks – artistic, general knowledge, sporting, logical, interpersonal, etc. Tasks can be set to value skills which are often overlooked and may give some players an advantage – for example, knitting, maths or whistling.

Creating Challenges: Challenges motivate young people to apply their knowledge by encouraging them to complete objectives even when they experience difficulty meeting their goals. Challenges should not be too difficult or too easy. If challenges are too difficult young people are likely to feel defeated, but if they are too easy, they will get bored. While finding that balance you can increase difficulty, reduce time or add new elements: if things are going well it is good to be disruptive in activities or to change the rules. The most common response is, 'that isn't fair!', which gives an opportunity to discuss fairness and justice.

Creating a Feeling of Ownership: This element gives young people some freedom to make customisations to their projects or activities. Customisation allows them to have some originality and personalise their projects and experiences.
This ownership can be developed by using customised trading cards, badges, rewards. Again there is no shortage of commercial websites where you can design and print such cards. However, you can also buy blank cards in online shops or art/games suppliers and get the young people to make them themselves.

Designing an Avatar: It can be interesting to get participants to design their avatar with a superhero, sports or game character theme to it. There are free websites you can access help you do this.

Learning by Collecting and Trading: Collecting and trading objects can be integrated with youth work activities to make them more entertaining. For instance, to learn about other countries young people could be asked to collect and trade cities based on particular characteristics. This element could be applied in many different ways to encourage young people to work towards goals.

Providing a Sense of Completion: Rewards extrinsically motivate young people to participate in the group. Rewards can encourage them to get involved in an activity but should not always be relied on to motivate young people to learn or change their behaviour. Extrinsic rewards can discourage voluntary learning if overused. This means if young people expect to receive a reward each time they participate, they will not want to learn without one.

Engagement Over a Prolonged Period of Time: Leaderboards, which visually display progress on a particular activity, can motivate young people to perform or behave differently in the group. Physical or digital leaderboards can be used. If a player or team is too far down the leaderboard, it can be demotivating. It can be a good idea to split the leaderboard into 'divisions' half-way through a competition. The first group is put in division blue, the second group is put in division red, the third in division green and so on. This approach means that everybody still has something to play for.

Participation in Ongoing Decision Making: Voting on what to do in the group gives young people a sense of choice in decisions or changes being made. Young people could vote on what activity the group will undertake or the destination for a trip. This element will help to engage players who like influencing changes. Voting counters, cards or flags can be used. So, for example, if you are playing Monopoly as a team and there is disagreement about whether to buy a property or not, members could cast a vote. Perhaps each player could have five votes to cast throughout the game so that they would need to be strategic about how they use their votes.

Encouraging Creative Thinking: Mix things up by allowing young people to innovate and think outside the box. This will give them a chance to challenge designs and build new ideas. An innovative platform allows young people with a disruptive player type to take control over and develop new ways of doing things. This about how you can change the space, move activities and games online, move outside or use music. Taking Cluedo, for example, why not suggest running it around town using different public buildings as the various rooms? 'Learn more about 'player types' at https://www.interaction-design.org/literature/article/bartle-s-player-types-for-gamification.

4.3 Designing and Using a Game Card

One way to use gamification to keep people engaged during a workshop is to develop and customise a game card. This card is a record of progress and achievement during the workshop and is fun to fill out and share.

Designing a Game Card

The game card should have a consistent narrative or theme which may or may not have an association with the workshop. So it can be about climate, superheroes, cultures of the world, plants, etc. There are four sections on the card – the player, the workshop levels, achievement and feedback.

The Player Section

Your avatar is an opportunity for the participant to introduce themselves to the group in a fun and engaging way. If you are following a botanical theme, the participant's botanical name can become the combination of a flower and a tree, Daisy-Ash, Rosie-Oak, Dandelion-Beech, etc. They might pick a vegetable that reflects their personality and draw a face on it as their avatar (it is a good idea to have stickers of a range of vegetables for those not confident drawing).

It is also good to have one activity which requires them to share a story: 'the scariest plant I have ever seen'. They then share these in small groups, getting to know each other in an engaging and creative way.

Workshop levels: A sticker is given to participants as each part of the workshop is completed. These stickers should be consistent with your theme. It is best to avoid the shop-bought achievement stickers. Young people may be familiar with these and associate them with school. Make up the stickers yourself using free images from the internet. E.g. use fantasy-type stickers and print them out on labels.

Achievement stickers: The players are also awarded stickers for contributing during the workshop. You can choose the categories of achievement: 'Speaking on behalf of the Group', 'Using Humour', 'Team Player', etc. Keep it to between four and six categories and you can give sets of stickers to each team so that they can distribute them to members themselves.

Feedback: Finally the last section is to get the participants to recap on the workshop and to comment on how they found the experience. The cards are gathered up at the end, the feedback noted and they are stamped and returned in a ceremony as a keepsake for the participants. This section can also be replaced with one providing a map of the venue and a puzzle for them to solve.

4.4 Top Trumps

Another interesting way to gamify a workshop experience is to get participants to create their own Top Trumps cards. Top Trumps is a card game where a series of characteristics are given values and players compete against each other according to who has the highest score against a particular characteristic.

For example, you can ask participants to give themselves scores out of 100 for:

- Creativity
- Technology
- Storytelling
- Problem-solving
- Teamwork

They can also create an avatar, superpower and a nickname for themselves. You can produce these cards yourselves or have them printed professionally, and there are many online services for this.

SECTION 5: GAME DESIGN WORKSHOPS

Designing games is an exciting, multi-faceted and time-consuming process. Designers can work alone, but this process works best with groups of young people. Within the group, there will be the range of skills, understanding and experiences, both of games and Development Education, which will be a real asset in making the game. Those who participate will:

