



LEVERS AS A PRE-CONDITION FOR INTEGRAL EDUCATION

An exploration of principles and transformative
mechanisms of Service-learning in the case of Doelland

KU Leuven, Faculty of Architecture
& KU Leuven Engage, Service-Learning

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Authors

Aurelie De Smet, Maristela do Nascimento Rocha,
Ward Foulon (student), Victor Goossens (student),
Léon Hardeman (student), Kathia Reynders,
Mariam Tharwat (student)

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EXECUTIVE SUMMARY

This research evaluates the impact of Service-learning with regard to Integral Education, using the Doel-land initiative, as a case study. Doel is a 17th-century unique harbour village located in the Flemish region of Belgium, near the port of Antwerp, and has a rich history, culture, and traditional Flemish architecture. However, since the 1960s, the village has faced significant challenges due to expansion plans for the port. Many people have left the village, leaving buildings abandoned, which created opportunities for vandalism and prompted demolition plans. Despite that, attempts to resist and revalue the village have been made through artists, residents, researchers, activists, and heritage organizations. In this research, we analyse one such attempt, namely, the Doelland initiative, a Service-learning case organized at the Faculty of Architecture of the Catholic University of Leuven (KU Leuven) by Daan De Volder, Pascal François, and Joris Van Reusel. In this project - which is part of the AOB2 Dysfunction Strategies, aimed at developing design-based strategies for dysfunctional spaces - architecture students and teachers are involved in a Service-learning discipline with activities that take place in the village of Doel. This initiative has evolved into a long-term engagement involving a large number of stakeholders and became a recognized voice in the public debate, contributing significantly to achieving a consensus between the local community, the port of Antwerp, and the Flemish government that ultimately led to the official saving of the village in 2019.

Drawing on the Empowerment Paradigm of Van Regenmortel (2002) and Actor Network Theory (Latour, 2005) and conducting in-depth interviews and participatory workshops with students, teachers, and community representatives, this research analysed the change process caused by the Service-learning project. It identifies five principles and mechanisms that can function as levers with transformative potential to enable Integral Education: (1) authenticity, (2) immersive engagement (humility); (3) openness, flexibility, & reciprocity; (4) courage, activism, & agency; and (5) empathy, care & respect. These principles were connected by the most fundamental principle of 'solidarity', which was responsible for implementing values such as solidarity, horizontality, dialogue, interaction, and open communication. These principles and mechanisms have contributed to the holistic development of the individuals participating in the project. They report feeling more recognized and confident about themselves, a heightened sense of responsibility towards others, a greater willingness to act towards

social transformation, increased openness to different types of knowledge and experiences, a stronger sense of belonging and well-being, and the ability to integrate their vulnerabilities, humanity, and personality into creative processes during the project realization. This research provides valuable insights into the potential of Service-learning initiatives to promote Integral Education. These findings can guide students, teachers, and social partners in effectively implementing and shaping transformations for both existing and new Service-learning projects.



ABOUT US



Service-learning aligns with the mission of the Katholic University of Leuven (KU Leuven) to *'put its knowledge and expertise at the service of people and society; with special attention to the most vulnerable.'* The central KU Leuven Engage service is supporting the institutionalisation of this pedagogy all over the university since 2016. The Faculty of Architecture is the first to have appointed a Service-learning coordinator to further support the implementation of this approach. This research was executed as a collaboration between KU Leuven Engage and the Faculty of Architecture.

RESEARCH PARTNERS



Aurelie De Smet

Aurelie is Service-learning facilitator at the KU Leuven Faculty of Architecture. She is fascinated by the direct and indirect influence people have on their environment and vice versa and is familiar with both practical as well as academic aspects of (landscape) architecture and spatial planning.



Kathia Reynders

Kathia coordinates a variety of Service-learning projects at KU Leuven Engage, and leads strategic initiatives, both regionally and internationally. She takes responsibility for strategy development, capacity building and deepening the pedagogical approach, and focuses on the professionalisation of teachers (teams).



Maristela do Nascimento Rocha

Maristela is a Latinx service-learning researcher and trainer at KU Leuven. Her work focuses on Latin American Studies, aiming to propose and develop critical and decolonial pedagogies that challenge colonial legacies in education.



Doelland Tutors & Students

Joris Van Reusel, Pascal François, Daan De Volder, Jeanne Vancoppenolle, Madeline Smid, Pauline Liphout, Louis Praet



SSDA Students

Ward Foulon, Victor Goossens, Léon Hardeman, Mariam Tharwat



Doel Stakeholders

Jan Creve, Denis Malcorps, Guido, Johan De Vriendt, Kevin Demey, Liese Stuer, Sven Augustijns

INTRODUCTION

Integral Education, often connected to the works of Sri Aurobindo (1872-1950) and The Mother (1978), is a type of holistic education that advocates for the development of the whole person, converging Western and Eastern philosophies, psychologies, and sciences in order to integrate the individual's physical, vital, mental and spiritual dimensions. Western education generally tends to focus on the cognitive development of individuals, progressive methodologies centred on the student, and positivist science. Eastern education focuses on spiritual development, the connection between body and mind, and traditional knowledge forms. Combining these two worldviews can help address the shortcomings of mainstream education (Ashok & Sindhuja, 2023), which is under the increasing pressure of neoliberal and marketization forces that do not leave space for the development of values other than individualism, consumption, and competition (Mintz, 2021).

This reality makes it difficult to apply Integral Education since the values it aims to develop are often against neoliberal ones, especially when it comes to developing awareness in its four dimensions: construct awareness, ego awareness, relational awareness, and system awareness (Murray, 2009). The main challenges in applying Integral Education involve the increasing number of students in schools, the fact that Integral Education is qualitatively different from the education required to compete in the knowledge economy, the lack of teacher and management professionalization, and the lack of holistic curriculum (Ashok & Sindhuja, 2023). Therefore, there is a need to search for ways of implementing Integral Education that consider the complexity of contemporary educational practices.

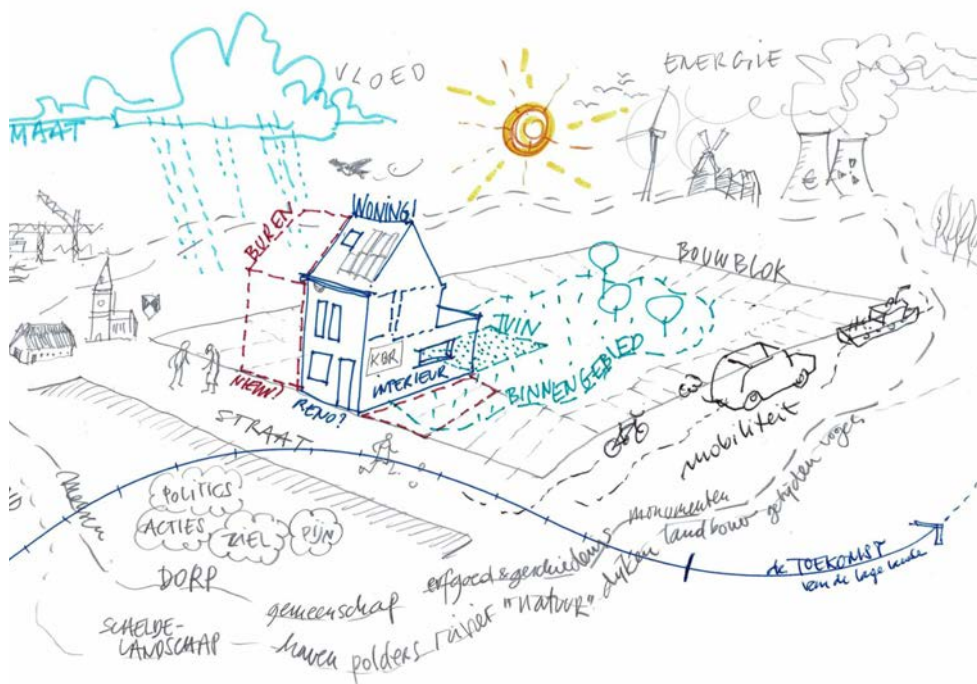
This research contributes to a search for mechanisms and principles for implementing Integral Education by exploring how Service-learning can facilitate this process, especially regarding non-individualistic, solidarity, spiritual, social justice, and community values, which stand in opposition to individualism. Service-learning has the potential to contribute to the development of holistic values while at the same time working on the learning of knowledge content, which is another common challenge of Integral Education (Ashok & Sindhuja, 2023). It combines service, learning, and reflection within its curriculum design, creating opportunities for students to learn from experience in real-life contexts, to have meaning in the communities around the university through service that addresses their real needs, and to acquire owner-

