RISUS - Journal on Innovation and Sustainability

STRATEGIC PLANNING OF RESILIENT AND REGENERATIVE CITIES: A CASE STUDY ON HOW NEW GENERATIONS MAY CONTRIBUTE

Planejamento estratégico de cidades resilientes e regenerativas: um estudo de caso sobre como as novas gerações podem contribuir

Daniela Gasperin[1], Paula Patrícia Ganzer[2], Vitória Catarina Dib[1]

[1] Member of Group of Studies and Research on Futures, Pontifical Catholic University of São Paulo, Brazil,
[2] Visiting Professor at the Federal Institute of Education, Science and Technology of Rio Grande do Sul, Brazil,
[3] School of Economics and Business Administration, Pontifical Catholic University of São Paulo, Brazil
E-mail: palestrante@daniellagasperin.com.br, ganzer.paula@gmail.com

ABSTRACT

Resilience is a process in which communities collectively respond to significant events, using various coping and adaptive capacities. This scenario has mobilized reflections and strategies on the need to build resilient and regenerative cities with the capacity to recover from disasters and sustainably adapt to changes. The ecosystemic view of resilience perceives the individual incorporated into a web of complex relationships so that the individual, the family, and the environment are interconnected, and each sphere contributes to coping with adversities. This qualitative research was outlined in a case study conducted online with 200 individuals, of which 150 are students aged 11 to 13 years and 50 teachers, from four municipal schools. The research answered the following question: How does the knowledge of feelings and the ways of dealing with them in adolescents and teachers influence the development of a resilient and regenerative city? Content analysis was applied to analyze the data with the aid of the software NVivo version 20. The research was conducted through the Quality of Life Project Knowing the Feelings promoted by the Resilient City Program in the Municipality of Veranópolis in the State of Rio Grande do Sul, Brazil. The results showed the importance of the project for people's lives and the understanding of their feelings for developing themselves and strengthening resilience. The preparation to exercise citizenship begins with the knowledge about oneself and the environment in which one lives, aiming to interpret and act in society responsibly and, in this process, build a resilient and regenerative community.
Keywords: Resilience; Regenerative; Generations; Quality of Life.

PLANEJAMENTO ESTRATÉGICO DE CIDADES INTELIGENTES E REGENERATIVAS: UM ESTUDO DE CASO SOBRE COMO AS NOVAS GERAÇÕES PODEM CONTRIBUIR

Strategic planning of resilient and regenerative cities: a case study on how new generations may contribute

Daniela Gasperin[1], Paula Patrícia Ganzer[2], Vitória Catarina Dib[1]

[1] Member of Group of Studies and Research on Futures, Pontifical Catholic University of São Paulo, Brazil,
[2] Visiting Professor at the Federal Institute of Education, Science and Technology of Rio Grande do Sul, Brazil,
[3] School of Economics and Business Administration, Pontifical Catholic University of São Paulo, Brazil
E-mail: palestrante@daniellagasperin.com.br, ganzer.paula@gmail.com

RESUMO

Resiliência é um processo no qual as comunidades respondem coletivamente a eventos significativos, usando várias capacidades adaptativas e de enfrentamento. Esse cenário mobilizou reflexões e estratégias sobre a necessidade de construir cidades resilientes e regenerativas com capacidade de recuperação de desastres e adaptação sustentável às mudanças. A visão ecossistêmica da resiliência percebe o indivíduo incorporado em uma teia de relações complexas de forma que o indivíduo, a família e o meio ambiente estejam interligados e cada esfera contribua para o enfrentamento das adversidades. Esta pesquisa qualitativa se delineou em um estudo de caso realizado online com 200 indivíduos, dos quais 150 são alunos de 11 a 13 anos e 50 professores, de quatro escolas municipais. A pesquisa respondeu ao seguinte questionamento: Como o conhecimento dos sentimentos e as formas de lidar com eles em adolescentes e professores influenciam no desenvolvimento de uma cidade resiliente e regeneradora? A análise de conteúdo foi aplicada para analisar os dados com o auxílio do software NVivo versão 20. A pesquisa foi realizada por meio do Projeto Qualidade de Vida Conhecendo os Sentimentos promovido pelo Programa Cidade Resiliente do Município de Veranópolis / RS , Brasil. Os resultados mostraram a importância do projeto para a vida das pessoas e a compreensão de seus sentimentos para o desenvolvimento e o fortalecimento da resiliência. A preparação para o exercício da cidadania começa pelo conhecimento de si mesmo e do meio em que se vive, objetivando interpretar e atuar na sociedade de forma responsável e, nesse processo, construir uma comunidade resiliente e regeneradora.
Palavras-chave: Resiliência; Regenerativa; Gerações; Qualidade de Vida.