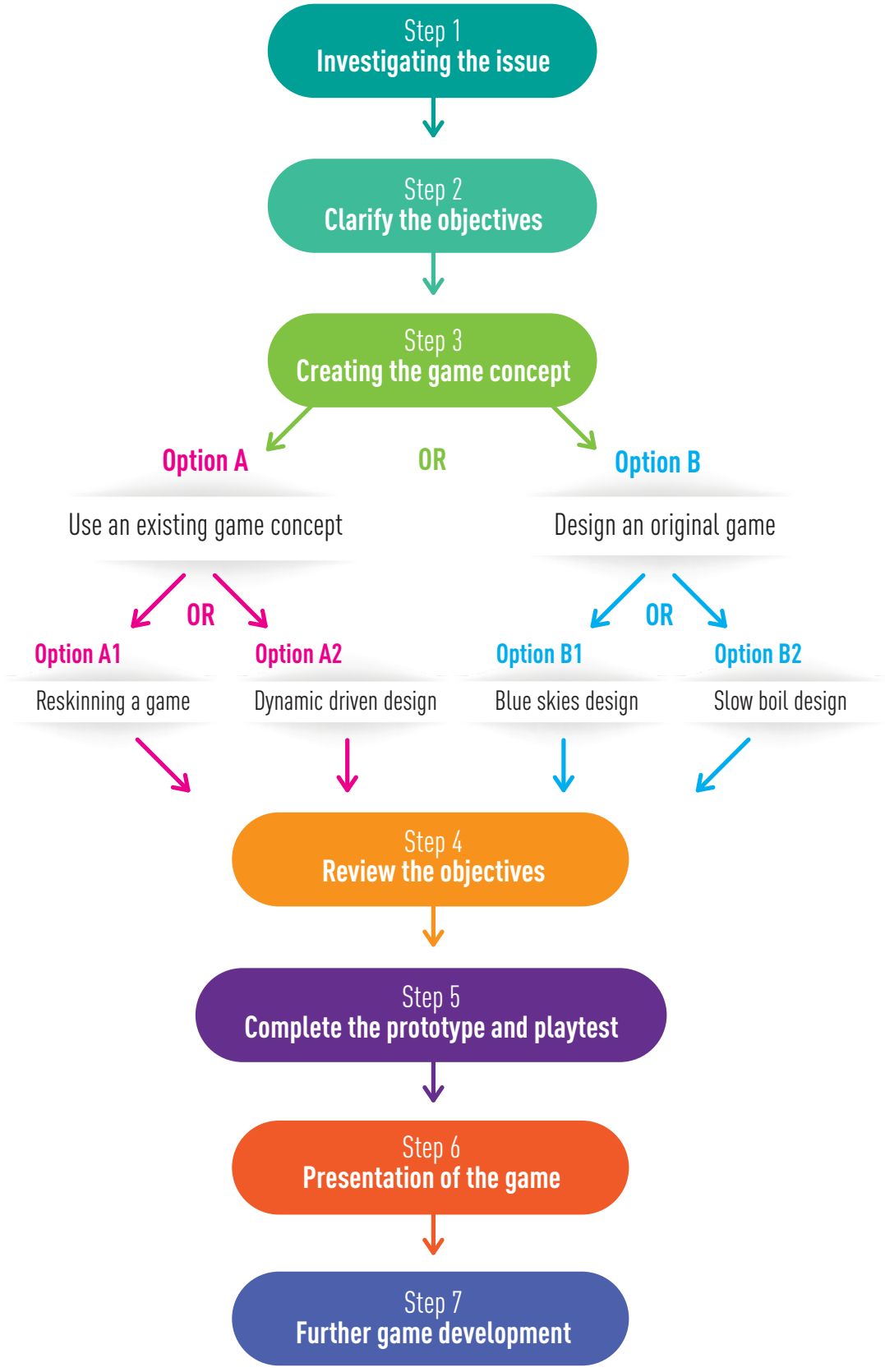
- engage meaningfully with a Development Education issue
- gain a positive experience of teamwork
- gain an understanding of game design and develop a game

The starting point for producing Development Education games must always be the issue to be addressed. You can start with a broad theme such as climate change, poverty or migration. As projects develop, it is perhaps best to narrow things down to a more specific issue, for example, 'Drought in northern Kenya', 'Biodiversity In the Great Barrier Reef' or 'Glaciers melting in Antarctica'.

In this section we will look at the steps you can go through to create a Development Education game. The first two steps are the same regardless of what game design approach you take. These steps are really about clarifying what the game is setting out to achieve.

It is the third step in the process where you need to decide on the approach to take with the development of your game concept – will you base your game on existing game concepts or make a totally original game? The former is the most usual approach to take for novice designers, while the latter is better left to those with more experience in designing and playing games.

If you are going to use existing game ideas, there are essentially two options – 'reskinning' an existing game, or using a specific game dynamic you feel will work well for your objectives. Reskinning is usually more straightforward, young people usually get more invested in a game concept over which they have more creative control, as they engage in 'Dynamic Driven Design'. Similarly, there are two approaches to designing an original game concept – 'Blue Skies', where they brainstorm ideas, or a 'Slow Boil' where their ideas develop over longer periods of time. Once the concept has been developed the rest of the process from steps four to seven (see below) are the same.


Step 1
Investigating the issue
Step 2
Clarify the objectives
Step 3
Creating the game concept
Option A
OR
Option B
Use an existing game concept
Design an original game
OR
OR
Option A1
Option A2
Option B1
Option B2
Reskinning a game
Dynamic driven design
Blue skies design
Slow boil design
Step 4
Review the objectives
Step 5
Complete the prototype and playtest
Step 6
Presentation of the game
Step 7
Further game development

STEP 1
INVESTIGATING THE ISSUE

It is important that the issue selected resonates in the lives of young people but is also far enough away that it is not their lived experience. Racism in Ireland, for example, may be too immediate for a mixed-race group of young people, but could be raised in their exploration of the Civil Rights Movement in the USA. This is not to avoid the issue, but rather to give enough psychological distance to enable it to be discussed constructively.

If you are going to develop several games with a number of groups, it is advisable to stick with the same theme (say climate change) but select different issues (e.g. drought in Kenya, flooding in the Marshall Islands, forest fires in Brazil). Once the issue has been selected by the group they need to research it.

Different members of the team pursue different avenues of investigation and come back to share what they have learned. You could invite people with expertise relating to the themes being explored to come to speak with the group. It is also good for young people to see the issue from the perspective of those most affected, for example, through short documentaries, testimonies, YouTube videos, Development Education resources, etc.

It may also be helpful to give young people headings for their research, for example, 'people', 'places' and 'problems'. They can then explore the science, statistics, stories, politics and solutions relating to the issue.

STEP 2
CLARIFY THE OBJECTIVES

Once the groups have developed a degree of understanding of the theme to be explored, they can proceed to the game design process. To begin with, they need clarity about the objectives of the game. In identifying the objectives, you should ask yourself about what you are hoping to achieve and whether games are the most appropriate method to use. The template included in Appendix 1 can be used. Thinking through the following will help:

- The players: Who is this game aimed at? What age are they? Do they know each other? Are they used to playing games? Do they share the same physical space? Are there issues of inclusion and diversity among the players? How are their literacy, numeracy, language or physical dexterity skills? All of these factors will help in framing the type of game you can develop.

- The play context: What is the reach of the game? Is it intended to be a once-off game, or do you want people to return to play the game again and again? Will the game be limited to a particular context, for example, your youth club, any youth club or maybe any educational setting?

- The values: What are the values underpinning the game? How might the game portray gender, ethnicity, age or ability? How will you portray the Global South, the natural world and consumerism? You can decide to ignore these issues, to be neutral on them or, in line with youth work and Development Education values, you can be proactive in challenging stereotypes and conventional thinking. Whichever stance you take, it is important to consider and compile your values at the offset.

- The outcomes: What is the outcome you want for the players? Is the game simply to entertain, in which case it is not a Development Education game. Are you looking to raise awareness about an issue? What specific information are you looking to relay? If you want to move deeper and the intention is to increase players' understanding, then this will require discussion, reflection and deeper engagement with the issues as part of a debriefing during or after the game. Perhaps you want the game experience to provoke action? If this is the case, then you need to be clear about the nature of the action you want the game to encourage. Is it to be about fundraising, about engagement with a particular campaign, or about initiating a local project? Such predetermined outcomes are common in Development Education. However, it might be worth considering using the creative and collaborative space that the game provides to enable young people to develop their own responses to the issue being addressed.

- The experience: What is the experience you want the game to create for players? This is a key question and relates to the aesthetics of the game. The game, as with any game, should be fun. Empathy is a response games are often used to evoke. Anger, frustration, fear, joy, agency, guilt, isolation, inclusion, victory, defeat, collaboration and competition are also often evoked. Emotional engagement is a key characteristic in games and an important consideration in game design and development. Most card games, board games and individual computer games address emotional engagement in a controlled and limited way. Team games, roleplay and simulation games, however, are often designed to be more emotionally engaging. While you can anticipate that a particular game mechanic might elicit a certain emotional response in players, it is difficult to know the extent to which it will affect players and how they will respond. Depending on the people who are playing the game and the context in which it is being played, the same mechanic may elicit very different emotional responses in different people. This will vary with their personalities, player types, vulnerabilities, life experiences and moods and will depend on the underlying relationships which the players bring, and act out, in the game. Suffice it to say, if you are looking to raise emotions you should do so in a safe, purposeful, age-appropriate way.