ship of their own learning through continuous reflection and active engagement. This approach has been proven to influence real curriculum and institutional changes worldwide (Bringle et al., 2011). Therefore, we believe that it can potentially contribute to the development of Integral Education.

Applying the Empowerment Paradigm of Van Regenmortel (2002) and Actor Network Theory (Latour, 2005), as well as through in-depth interviews and participatory workshops with students, teachers, and community representatives, this research aims at identifying in which ways Service-learning can contribute to the development of tools and frameworks that foster the implementation of Integral Education. It focuses on identifying the mechanisms established through Service-learning methodology and their impact and consequences for Integral Education.

Our case is the Service-learning initiative 'Doelland,' organized at the Faculty of Architecture of the Catholic University of Leuven (KU Leuven) by Daan De Volder, Pascal François, and Joris Van Reusel. In this project - which is part of the Academic Design Office (AOB) Spatial Dysfunction Strategies, aimed at developing design-based strategies for dysfunctional spaces - architecture students and teachers are involved in a Service-learning discipline with activities that take place in the village of Doel, a 17th-century unique harbour village located in the Flemish region of Belgium near the port of Antwerp. This village has a rich history, culture, and traditional Flemish architecture. However, since the 1960s, it has faced significant challenges due to expansion plans for the port. Many people have left the village, leaving buildings abandoned, which created opportunities for vandalism and prompted demolition plans. This project has evolved into a long-term engagement involving a large number of stakeholders and became a recognized voice in the public debate, contributing significantly to achieving a consensus between the local community, the port of Antwerp, and the Flemish government that ultimately led to the official saving of the village in 2019. This case has, therefore, the potential to contribute with insights into how Service-learning might contribute to Integral Education. In the following sections, we describe the research design and questions.

mensen maken dorpen



relatie wonen in context.

VLOED © DOEL LAND - Burg 55 - 2022



Image source: Doelland Studio

1.1 Project Overview

The research started in November 2023. The first step involved a literature review and documental research to understand both the Doel Village social and political context and the Service-learning project (Doelland Initiative) being conducted there. After this preparation time, the first visits to the village occurred at the end of November, and data collection started in January with in-depth interviews and later in April with workshops with community members and students. The next steps of this project involve disseminating the results within the faculty, the community and the wider Uniserviate Network. All steps occurred in parallel with frequent work meetings, where students from another Service-learning course at KU Leuven, the Socio-Spatial Design Agency (SSDA) Elective, also participated as co-researchers. Figure 1 summarizes this research process.

1.2 Research questions

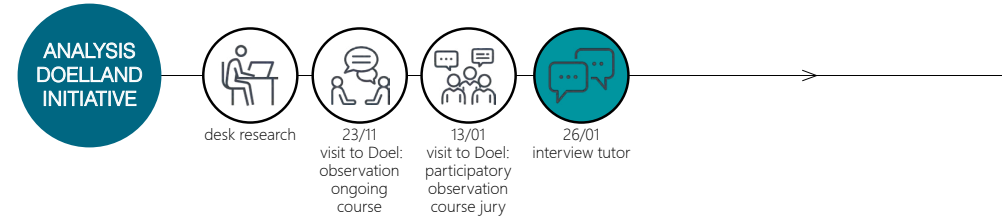
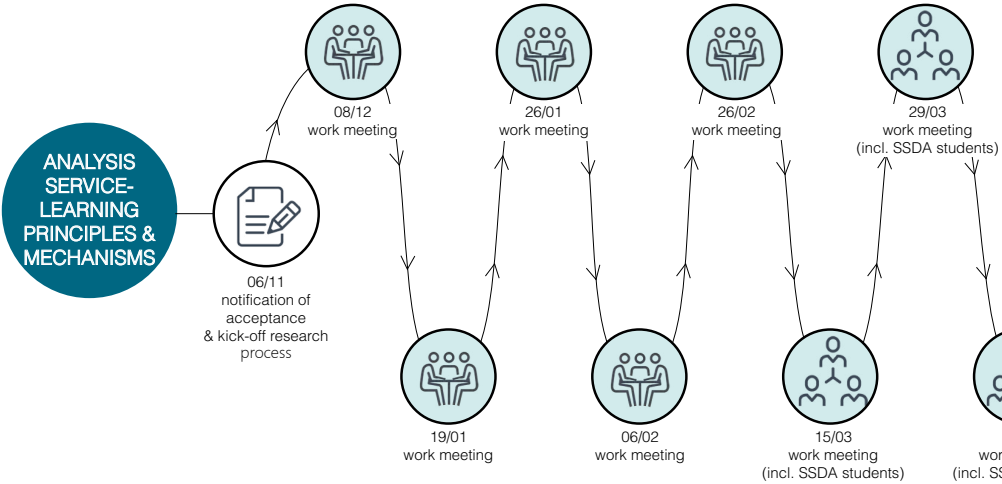
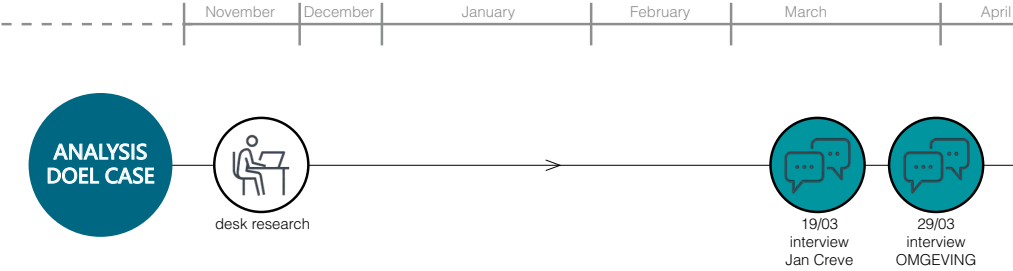
The objective of this research is to understand how Service-learning can act as a lever for Integral Education. It identifies transformative mechanisms and principles of Service-learning, shifting the focus away from determining static and measurable outcomes to processes and their fluidity and complexity.