INTRODUCTION

Every year, over 200 million people are affected by droughts, floods, cyclones, earthquakes, forest fires, and other threats. In addition, poverty, increasing population density, environmental degradation, and global warming make the impact of natural threats ever greater. Facing this scenario, the United Nations Office for Disaster Risk Reduction (UNDRR) assists in capacity building to support municipalities implementing the global campaign Resilient Cities. Governments worldwide commit to reducing disaster risk and adopt a pathway called the Hyogo Framework for Action that focuses on reducing vulnerability to hazards (UNDRR, 2021).

The Hyogo Framework for Action prioritizes five actions: i) Building institutional capacity: ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation; ii) Knowing one's risks: identify, assess and monitor disaster risks and improve warnings and alarms; iii) Building knowledge and awareness: use knowledge, innovation, and education to build a culture of safety and resilience at all levels; iv) Reduce risks: reduce underlying risk factors through land use and occupancy planning, and environmental, social, and economic measures; and v) Be prepared and ready to act: strengthen disaster preparedness for effective response at all levels (UNDRR, 2021).

According to the Global Hazards Report (2020), extreme weather and deficiencies in climate responses represent the most significant global risks in terms of likelihood and impact influenced by vulnerability, coping capacity, and adaptation. Vulnerability comprises the components of susceptibility and relates to social, physical, economic, and environmental factors that make people or systems susceptible to natural hazards, the adverse effects of climate change, or other transformative processes. We face a series of threats that cross borders and comprise technological, environmental, political, economic, and social aspects. The coping capacity is understood as the community's diverse abilities to minimize the negative impacts of natural hazards and climate change through direct action and available resources. Moreover, the adaptive capacity comprises the strategies to deal with such negative impacts.

Given the above, it is paramount to reestablish the social condition of individuals in vulnerable situations, favoring the understanding of personal virtues and strengths to produce essential effects in their lives. To ensure human dignity and boost the well-being of citizens, effecting actions that in the long term result in a resilient and regenerative city.

1 THEORETICAL BACKGROUND

1.1 Resilient and regenerative cities

Resilience is a process in which communities collectively respond to significant events, using various coping and adaptive capacities. It is an essential aspect of risk management for guiding individuals in developing preventive measures and promoting resilient communities to cope with adversity (Spialek; Czlapinski; Houston, 2016). This scenario has mobilized reflections and strategies on the need to build resilient cities with the capacity to recover from disasters and sustainably adapt to changes. It has been a priority theme worldwide because in order to become sustainable, a city must become resilient or enhance manifestations of resilience.

The ecosystemic view of resilience perceives the individual incorporated into a web of complex relationships so that the individual, the family, and the environment are interconnected, and each sphere contributes to coping with adversities (Kirmayer et al., 2009). From the emergence of this vision, the concept of resilience has been applied to understand individual adaptive capacities by communities and societies (Norris; Stevens, 2008). This process facilitates the participatory and shared action of all towards the confrontation and resolution of their problems.

