

Dynamics of Youth

Strategic plan 2021-2025



Introduction

1. Preface

Dynamics of Youth is one of the four Strategic Themes of Utrecht University. We cross disciplinary and sectoral boundaries to advance our knowledge and understanding of the individual and environmental conditions that shape youth development, health, resilience, and wellbeing. In today's rapidly changing world, facilitating interdisciplinary research and collaboration is more important than ever. Our interdisciplinary collaborations on youth development have proven to be fruitful. The results that we have realized in the last years provide evidence of the promise and scalability of our efforts. In this Strategic plan, we describe our vision, mission, and core values for the next period (Sections 1-4). We give an account of how Dynamics of Youth developed and what our hubs, researchers, and their networks accomplished (Section 5). We then describe our ambitions (Section 6), and how they align with trends in science and academia worldwide and the Strategic Plan of Utrecht University in particular (Section 7). These trends provide the underlying basis of our activities (Section 8). This basis motivates the strategic goals and related activities we aim to accomplish in the third period of DoY (Section 9).

DoY vision, mission & core values

2. Vision

Connecting science and society to promote equal opportunities for all youth to thrive in all domains of life.

This connection is essential for a better future of individual children, adolescents, and emerging adults. It is a pre-condition for youth to respond to social and global challenges in a rapidly changing world and participate in shaping our future.

3. Mission

Dynamics of Youth generates and provides independent, trustworthy evidence that raises awareness and identifies opportunities to successfully respond to complex challenges facing youth. We facilitate networks, expertise, practice, and support for interdisciplinary collaborations to increase inclusiveness, reduce social inequalities, and improve youth health, wellbeing, and education.

4. Core values

Trustworthiness, independence, rigor, impact, interdisciplinarity, participation, inclusivity, sustainability.

Overview

5. Past and Present

The Strategic Theme Dynamics of Youth (DoY) started in 2013. In the **first period (2013-2017)**, the Gravitation grant the <u>Consortium on Individual Development</u> provided the basis for the

development of DoY. DoY invested in the development of the DoY community and laid the foundations for an infrastructure supportive to DoY's mission. This mission is driven by the aim to provide trustworthy, independent, and rigorous scientific evidence on youth development, spanning conception to emerging adulthood. Since its very beginning, DoY research and researchers aim to demonstrate trustworthiness¹, which requires honesty, competence, and reliability in everything we do. Scientific independence is key to DoY's scientific credibility. Scientific rigor², that is, the strict application of the scientific method to ensure unbiased methodology, analysis, interpretation and reporting of results is the basis of DoY research. Our method is impact-driven. We connect science with society to ensure that our efforts align with the needs of practitioners, policymakers, and the public at large. This interdisciplinarity can only be realized through sustainable collaborations that bridge disciplines and sectors and an open, participatory, and inclusive approach where we work toward the shared goal of being a driving force for the optimal development and thriving of all youth.

Based on these foundational values, in the **second period (2018-2021)**, DoY invested in strengthening and extending the DoY community and infrastructure. We consolidated our collaboration with Child Health (speerpunt UMCU), aligning our strategic goals and harnessing the complementary diversity of expertise. We organised our activities in and across six hubs — interdisciplinary breeding places for fundamental and applied research on specific youth issues — and the longitudinal YOUth cohort study (YOUth). Members of the DoY community share knowledge, resources, best practices, and infrastructure in research, education, teaching, and outreach. To illustrate our activities, we present a couple of examples.

In line with the Strategic Plan of the University, DoY and Child Health invested in the **implementation of Open Science Strategies** by supporting the FAIRification of existing data and developing necessary data infrastructure and guidelines to facilitate collaboration within and across organizations (e.g., UU, WKZ), disciplines, and sectors (e.g., Kenniswerkplaats Jeugd en Gezin; Kenniswerkplaats Jeugd Utrecht stad). For example, our *invigoration grants* aim to promote the sustainability of existing research, activities and investments (e.g., FAIRification, strengthening existing research, activities and investments). Taking lessons from the cohorts participating in the Consortium on Individual Development and the YOUth cohort study, we have been working with the UMCU-based PROactive cohort study as a test case for our efforts aimed at developing templates, workflows, protocols, and other tools that will encourage and facilitate researchers within DoY to share their data in line with the FAIR principles. These efforts represent foundational steps that will ultimately allow us to supply integrative, evidence-based solutions to complex fundamental and problem-oriented questions about youth.