More specically, we aim to identify 'leverage points' or 'Kairos' moments, which are moments that provide op-

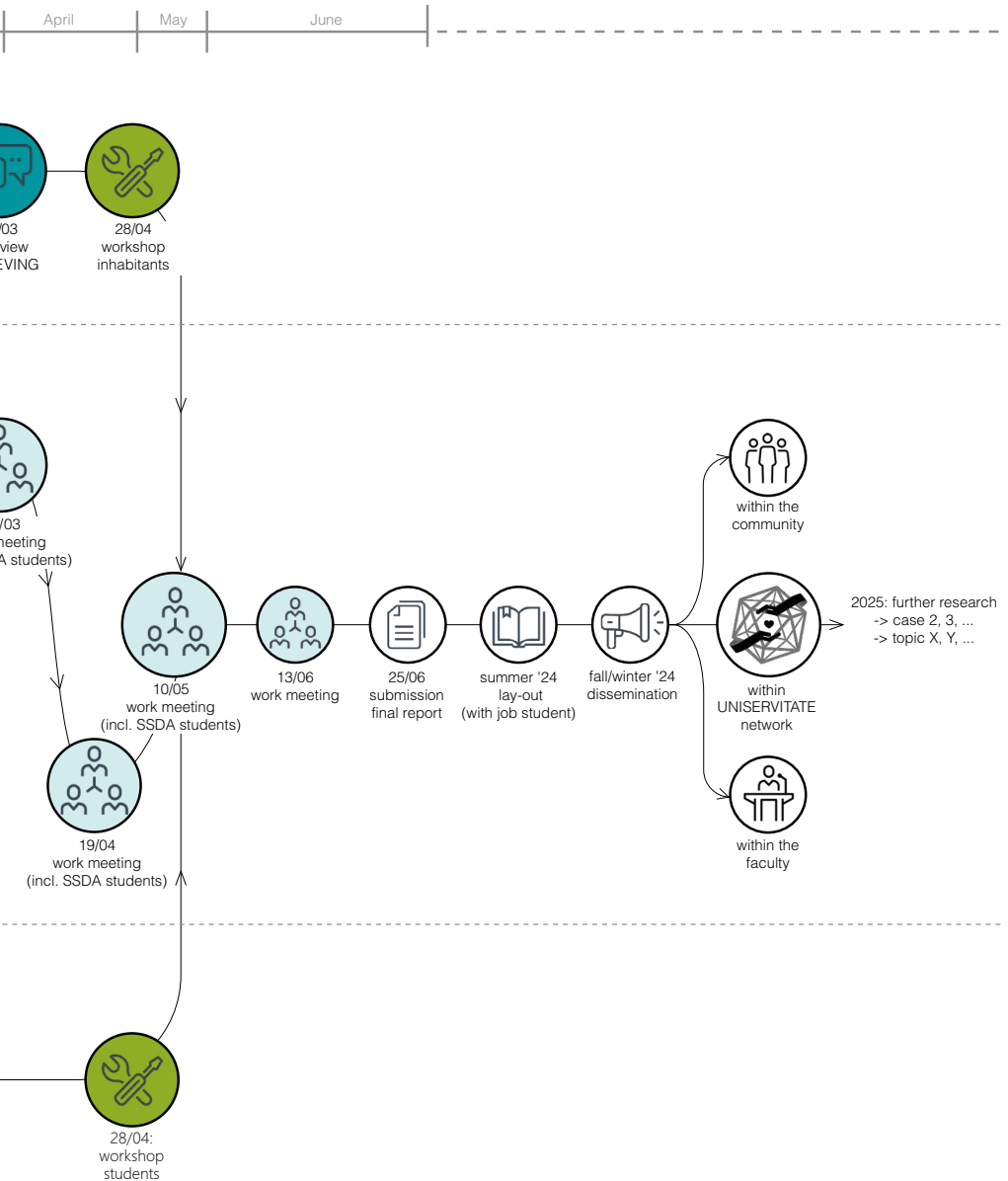
portunities for growth, learning, or change (Hermesen, 2015), which are elements that allow us to look closer into processes rather than outcomes. Therefore, our main research questions are:

- *Which principles and mechanisms within Service-learning can function as levers that hold a transformative potential to enable Integral Education?*
- *What was the impact of these elements on the development of the students, community members, and teachers, and how did the interplay between these three types of actors influence this development?*
- *Based on the findings from this research, what recommendations can be made to teachers and educational support staff who want to evaluate and improve their own Service-learning initiatives or who want to setup new Service-learning initiatives with the aim of achieving Integral Education?*

LEVERS AS A PRE-CONDITION FOR INTEGRAL EDUCATION



ATION RESEARCH PROCESS



METHODOLOGY

Image source: authors



2.1 Theoretical Framework

We understand Integral Education in accordance with Murray's framework (2009). It integrates four elements:

... a *(meta-)model* or framework (a system of concepts for interpreting the world), a *methodology* (a set of injunctions or principles for inquiring about the world), a *community* (the embodied group or groups of people using integral models and methods), and/or a set of *skills* or capacities (a developmental stage that points past modern and post-modern cultural perspectives, and past formal operational modes of thinking). (p. 97)

In this research, we interpret the collected data according to these four elements of Integral Education. The four elements allow for a wholeness approach that should be reflected in all educational dimensions, connecting mind, body, emotion, and spirit at the metalevel. The Integral Education methodology involves not only methods for the learning of knowledge content but also for 'learning how to learn,' 'metacognition,' and 'metaknowledge.' Integral Education uses concepts from systems theory, such as 'chaos' and 'non-linearity,' to understand knowledge, learning processes, and the world in their complexity, understanding that learning processes do not happen in a linear and deterministic way but require space for experimentation, error, and challenges. It also uses methods from progressive pedagogies, such as problem-solving

and self-directed learning, to develop autonomy and lifelong skills connected with 'freedom, equality, empathy, sincerity, inclusivity, reciprocity, integrity, and mutual regard' (Murray, 2009, p. 105). In this process, 'dialogue' is an important principle and method that helps build 'solidarity,' 'horizontality,' and 'dialectical intelligence,' which are key elements that unite the community participating in the learning processes. Integral Education also values multiple capacities, skills, knowledge, and intelligence. It aims at developing integral consciousness capacities at different levels by recognizing different stages of adult development: 'emotional, epistemological, social, ego, and moral' (p. 112). More specifically, Murray draws on the Fifth Order Consciousness from Robert Kegan to understand these different developmental stages: construct awareness, ego awareness, relational awareness, and system awareness.

Since Integral Education draws on systems theory, this research also looks at the case through the lens of Actor Network Theory (Latour, 2005). Actor Network Theory describes the fabric of relationships and interactions, forming an ontological network that seeks to explain social reality. An actor-network is not to be understood as a stabilized and finalized set of connections, as is the case with an electrical cable network, but it has a dynamic and fluid nature. The connections and nodes can change over time, follow multiple and

undetermined paths, be localized, expand, or disappear. Actors are not only humans and institutions but can also be any non-human entities capable of acting, interacting, shaping, and constructing social phenomena (Latour, 1996). Actor Network Theory contributes to this research by helping us see the different actors participating in the project as disconnected from their commonly perceived social hierarchies and positions, allowing us to understand processes at different levels and, therefore, contributing to the finding of mechanisms and principles underlying the case studied. In other words, because this framework pays close attention to context, timing, and dynamic interactions, it allows us to look for 'Kairos moments' (Baert, 2016), which are crucial instances of alignment between time and context that enable change and transformation.

Lastly, we connect both theoretical frameworks through the Empowerment Paradigm from Van Regenmortel (2002), which allows us to understand the role of Service-learning and Integral Education within the actor-network. Empowerment is defined by Regenmortel as: 'A process of strengthening in which individuals, organizations, and communities gain control over their own situation and environment through acquiring control, sharpening critical awareness, and encouraging participation' (Van Regenmortel, 2002, p. 76, own translation). This definition of Empowerment is in line with Service-learning basic principles, which gives students the ownership of their own learning process while at the same time attending to community needs and, therefore, also contributing to gaining control of their lives and spaces (Werner et al., 2002; Bringle et al., 2011).