STEP 3
CREATING THE GAME CONCEPT

Once these objectives are clearly understood, the team should commit them to paper by filling out the template in Appendix 1. At this point, they should share their objectives and reflect on whether these can be achieved using a game or if some other means would work better. If they are still committed to designing a game, they can move on to step three – the development of their game concept. This step involves coming up with the idea behind the game: What type of game will it be? Will old or new game ideas be used? Will it mix and match old and new game ideas?

In coming up with the core concept for a game there are essentially two places to start from:

A. An existing game or game dynamic, which can be applied to the theme being explored

B. Create a game concept from scratch

Option A Using an Existing Game Concept

It is best to take this approach if you are new to game design or if you are not very familiar with a range of games. This is also a good process when working with a group as it brings structure and minimises the amount of uncertainty associated with the initial creative process. If you decide on this approach there are two places to start – with a particular game or with a particular dynamic. Starting with an existing game is called 'reskinning' a game. If you have more time and a large group (12 to 20 young people) it can be fun to run a half-day workshop on creating a game using an existing game dynamic.

Option A1 Reskinning A Game

Reskinning is probably the most straightforward approach to designing games and a good starting point for those who are new to games in youth work and Development Education. You start with a game you know and change it, one mechanic, dynamic or aesthetic at a time.

Selecting the Game
Once you have clarified the objectives for your game, you can begin by brainstorming to identify an existing game which would help you address those objectives. You might take Snakes and Ladders as a starting point or Top Trumps, Monopoly, Simon Says, Soccer, Fortnite or The Game of Life. You should be clear on why you picked that particular game and how it helps in addressing your objectives. If you are designing in groups everybody should be familiar with the chosen game. Perhaps you can play it again in preparation for the next stage.

Changing the Narrative
You can then brainstorm a new story for the game around the issue you want to address. What do the playing pieces represent? What does the board represent? What are the good things and bad things which can happen in the game? What is the win state in the game? And what is the mechanic by which you progress and take turns?

So, for example, Snakes and Ladders can become a migrant family's journey to Europe with the playing pieces as family members, the board as a map, the snakes as obstacles and the ladders as assistance to migrants. The objective is to get all the family to safety by rolling the dice in turns.

Changing the Mechanics
You can then begin to introduce new mechanics to encourage new dynamics. Make it a collaborative rather than a competitive game, so the objective in Snakes and Ladders can be that all three members of one team get home, rather than simply beating the other players in the race to the end. You can give people choices or resources when they land on a positive space, so if they land on a ladder they pay €100 and climb it, or they may choose not to. In this case, you will need to distribute money to players and to develop a mechanic determining how they spend and replenish it.

You can change the dice throw as the mechanic for moving forward to a skills-based mechanic – e.g. a dartboard, skittles or a quiz. This takes away the random basis for advancement and further introduces agency and player control. You can give different players different numbered dice, introducing an element of weighting for and against certain players or teams.

Changing the Layout
At this point, you have changed the game to have a new story and introduced new mechanics. It is most likely still recognisable as the original, so you can change the look and feel of the game. Consider changing the shape and design of the board, remember, in Snakes and Ladders the squares 1-100 can be laid out in a straight, circular or a spiral pattern following the curve of a road or a railway. The squares can be represented by sectors, regions or countries on a map.

An interesting thing to do is to scale up or scale down. A board game can be scaled up to life-size to introduce physical movement, lots of creativity and fun. Snakes and Ladders or Cluedo could be set up to be played around a room, a playground or a neighbourhood. Alternatively take a life-size game such as soccer, showjumping or orienteering and scale them down on to a board. Use your imagination; a game based on Monopoly does not need to look or feel like Monopoly.

Option A2 Dynamic Driven Design

If you want to take a more original approach, you can begin with an existing game dynamic rather than an existing game. This is best done as part of a day-long workshop as it does take some time, but it is fun and rewarding for young people.

Most games follow a defined core dynamic; there is a single thing that happens in the game. Snakes and Ladders is about racing to the end, Monopoly is about survival, Top Trumps is about collecting or accumulating. There are ten core dynamics in games which show up time and again[15].

1. Territorial acquisition: There is a limited amount of space and players compete to own it – e.g. Carcassonne and Risk use this core dynamic.

2. Predictions: These are based on anticipating how your opponent behaves or how the mechanic of the game might work in your favour. Most card games are predictive as is something like Rock Paper Scissors. Dixit is also a very good engaging game which uses this core dynamic.

3. Spatial reasoning: This is the dynamic in many puzzle type games where you are slotting pieces together or creating patterns – e.g. Connect4 and Tetris use this core dynamic.

4. Survival: While in many games a player can die or suffer a setback, this is not the core dynamic in the game. In many computer games, you die and are respawned. In Frustration, when another player lands on you, you go back to the start and continue the game. In a game such as Monopoly, everything you do is to secure your survival and so you always have this in mind when making decisions in the game.

5. Destruction: As opposed to survival games, in some games players set out to destroy resources in the game. These games are most likely to be based on themes of war or on the genre of computer games where monsters destroy cities – e.g. Nuclear War the card game, Rampage, Total Destruction and Godzilla use this core dynamic.

6. Building: Games based on building stuff have always been popular. Some such games involve free play (e.g. Lego and Minecraft) while some involve clear sets of rules (e.g. Settlers of Catan and Sim City).

15 Brathwaite, B. & Schreiber, I. (2008) *Challenges for Games Designers. Non-digital exercises for video game designers.* Course Technology PTR.

7. Collection: Many games use collections as a core dynamic. However, there are also many games where the whole idea of the game is to find, make, win, beg, borrow or steal things. Match Attax and other collectable card games use this core dynamic. There are many mobile phone games, such as Candy Crush, which also use this core dynamic.

8. Chasing or evading: This is a very straightforward game dynamic, which is seen in many field sports and in computer games such as Pacman and Mario Bros. Scotland Yard and Colditz are board games which use this core dynamic.

9. Trading: This core dynamic involves the collection of resources and on negotiation with other players or the mechanics of the game itself. Pokémon and Pit are examples of games that use this core dynamic.

10. Race to the end: This is one of the most straightforward core dynamics and does pretty much what it says on the tin – the first home wins! Snakes and Ladders, Car Racing and Frustration are examples of games that use this core dynamic.

Selecting the Dynamic
Look at the above ten core dynamics and decide on one to use. This may be based on the objectives of your project, the values you want the game to reflect and the extent to which the group you are working with are familiar with games.

Decide on a dynamic, or perhaps two complimentary dynamics (e.g. territorial acquisition with trading, race to the end with chase or evade, or building with survival). Then get four, five or six games which are driven by these dynamics and play the games.