The impact agenda in many calls demands research that makes a difference and that is engaged with community, industry, political stakeholders. Therefore, DoY invested in fostering and facilitating high performing academic teams and researchers for **research acquisition and grants**. These efforts were successful. To illustrate, DoY researchers participate in two NWO consortia in the NWA program "Research on Routes through Consortia". The hub 1001 First Critical Days is part of the consortium Multilingual Voices in Stem education. The hub Healthy Play Better Coping is part of the eHealth Junior consortium. Three vici grants and several ERC grants obtained by DoY researchers illustrate not only the excellence of DoY researchers but also

¹ O'Neill, O. (2018). Linking trust to trustworthiness. International Journal of Philosophical Studies, 26(2), 293-300.

² Casadevall, Arturo, and Ferric C. Fang. "Rigorous science: a how-to guide." (2016): e01902-16.

the broad span of its topics, including <u>language development and mother-child attachment</u> <u>before birth</u>, <u>improvement of self-regulated learning of problem-solving tasks in STEM-domains</u>, research on <u>multilingual children and families</u>, research on the <u>transition to secondary and tertiary education</u>, and <u>teenagers' engagement with climate change</u>, to name but a few. Additionally, DoY invested in shaping major funding programmes such as the new Horizon Europe programme and NWA/NWO and Ministry contacts with the aim of increasing awareness of investment in child and youth research and being better positioned to react to future opportunities/calls.

DoY contributed to the development of **interdisciplinary youth education and teaching** that has added value to the educational activities of UU faculties. Two hubs developed modules for LifeLong Learning, the DoY minor 'Youth and Climate Change' (<u>Een interdisciplinaire kijk op klimaatverandering</u>) starts in September 2021, and the faculties of Social and Behavioural Sciences, Geosciences, Law, Economics, Governance and Organization and the UMC Utrecht develop an interdisciplinary DoY master with the preliminary title 'Youth in a Changing World' intended to start in September 2023.

DoY research responded to pressing societal challenges surrounding youth during the COVID-19 pandemic by examining a broad range of outcomes related to wellbeing and education as a function of lockdown measures. At the national level, the expertise of DoY researchers and scientific findings already provide input for professionals and policymakers, for example, related to the Nationaal Programma Onderwijs (DoY researchers conducted the Wetenschapstoets and participated in the scientific expertgroup installed to monitor and evaluate the program) and the Alliantie Delta Plan Jeugd. At the international level, DoY members edited special issues on COVID-19 and Youth in leading international, peer-reviewed journals in the field. DoY and UUGlobe partner in facilitating the Global Learning Community in which 70 global organisations (from grassroots to international organisations) work to improve the quality of primary and secondary education systems especially for children in adversity. Our efforts are funded by the Porticus foundation. DoY has continued to be an active member of EuroChild and collaborates with the OECD (Centre for Educational Research and Innovation). DoY and the recently founded KU Leuven Instituut voor Kind en leugd have a longstanding collaboration, which is further strengthened by a joint project on the use of virtual reality in socially anxious children granted in the context of the UU-KU Leuven Joint PhD program.

To accelerate interdisciplinarity within UU/UMCU and beyond, **DoY's funding scheme** aimed to stimulate projects that were crucial to create room for exploration and uncommon collaborations. DoY funded the seed-money call 'Youth as agents of sustainable change' together with Pathways to Sustainability, launched a project between the hub Youth got Talent and the focus area Sport & Society on impeding and promoting factors for sports participation among youth from low wealth families, and four rounds of invigoration grants (see above). These invigoration grants can only be used for existing projects that are *invigorated by interdisciplinarity*. Thereby, they are an important impetus for our ambition to stimulate data sharing and harmonization, to develop new methodologies within interdisciplinary child and youth research, and to have an added values to existing funding structures.