The Empowerment Paradigm focuses on health, well-being, social justice, inclusivity, and other environmental factors instead of responsabilizing individuals, contributing, therefore, to the identification of structural mechanisms that lead to empowerment. It aligns with Integral Education and Actor Network Theory since it also considers different levels of analysis, from the individual to the broader social context. However, it is an important addition to the previous frameworks because it offers concrete examples of empowerment that facilitate our analysis and are also in line with Service-learning goals. In this sense, it offers us a frame of reference in relation to which mechanisms and principles are evaluated. In order to have empowerment, the following three pairs of concepts are necessary: active citizenship - social inclusion; social integration - quartering (actively creating space for diversity); and resilience - shared responsibility. Taking these pairs into consideration allows us to focus on concrete aspects of the project process while not losing sight of the holistic dimensions of Integral Education.

2.2 Methods

This research combines participatory document and newspaper analysis, dialogical examination, and interviews with the involved teachers, students, community members and spatial professionals. The interviews are conducted in two forms: in-depth interviews (Brinkmann & Kvale, 2014) and workshops where community members engaged in group discussions with the researchers on the actions and events in Doel and the research concepts (Service-learning, Integral Education, Levers, Kairos) with the aim of identifying patterns and key points. During the in-depth interviews and workshops, the participants contributed to the construction of the timeline mapping and actor-network analysis, which were further elaborated by the researchers (a.o. using CmapTools software) (see part 2.3).

The in-depth interviews (N=4) were conducted following the interview guidelines presented in Table 1. The workshops (N=2) were prepared to understand students' (Workshop 1) (N=4) and the community members' (Workshop 2) (N=5) experiences at a deeper and personal level. They followed the guidelines presented in Tables 2 and 3.

2.3 Data Analysis

In order to understand the Doel context and the Doel-land initiative, during the dialogic examinations, we applied the Iceberg Model (Figure 2) to analyse the case systemically. This model guides us in thinking about events, patterns, and their underlying causes and associated mental models:

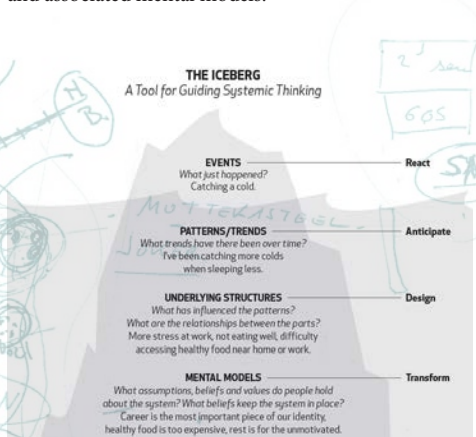


Figure 2: The iceberg model.

(Source: <https://ecochallenge.org/iceberg-model/>)

The Iceberg Model analysis was complemented with timeline mapping (Marshall, 2019), which was built based on the data collected during the documental and newspaper analysis, workshops and interviews (Figure 3).



Figure 3: Doel case & Doelland initiative timeline
(see Appendix for a more readable version)

Building a timeline helps to focus on specific events and to visualize the project’s evolution in time, which facilitates the identification of mechanisms and actors influencing changes. Mechanisms are defined as ‘a set of interacting parts - an assembly of elements producing an effect not inherent in any of them. A mechanism is not so much about “nuts and bolts” as about “cogs and wheels” - the wheelwork or agency by which an effect is produced (Hermes 1998, p. 78 apud Marshall, 2019). Through timeline mapping, we start identifying such mechanisms, which are further complemented by a thematic analysis of the participants’ interviews and a multi-stakeholder analysis of the actor networks (Figure 4).

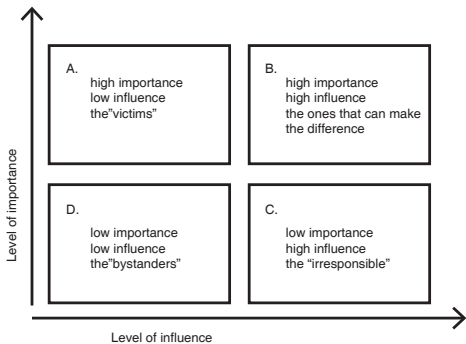


Figure 4. Multi-stakeholder analysis.

Table 1. Interview guidelines

Topics	Questions
Relationship with Doel	<p>1. Can you describe your personal story/relationship with Doel?</p> <p>2. What were the key turning points or significant experiences with Doel?</p> <p>3. What principles or mechanisms do you think contributed to your learning, growth, or progress in this context?</p>
Interaction with Students and Teachers	<p>1. Can you tell me about your interactions with students or teachers?</p> <p>2. What positive or productive experiences have you had with students or teachers?</p> <p>3. What challenging or frustrating experiences have you encountered with students or teachers?</p> <p>4. What were the key turning points or significant moments in these interactions?</p> <p>5. What principles or mechanisms do you think contributed to your learning, growth, or progress through these interactions?</p>
Follow-up Questions	<p>1. How did specific interactions with students or teachers affect you?</p> <p>2. What impact did these interactions have on your personal or professional development?</p>
Future Visions and Impact	<p>1. How do you envision your experiences in Doel shaping your future endeavours and contributions to society?</p> <p>2. What specific values or lessons learned in Doel do you intend to carry forward in your personal and professional pursuits?</p> <p>3. In what ways do you see yourself continuing to engage with issues of urban development, community resilience, and social justice inspired by your time in Doel?</p>

The people interviewed are:

- 22/12/2022: Pascal François, Daan De Volder & Joris Van Reusel (the involved teachers)
- 26/01/2024: Joris Van Reusel
- 19/03/2024: Jan Creve (a community member, part of the Doel 2020 action group)
- 29/03/2024: Sven Augustijns (a spatial professional working at OMGEVING, the design office charged with coordinating the future exploration study for Doel)

Table 2. Workshop 1 (students) guidelines

Topics	Questions
Memories and Connections	<p>Prompt: Close your eyes and imagine yourself back in Doel in a place that resonated with you the most.</p> <ol style="list-style-type: none"> 1. What do you see or feel in that moment? 2. Does it spark a memory or feeling from your own life? 3. Was it a conversation with a resident, a glimpse of the landscape, or a feeling of accomplishment? Share that story/connection with the group.
Digging Deeper	<p>Prompt: Imagine Doel as a living entity, a person with a soul.</p> <p>Pair 1:</p> <ol style="list-style-type: none"> 1. What story do you think Doel would tell about your time there? 2. What challenges has it faced, and what hopes does it hold for the future? <p>Pair 2:</p> <ol style="list-style-type: none"> 1. Did your presence contribute to its struggles or offer a glimmer of hope? 2. By weaving your powerful moment into Doel's narrative, what did you learn about yourself, the world, and the potential impact we can all have? <p>Pair 3:</p> <ol style="list-style-type: none"> 1. Looking back, was there a moment in Doel when you felt a sense of awe, wonder, or a deeper connection to something larger than yourself? 2. Describe that moment and its significance. <ol style="list-style-type: none"> 1. Looking ahead: How might the lessons you learned in Doel influence how you approach challenges or contribute to your community? Describe a specific example of how you might put those lessons into action. 2. What impact did these interactions have on your personal or professional development?
Impact and growth	<ol style="list-style-type: none"> 1. How do you envision your experiences in Doel shaping your future endeavours and contributions to society? 2. Think about a time in Doel when you felt most challenged while working on/in Doel. How did you overcome that struggle, and did anyone from the Doel actors help you during this time? 3. Imagine a future where the lessons you learned in Doel inspire you to make a positive impact on your own community. Describe what that might look like.
<p>The people who participated in Workshop 1 are:</p> <ul style="list-style-type: none"> - Jeanne Vancoppenolle, student involved in the 2017 Doell and initiative - Madeline Smid, student involved in the 2023 Doell and initiative - Pauline Liephout, student involved in the 2023 Doell and initiative - Louis Praet, student involved in the 2023 Doell and initiative 	

