

Carla Moreira Graça Mello
Adilson Pereira
Denise Celeste Godoy de Andrade Rodrigues



Carla Moreira Graça Mello
Adilson Pereira
Denise Celeste Godoy de Andrade Rodrigues

Game Manual
Zelo



Volta Redonda

2020

Centro Universitário de Volta Redonda - UniFOA

Product from the Master's in Health Sciences and Environment Teaching

Illustrator: Dannilo Marcos Borges

FICHA CATALOGRÁFICA

Bibliotecária: Alice Tacão Wagner - CRB 7/RJ 4316

M527m Mello, Carla Moreira Graça.

Zelo – Game Manual. / Carla Moreira Graça Mello; Adilson Pereira; Denise Celeste Godoy de Andrade Rodrigues. - Volta Redonda: UniFOA, 2020. 24 p. Il.

Product (Master) – UniFOA / Mestrado Profissional em Ensino em Ciências da Saúde e do Meio Ambiente, 2020.

1. Health Science - product. 2. Environmental Education – ethic - game. I. Centro Universitário de Volta Redonda. II. Title.

CDD – 610

SUMMARY

1. INTRODUCTION	6
1.1. OBJECTIVE	6
2. ZELO GAME	7
2.1. GAME LOGO	8
2.2. GAME COMPONENTS	9
3. GAME DEVELOPMENT	12
3.1. GAME OBJECTIVE	12
3.2. GAME RULES	12
4. THE STORY OF ZELO	15
5. ZELO'S CHEST PHRASES	17
6. GAME MISSIONS	19
7. BIBLIOGRAPHIC REFERENCES	22

ILLUSTRATION LIST

<i>Picture 1: Zelo Game Board</i>	7
<i>Picture 2: Zelo Game clothing</i>	7
<i>Picture 3: Logo developed for the Game</i>	8
<i>Picture 4: Fabric made Zelo Dolls in two different sizes</i>	10
<i>Picture 5: Chest with the Game's philosophical phrases</i>	10
<i>Picture 6: Zelo game die</i>	11
<i>Picture 7: Zelo game journal</i>	11
<i>Picture 8: Zelo's character design</i>	12

LIST OF CHART TABLES

Chart 1: Objects that compose Zelo Game and their respective descriptions	9
Chart 2: Zelo Game Missions – Self-Care Trail	19
Chart 3: Zelo Game Missions – Caring for Others Trail	20
Chart 4: Zelo Game Missions – Caring for the Planet Trail	21

PRESENTATION

The cooperative Game **Zelo** was developed as a teaching product at the Master's Program in Health Sciences and Environment Teaching (MECSMA) at Centro Universitário de Volta Redonda (UniFOA). This manual presents the game components and its rules.

The theoretical basis used in the game is Felix Guattari's (1930 – 1992) Ecosophy, more precisely, the concepts related with the three ecologies: personal, social and environmental. The cooperative game's theoretical basis is grounded in Ausubel's Meaningful Learning Theory.

The game's creation process was accomplished by Design Thinking methodology (BROWN, 2010). This methodology is composed by three primordial stages: inspiration; idealization and implementation. At the inspiration stage one proceeds with the preliminary immersion, in-depth immersion and idealization. At the preliminary immersion, researches were developed to further understand the subject. Afterwards, In-Depth immersion was performed, understood as the moment of diving into the context and grasping how people talk, act, thing and feel.

The game's graphic part was developed in association with UniFOA's Design undergraduate student, Dannilo Marcos Borges da Costa, recipient of the scholarship at Programa Institucional de Bolsas de Inovação Tecnológica - PIBITI/UniFOA (Project – Critical Environmental Education and the ethics of Care – development of didactic material).

The authors expect this pedagogical proposal, substantiated on Zelo Cooperative Game, can provoke reflections on habits and attitudes from Ecosophy's perspective, contributing to the development of an ethic-ecological conscience.

1. INTRODUCTION

Zelo cooperative game integrated the ethics of Care and sustainability intertwining three Félix Guattari's Ecosophy ecological levels: personal, social and environmental. The ecological ethics understanding is potentialized by the personification of care through the character of Zelo and the exercise of pro positive care ecological habits: with one self, with others and with the planet.