To provide researchers from all 7 UU faculties with opportunities to meet each other and mobilize expertise and knowledge in youth science and beyond, **DoY's communication strategy** focused on organizing platforms, meetings, and workshops. These activities enabled researchers

and stakeholders to get to know each other, exchange best practices and experiences, generate new initiatives, and share expertise on specific research topics (e.g., workshop on youth and adversity), privacy (in collaboration with the UB), funding of youth/child research – How to get started, Opportunities for DoY in Horizon Europe at the UU launch of Horizon Europe, Open Science (OSCoffee FAIRifying research data about children and adolescents), and public engagement and co-creation. We also engage in efforts to promote the need for interdisciplinary collaborations internationally. For example, our contribution to Inside Higher Ed illustrates how research into the Dynamics of Youth will help improve the health, well-being and engagement of future generations.

Future

6. DoY 3.0: Our Youth, Our Future

Rapidly evolving and unprecedented global challenges (e.g., COVID-19, digitalization, diversity, climate change) shape our youth and youth development in important ways. For some, they offer opportunities to thrive and realize their potential. For others, they curtail the promise of youth by widening social inequalities and exacerbating adversity. Thereby, these challenges raise the stakes for improving youth health and wellbeing, increasing inclusiveness, and reducing social inequalities.

From conception to young adulthood, the world and society that youth grow up in affords extraordinary opportunity for learning and exploration and for laying a strong foundation for a successful, happy, and healthy life. How youth develop and navigate developmental periods is critical for both their own future and for the progress of the social and physical world we live in. Young people are the future problem solvers for challenges that we cannot yet appreciate or even foresee. They are the key contributors to future workforces, and, as many will become parents, to the healthy development and well-being of the next generation as well. Put differently, our youth is our future.

To build youth opportunity for the future, we have identified four thematic research domains that are essential for youth to navigate the world, for opportunities to be equitable and high quality, and for looking at the full continuum of development, from conception to emerging adulthood.

Four Research Domains

Early Childhood: Scientific evidence, including the groundbreaking work of DoY researchers and hubs, have generated a much deeper appreciation of the importance of (very) early life experiences and the interaction between genes, individuals, and environments on child development and the unfolding of human behaviour over the life course. The time from conception to toddlerhood is critical to brain development, language acquisition, motor skills, and the social, emotional, and cognitive skills that children need to interact and play with others. Early childhood marks the occurrence of many milestones and offers myriad opportunities to increase the odds of favorable development through prevention and intervention efforts in different social contexts, including the family, childcare, pre-school education, and neighborhoods.

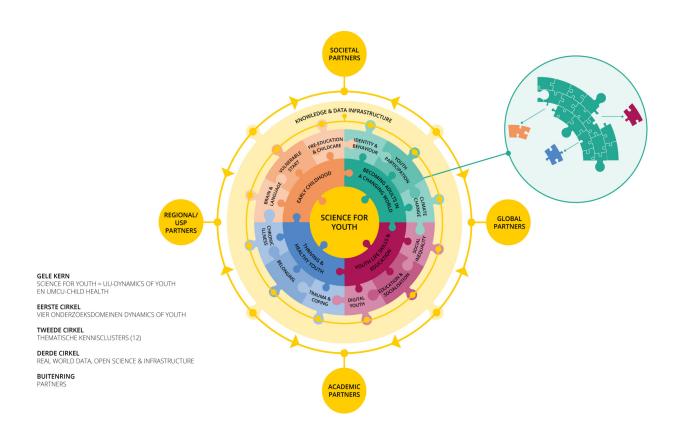
Becoming adults in a changing world: Although much research is focused on early childhood development, scientific evidence spanning different disciplines and sectors shows that the years between childhood and adulthood offer an amazing opportunity to lay the foundation for optimal development in adolescents and for the world they will someday lead and participate in. During these years, young people build their identity, complete their education, transition to employment, and pursue other endeavours that help set them on the path to a healthy and productive adult life. As future citizens, professionals, and policymakers, they shape social progress and the world of tomorrow. Shifting the focus from risk and vulnerability in adolescence to learning, resilience, and adaptation, the innovative research by DoY researchers and hubs calls for novel approaches to effective legislation and policies. It also underlines the importance of effective and scalable interventions that help adolescents to successfully navigate the transition to adulthood in a changing world imbued with challenges, such as climate change and globalization.