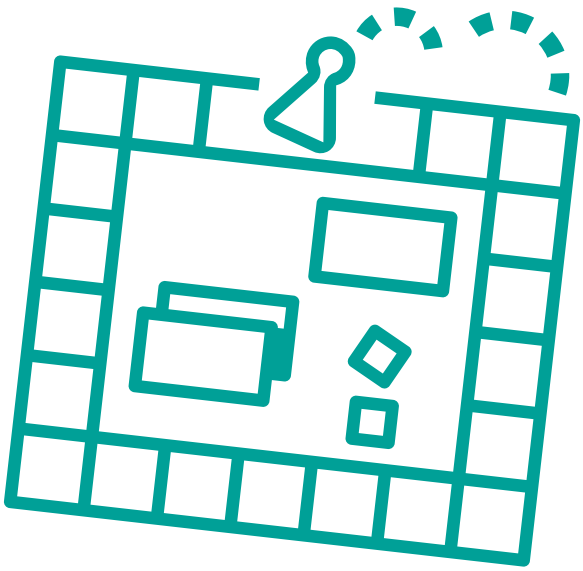
Exploring the Dynamic
This can be a good way to run a workshop with a large group of young people. Imagine you have five game design teams with five young people in each. Allocate one member from each team to play a different game. Give them an hour or so to play the game and to share their experience of playing and then they can return to their design teams to work together to develop their concepts.

Agreeing a Game Concept
This is the creative phase where the team decide on the concept for the game. It is important that they do not deviate too far from the dynamic agreed. Give the group 45 minutes to decide on and outline the following:

1. How the game is played
2. The story of the game
3. How the game is won
4. How players move or progress in the game
5. Any decisions players have to make during the game
6. Good and bad things which can happen to players in the game and how they happen

It is helpful to have plenty of sheets of paper, pens and markers for each group. Encourage one person to take notes of discussions and one to draw ideas on paper. Keep an eye that discussions are progressing and constructive. However, be prepared for periods of impasse.

Review and Break
Stop the work after about 45 minutes to an hour and ask the groups to briefly describe where they are at. Some will have considerable progress made, some not. Take a 20-minute break and provide support to those who may have gotten stuck. If one team is not functioning you could disband it (sometimes one person becomes intransigent and you can give them the option of progressing with the game idea on their own with the rest of the team dispersed to other groups).



Refining the Game Concept
After the break, draw the groups' attention to the materials in the centre of the room and ask them to complete a prototype to demonstrate the game within 45 minutes. This is usually an unrealistic timeframe. However, the limited time creates a sense of urgency which can be helpful. As guidance, you could ask them to do the following:

1. Complete the game board or the game space
2. Create character pieces
3. Make any cards that are needed
4. Compile a list of the rules of the game

Keep moving among the groups and encourage people to take on specific jobs – e.g. playing, writing, colouring or crafting. After 45 minutes groups should be beginning to get going; stop the work, ask them whether they need more time and tell them they have another 20 minutes. After another 30 minutes, ask them to demonstrate their game.

Game Demonstration
As a facilitator, you will see which groups have their games at an advanced stage and which will need some more time (at this point it is usually one or two people from the team finishing off the board). Ask/encourage one team to volunteer to demonstrate their game first and invite all of the participants to gather round.

Invite the team to explain their game, how it works and why they chose that particular way of doing it. Keep it informal. Once the group have talked through their game and had a chance to demonstrate it, or aspects of it, ask the other groups for feedback. Encourage one member of the demonstrating team to note down the feedback.

In the middle of the room provide dice and games pieces, coloured paper and card, lollypop sticks, glue and a range of arts and craft supplies, which may be useful in sparking the imagination.

Reskinning Snakes and Ladders to Reflect on the Plight of Refugees

One of the most straightforward games to reskin is the classic 'race to the end', Snakes and Ladders. This works best if you make a large-scale version of the board game. Get the group to play the game according to the normal rules. You may cut the game short once the young people get into it and have a clear understanding of how it works. Ask the group to discuss the story of the game – what is it all about? How did it feel to play the game? Is it a good game?

Change the narrative: you now tell the group that you are going to change the story of the game. It is no longer about Snakes and Ladders. It is about refugees fleeing to safety. The thing about this game is that each player will play with a family of four refugees and the objective is to get them all to the end – which represents them reaching a place of safety. Give each player four character cards that represent members of their family (include different types of families).

Change mechanics: When a player lands at the base of a ladder they take an orange card and follow the instructions. When they land at the head of a snake they take a green card (see Appendix 3). If they land on a square with a part of a snake on it, they must pay €200 (if they cannot, they must miss a go). If they land on a square with a piece of a ladder on it, they get €100. Each player gets varying amounts of money at the start of the game (€100, €500, €1,000, €5,000).

If families split up, they can share out their money and each member takes turns and moves separately, one after the other. When a player reaches the end, they receive €2,000. They can distribute their money as they wish.

Change layout: You can change the board from a square to a map so that players move between regions in different countries (either real or fictional). You can make the snake heads represent border posts and the ladders represent refugee supports.

Debriefing: It is important to observe the group playing the game and when something significant happens, pause the game and ask, 'what happened?' and 'how did it feel?'

Other suggestions: Instead of using a dice to determine how players move, throw velcro darts or skittles to introduce an element of skill and control.

NYCI's Equality and Intercultural Programme have a 'reskinned' Snakes and Ladders game, 'Game of Life', as part of their 'Beyond Hate' resource. Its aim is to build understanding about the lived experience of people with diverse identities and about how privilege and power impact different groups in society. The game involves using identity cards. The game opens with a conversation around some of the terminology used on the cards so that players understand more about their 'identity' and the 'identity' of other players. Then the youth worker facilitates a conversation on privilege by looking at relative privilege among the identities; this dictates what each player enters the game of life with. Each player is also given a social justice card and a youth work card that they can play at any time to support them to move forward in the game. The game provides food for thought, which then feeds into a discussion about how power and privilege are held in the world[16].

16 The game can be found in the 'Beyond Hate' resource at https://www.youth.ie/articles/transforming-hate-in-youth-work-settings/.

Option B Design an Original Game

In order to create an original concept you, or the members of your team, should be very familiar with games. It may also be useful to have advice from an experienced game designer. It is worth noting that, as with any creative group process, this can be an intense and formative experience for a team. Good communication throughout the process is essential.

As mentioned earlier there are two approaches you can take to original games design, 'Blue Sky' or 'Slow Boil' design.

Option B1 Blue Skies Design Workshop

Blue Sky designing refers to a process whereby, having set the parameters for the design in the objectives, you allow the designers to create a series of original ideas for games within a short and intense period of time. Tell them that you will come back in one hour and ask them to identify three original game ideas (anything goes)[17].

It can be very difficult not to gravitate towards an existing game and the contention can often be in people interpreting other people's ideas in terms of games that they have already experienced. Ban the team from referring to the name of any other game at this stage. They can describe the dynamic in a game, but not the name of the game itself.

Remind the team of the objectives and stick them on a wall but do not give them copies, as this will become a distraction. Leave large sheets of paper and pencils on a table and provide lots of art and crafts materials.

After the hour, ask the group to present their ideas and to select a core idea to work with. Reassure them that the other ideas may also be used. They should consider the following in selecting the game idea to work on first:

- How original is the concept?
- How excited am I about this game?
- How well does it meet the objectives?
- How realistic is it for us to develop?

17 Brathwaite, B. & Schreiber, I. (2008) *Challenges for Games Designers. Non-digital exercises for video game designers.* Course Technology PTR.

Option B2 Slow Boil Design

Slow Boil design involves immersing the design team in the issue to be addressed. You give the team the issue and the context – e.g. climate change and Kenya, refugees and Libya or race relations in the USA. The team learns everything they can over a prolonged period about the issue. It may take weeks or months for them to feel the germ of an original game idea emerge.