Resilient cities are those capable of developing effective ways of dealing with the challenges ahead. It is important to understand which processes increase or reduce preventive behaviors to deal with increasing global risks. To this end, a resilient city looks out for the development of: i) a place where disasters are minimized because its population lives in houses and communities with organized services and infrastructure; ii) it counts on a competent, inclusive and transparent local government that cares about sustainable urbanization and invests the necessary resources to develop capacities for municipal management and organization; iii) local authorities and

the population understand the risks they face and develop local and shared information processes based on disaster damages, threats and risks, including who is exposed and who is vulnerable; iv) citizens are empowered to participate, decide, and plan their city with local authorities; v) it is able to minimize physical and social damage from extreme weather events, earthquakes, and other natural or human-induced threats; and vi) it is able to respond, deploy immediate reconstruction strategies, and quickly reestablish essential services to resume its social, institutional, and economic activities after an adverse event (UNDRR, 2021).

In the path of building a sustainable future, Fleming (2013) observed our development trajectory, which started from business as usual to a green strategy and may reach a regenerative model. For that to happen, a change in the worldview is necessary. There should be an investment in a conscious education to redesign our presence on the planet. Towards a sustainable and integral worldview, a new set of values becomes necessary that lead us from the green model to more profound ideals of sustainability and resilience. History shows that cultural change does not occur through a slow and gradual process but a series of evolutionary leaps in human consciousness. The shift from nomadic hunting and gathering cultures to centralized agricultural societies and then to industrialized nations corresponds to the convergence of new energy sources and the invention of communication technologies. Currently, we are moving from a perspective of an improved standard of living through technological progress, defined by comfort and conveniences, to a perspective of increased quality of life, perceived through meaningful experiences and relationships with nature and others (Fleming, 2013). It is necessary to take a step forward by reducing the demand for goods and energy, rethinking the use of natural resources, redesigning our strategies, and using appropriate technologies. These steps aim to minimize the impact of our actions and enable the planet to reach resilience so that it can be first restored and then regenerated, according to Figure 1.

Figure 1. Path from the usual model to the regenerative model
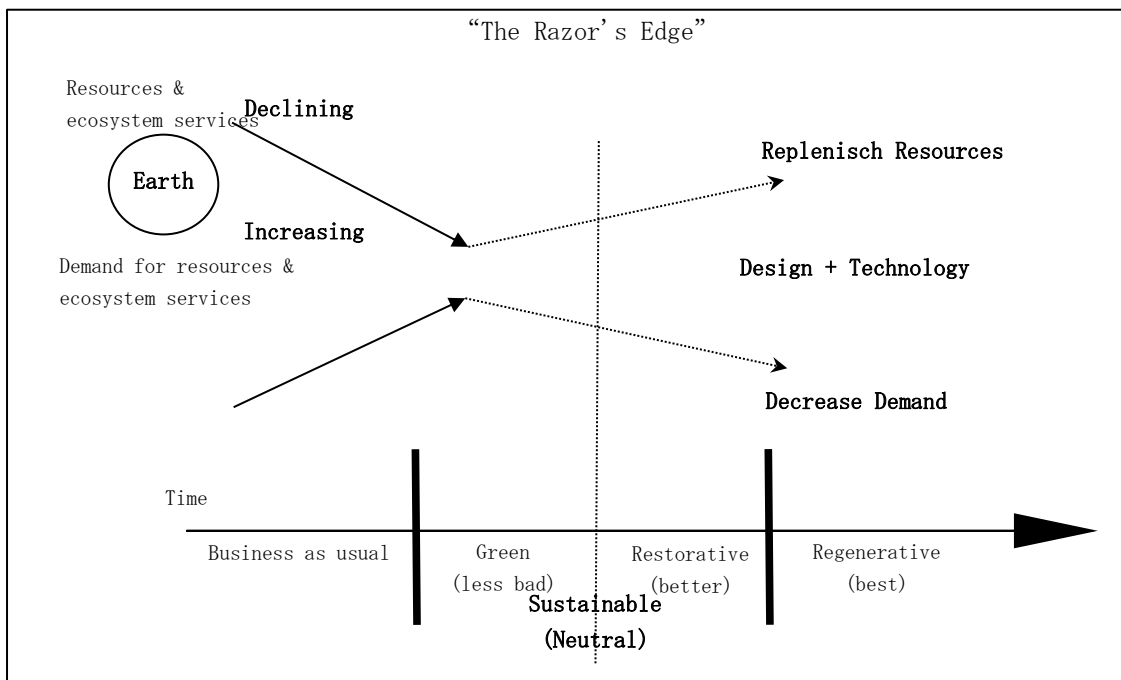
Source: Fleming (2013, p. 81)