Table 3. Workshop 2 (community members) guidelines

Topics	Questions/Activity
Memories and Connections	Mindmap: Participants create a mindmap visualizing their memories of significant events, projects, milestones, and actors in the city.
Symbolic Representation of Experience	<p>Prompt: Residents are invited to choose a symbolic object or image that represents their journey in Doel.</p> <ol style="list-style-type: none"> 1. What does this chosen symbol signify about your experiences and growth in Doel? 2. How does it encapsulate the essence of your journey, including challenges, triumphs, and personal transformations? 3. What emotions or memories does this symbol evoke, and why is it significant to you?
Mapping Community Relationships	Prompt: Residents collaborate on creating a collective map of community connections and relationships in Doel. Using a separate large sheet of paper, they identify various stakeholders, organizations, and groups involved in the community. Residents mark their interactions, collaborations, and observations regarding these entities on the map.
Conclusion	Residents give feedback and ask questions to researchers.

The people who participated in Workshop 2 are:

- Denis Malcorps, a former Doel resident, part of the Doel 2020 action group and the Doel Working Group
- Guido, a former Doel resident, who frequently interacts with the KU Leuven students during their activities in Doel
- Johan De Vriendt, a former Doel inhabitant, author of a book about Doel (Heimweeën)
- Kevin Demey, currently a resident of Doel
- Liese Stuer, currently a resident of Doel

FINDINGS & IMPLICATIONS



Image source: Doelland Studio

The findings are divided into two parts. First, we describe the Doel case and provide an overview of its main actors, as well as its interaction with the Doelland initiative, including their actors and methodologies used for Service-learning. The second part describes the mechanisms identified that worked as levers for Integral Education in light of our theoretical framework.

3.1. The Doelland Initiative

In the mid-20th century, Doel faced the expansion of Antwerp's port due to the petrochemical industry, leading to a decree in 1968 banning new construction and casting doubt on the village's future. Economic downturns in the 1970s, including the oil crisis, reduced the need for harbor expansion but plans for large container docks like Deurganckdok in 1995 threatened Doel's existence. Despite persistent protests, the village transitioned from residential to industrial zoning by 1998, with further plans for expansion. Legal battles ensued, culminating in the Council of State's 2002 suspension of Doel's displacement. However, demolitions began in 2008, even though they were halted in 2009, while the population dwindled to under 200, and the village became a 'Ghost Village'. The community endured a cycle of uncertainty until 2017, when a historic agreement among the Flemish government, Antwerp harbor, and civil movements aligned stakeholders to improve mobility and qual-

ity of life in the Antwerp region. In 2019, a pivotal agreement known as the "Toekomstverbond" (Future Alliance) secured the future of Doel Village amidst Antwerp's harbor expansion plans. This agreement integrated residential living, heritage preservation, and recreational activities with the operational needs of the expanding harbor. It safeguarded residential areas outside Doel, preserved agricultural land for nature conservation, and included significant investments in infrastructure and heritage restoration. This comprehensive approach marked a decisive moment after years of uncertainty, ensuring Doel's survival and aiming to enhance its sustainability and livability in the face of ongoing development pressures.

The teachers' involvement in Doel started in 2015 with an initial on-site design exercise. In 2016, the project saw its first architectural action through a public design investigation on 60 plots, followed by a press conference and a public exhibition route. The following year, further design research was conducted, including a postcard campaign and the launch of 'Doelland'. The project also contributed to the Interreg project Genspark Groot Saeftinghe, mapping opportunities for the region, and established a research field station known as Doel-ark in the summer of 2017. It gained recognition from the university as an Academisch Ontwerp Bureau (Academic Design Office) in 2017 and linked with a Strategic Research Project (SRP) in 2018. Initiatives included a permanent exhibition at De Doolen and exhibitions in Beveren, along with political de-

Table 4. Actors involved in the Doel Working Group

Actor	Identity and role	Interests in Doel	Motives/Costs/Benefits
Municipality of Beveren	Local government in East Flanders, Belgium	Responsible for Doel's restoration/repurposing	Managing governance and well-being of residents = dealing with ambiguity (opportunities & threats, multistakeholder)
Wetland Land van Waas	Rural area known for polders and natural values	Cultural heritage and landscape contribution; flood prevention	Environmental conservation, historical preservation
Our Lady of Heaven Church in Doel	Historic church in Doel	Religious and cultural heritage preservation	Preservation of church and local heritage
Doel 2020	Action committee for Doel's preservation	Cultural and historical value; resistance against port expansion plans	Village preservation, community resistance
Doel & Polder Heritage Community	Group promoting cultural heritage in Doel and surrounding polder landscape	Preservation of historical buildings, landscape features, traditions	Cultural heritage promotion, historical awareness
Waas Polders Agricultural Community	Represents agricultural interests in Waas Polders area	Economic interests in land use and development	Agricultural land use, economic sustainability
Farmers' Union (Boerenbond)	Organization advocating for farmers' interests	Economic benefits for agriculture	Farming community support, economic gains
Voka-Alfaport	Represents interests of Antwerp port community	Port operations and logistics; economic growth	Port development, economic prosperity
Natuurpunt	Volunteer union for nature conservation	Environmental protection and biodiversity	Nature conservation, biodiversity enhancement
De Vlaamse Waterweg	Manages waterways in Flanders, promotes water transport	Water management, navigation, environmental sustainability	Waterway infrastructure, environmental stewardship
Antwerp Port Authority	Manages Port of Antwerp operations	Harbor expansion, economic growth	Port development, economic impact
Maatschappij Linkerscheldeoever	Manages land policy and industrialization in Left Bank of Scheldt area	Industrial development, land management	Land policy, industrial growth
Flemish Government	Government of Flanders, Belgium	Policy-making, development planning	Regional development, governance
KU Leuven	University involved in research and design projects in Doel	Academic research, spatial planning	Research collaboration, educational benefits

3.2 Mechanisms & Principles

In this section, we divide the principles found into the four elements necessary for Integral Education – metamodels, methodology, community, skills, and capacities, highlighting how the Service-learning experience contributed to each of them by focusing on the three pairs of concepts from the Empowerment Paradigm to explain the mechanisms. In total, we identified five key principles whose mechanisms are described below.