Different members of the team pursue different avenues of investigation and come back to share what they have learned. When sharing their understanding of the issue, initially they are encouraged not to share game ideas. It is only when they have come to terms with the issue that they can begin exploring their game concepts. It is often a particular story, incident or picture which triggers the game concept. It may happen that the group does not come up with a viable idea, in which case you might consider reskinning an existing game or starting with a game dynamic.

STEP 4
REVIEW THE OBJECTIVES

Having completed step three, whether reskinning or starting with an existing core dynamic, the teams will have a rough prototype for their games. It may be that there are four or five games at this stage and you want to focus on developing one or two games. At this point, it is good to check where the energy is and progress on that basis.

The game design team should now reflect on the objectives they have set and review whether their design is on track to meet those. What can they do in their game to strengthen how it addresses each objective?

At this stage, it is also important that the group continue to learn as much as they can about the issue being addressed in their game. This is an opportunity to get them to do some specific research which might be useful in informing the game.

It is important at this phase in the process to challenge the group under three headings:

1. Does your game have potential negative connotations? Are you stereotyping people? Are you using accurate information? Are you trivialising unnecessarily? How can the game be improved in this regard?

2. How do they feel about the game? Will it be fun? Will it present players with dilemmas? Will it be easy to produce? How can the game be improved in this regard?

3. How are they working as a team? Are they getting along okay? Are they using everybody's skills? Are they well organised? How can they improve the process in this regard?

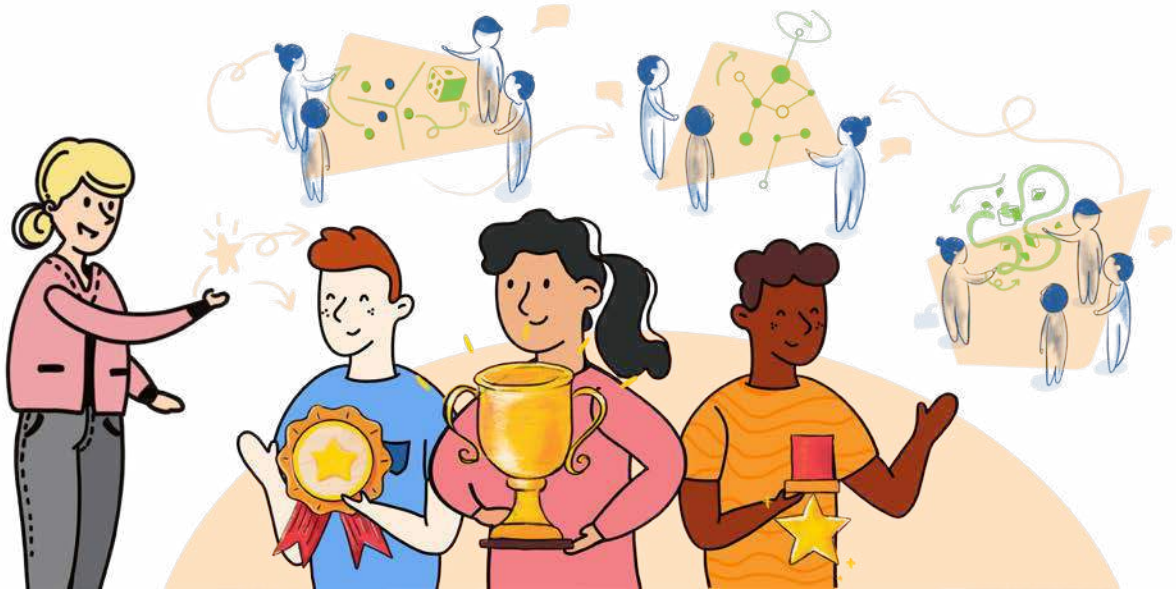
STEP 5
COMPLETE THE PROTOTYPE AND PLAYTEST

Set a deadline for completion of the game design. Organise an event where all of the games will be played. The teams will need to complete their prototype and run three structured playtests before this.

Playtest 1: The first playtest should be with friends who will give constructive feedback. The team should lead the game with their friends participating and then fill out the feedback sheet (see Appendix 4). They should respond to the feedback.

Playtest 2: They should then play the game a second time with two or three youth workers/educators who haven't played it before. They will again record this using the playtest feedback sheet and respond to the feedback.

Playtest 3: The final playtest is slightly different in that they will give the game to a group to play (friends of friends, siblings, etc.) and they will oversee them playing the game. If needs be, one of the team can play in order to explain how it works. However, they should let the game play out to completion.



STEP 6
PRESENTATION OF THE GAME

Create an event at which the various games are demonstrated. This can become a games competition or part of a Development Education or youth work showcase. It would be good to invite external people with an interest in the issues and in games. It is also important that the participants note any feedback from the reviewers and respond to it.

This event is the culmination of the development of the games and marks the end of the process for the youth group. It may also be appropriate to award a prize. Perhaps games will be selected to go forward to Trócaire's Game Changers competition[18]? Perhaps there can be game development kits as prizes or a visit to a Development Education organisation?

STEP 7
FURTHER GAME DEVELOPMENT

Some participants may continue with the development of their games as a board game, in which case they should undertake an iterative process of design and development. If the group intends developing their game further, they will need to create a 'game design document' (see Appendix 2). This is the blueprint from which a game, whether physical or digital, can be built. Every detail necessary to build and play the game should be addressed. The content of the document will be drawn from the objectives and the experience of developing and playtesting the game. The game design document can take on many formats and will take a different feel if the intention is to develop the board game into a computer game.

18 To find out more about this competition visit https://www.trocaire.org/education/gamechangers

"WAS THE LEARNING MORE IN MAKING THE GAME OR PLAYING IT?"

"WE FELT REAL EMPATHY TOWARDS THE CHARACTERS IN THE GAME...I NEARLY CRIED."

"CAN YOU BUILD IN A WAY TO LOBBY ON THESE ISSUES THROUGH THE GAME?"

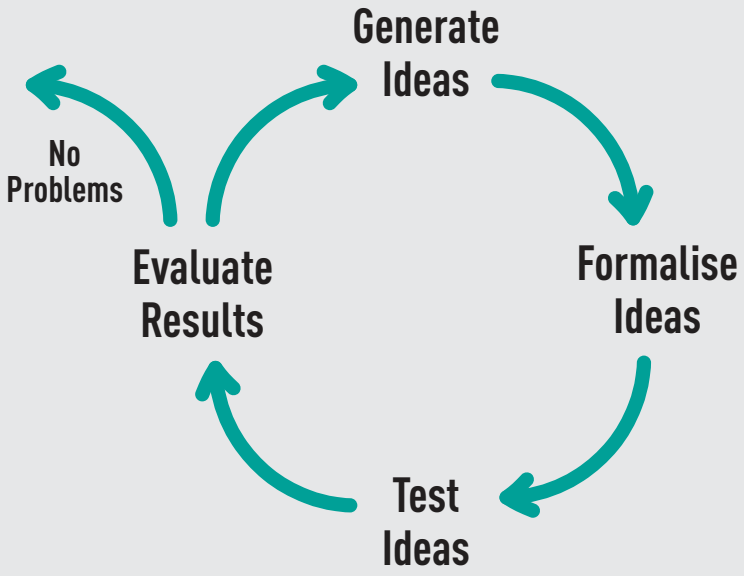
"I COULD SEE HOW THIS GAME COULD BE DIGITISED AND MOVED ONLINE."