Senge (2010) emphasized the importance of a worldview shift towards a regenerative economy. According to the author, innovators create the regenerative economy in their own ways by seeing the more extensive system in which they live and work. They look beyond surface events and issues, perceiving deeper structures and forces. They do not allow barriers (whether organizational or culturally imposed) to limit their thinking. They make strategic choices, considering natural and social limits, and work to create innovation cycles - strategies for change that replicate how growth occurs in the natural world. A resilient and regenerative culture observes the patterns and cycles of nature to collaborate with creating a new model capable of reestablishing

balance through recognizing the interdependence and complexity of living systems, appreciation for diversity, and a systemic and integrated system perspective.

2 DATA AND METHODOLOGY

The methodology of this qualitative research was outlined in a case study, focusing on contemporary phenomena of a real-life context (Yin, 2005), characterized by an in-depth evaluation of the object in order to have broad and detailed knowledge, with a descriptive and exploratory purpose (Gil, 2017). The research sought to answer the following question: How does the knowledge of feelings and the ways of dealing with them in adolescents and teachers influence the development of a resilient and regenerative city?

The case study was carried out with 200 individuals, of which 150 were students aged 11 to 13 years and 50 teachers, from four municipal schools. The adolescents were chosen because they represent the future of the next generations. They must implement another form of development capable of collaborating with the restoration of the dynamic balance of the Earth system, together with the educators, to build the regenerative economy of tomorrow.

Data collection occurred through participant observation with the researcher's active participation in the workshops. The participants received, read, and signed the free and informed consent form before the execution of the project.

Qualitative data analysis was applied to the content analysis by Bardin (2011) with the aid of software NVivo version 20. According to Bardin (2011), the document analysis is a preliminary phase of a database, being an operation or a set of operations aiming to represent the content of a document in a form different from the original to promote its consultation referencing in subsequent states.

The next step was the analysis of emerging categories, employing three steps: i) pre-analysis, with the floating reading of the interviews to enable interpretation; ii) exploration of the material, coding the data from the records made during the interviews; iii) treatment of the results and interpretation, by classifying the elements according to their similarities and differences, for subsequent regrouping according to shared characteristics (Bardin, 2011). Finally, we presented the construction of the Quality of Life Project: getting to know the feelings, which aimed to propose a reflection on personal feelings and behaviors that influence the development of a resilient and regenerative community.

2.1 The construction of the quality of life project: getting to know the feelings

Psychology highlights the importance of social support and the sense of belonging for the empowerment of individuals. Social interaction with others who share the same values and interests is central to developing our identities, wills, values, and goals. Hence the importance of social context and joint action to effectively intervene in the surrounding reality (Kronenfeld, 2016). The Quality of Life Getting to Know the Feelings project emerged to reflect on some feelings and behaviors that can improve resilience at an individual and collective level.

This perspective connects to the current process of individualization and isolation that we face with the coronavirus pandemic, which has been causing suffering in several aspects of human life. Present in adolescents, our future generation, and evidenced by anxiety, panic, fear, and anguish, among others. Therefore, it is necessary to name, know, and deal with such feelings. The project merged the human development actions carried out in recent years in the Municipality of Veranópolis, in the State of Rio Grande do Sul, Brazil. The city covers an area of 289.4 km² and has a population of 26,241 inhabitants. The Project is part of the Veranópolis Resilient City Program, whose starting point is socio-environmental responsibility for improving public management and the consolidation of public policies that promote social inclusion and strengthen ties with the community to reduce vulnerabilities.

Anchored in the UNDRR's perspective, the program aims at an administrative efficiency for reducing vulnerabilities with the insertion of all social actors, which strengthens governance and participative democracy. The program was divided into five phases.

Phase one started in 2019, comprising the organization and preparation for constructing a resilient city with the meeting of different social actors to discuss the actions that can improve access to information, knowledge, capacities, and tools to deal with risks.