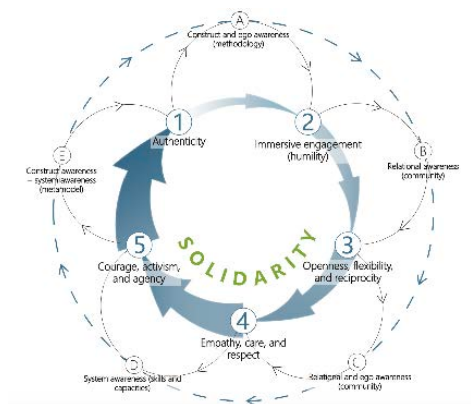


Figure 6: Mechanisms

3.2.1 Authenticity

In the Doelland project, authenticity permeated the interactions between teachers, students, and the community. From the beginning, the teachers maintained an open and curious attitude towards the challenges faced by Doel, refraining from taking a decisive stance against the harbor development. Their approach was not about asserting authority but rather empowering the community through their collaborative efforts. As a result, students, teachers, and the community became empowered through shared responsibility. One of the community members expressed the motivation behind their involvement as follows:

We started the fight for Doel not because we thought we could win, but because we felt that we couldn't let this happen, no matter where it would end. (Community Member)

This sentiment underscores the genuine commitment to the cause, driven by a deep sense of responsibility rather than the expectation of victory. One student remarked on the university's role, noting that academic involvement can shed light on important socio-political issues under the guise of research. This dual role of investigation and advocacy under-

scores the authentic engagement of academia in addressing real-world challenges. Furthermore, members of the Doel Working Group acknowledge Doelland's role as an activist organization within the broader movement concerning Doel. This recognition highlights the authenticity of diverse stakeholders working together towards shared goals despite differing perspectives and roles. The students also observed the teachers' struggle to maintain neutrality, indicating the inherent difficulty of balancing academic objectivity with personal engagement in community issues. This authenticity in navigating complexities fosters trust and credibility within the collaborative framework of the Doel project.



Image source: Doelland Studio

3.2.2 Immersive engagement

During the realization of the project, teachers and students were fully immersed in the community. Students stayed overnight, first in the Doel-Ark (2017), later on in local residences (2023), were introduced to people on-site, and taken to Doel Working Group meetings. Teachers participated in religious ceremonies. The community members had a genuine interest in the work produced by them. Teachers were actively present in the community with a spirit of humility.

The immersive engagement results in teachers and students gaining the trust of the community, which in turn opens its doors to students based on the demonstrated commitment of both teachers and students. Their active presence fostered closeness and immersion. They brought fresh perspectives, creativity, and out-of-the-box thinking. Their presence offered hope and vision for the future, shifting the situation away from a focus on the past condition.

This engagement is enriched by their lived experiences and increases with time when reciprocal engagements are observed by all parties.

We felt very grateful that the community made time for us, so we really wanted to give something back. (Student)

Unlike most, they came and kept coming back, while others came, took what they needed, and

then disappeared. (Community Member)

What the teachers and students brought was a positive, future-oriented, and out-of-the-box perspective on Doel. (...) Encountering other people who also believed in Doel was very important for us; it helped us to persevere. (Community Member)

KU Leuven added more weight in the form of expertise and passionate action by these three individuals [the teachers], year after year (also outside of their courses), and not from within an ivory tower. (Community Member)

What we had to offer was time and innocence. Our role is one of inspirators; we are definitely not the main actors here. (Teacher)



3.2.3 Openness, flexibility and reciprocity

The real-life context of Doel was one characterized by a lack of resources and perspective. The result was that everyone had to become inventive - both the community and the students acted from a sense of 'doing what you can and giving what you have'. For instance:

A student whose parents are bakers designed a new bakery for Doel and also developed a new cookie recipe using local ingredients shaped like a local bird to raise awareness about ecological issues.

We could borrow crates from the place where I do a student job, so we used those to build our installation. (Student)



Academically, the project demonstrated openness by continuously adapting coursework to meet community needs, informed by ongoing dialogue and deepening insights from teachers. Initial inputs sparked new ideas and hope, gradually aligning with community priorities and identifying impactful opportunities for action despite operating with limited resources. Within the community, there was a commitment to welcoming all who sought to contribute constructively.

This reciprocal relationship fostered a collaborative environment where academia and community members exchanged knowledge and resources, benefitting mutually from shared engagement. These principles not only shaped the project's success but also nurtured a sustainable partnership, illustrating the transformative power of Service-learning anchored in openness, flexibility, and reciprocal engagement. Both students and teachers felt they were truly contributing to something meaningful. The following excerpt illustrates the students' growth process:

At first, we didn't really know what was expected from us; this is totally different from other courses. (Student)

The teachers said: there is no budget; we rely on your creativity. (Student)

He knew how to use tools, so he taught all of us. (Student)

We all helped each other out. (Student)

We learned so much from Guido [one of the community members]. (Student)

The group work was so much fun; there really was a sense of community. (Student)

As there was more room for failing in this course, you are less afraid to try out different things, and you feel more motivated to work for a better grade. (Student)

3.2.4 Empathy, care and respect

The principles of empathy, care, and respect played an essential role in the collaborative relationship between academia and the community. From an academic point of view, there is a genuine commitment to understanding and addressing the community's needs. Teachers immerse themselves deeply in the local context, continuously returning to gain deeper insights and ensuring they do not overwhelm their partners. This engagement is marked by small acts of care, such as being very cautious not to over-question the community partners or providing breakfast pastries for students, which reflect a sincere effort to build rapport and support within the community.

On the other hand, the community reciprocates this empathy by opening up their stories, welcoming students into their spaces, and taking on tasks like maintaining facilities used by the teachers and students. This exchange goes beyond practical assistance; it fosters a sense of mutual respect and shared responsibility. Roles within the collaboration evolve naturally, aligning interests and nurturing an environment where everyone feels valued and supported. As a result of this empathetic approach, teachers develop genuine expertise rooted in lived experience, while students gain a profound appreciation for the community's challenges and strengths. This reciprocal learning process not only enriches academic understanding but also cultivates a sense of belonging and purpose among students, who feel their contributions are meaningful and respected. In essence, the Doel case exemplifies how empathy, care, and respect can form the foundation of transformative educational experiences.

our interests with those of the community. That is different, for example, from tourists who just come to take pictures, or the Doel festival, which is not at all for the people of Doel. (Student)

Now we understand how it will be in real life. (Student)

I was 'caught' by Doel and the community's struggle. (Teacher)



3.2.5 Courage, activism and agency

The principles of courage, activism and agency resonate deeply among all stakeholders involved. There is an inherent drive across academia, students, and the community to address pressing issues with a sense of urgency and authenticity. This activism is fueled by a genuine belief that something is wrong and must be corrected, which fosters a collective commitment to take meaningful action. One of the community members expressed this spirit as follows:

Fighting bonds. By fighting together for the right cause, you become attached to each other. (Community Member)

This highlights how the process of fighting for a shared cause not only addresses the issue at hand but also strengthens bonds and enhances a sense of belonging within the community.

The project emphasizes agency, believing in the impact of even small actions over time. From direct activism to diplomatic negotiations, participants adapt strategies, skills, and knowledge to tackle challenges. Academia has challenged norms by reevaluating current architectural education and practices and transforming student-teacher relationships. Residents also played a role in education by enriching students with

We took on a respectful attitude and aligned

diverse skills beyond traditional training. Community members have also discussed about current social structures and ideologies, such as neoliberalism. This shift was driven by intuition and experience, integrating activism into professional education rather than treating it separately. This process inspired critical reflection, awakening activism, and deepening insights among students and teachers. It prepares them for future challenges with resilience and innovation, fostering a commitment to transformative action in education and community engagement.

This course helped to ignite a fire in me. Through this course I also learned about myself, I was probably in search of it, this activism must have been somewhere inside of me already, but through the work in and on Doel it was awakened. (Student)

This studio brought more insight into how as an architect you can work for people; it showed a different work ethic, similar to what I learned in the lecture on the work of 'Assemble'.(Student)

I learned that architecture is not only about designing; this studio brought anthropology and architecture together - at first, I did not really understand why we needed that course. (Student)



DISCUSSION, RECOMMENDATIONS, AND LESSONS LEARNED

Image source: Doelland Studio



The results of this research reveal how Service-learning, through the combination of immersive experiences, openness and reciprocity, courage, empathy, authenticity and community engagement, contributes to creating a holistic and impactful learning environment. By actively engaging with the community, reflecting on broader social contexts, and adapting to real-world needs, students and faculty not only contribute meaningfully to the community but also undergo significant personal and professional growth. This approach leads to sustained engagement, critical reflection, and empowered participation, ultimately enhancing the educational experience and community well-being.