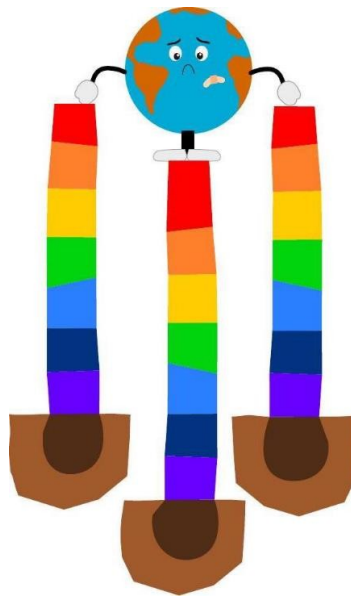
1.1. OBJECTIVE

Contribute to the environmental education effectiveness favouring the apprehension of an ethics of Care reverberating in student's habit shifts integrating behavioural changes of: personal nature, with others and with the planet.

2. ZELO GAME

Zelo is a cooperative game, having as its target audience 7 to 11 year old children. The game's board (Picture 1) is carpet shaped where children dress up as Zelo's character (Picture 2) move over the games board spaces.

Picture 1: Zelo Game Board



Source: Costa, Mello e Rodrigues (2019)

Picture 2 shows an image of the clothing used by the players during the game.

Picture 2: Zelo Game clothing



The clothing is composed by: a jumpsuit, a wig and a white shirt with colourful felt stripes fastened at the sleeves with Velcro.



2.1. GAME LOGO

Zelo's game logo (Picture 3) had as its basis the 5R's of sustainability, represented by the logo's circular form, illustrating the cyclical consumption and trash management movement, composed by blue and green doubled toned colours, bringing the idea of nature surrounded by circle.

Picture 3: Logo developed for the Game



Source: Costa, Mello e Rodrigues (2019)

The typographical logo is composed by a well adorned fantasy font, causing the ludic effect, adequate for the product's target audience. The sheet's illustration makes reference of the game's character Zelo establishing an imaginative creative bond. The combination of these factors generated the art as the communication channel for the product's objective, aimed at the Environmental Education for an ethics of Care.

2.2. GAME COMPONENTS

The game components with their respective description are shown at the Chart 1.

Chart 1: Objects that compose Zelo game and their respective descriptions

Object and quantity	Measures	Material	Function
1 Board	3,67m x 2,24m	Tarpaulin	Game track, which is used as a mat for players to walk during the game
1 Zelo doll	1,20 m tall	Several fabrics	Prize at the end of the game
1 Scoreboard	2,60m x 1,52m	Denim and felt	Smaller game track for scoring each team's score
3 Small Zelo dolls	30 cm tall	Several fabrics	Doll in reduced size smaller size for scoring each team's score
1 Chest with philosophical phrases	6 cm tall 10 cm width 20 cm length	Paper	Phrases used for reflection in some of the stages of the game
1 Die	Cube with 18 cm edges	Denim and felt	Mission evaluation
1 Journal per player	A4 sheet	Paper and cardboard	Logbook for individual record of each player
1 Manual	A4 sheet	Paper	Game Instructions
1 Story	A4 sheet	Paper	Initial awareness of the game
3 clothing	Size for 12 years old	Fabric	Representation of the character, which the player wears on the day of the game

The game's character was fabric made in two different sizes. The tallest doll is 120 centimetres tall and the smallest ones are 30 centimetres tall (Picture 4).

Picture 4: Fabric made Zelo Dolls in two different sizes



The game has a scoreboard similar to the playing board, printed in a smaller size, where Zelo's miniature dolls are used to mark the teams' progress during the game.

Images of the phrases chest, the die, the journal and the game's manual are respectively shown on Pictures 5, 6 and 7.