In phase two, the diagnosis and risk assessment of the municipality were carried out. In phase three, in 2020, a security and resilience action plan was developed, in a scenario where the world has dedicated efforts to stop the advance of the coronavirus pandemic, evidencing the deficiencies of the countries and the challenges that Brazilian cities need to face to become more resilient and regenerative. The Quality of Life Project Getting to Know the Feelings was developed in this phase and executed in 2021. The project was structured in three workshops with 150 students and 50 teachers, namely: i) self-control workshop to deal with feelings of anxiety, anguish, aggressiveness, and lack of motivation; ii) self-esteem workshop to perceive qualities and deal with frustration, hurt, anger, resentment; and iii) self-confidence workshop to believe in potentialities and deal with insecurity, fear, and loneliness.

The teaching methodology of the workshops was based on Pichon-Rivière's (2007) operative groups, with the preparation of a folder distributed to all participants. Chart 1 shows the content developed.

Chart 1. Quality of Life Project Getting to Know the Feelings

Anxiety It is an unpleasant emotional state, apprehension, or fear of imminent danger, real or imagined, accompanied by physical sensations. The discomfort is often difficult to describe, but the sensations are clear.	Breathing	Self-control: dealing with emotions
Anguish Anguish is not about anything precise, waiting for something that cannot be named. It is the feeling of possibility, since the possibility is the dimension of the future.	Living in the present	
Aggressiveness This behavior can be manifested by destructive and attacking actions, verbal or physical.	Physical activity	
Frustration It is an emotional state when one is forbidden to the satisfaction of something. It is in the frustration of an expectation through an unforeseen solution.	Dealing with expectations Developing gratitude, recognition	Self-esteem: realizing your qualities
Sorrow It is an emotional state that results from disappointment when we create expectations about something or someone.		
Anger Anger is a feeling of frustration or inability to satisfy a need or desire.		
Low Self-Esteem It is a person's evaluation of himself/herself, including psychological and physical characteristics, qualities, and abilities.		
Resentment It is an emotional state of anger against what one cannot be or cannot have.		
Insecurity Insecurity is discomfort triggered by believing oneself to be worthless, unloved, or not good enough.	Trusting yourself	Self-esteem: believing in your qualities
Loneliness It is an emotional state of isolation and the impossibility of communication.		

|		
Fear It is an emotional state of pain or agitation produced by the prospect of future evil, which can produce death or pain.		

Each workshop totaled three hours, held weekly in each school, in the online modality, with students and teachers. The students were divided by school and class, with an average of 15 participants, totaling ten groups. A workshop was also held with the teachers. The project's workload totaled 36 hours.

Phase four is ongoing with the execution of the planned actions. The Quality of Life Project continues with the students' parents and social entities to inclusively and participative achieve its aim. Phase five will be the follow-up of the executed actions, their results, and implementations by improving educational and informative campaigns that promote resilience actions. Since history has taught us we are resilient, it is essential to build resilient cities to deal with adversities with the least impact and the most learning for future generations. The analysis and discussion of the results are presented next.

3 RESULTS

The transcribed content of the workshops held with students and teachers was imported into NVivo software version 20, and content analysis was performed following Bardin (2011). After importing the contents in a Microsoft word file, the categories formed from "nodes" created in the software allowed the emergent category analysis (Figure 2).

Figure 2. Categories or "Nodes" of analysis
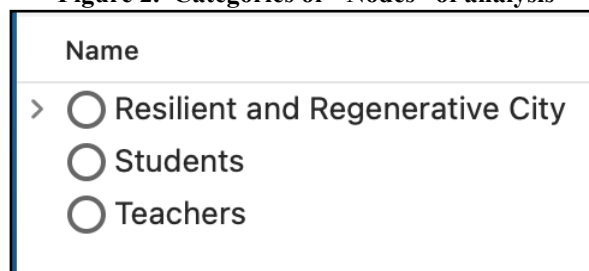
Source: NVivo 20