Thriving & Healthy Youth: Advances in medical treatment and technologies for childhood disease and disabilities have resulted in dramatically increased survival rates and a growing population of children with chronic disease. Similarly, advances in mental health treatment have resulted in creating opportunities for healing and recovery. Nevertheless, variability in developmental outcomes is immense. Until recently, research focused primarily on the negative psychosocial sequelae and stigma of childhood mental and physical adversity. Emerging theory and empirical evidence, including the cutting-edge studies of DoY researchers and hubs, propose that the focus on (long-term) cognitive, social, academic, emotional, and physical deficits might obscure an understanding of the full range of developmental outcomes in all domains of functioning. To create equal opportunity, we need to move beyond recovery from adversity by promoting thriving and growth through effective prevention and interventions.

Youth Education & Life skills: The COVID-19 pandemic has shown that globalisation and digitalisation have connected people, cities, and countries in ways that vastly increase our individual and collective potential. It has also made it clear that the same forces have made the world more complex and more uncertain. In this changing more diverse world, education is no longer just about teaching youth academic skills but also about helping them develop the tools and skills they need to confidently navigate through this world. To promote equal opportunities, scientific research points to education and digital technology, as preventative tools to raise awareness and build future global citizens. The impactful research of DoY researchers and hubs is a call for action to increase inclusion in light of the growing diversity of youth. It underlines the role of education to mitigate the effects of risks and uncertainty, by equipping teachers, students, and parents with the facilities, knowledge, and skills necessary to cope with crises as they emerge, building their resilience in the process.

Therefore, in the **third period**, we will build on the knowledge development and realised impact in the previous period to further position DoY as a generator of and facilitator for solutions to the complex challenges facing youth and a trusted source of evidence-based advice, practice, and knowledge for interdisciplinary collaborations. Realizing our vision will require an innovative shift in the ways DoY collaborates across its own units as well as with faculties, stakeholders, and communities. The main structure of DoY is formed by its interdisciplinary communities. From

2022 onwards, we will shift from hubs to four research domains. In these domains, scholars from different disciplines collaborate across faculty boundaries on the four main four thematic domains that DoY research identified as essential to realize our vision. The research domains are responsible for driving and deepening the interdisciplinary exchange on key issues related to DoY. In its lightest form, a domain can stimulate discussions through symposia, sharing papers, and organizing community building events. Domains can also comprise of several larger, more structural working communities that organize a range of activities and build more structural networks, including societal partners, on various knowledge clusters within a domain. These are very similar to the previous 'hubs' and may build on the networks, expertise and collaborations developed by these hubs. This significant pivot will result in a DoY that more proactively prepares youth researchers, policymakers, professionals, and—crucially—youth themselves to adapt and respond to challenges and the changing world of the future.



By being more inclusive, participatory, visible, and impact-driven DoY can contribute to impact decisions that will lead to a better world for our youth and our future. In our efforts, we will strengthen our collaboration with the other three Strategic Themes. By joining forces, we will increase the visibility of the Strategic Themes, streamline our efforts to make them more efficient, thereby reinforcing the implementation of the foundational principles guiding the Strategic Plan of Utrecht University (collaboration across borders, future-proof teaching culture, close-knit communities, sustainable development, and Open Science).

Scientific direction

7. Trends in academia and science

The <u>UU Strategic Plan</u> and signing the Declaration on Research Assessment (<u>DORA</u>) underline that the UU is committed to both (1) accelerating and improving science and academic scholarship and (2) increasing societal impact by allowing for high quality research, education, and outreach that are foundational for better and informed decision making. This commitment is reflected in the DoY portfolio of activities through which we facilitate several transitions that commenced in academia and science worldwide³.

7.1 From output to meaning

Organizations that can answer the question "What is my purpose in life?" perform better than organizations focusing on output and productivity. Such organizations centre their activities on people and societal issues. By transitioning from the ivory tower and focus on output, economic return-on-investment, and h-factors to the evaluation of commitment to Open Science, cocreation, and reciprocal relationships with social partners and stakeholders, the UU made a bold first step in changing academic culture and science. Implementing this ambition, DoY connects science, society, and education with the goal of improving youth development and thriving, increasing inclusiveness, and reducing social inequalities. DoY puts children and young people at its core and asks what impact our activities have on youth and their development now and in the future. Our activities align with UU's goals to make the Sustainable Development Goals an integral part of research, education, and the organization with the ultimate goal that "no one – for DoY no child or young person - is left behind". DoY contributes to this goal with a diverse portfolio of activities that are based on our core values.