Within the actor-network, the principle of 'solidarity' serves as a point of reference to interpret these results. Solidarity, in essence, transcends mere conceptualization. It evolves through actions that foster deeper connections and mutual support among the different stakeholders: educators, students, and the community. Essential to this approach is the immersion and closeness of educators within the community. Their consistent presence not only brings fresh perspectives but also instils hope and a visionary outlook for the future. This lived experience breaks through impasses and challenges, bringing creativity and out-of-the-box thinking into the educational process.

Furthermore, meaningful engagement by educators fosters trust within the community. This trust allows students to participate meaningfully, building upon

the foundation of solidarity established by educators. As a result, students and teachers alike gain a nuanced understanding of community needs and aspirations, driving the educational process beyond conventional boundaries. A pivotal outcome of this engagement is the creation of a sense of belonging and bonding within the community. Through shared experiences and reciprocal acts of care and restoration, roles evolve, and interests align. This shift from mere involvement to deep care and mutual responsibility nurtures a healing process for community members while providing a unique educational journey for students – essential to Integral Education.

Moreover, the Doelland initiative embodies activism at its core. Each stakeholder – educators, students, and the community – embraces a proactive stance against injustice and challenges. This collective activism not only deepens solidarity but also fosters a profound sense of agency among participants. It empowers them to effect meaningful change, bridging personal growth with community well-being.



Image source: Doelland Studio

Central to this transformative process is humility – an acknowledgement of the limitations and potentials of each participant. This humility drives a continuous cycle of learning and adaptation, ensuring that actions are grounded in mutual respect and a shared commitment to social justice. In essence, the Doelland initiative exemplifies how Service-learning can cultivate solidarity as a foundational element of Integral Education. By embracing principles of immersion, empathy, activism, and agency, it catalyses transformative educational experiences that prepare students to navigate complex societal challenges with compassion and efficacy. Moving forward, leveraging these insights will be crucial in expanding the impact of Service-learning initiatives, fostering inclusive communities, and advancing the principles of integral education on a broader scale.

Educational institutions interested in Integral Education would benefit from investing in developing and implementing more immersive learning programs that involve placements and overnight stays in local communities. In this research, we have demonstrated that immersive experiences contribute to fostering deeper connections between students, faculty, and community, building trust, and enhancing educational impact, which aligns with Integral Education's holistic approach. Curricula should be adapted to reflect the needs of communities and incorporate flexibility to address real-time challenges as well as leave more room for experimentation (through a more balanced distribution between evaluation of the process vs the end product). Educational policies would also benefit from implementing measures that involve community members actively in planning, implementing, and evaluating educational projects. In order to promote social change within Integral Education, policies need to integrate critical reflection and activism into their activities, considering that these elements empower students to address societal challenges and develop a sense of responsibility, which is crucial for Integral Education. There should also be an investment in the professionalization of teachers for the understanding of the dynamic nature of social interactions while integrating solidarity principles into their educational training.



Image source: Doelland Studio

LIMITATIONS AND POINTS OF ATTENTION

Due to the limited time and budget, there are a few limitations to this research. Reflecting on the research methods, it should be noted that, with the aim of involving the stakeholders as co-researchers, we had to adjust our approach to accommodate their needs. For example, it was originally planned to apply a more complex method for group analysis in the context of the workshops with students and the community. However, due to limitations in available time and the desire of the stakeholders to use a less demanding/theoretical approach, it was decided to deviate from this. Moreover, during the workshops, even the prepared guidelines (cf. Tables 2 and 3) were eventually partially abandoned in favour of going along with the flow of the dialogue that spontaneously emerged. At the same time, care was taken to ensure that all the prepared topics were properly covered. Nevertheless, it would be appropriate to conduct more interviews to obtain an even more complete picture from the different perspectives of the various parties involved. Finally, we find it important, after finalizing the analysis, to again enter into dialogue with those involved about the research results, as they are reported in this document.

To this end, another workshop/meeting will be organized in Doel in September 2024. Therefore, we have reserved part of the budget for this (see financial report).

Besides the principle and mechanisms, this research also revealed a few points of attention. Real-world contexts can create tension between letting the students figure things out on their own and accommodating their needs. When left un(der)addressed, this situation can lead to unclear and/or constantly changing planning, increased workloads, unclear roles (which, if not followed up on, can allow free riding), and spiraling costs for students and teachers alike. In such contexts, it is important that teachers would make the students' agency clear from the beginning and give them the required knowledge to be able to engage in the field. From their side, teachers need to be able to rely on students' abilities to, for example, execute group- and fieldwork and communicate with societal actors in a polite and efficient way.

FUTURE STEPS

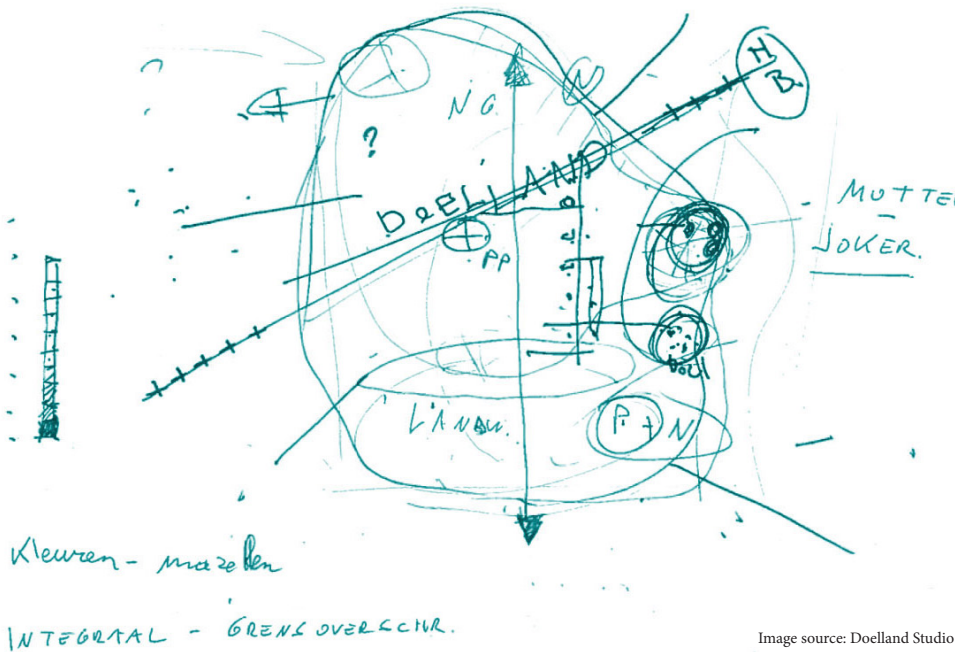


Image source: Doelland Studio

To verify the findings from this case, in the future, additional cases will be studied. Furthermore, to follow up on this project, we will:

- further elaborate on the dialogic interaction between students and teachers, (as for now, the focus was mainly on the academy-community relationship),
- further investigate the role of KU Leuven as an institute compared to the role of teachers as individuals and also generate insights into this, so that we can also make recommendations in this regard, and
- further promote the tools that are being developed by the KU Leuven's Service-learning Department and Educational Support Service, such as the 'Service-learning canvasses' and the pedagogical information on group work, as these can help to better anticipate and circumvent the above-mentioned points of attention.