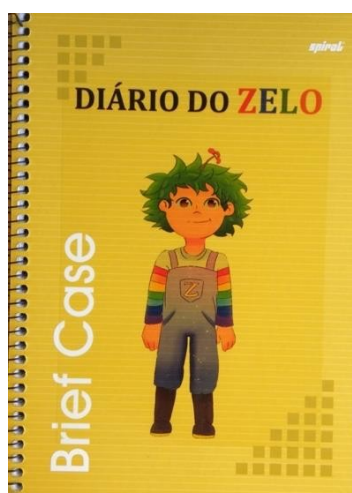
Picture 5: Chest with the Game's philosophical phrases



Picture 6: Zelo game die



Picture 7: Zelo game journal



Source: Costa, Mello e Rodrigues (2019)

3. GAME DEVELOPMENT

3.1. GAME OBJECTIVE

The game's objective is to rescue the character Zelo (Picture 8) from the three oblivion caves, giving back its colours through the accomplishment of missions related to the three ecologies: personal, social and environmental, at the rainbow trails, taking Zelo back to planet Earth.

Picture 8: Zelo's character design



Source: Costa, Mello e Rodrigues (2019)

3.2. GAME RULES

Zelo cooperative game is an invitation to rescue the character from the oblivion cave, curing him, allowing him to become colourful again and to spread all over the planet. The game happens in stages, described below.



Stage 1:

The players group is gathered and watch the video with the letter from the Earth. Following, a debate takes place about environmental education, i.e., about care with oneself, with others and the planet. After

this, Zelo Game is presented to the players, the character's story is told and everyone is invited to take part in Zelo's rescue mission from the oblivion cave, colouring him and taking him back to planet Earth.



Stage 2:

Stages 2 and 3 are weekly cyclical.

At this stage, every week, each team receives a mission according to their trails as described in this manual. Throughout the week, the mission must be daily executed and each task must be registered in a page of Zelo's Journal.



Stage 3: Mission Assessment

In the following week, the first mission accomplishment assessment takes place. Three evaluation parameters are used: the facilitator's analysis along with the teacher's, the group testimonies and the die result, as described:

The die has three possible results: rainbow face (mission accomplished); white or black face (non-completed mission), requiring the mission to be taken again, representing that Zelo remains without the board space colour; or the heart face (reflect about the mission). If the die show this last face, a wisdom phrase must be picked up from the chest (the phrases are registered in this manual) and a reflection must be written in Zelo's journal. In this case, the mission must be restarted, improving the execution strategy through the reflection of the picked up phrase.

If the mission is adequately accomplished, the group will receive their respective board space colour. Each conquered colour will represent a further step on Zelo's rescue trail from the oblivion cave, getting closer to his true HOME, the planet Earth. The stripes with the accomplished mission colours are, therefore, attached to the dolls and the clothing shirts sleeves.

The same thing happens from the second to the seventh mission. However, the tasks are non-cumulative, thus, in the seventh mission a great challenge is proposed requiring the execution of all seven tasks during the last week.



Final Stage:

At this stage, the students are invited to share, in a way defined by themselves, what they've learned at school through the posters, videos, dramatizations and lectures. If they're able to collective win in every stage, they're awarded a Zelo Mascot, the tallest cloth doll, belonging from then on to the school.

4. THE STORY OF ZELO

Before beginning the game, the story of Zelo is told to sensitize the players. The text can be found reproduced below.

The legend tells that Zelo was a very special and fond being, living in every little piece of the planet. He

appeared at home when mommy harvested fresh natural corn, without using any chemicals, to bake that deliciously scented corn bread served with all kindness to the whole family.

At this time, meals were cooked at home and there weren't many little ready-made food packages filled with artificial food preservatives.

Zelo was also present when a colleague offered help in the studies role-playing as a private teacher, teaching the schools subjects in a very jolly way, encouraging and appreciating every little study progress. Zelo lived in the indigenous tribes, in these folks respect and gratitude for our greater mother, the Mother Nature!

These are the peoples that always protected and knew that we're siblings with the animals, the Sun, the Earth and the water and that everything in the planet is connected. Therefore, Zelo was created to be an inseparable friend with every human being and to protect our beautiful blue planet's life. But many children and adults started to abandon and destroy him. This is very sad.

When Zelo is abandoned, he loses his colour until he turns entirely black and white, as an old movie. After being abandoned by those who should be his best friends, the human beings, he's banished to a cold, lightless and very ugly place called the oblivion cave.



In this cave, he starts to be erased by the big carelessness rubber through the destruction caused by consumerism, that increases a lot of the trash that rubbles and poisons our home Earth, by food intoxication that damage our health, by bullying, that hurts people's hearts, and also by the excessive time in mobile phone games, stealing time away from open air games, thus, by the carelessness: with yourself, with other people and with planet Earth.