The step performed in NVivo 20 allowed the application of the three stages of content analysis of Bardin (2011): i) pre-analysis, with the floating reading of the interviews to enable interpretation; ii) exploration of the material, coding the data from the records made during the interviews; iii) treatment of the results and interpretation, by classifying the elements according to their similarities and differences, for subsequent regrouping according to shared characteristics. As a result, after the categorization by "nodes," the grouping of the writing excerpts for each category was done. After this grouping, the word frequency was performed by selecting the 30 most frequent words, which formed the "word cloud" that represents the significance of the words through the times they were mentioned in the workshops and testimonials.
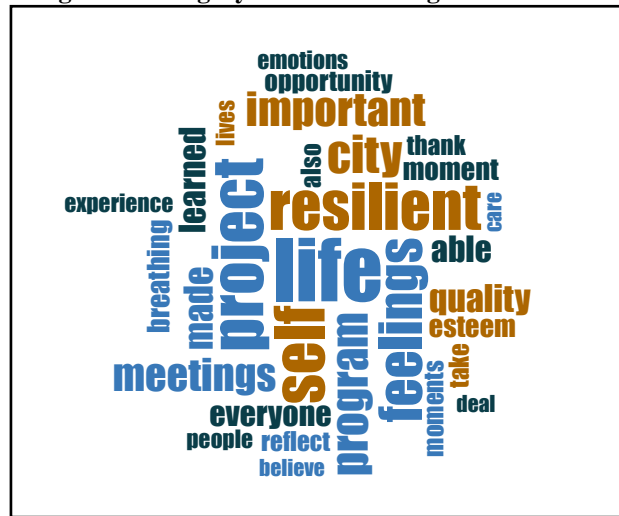
3.1 Resilient and regenerative cities and the quality of life project categories

The frequency of words in the resilient and regenerative cities category showed "life" as the most cited word, appearing 46 times. Next, the words "project" 37 times, "self" 36, "resilient" 34, and "feelings" 31. The importance of the project for people's lives is evidenced and the understanding of their feelings for their self-development and strengthening of resilience.

Hanson (2018), claimed resilience is the capability to recover from adversity, trauma, and setbacks and to keep pursuing goals and opportunities. We need resilience to survive, but we also need resilience to thrive. To deal with stress, work through conflicts, push through weariness and pain, and deal with a changing world. Resilience requires inner resources like secure attachment, self-control, grit, gratitude, mindfulness, compassion, and confidence. The essence of self-reliance is resilience, and the essence of resilience is knowing how to use each day to become a little stronger, wiser, more loving, and happier. The word cloud evidenced that the city

appreciates the care, that it is possible to believe in resilience development, and that the project is focused on life and knowing the feelings. Figure 3 presents the results of the word cloud.

Figure 3 Category resilient and regenerative cities

Source: NVivo 20

The result of the word cloud shows that the project has achieved its goal of proposing a reflection on personal feelings and behaviors, which influence the development of a resilient and regenerative community by enhancing the socioemotional skills of students and teachers. The socioemotional concept is inserted in the study of social skills, relating to repertoires of interpersonal and affective relationship management, in the interface with how people perceive, feel, and express the interaction between contingent situations and behaviors (Caballo, 2014). From this perspective, behaviors can change depending on the social environment and are subject to specific intervention to better adapt the person's interaction with the social context.

Tough's (2014) described the big five, which are constructs obtained by factor analysis performed on responses from broad questionnaires with diverse questions about behaviors representative of all the personality traits an individual might have, giving rise to the hypothesis that the personality traits of human beings would cluster around five major domains, namely: i) Openness: being willing and interested in experiences; ii) Conscientiousness: being organized, striving, and responsible for one's own learning; ii) Extraversion: orienting one's interests and energy toward the outside world; iv) Agreeableness: acting in a group cooperatively and collaboratively; and v) Neuroticism: demonstrating predictability and consistency in emotional reactions. It draws attention to the fact that the initials of the five categories form the word "ocean." The ocean is a metaphor for socioemotional skills, entering the immensity and depth of the self.

3.2 Students' Category

In the students' category, the frequency of words remained as in the previous category. The word "life" presented the highest incidence, followed by "project" and "self," but a new word emerged, "learned." The Quality of Life Project provided the students with conditions to understand/name their feelings, deal with/transform their reactions, and contribute to forming participative and collaborative citizens in their environment.