"HOW MIGHT YOU DEAL WITH CHALLENGING ISSUES LIKE GENDER-BASED VIOLENCE IN A GAME?"

Development Education and youth work practitioners in discussion, unpublished research, Paul Keating, LIT

Iterative Design

Iterative design involves a process whereby you generate, formalise and test ideas, evaluate results, refine ideas and repeat. In the case of games, iterative design means playtesting. Throughout the entire process of design and development, your game is played. You play it. The rest of the team plays it. Other people in the youth group play it. People visiting play it. You organise groups of testers, that reflect your target audience, to play it. You have as many people as possible play it. In each case, you observe them, ask them questions, then adjust your design and playtest again[19].



19 Fullerton, T. and Swain, C. (2008) *A Game Design Workshop: A Playcentric Approach to Creating Innovative Games. A volume in Gamma Network Series.* Taylor & Francis.

SECTION 6: COMPUTER GAMES, YOUTH WORK AND DEVELOPMENT EDUCATION

6.1 Using Computer Games in Youth Work

Increasingly, for many young people, social media and computer games are the medium and the social space in which they meet and make friends. It is a very different space to the youth centres, clubs, streets or public parks that are envisaged as the context in which youth work happens. However, it certainly is a social space and one in which young people are increasingly expressing themselves, engaging with each other, developing their understanding of the world and articulating their views. In this context, there is considerable discussion and interest in the concept of virtual or digital youth work. The term 'digital youth work' means proactively using or addressing digital media and technology in youth work as a tool or an activity. The intention within this area of practice is to use technology, and increasingly games and virtual reality, as a means of engaging with young people.

There are many different ways in which youth workers can integrate computer games into their practice. Much of this depends on what you are looking to achieve and whether you have the confidence to use computer games in this way. At a basic level, you can use computer games to encourage young people into a youth work setting either by making games available in a centre, or by setting up play events online. If you intend taking computer games a step further, using them to do youth work, it is best that they are integrated into a well thought out and structured programme. There are a number of points to keep in mind:

- It is best to dedicate time to consistent game-play rather than using computer games sporadically or for a single purpose. In this way, games become a part of the routine of the youth group and your relationship with them.

- As with any youth work intervention, you will need to clearly determine the purpose of game-based learning and choose the approach, the game or the games you intend to use carefully.

- You should first play the game with colleagues in order to ensure it aligns with your values, the learning you want to achieve and the interests and abilities of your youth group.

- When you are using games in this way, it is best to structure the process to involve a learning phase, playing phase and a debriefing phase. That is to say, you share information about an issue, (for example, climate change) play a game about climate change and then debrief on how the group found the experience, what they learned and how they want to respond to it. There are many different ways in which you can structure this process – e.g. share information, then play, debrief and respond. Or perhaps share information, then play, debrief, share more information, play again, debrief and then respond. Or you could play the game as the starting point in order to motivate the group to learn and then follow this up by sharing information and encouraging them to act on the issue.

Within computer-games-based-learning, there are three distinct approaches which are commonly used in both formal and non-formal education. The first, special purpose games, is to access and use games which are specially designed for the educational purpose you intend. The second, commercial off-the-shelf games, is to use mainstream games to highlight an issue. The third involves facilitating young people to make their own computer games.

Special Purpose Computer Games

The most common way of using computer games is to find customised games which are already designed to achieve particular learning outcomes. There are many knowledge-based games dealing with mainstream subjects such as maths, science, geography, languages etc. Increasingly computer games are used to teach skills in first aid, science, conflict resolution, engineering and to encourage change in behaviour with respect to, for example, diet, recycling and mental health.

Simulation games have been used to draw attention to conflicts and to encourage action on the part of players. Darfur is Dying was developed in order to highlight the conflict in Darfur. PeaceMaker, 9/12, This War of Mine and War on Terror all look critically at geopolitics and conflict. World Climate, World Without Oil, AdaptNation, Never Alone and Bee Simulator are examples of games being developed to raise awareness and engagement with climate change. Computer games such as Papers Please, My Life as a Refugee, Against All Odds and Salaam are games about migration and refugees.

In recent years, some Development Education organisations have been experimenting with the use of virtual reality in their practice (e.g. Concern Worldwide). The UK`s Department for International Development (DFID) has collaborated with Google Expeditions on a series of virtual tours of UK Aid projects. These can expose viewers to an immersive experience of a Syrian

refugee camp, enabling them to learn about the stories of individual children who have been forced to leave their homes. The UN's Clouds Over Sidra shares the story of Sidra, a Syrian refugee living in the Za'atari camp in Jordan. In the video, the viewer is virtually taken by her hand on a tour around the camp where she and 90,000 other refugees live.

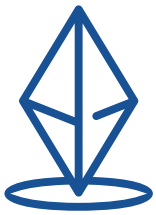
Mixed Reality Games

Two further concepts which are important in the contemporary gaming context are virtual reality and augmented reality, collectively referred to as mixed reality. These produce a further layer of immersive and collaborative potential and have become more accessible in recent years with the ongoing popularisation of virtual reality headsets and location-based games.

Augmented Reality (AR) games are a genre which combine the real world with fantasy. They have, in recent times, harnessed technology to seamlessly integrate both physical and computer-generated environments in games such as Pokémon Go. This AR game produced a cartoon-style map of the users' real-world location. It then superimposed Pokémon creatures that the player had to pursue and capture. While this game may seem quite frivolous, its developers envisaged it as a game to promote physical activity and mental well-being. Its popularity, with 65 million monthly active players nine months after its launch, demonstrated the technical capabilities and the level of engagement that such applications can command.

Virtual Reality (VR) has been defined as ***'a three-dimensional, computer-generated environment which can be explored and interacted with by a person. That person becomes part of this virtual world or is immersed within this environment and is able to manipulate objects or perform a series of actions.'*** Virtual Reality Society (2017)

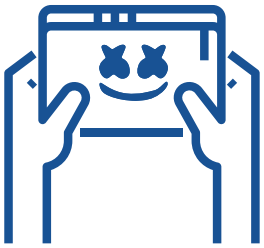
Commercial Off-The-Shelf Games



Another approach to take with games-based learning is to design learning into an existing mainstream commercial game. Minecraft can be used for projects in construction, design, electronics and coding. Assassins Creed can be used to explore geography and history. Roblox can present opportunities to engage with problem-solving in maths and business. Civilization and the various editions of The Sims can address issues of planning and sustainability. In order to use these games, you will need to be familiar with them yourself. Remember such games were designed as entertainment, and will need to be shaped and integrated into a learning or personal development process within a youth work context.

While many games have significant learning and skills development built-in, you can add to this in a straightforward way. Get a group to work together to recreate their youth centre or other public buildings in Minecraft. Add some technical challenges – opening doors, working lights, using lifts etc. Get groups to build a town in Minecraft and to decide on where certain buildings are located. SimCity or Roblox could be used similarly.

Multiplayer and Mobile Gaming



In parallel with the explosion in popular engagement, there have been a number of technological paradigm shifts in gaming which has seen the genre move from the single-player arcade-style games of the 1980s, to mobile and massive multiplayer online role-play games (MMORPG). Such MMORPGs typically involve players embarking on quests or missions within a virtual world and there encountering puzzles, obstacles and opponents that need to be overcome. These games have the added dimension that players construct online personae for themselves from a menu of characteristics and often join a clan or a tribe with whom they collaborate. Such collaboration can be enhanced by text communication or by audio chat between otherwise anonymous players. In the course of play, players are typically encouraged to interact with other clans or individual players in a confrontational or collaborative mode.