As mentioned in the introduction, the next phase of this project is dissemination. In this context, we will

make the results available to the Uniservitate network through participation in its conferences and the (digital) publication of a lay-outed version of this report, including clearly readable illustrations and visually interesting graphical representations of the findings. To prepare this publication, we have reserved part of the budget to allow us to work on this together with a job student over the summer of 2024 (see financial report). The dissemination to the broader educational community will moreover happen through the presentation of the research results in a seminar organized by the Faculty of Architecture and open to all faculties. Finally, to disseminate the findings to the community of Doel, we will discuss with them the best possibility in accordance with their needs; for instance, this could take the form of a website, newspaper article, or installation. Finally, we also plan to write a research paper to be published in a scientific journal.

CONCLUSION

Image source: Doelland Studio



In this research, we explored the Doelland initiative, a Service-learning case organized at the KU Leuven Faculty of Architecture by Daan De Volder, Pascal François, and Joris Van Reusel, through actor-network theory, the Empowerment Paradigm from Van Regenmortel (2002), and interviews with students, teachers, and community members. We have aimed to uncover the underlying principles and mechanisms of this initiative that had an impact on the implementation of Integral Education.

The results have illuminated the transformative power of Service-learning for Integral Education, identifying the principle of 'solidarity' as the main frame of reference connecting them. By embodying principles such as immersive engagement, flexibility, and activism, educators, students, and community members have

forged deep bonds and enacted meaningful change. Solidarity, as a guiding principle, not only enhanced educational outcomes but also nurtured a sense of belonging and responsibility towards others. This holistic approach fosters a dynamic learning environment where empathy, care, and mutual respect are integral to personal and collective growth.

Moving forward, integrating these principles into educational policies can help cultivate environments where solidarity thrives, contributing to a more equitable and socially just society and to the development of the whole person.

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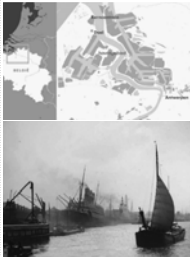
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APPENDIX

Doel case & Doelland initiative Timeline

1960s

In the 1950s and 1960s, the port of Antwerp, which was then only active on the right bank of the Scheldt, expanded rapidly. The port also wanted to establish itself on the left bank and incorporate 10,000 hectares in the Waasland. The village of Doel had to disappear.



1973

In the 1970s, the economy stalled and there was the first oil crisis. Suddenly, so much more space for containers was no longer needed. The tide for Doel seemed to be turning.



1985

In the mid-1980s, Doel was declared a redevelopment area and the municipality of Beveren, with which Doel had merged in the meantime, decided to invest heavily in the village. Young families were encouraged to come and live in Doel and millions were even invested in the restoration of the village church. For ten years, Doel almost completely disappeared from the news: no news was good news.



1998

In 1998, the village apparently received its final blow as the Flemish government announced the construction of the Deurganck dock and changed the territory of Doel from a residential area to an industrial area. In addition, plans were announced not much later for another dock: the Saefthinghedok, which was to be built right on the site of the village. All this led to the establishment of the action group Doel 2020.



2006

In 2006, the Heritage C founded.



1960



1968

In 1968, a building ban was imposed. As this led to doubt and uncertainty about the future, it was the beginning of the end for the small polder village. The uncertainty kept newcomers away and residents chose to play it safe. The Doel residents who stayed waited for their expropriation. According to a study by the Intercommunale for the Waasland, the only "human solution" was that Doel would disappear completely. But no decision was made. Nothing happened for years.



1978

In 1978, State Secretary for Regional Economy Mark Eyskens (CVP) personally came to Doel by helicopter. Doel could continue to exist forever, was his message. The village seemed to be saved, but in the meantime the decline had already set in and many people had already left.



1995

But in 1995, Doel was suddenly in turmoil again. Plans leaked that the Antwerp port wanted to build a large container dock right next to the village: the Deurganck dock. Uncertainty struck again.



2002

Over the years there was much protest, by citizens and organisations. The plans of the Flemish government were fought tooth and nail. In 2002 the Council of State suspended the zoning change of Doel. However, the construction of the Deurganckdock, right next to the village, was already well advanced by then.

the Doel & Polder
e Community was



2015

First on-site sketching exercises
(Jo Van Den Berghe & Hugo Vanneste)



2016

First architectural action
on the site = public design
research on 60 plots

- + press conference
- + public expo route



2017

Further substantiating design
research
=> postcard campaign + launch
of 'Doelland'

- + cooperation with Interreg
project Genspark Groot
Saefinghe = mapping
opportunities for the region
- + placement of research field
station: Doel-ark (summer '17)

- + permanent exhibition
in De Doolen
- + internal recognition as AOB
(2017)
- + link SRP (2018)



2019

Public presentation
Doelland book + website
= introduction 'slow
urbanism' approach

- + KU Leuven part of CP-
ECA actors' consultation
(see below)
- + actions, press releases
and objections to new
Haven plan
- + first aid renovation
monastery, inn-tram
station and storage area
(summer) + expo during
Scheldewijding



2015

2016

2017

2019

2020



2008

In 2008, Doel was regularly in the news again. The Maatschappij Linkerscheldeover (MLSO), which manages the harbour grounds on the Left Bank, started demolishing a number of houses. In 2009, the demolition stopped, but the images of demolition cranes obviously did the village no good. The number of inhabitants continued to decline steadily.

2016

In 2016, the Regional Spatial Implementation Plan (ruimtelijk uitvoeringsplan) for the expansion of the port of Antwerp on the Left Bank of the Scheldt was also rejected by the Council of State.

2017

After a long process of consultation led by intendant Alexander D'Hooghe, the Flemish government, the city of Antwerp, Port of Antwerp and the citizens' movements Ringland, Ademloos and stRaten-generaal concluded the 'Future Covenant' in 2017. The aim of this agreement was to drastically improve the mobility and quality of life in the Antwerp region. Following this, the Complex Project Extra Container Capacity Port of Antwerp (CP-ECA) was launched by the Flemish government.

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2020

KU Leuven part of Working Group Doel + organization of five workshops => Plan Doelland as basis for Open Call

+ KU Leuven as critical jury member and co -supervisor from working group Doel at OO



2022

Further future-oriented design research: drawing up construction files 'academic measurements' + facade drawings 'as it is, in 2023' => expo & presentation on Campus Ghent



2023

Hands-on renovation of 6 buildings (postcards)



2024

Assignments semester 2 academic year '23-'24



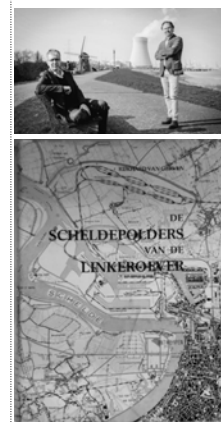
2020



2021



2022



2023



2024



2020

In January 2020, the government laid down the guidelines for the Extra Container Capacity Antwerp plan. But there was renewed protest and in May 2021, the Council of State advised to annul the decision because there were too few guarantees that the plan would not have a negative impact on a number of nature reserves. This led to the establishment of the Doel Working Group facilitated by the Ministry of Public Works (MOW), which launched an Open Call (OO) for a multidisciplinary study and design regarding the future of Doel, which was assigned to Studiebureau Omgeving and RE-ST architects.

2022

In 2022, the Flemish Government finally concluded the 'Future Covenant' with thirteen organisations and parties. According to Flemish Prime Minister Jan Jambon and Flemish ministers Matthias Diependaele and Lydia Peeters, this covenant is "a unique agreement on the preservation of Doel, nature and heritage and the further expansion of the container capacity of the port".