5. ZELO'S CHEST PHRASES

"You are free, therefore choose, that is to say, invent." Jean-Paul Sartre

"Exercise your creativity, be original." Carla Graça Mello

"Man is nothing else but what he makes of himself."

Jean-Paul Sartre

"Take good care of yourself!"

Carla Graça Mello

"The cautious seldom err. To lose by caution is rare indeed." Confucius

"Avoid excess and shortage, seek for balance." Carla Graça Mello

"Perfect friendship exists between persons who are virtuous." Aristotle

"Be human, cultivate virtues!"

Carla Graça Mello

"One must still have chaos in oneself to be able to give birth to a dancing star."

Friedrich Nietzsche

"Every concern can be turned into a creation. Remember: stress is what makes the oyster produce a pearl."

Carla Graça Mello

"The worst evil is the one we get used to."

Jean-Paul Sartre

"Seek to transform what's bad, cultivate the good." Carla Graça Mello

“The wise man never says everything he thinks, but he always thinks
everything he says.” Aristotle

“Take good care of what you think, feel and say.” Carla Graça Mello

“The more love we have, the easier we make our way around the
world.” Immanuel Kant

“Without love, life is lost.” Carla Graça Mello

Source: https://www.pensador.com/frases_de_jean_paul_sartre/

6. GAME MISSIONS

The game missions divided according to the trail are respectively found on chart tables 2, 3 and 4.

Chart 2: Zelo Game Missions – Self-Care Trail

Place Colour	Mission	Reference Author
Red	Make a plan to reduce time spent with electronic devices, using them only for what's necessary. Research the consequences and damages caused by excessive usage of electronic devices.	Zygmunt Bauman
Orange	Consume variable greeneries, fruits and vegetables daily. Hydrate yourself! Search about healthy meals and hydration!	Sônia Hirsch
Yellow	Make a good personal hygiene plan. Research about oral and body hygiene.	Erica Aparecida Lourenço Rogel
Green	Learn to relax, keeping yourself calm and self-controlled. Make one of the manual daily relaxations and also create those of your own.	Michel Foucault
Sky Blue	Fill your weekly mind map, planning your days to achieve your objectives and targets.	Terry Orlick
Indigo Blue	Cultivate a good self-esteem. Write your accomplishments down every day and recognize your qualities and achievements! Write compliments for yourself!	Terry Orlick
Violet	Reflect about your week. Pick up a phrase from Zelo's chest and write a reflection based on the phrase you read.	Paulo Freire

Chart 3: Zelo Game Missions – Caring for Others Trail

Space Colour	Mission	Reference Author
Red	Design a daily plan to be adopted at home with small surprises for your family, demonstrating your love to your family members, spreading kindness, affection and propagating zeal.	Humberto Maturana
Orange	Appraise your colleagues at school, recognizing their qualities. Write appreciation letters and put them at the Appreciation Mail Box. Include all your colleagues and don't forget anyone. Avoid putting nicknames and negative things. Propagate the good and happiness!	Terry Orlick
Yellow	Suggest some cooperative games during your school's playtime. Look up at the game's notebook for a very cool game and have fun with your friends, sharing virtues and playing!	Fábio Otuzi Brotto
Sky Blue	Help mommy in a house chore. Make a plan with all your chores and execute them without making your parents ask for them!	Fábio Otuzi Brotto
Indigo Blue	Study about human virtues and practice them at school and at home. Spread posters about the subject at your school to inspire your colleagues!	Aristotle
Violet	Help by keeping silence in your classroom and peace in your family. Cultivate self-control! Design a plan.	Terry Orlick