For Vygotsky (2009), to have impact and relevance, interactions between people must be meaningful and integrative to transform the individual through reflection and awareness. Meaningful dialogues and conversations are the most profound way a human being can reflect on the conception of the world, values, and practices. The word cloud, presented in Figure 4, shows the importance of dialogue as a driving force for social learning.

Figure 4 Students' category
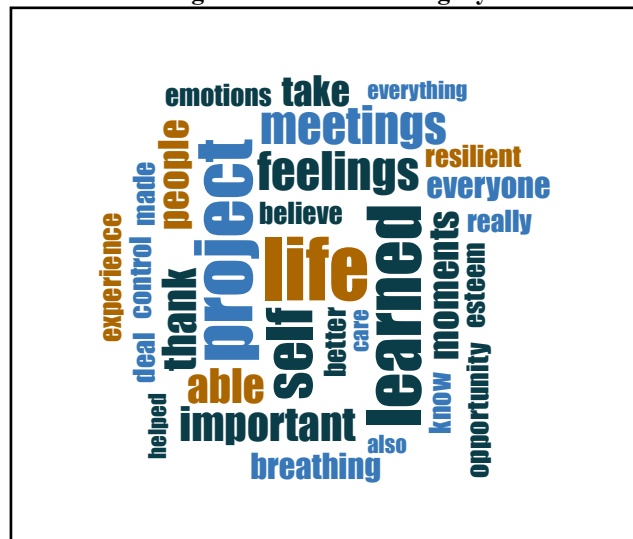
Source: NVivo 20

Dialogue construction calls for participants to be able and willing to communicate equally in an open conversation that welcomes diversity of views and observes divergences when adequately handled. Hanson (2018) said mindfulness is important because we need to be aware of beneficial experiences or opportunities to gain inner resources that make us resilient. If we are not mindful, we might lose opportunities. Mindfulness gives us control over whom we are becoming. For many people, the mind dwells in resentment, anxiety, or regret. Mindfulness enables us to regulate where our mind dwells. We can notice when our mind is dwelling on a beneficial experience and when it is not. If a person cannot be mindful, they cannot direct their own process of becoming.

Learning is the strength of strengths, responsible for growing all the others. If lifelong learning is important, it becomes essential to get good or better at learning. That kind of central insight and internal commitment is the value of self-reliance. The essence of self-reliance is that you can count on yourself to learn and enjoy the fruits. The preparation for the citizenship exercise starts with the knowledge about oneself and the environment in which one lives to interpret and responsibly act in society and, in this process, build a resilient and regenerative community.

3.3 Teachers' Category

In the teachers' category, the frequency of words remained as in the main category. The new words were "meetings" and "resilient," reinforcing that the meetings strengthened the understanding of self and resilience enhancement.

Foucault (1988) used the term care, which comes from the Socratic-Platonic knowledge, understood as the art of existence, the principle one should take care of oneself deriving in social imperatives and elaborating collective knowledge. The author referred to the specific techniques that men use to understand who they are.

There are many reasons why "know thyself" has eclipsed "take care of yourself." In Greco-Roman culture, the knowledge of the self appears as a consequence of the care of the self. In the modern world, the knowledge of the self represents a fundamental principle. Caring for the self consists in knowing oneself. The knowledge of the self becomes the object of the search for the care of the self (Foucault, 1988).

For Hanson (2018), a way to help people is to help them get out of situations that bang hard on them every day. We help people get away from things that are bad for them. A significant way to help people become resilient is to help them develop targeted psychological resources, inner strengths in a deliberate way. Figure 5 reveals the importance of talking about self and resilience.

Figure 5. Teachers' category

Source: NVivo 20

Based on Gardner's (1995) concept of multiple intelligences, the development of socioemotional skills can be translated as strengthening interpersonal and intrapersonal intelligence. In this context, teachers also need space to reflect on their feelings, to rescue the multiplicity of aspects inherent to their experiences. Instead of denying emotion, it is necessary to be aware of the universe of feelings and behaviors present in human life.