7.2 From restricted access to sharing science

Closed strategies and restricted access to scientific resources are becoming less effective in academia and the changing world. The UNESCO recommendation on Open Science underlines that Open Science aims to make scientific knowledge openly available, accessible, and reusable for everyone, to increase scientific collaborations and sharing of information for the benefits of science and society. Using open methods can lead to more robust scientific results, more efficient research, and (faster) access to scientific results for everyone. Appropriate infrastructures to support Open Science practices are essential. DoY provides services to support these practices, develop infrastructures, and help researchers to transition to open and FAIR science.

³ Sections 6, 7, and 8 of this document are inspired by work by others, namely (1) https://studiozeitgeist.eu/, (2) the Strategic Plan of the National Academies of Science, (3) self-evaluation Life Sciences 2020, (4) Institutions for Open Societies notities 2021, (5) the Strategic Plan of the National Research Council, the operating and principal programmatic arm of the National Academies of Sciences, Engineering, and Medicine; (6) eerste versie Research IT 14 december 2014; and (7) NPOS (2020) Eindrapport Verkenning en optimalisering nationaal datalandschap

7.3 From hierarchy to teamwork

To be able to create impact, establish connections, and generate (public) engagement, it takes people doing things they are good at and enjoy doing. Recognizing the importance of teamwork, the *Utrecht University Recognition and Rewards work group* has developed the <u>TRIPLE model</u> to describe the domains of academic work. To realize our mission, DoY needs to build teams that not only bring out the best in everyone, but also feel responsible and accountable for achieving our goals. This requires building networks that connect people with each other, thereby allowing for the creation of new and stronger networks. Such networks also form the basis for solid consortia that are best placed to apply for/attract investment. DoY facilitates building these networks by providing support, developing infrastructures, and providing space for encounters and the exploration of new opportunities.

7.4 From vulnerability to strength

Resource distribution in science is unequal, both for tangible resources (time, money, support, information) and non-tangible resources (emotional support, recognition, appreciation). There is also too much fragmentation of resources, people, and projects. DoY invests in shared infrastructures, facilities, and Open Science practices thereby striving for a more equal distribution of tangible and non-tangible resources. By shifting certain responsibilities in science from individual researchers to teams and the community (e.g., data archiving), by making steps in implementing DORA, by contributing to the recognition of teamwork, and by supporting researchers in FAIRifying their work and their teams, DoY contributes to the efficiency and quality of the research process. We also strengthen the human and social capital in science. By sharing science, including data, expertise, facilities, best practices, and other tangible and non-tangible resources, (early career and senior career) researchers can set up collaborations with others more easily, which in turn can lead to new research opportunities. Also, sharing science and resources may positively increase the scientific and societal impact of our research. Importantly, it creates opportunities to unlock academic talent and create top-notch teams.

7.5 From performance to play

Tackling work and performance pressure is high on the UU agenda, not only because it is plainly unhealthy, but also because they can hinder creativity and innovation (for a great discussion see this blog by Sanli Faez and listen to the podcast of the Utrecht Young Academy on this issue). Crucially, interdisciplinarity requires boundary work that builds bridges and connects people. Meeting people from other disciplines and sectors, building trust among key stakeholders, negotiating differences, and exploring commitment within and across disciplines and sectors takes considerable time and effort; time and effort that many scientists feel they don't have and can't make in their current working lives. In the second period of DoY, members of the DoY hubs had the courage to invest in interdisciplinarity and took considerable risk to develop research that truly bridges disciplines and relates to societal challenges regarding youth (for examples see above). DoY further developed its portfolio of activities, including its funding scheme, to increase time for interdisciplinarity and space for bringing "play back into science." Researchers who play, can win and/or lose. Although we celebrate successes, failure and losing should be an option. In the third period, DoY aims to provide (young) researchers with increasing opportunities for interdisciplinarity and provide them with opportunities to move more freely, see things from a different (disciplinary) perspective, and come up with new ideas. To do so, DoY will invest in

increasing the space for "play in interdisciplinary science" by continued efforts to develop infrastructures and funding tools that provide affordances and opportunities for researchers to engage in exploration, be curious, and harvest their creativity. Even at the risk of 'failing'.