Chart 4: Zelo Game Missions – Caring for the Planet Trail

Space Colour	Mission	Reference Author
Red	Study about the 5R's: Recycling, Reducing, Reflecting, Refusing and Reusing. Practice the 5 R's at your consumption. Make a plan. Avoid waste! Make a list of things that you can make to waste less products and resources from nature. Take notes about your experiences to share with the group!	Ministry of Environment
Orange	Watch the movie "Pay It Forward" and create a pay it forward movement with your colleagues. Practice at least three good actions per day.	Fritjof Capra
Yellow	Design a plan with 5 ecological actions to apply daily. Make a poster with your school colleagues!	Ministry of Environment
Green	Research about intoxication, intoxicating foods, cleaning products and cosmetics.	Lair Ribeiro
Sky Blue	Save water! Research about the subject and design a plan.	Ministry of Environment
Violet	Learn about Human Rights and design a group plan to publicize them at school!	Ministry of Education

7. BIBLIOGRAPHIC REFERENCES

BROWN, T. **Design Thinking: uma metodologia poderosa para decretar o fim das velhas ideias**. 1 ed. Rio de Janeiro: Editora Elsevier, 2010. p.172.

COSTA, D.M.B., MELLO, C.G.M., RODRIGUES, D.C.G.A.

Educação Ambiental Crítica e a ética do Cuidado - desenvolvimento de material didático. Projeto PIBIT/UNIFOA, 2019 (Acesso restrito).

GUATTARI, Félix. **As três ecologias**. 12ª edição. Campinas, SP: Papirus, 1990.

PENSADOR. **Frases e Pensamentos**. Disponível em: <https://www.pensador.com/frases_de_jean_paul_sartre/>. Access in May 15, 2020.

Carla Moreira Graça Mello

Bachelor in Physical Education (full licentiate) from Centro Universitário de Volta Redonda in 2008, post graduated in Cooperative Games by Centro Universitário Monte Serrat de Santos in 2010, post graduated in Transpersonal Psychology by Alubrat in São Paulo in 2012. Master in Health Sciences and Environmental Teaching at Centro Universitário de Volta Redonda. Teacher at Centro Federal de Educação Tecnológica Celso Suckow da Fonseca - CEFET/RJ. Coordinator at Highlights – Eventos Sustentáveis extension project, an Environmental Educational proposal through recreation and leisure events. Since 2014, acts at Associação Almater- Jundiaí/SP creating and applying cooperative Games inspired in the works of Great Personalities of Humanity. Experienced trainer of High School I educators in Cooperative Games. Published a children's book and created games related with this work.

E-mail: carlagracamello@yahoo.com.br

ORCID: <https://orcid.org/0000-0001-6055-9218>

Adilson Pereira

PhD in Philosophy – Ethics – UGF/RJ, Master's in Philosophy, Ethics, Specialist in Philosophy History UGF/RJ, MBA in HR and Marketing – UGF, Licentiate in Philosophy – UNIFAI / SP. Professor at FAETEC/RJ – acting at Escola Técnica Estadual Amaury César Vieira High School, Professor at UniFOA's Professional Master's Program in Health Sciences and Environmental Teaching. Experienced Professor in Health (Bachelor's in Medicine, Nursing and Physical Education), Law (Bachelor's in Law), also experienced in teaching at postgraduate courses in Health, Law, Management, Researcher for the Technological Innovation Implementation Project – FAPERJ/RJ and Education. Member of the Evaluators Board at INEP/MEC.

e-mail: adilsonfaetec@gmail.com

ORCID: <https://orcid.org/0000-0002-3581-4683>

Denise Celeste Godoy de Andrade Rodrigues

Bachelor's in Chemical Engineering from Universidade Federal do Rio de Janeiro (1992), Master's in Industrial Biotechnology from Faculdade de Engenharia de Lorena (1997), Licentiate in Physics and Biology from Centro Universitário Geraldo de Biase (UGB/FERP) (2002) and PhD in Biochemical Pharmaceutical Technology from Universidade de São Paulo (2002). Current Associate Professor I at Universidade do Estado do Rio de Janeiro (UERJ). Experienced in Chemical Engineering and Sciences Teaching fields, acting in the following subjects: Environmental Bioremediation, Environmental Education, Chemistry Teaching, and Educational Products. Participates in projects on the following research lines: biological treatment of liquid effluents, soil bioremediation, Science teaching, Environmental Education. Provides guidance for academic works at the UniFOA's Professional Master's Program in Health Sciences and Environmental Teaching since 2009.

E-mail: denise.cgar@gmail.com

ORCID: <https://orcid.org/0000-0002-5110-1405>