The Project Quality of Life Getting to Know the Feelings of the Resilient City Program provided the opportunity to explain emotional concepts, their implications, and management to ensure that the workshops were meaningful to teachers and students. The Project provided moments of conscious reflection to promote metacognition, that is, thinking about one's own thinking.

During the research, we realized that the knowledge of feelings and how to deal with them in students and teachers influence a resilient and regenerative city. Knowing and caring about the self increases the resilience to face challenges. A resilient city is built with resilient citizens, an organized community, competent, inclusive, and transparent local government. Citizens are empowered to participate, decide, and plan their city together with local authorities and go further, towards regenerative development, with a worldview that considers natural and social limits, and working to create innovation cycles in a systemic and integrated perspective.

CONCLUSION

The Quality of Life Project Getting to Know the Feelings of the Resilient City Program contributed to everyone's learning. This represents the possibility of building dynamic processes of participation and collaboration and increasing numbers of public actors and society in new ways of thinking and facing problems related to socio-environmental sustainability. In order to strengthen collaborative and articulated diagnoses that promote sustainability (Bandura, 1963).

In practice, we noticed that the workshops contributed to the integral formation of the students, because they offer an opportunity for the reflection and management of various feelings and behaviors that are enhanced in the face of adversities, which implies increased individual resilience.

For teachers, improving self-knowledge contributed to their pedagogical practice, because the teacher must be a researcher of his own action. Knowing the place of experience, its possible problems and conflicts, makes it possible to subsidize dialogues and collective reflections about the different perceptions of reality.

Finally, it is understood that in the future, a quantitative analysis should be applied, using the constitutive factors of reivich and shatté resilience, through the RQtest to measure the resilience quotients and monitor the results of this and other studies to promote resilient actions based on the actual demands of the community.

REFERENCES

Bandura, A. Social learning and personality development. Holt, Rinehart, and Winston, 1963.

Bardin, L. Content analysis. Edições, 2011.

Caballo, V. E. Manual of therapy techiniques and behavior modification. Santos, 2014.

Fleming, R. Design Education for a Sustainable Future. Routledge, 2013

Foucault, M. Technologies of the self. Ed. Technologies of the Self. A Seminar with Michel Foucault. Anherst: The University of Massachusetts Press, 1988:16-49.

Gardner, H. Multiple Intelligences: Theory in practice. Artmed, 1995.

Gil, A. C. How to desing research projects. Atlas, 2017.

Global Hazards Report. World Economic Forum. Global Risks. 15 Edition. Geneva, 2020.

Hanson,R. Resilient: How to Grow an Unshakable Core of Calm, Strength, and Happiness. Harmony, 2018.

Kirmayer, L. J.; Sehdev, M.; Whitley, R.; Dandeneau, S. F.; Isaac, C.. Community Resilience: Models, Metaphors and Measures, Journal of Aboriginal Health, November 2009.

Kronenfeld, J. J. Social Factors and Disparities in Health and Health Care. Emerald Books, 2016.

Norris, F. H.; Stevens, S. P. Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. American Journal of Community Psychology. April 41(1-2), 2008:127-50.

Pichon-Riviere, E. Bond theory. Martins Fontes, 2007.

SENGE, P.; Smith, B.; Kruschwitz, N.; LAUER, J.; SCHLAY, S. How Individuals and Organizations are Working Together to Create a Sustainable World. Paperback, 2010.

Spialeka, M. L.; Czlapinskia, J. Heidi M.; Houston, B. Disaster communication ecology and community resilience perceptions following the 2013 central Illinois tornadoes. International Journal of Disaster Risk Reduction. Vol. 17, August 2016: 154-160.

Tough, P. A matter of character. Intrínseca, 2014.

UNDRR. The United Nations Office for Disaster Risk Reduction (UNDRR). International Journal of Disaster Risk Reduction. 2021. Available in https://www.undrr.org

Vygotsky, L. S. The builder of thoght and language. Martins Fontes, 2009.

Yin, R. K. Case study: planning and methods. Porto Alegre Bookman, 2015.