In the same way that the physical roleplay game Dungeons and Dragons can be used to explore team dynamics, creativity and identity with young people, World of Warcraft can be used in a similar way online. Shorter-term first-person shooter type games such as Fortnite and Call of Duty encourage friends to work together in squads in a way which is more intense but requires communication, co-operation and leadership.

The second significant technological advance in the hardware of the gaming industry has been the technical capabilities and proliferation of hand-held mobile devices. This has facilitated the emergence of real-time interactive games which link with players' locations and social media profiles. Games such as Farmville and Candy Crush mimic real-world work tasks and accomplishments and integrate collaboration and interaction with friends into game-play. This ability to play with, and assist, real-world friends in such a casual and accessible manner can build the social connections of players. Geocaching and Pokémon Go are outdoor mobile games which encourage physical activity on an individual or a team basis.

6.2 Designing Computer Games

Having looked in some detail at the design of board games, the process for designing computer games follows the exact same steps: set your objectives, come up with a game concept, dynamics, mechanics and aesthetic of the game, build your prototype then playtest and refine. Increasingly, coding platforms such as Scratch[20] and Tynker[21] are encouraging novice coders to design games. More confident coders can progress to programmes such as Unity[22] and Kodu Game Lab[23], which are specifically designed to facilitate game design while Java, Javascript, HTML and C++ are the programming languages most often used in games design. It is possible therefore for game design and development to become the basis upon which young people develop their programming skills. It is also an option that members of a youth group who have skills in programming can lead on this aspect while others focus on creating and digitising the narrative, the artwork and the game dynamics. There is an amazing range of resources about computer game design available on the internet. Introductory versions of tools such as Game Maker[24], Unity[25] and Stencyl[26] are free and there are many instructional videos on YouTube, guiding developers through the basics.

20 https://scratch.mit.edu/
21 https://www.tynker.com/
22 https://unity.com/
23 https://www.kodugamelab.com/
24 https://www.yoyogames.com/gamemaker
25 https://unity.com/
26 http://www.stencyl.com/

Appendix 1 Objective setting form

Setting the Game Objectives

The design team:

The issue this game is looking to address:

The players – Who will play this game?

The context – Where will people play the game and with whom?

The values – What are the values that you feel are important in you game? (list at least 3)

The outcomes – What do you want the game to do?

Appendix 1 Objective setting form

What specifically will people learn by playing the game?

What will players do about the issue after playing the game?

The experience – What will players feel?

1. What are the emotions players will feel while playing?

2. How will players interact with other players?

3. How will players feel about the issue being addressed?

4. Will the game make players feel that they can do something positive about the issue? – How?

Appendix 2 Game design document

1. Title page

Game name (Perhaps also add a subtitle or high concept sentence):

Developers' names:

2. Game background

Values – What are the values informing the game?

Issue – What is the 'Dev Ed' issue being addressed and its context?

Target players – Who is the game aimed at and what is the reach of the game?

Objectives – What do you want players to learn, understand and do as a result of having played the game?

Influences – Where did the game concept come from?

Appendix 2 Game design document

3. Game description

Story and narrative – Includes back story, plot elements, game progression, description of the imagined world the player will enter and the journey they will take.

Game world – General look and feel of the world the game is portraying.

Characters – Each character should include the back story, personality, appearance, animations, abilities, relevance to the story and relationship to other characters.

Appendix 2 Game design document

4. Gameplay

Objectives – What are the objectives of the game?

Mission structure – Are there challenges to be overcome?

Play flow – How does the game get progressively more challenging for the players?

Game options – What are the key dilemmas/options/decisions open to players and how do they affect them and others in the game?

Appendix 2 Game design document

5. Mechanics - the rules to the game, both implicit and explicit

Movement in the game – How do you start, take turns and move through the game?

Objects – What are they, how do players accumulate and use them?

Events – What good and bad things happen, how and to whom?

Conflict/competition – If there is conflict, how does it happen between players?

Co-operation – Are players able to help each other, why and how?

Economy – What is the economy/resources of the game? How do they work?

Appendix 3
Reskinning Snakes and Ladders resources

You have been offered a place on a boat to Europe at a cost of €1,000 per person. Decide how many of your group will go, pay the fee and proceed up the ladder.	**Your brother has secured refugee status in Ireland and has applied for family reunification.** You and your family can proceed up the ladder.	**A trafficker has offered to fly the female members of your family to Europe.** Decide if you accept this offer and proceed up the ladder accordingly.
You sold your family jewellery and have found a trafficker who will transport your family to safety. You can all proceed up the ladder.	**You have registered your family with the UNHCR and have received travel papers.** Keep this card to offset one negative card you may receive. Once used, return the card to the pack.	**A male member of your family has been offered a job in Europe.** One of the male members of your family can proceed up the ladder.
You have linked up with an NGO who will help re-unify your family. All the family proceed to the space occupied by that member closest the end.	**One adult member of your family has secured a job as a translator with the UN.** One adult member of your family can proceed up the ladder.	**A male member of your family has been offered a job in Europe.** One of the male members of your family can proceed up the ladder.
You have met a man from your home town with travel documents for a family and has offered to use them to help you. Pay €500. The father stays behind and the rest of the family proceed.	**Border security has provided you with visas for your group.** All proceed up the ladder.	**You have met a forger who will make you travel documents for €500 each.** Buy as many as you can afford and proceed up the ladder.

Appendix 3
Reskinning Snakes and Ladders resources

You have been in contact with traffickers who are demanding you pay €200 per person to proceed. All descend the snake and remain there until you can pay or miss 2 turns.	**You have been refused entry at a European border and must take another route.** All descend the snake.	**Your children have contracted measles and must remain in hospital.** The children must descend the snake.
Your family jewellery has been stolen and you must return to make more money. One adult must descend the snake.	**Your family have been assessed by the UNHCR and have been denied travel papers.** All descend the snake.	**A female member of your family has been kidnapped.** Pay €1000. One of the female members of your family must descend the snake.
A male member of your family have been detained by counter terrorist police. One of the male members of your family must descend the snake.	**Local anti-migrant groups have attacked your group.** All descend the snake.	**A boat in which you are travelling has been turned back by the coastguard.** All descend the snake.
A man who promised to provide you with travel documents has stolen your money. Adults descend the snake.	**The country through which you are travelling has banned aid agencies from working with migrants.** All descend the snake.	**A border fence has been built and you must find another route.** All descend the snake.

Appendix 3
Reskinning Snakes and Ladders resources

Appendix 4
Playtesting feedback form

Directions: Circle the corresponding number score for each category that you feel is appropriate. 1 is the worst while 7 is the best. Write additional notes on the right-hand side relating to your scores or about the game in general. At the bottom of the sheet is a space to write about what you feel is the strongest element of the game, the weakest element of the game, and one thing you would change if you could.

Game:

NOTES

1 ▶ 2 ▶ 3 ▶ 4 ▶ 5 ▶ 6 ▶ 7

Clarity	Very cumbersome design. Difficult for the players to see what is going on in the game. Rules are unclear and difficult to understand.	Somewhat cumbersome layout. Rules are somewhat unclear and fairly difficult to understand.	Somewhat streamlined layout. Rules are generally clear and fairly easy to understand.	Very streamlined layout. The player can easily see what it going on in all areas of the game. Rules are very clear and unambiguous.

1 ▶ 2 ▶ 3 ▶ 4 ▶ 5 ▶ 6 ▶ 7

Flow	Lots of unnecessary procedures. There's too much to pay attention to. Many cumbersome exceptions to the rules. Needs to be streamlined!	Several unnecessary procedures and a lot to pay attention to. There may be several exceptions to the rules.	Few unnecessary procedures. There might be a tad too much happening. Few exceptions to the rules. Fairly well streamlined.	Few or no unnecessary procedures. There's just the right amount of stuff happening. Extremely well streamlined.

1 ▶ 2 ▶ 3 ▶ 4 ▶ 5 ▶ 6 ▶ 7

Balance	Very imbalanced or completely broken. Runaway leader problems, far too much luck, or too many useless components.	More imbalanced than balanced. There are too many strategic loopholes, useless components or components that are too useful. Luck may be far too great a factor.	More balanced than imbalanced, but there are still some loopholes or components that aren't appropriately useful. Few luck elements are a problem.	Very balanced and fair to all players. No strategic loopholes and luck is appropriate in its significance. No components are too useful or too useless.

1 ▶ 2 ▶ 3 ▶ 4 ▶ 5 ▶ 6 ▶ 7

Duration	The game lasts far too long or not nearly long enough. The game might also last a completely unpredicatable amount of time.	The game does not last a satisfying length for what it offers. The game might still be too unpredictable in length.	The game lasts an acceptable amount of time. Game time is relatively consistent for what the game offers.	The game lasts exactly as long as it should given what it offers. Game time is appropriately consistent.

Continued Overleaf >

Appendix 4
Playtesting feedback form

	1 ▶ 2	▶ 3	▶ 4	▶ 5	▶ 6 ▶ 7
Integration	Mechanics and theme are extremely mismatched. Different mechanics do not complement each other at all.	The mechanics and theme are somewhat mismatched. Several mechanics do not fit together well in the broad scope of the game.	The mechanics and theme are fairly well matched. Few mechanics might not fit well together.	The mechanics and theme fit extremely well together. All the mechanics come together to make a unified and immersive experience.	

	1 ▶ 2	▶ 3	▶ 4	▶ 5	▶ 6 ▶ 7
Fun	Complete lack of emotional connection, tension, interesting decisions, or interesting theme. Lots of downtime.	Little emotional connection, tension, interesting decisions, or intersting theme. Too much downtime. 'Fun' moments are rare.	There's a fair amount of connection, tension and interesting decisions. The theme is appropriate. Downtime is relatively low.	Constant emotional connection or tension. Most decisions are interesting or meaningful. Very good theme. Downtime is virtually non existent.	

	1 ▶ 2	▶ 3	▶ 4	▶ 5	▶ 6 ▶ 7
Interaction	Player interaction is at a completely inappropriate level. You affect other players far too much or too little.	Player interaction is lacking or inappropriate. You still interact with or affect players too much or not enough.	Decent player interaction overall, but improvements can be made to the amount of interaction or the quality of it.	Player interaction feels seamless and beneficial to the game without being too much or too lacking.	

NOTES

Strongest Point:	
Weakest Point:	
One Change:	

Appendix 5
Trócaire's Game Changers

Trócaire uses digital Development Education activities and games to bring about greater knowledge, understanding and awareness of the global issues that they work on with partner organisations in countries around the world.

Trócaire's annual 'Game Changers' competition encourages young people to use games as a way to explore global issues and to take action. Games entered by young people into the competition must explore a Development Education theme and must be either a board, card or video game. The competition is open to senior primary, post-primary or youth group categories[27].

Trócaire provides support to schools and youth work organisations to develop their games – from in-person meetings, online conversations and advice, to written resources.

Trócaire encourages those interested in entering the competition to consider: which of the Sustainable Development Goal(s) would you like your game to explore, and what would you like the players to learn from playing the game?

Source: Trócaire

27 To find out more about Trócaire's Game Changers competition visit https://www.trocaire.org/education/gamechangers.

Appendix 6
Relevant resources

http://www.poptropica.com/ Poptropica is a virtual world in which young people explore and play quests, stories and games.

https://www.games2train.com/site/html/tutor.html The Monkey Wrench Conspiracy (games2train) teaches players how to use new 3-D design software. ForgeFX develops games for safety training.

https://www.youtube.com/watch?v=T15hpXXk8Wo Civilization (MicroProse) is a resource about the game Civilisation, which teaches history and promotes civic engagement.

http://www.educause.edu/eli Engage Learning – European Web Portal for game-based learning resources.

http://eduproject.eu/yes/wp-content/uploads/2016/10/O1-A5-P1-P2-TP-UPB-YES-Handbook-extended-EN-final-complete.pdf A useful resource on the importance of games-based learning from young people by the Educause Learning Initiative.

http://www.wingz2fly.com/GameSurvey/search.html A searchable database of educational games with many that are suitable for a youth work setting.

http://www.gamebasedlearning.org.uk/ The Game-Based Learning Community is a non-commercial online games-based learning forum.

http://www.merlot.org/merlot/viewMaterial.htm?id=85084 An award-winning public health game from Merlot.

https://www.playfullearning.net/ A resource with inspiring ideas for on- and off-line learning games.

https://www.instituteofplay.org/ The Institute of Play aims to bring a games-based mind-set into practice discourse.

http://joanganzcooneycenter.org/ The Joan Ganz Cooney Centre is focused around research and evidence on digital media and learning.

https://habitica.com/static/front Habitica transforms your life into an epic old-school roleplaying game. Users can gain experience points for decluttering the closet and lose hit points for skipping their morning yoga session.

https://zombiesrungame.com/ This is an innovative running app that makes your daily jog fun by turning it into a desperate bid for freedom from the advancing undead.

http://www.yourulechores.com/ This app, created by a parent, gamifies household chores. It involves a Skyrim-inspired Game of Chores board that encourages family members to do house chores, such as sweeping floors and going to bed without meltdowns for virtual credits which can be redeemed (e.g. for money or extra videogame time). The app could be easily adapted to a youth work setting.

Appendix 6
Relevant resources

http://www.cbc.ca/parents/learning/view/how-apps-can-help-kids-learn-about-music Article about various apps and how they can be used to encourage young people to stick with tough subjects like playing a musical instrument.

http://peskygnats.com/ Pesky gNATs is a games-based resource designed to help mental health professionals deliver CBT (cognitive behavioural therapy) interventions to young people. It combines gaming and mobile technology with high quality psychological content to support evidence-based interventions with young people aged 9-17.

http://classbadges.com/ A site which provides information on using badges to motivate young people.

http://www.olpglobalkids.org/content/six-ways-look-badging-systems-designed-learning A site which provides information on using badges to motivate young people.

https://yukaichou.com/education-gamification/top-8-education-gamification-examples-for-learning-sprints/ A site which provides ideas and resources to those interested in including gamification in education.

http://edtechreview.in/dictionary/150-what-is-gamification A site which provides ideas and resources to those interested in including gamification in education.

https://www.elucidat.com/blog/elearning-gamification/ A site with resources that support gamification in e-learning.

National Youth Council of Ireland
3 Montague Street
Dublin 2
Ireland

Email: **info@nyci.ie**
Tel: +353 (0)1 478 4122
www.youth.ie

Science Foundation Ireland For what's next
LIT Limerick Institute of Technology
Irish Aid An Roinn Gnóthaí Eachtracha agus Trádála Department of Foreign Affairs and Trade