Tenets

8. Foundational tenets for pursuit of strategic goals

To fulfil our mission, five tenets lay the foundation for the strategic goals of third period of DoY 2021-2025:

8.1 Expand and strengthen DoY networks

DoY can be more impactful by expanding with whom and how it engages and collaborates beyond its current members and communities. DoY needs to strengthen its relationships with the existing community, including the seven faculties, Child Health/UMCU, and networks that the UU participates in such as the League of European Research Universities (LERU), the Eindhoven-Wageningen-Utrecht Alliance, and the Coimbra group. DoY also must pursue new opportunities to increase its visibility and the array of stakeholders that seek DoY networks, expertise, practice, knowledge, and support. This array includes professionals, politicians, policymakers, youth and youth organizations, and global institutions. By strengthening our coordinating mechanisms and expanding our networks, we increase the sustainability and scalability of our activities and create opportunities for connection and innovation.

8.2 Develop a DoY resource mobilization pipeline

DoY needs to build on its fundraising efforts. Through landscaping, networking, and analysis DoY can now confidently identify funding opportunities and can offer specialized support to researchers to maximize their chances of success. However, efforts to date, though sometimes successful, have been ad hoc. Given the ever-changing (inter)national scientific landscape and funding opportunities, DoY must develop a more structural approach to maximize its funding success in research funding, especially for early career researchers, and in turn expand its activities to achieve its strategic goals. Important elements for success are adequate funding/business development capacity, investment in proposition development and cooperation with other entities within the UU such as the RSO's, EU liaisons and regional cooperation liaisons.

8.3 Increase inclusion

To create networks with complementary skills and competencies and instil change, we need to attract and engage new stakeholders who challenge the status quo of existing academic structures. Early career researchers (UU/UMCU), youth, and stakeholders not yet involved in DoY, need to be involved and engaged both in our networks, boards, and activities.

8.4 Design for impact and diversity

As DoY expands with whom and how it engages and collaborates, it must build deep, interactive relationships with diverse communities. Listening to and learning from these communities will enrich and alter how DoY conducts its work; for example, by challenging each activity to consider how dimensions of diversity, equity, and inclusion could apply. Involving a wider range of perspectives, experiences, and evidence throughout DoY activities will improve the impact, quality, relevance, and accessibility of our efforts.

8.5 Embrace continuous learning and innovation

DoY must learn from past experiences and other (inter)national endeavours to promote interdisciplinarity in research, education, and outreach. Also, we need to learn from our current partners. We will continue to invite suggestions from a broadened group of stakeholders (e.g., Utrecht Young Academy; Societal board; KU Leuven Instituut voor Kind en Jeugd). As mentioned above, DoY aims to foster a culture that takes calculated risks—even with a risk of failure—and evaluate the outcomes of its activities. Therefore, DoY needs to be able to evolve over time, develop monitoring and evaluation mechanisms, and be willing to innovate.

8.6 Enhance DoY impact through investments in sustainable infrastructure and services

DoY recognizes the importance of cutting-edge tools, systems, and technologies to enhance the curation, discoverability, sharing, and use of data. These shared infrastructure and services need to be strengthened and, in some cases, developed (akin to Galleries, Libraries, Archives, and Museums (GLAM)). Considerable investments must be made to create the technological, social, human, and scientific capital that enables DoY to transition from individual researcher efforts to sustainable services, infrastructure, workflows, training, and education that benefit the DoY community. Crucially, such investments need to be continuous and continuing to ensure the updating and maintenance of such community infrastructures and services. First steps in this direction, in terms of shared facilities, data-management, and innovative research, have been made in collaboration with Child Health/UMCU, highlighting the scalability of our ambitions.

9. Transitioning from period 2 to period 3: Preparing for DoY 3.0

Over the course of 2021, we invested in the further development of our mission. Together with hub coordinators, program committee, and UU deans, we challenged ourselves to think about our core mission – what would be lost if we were to disappear? What culture do we want to foster that will enable us to achieve our goals? Considering the academic and organizational trends described above, connecting science and society to promote equal opportunities for all youth to thrive is a window of opportunity for our research and youth development that is wide open today. Realizing our vision requires organizational changes that help us to improve our growth and impact, within and beyond the UU/UMCU. The Strategic Plan of the UU clearly identifies that Strategic Themes as 'here to stay', which requires taking a long-term view and invest at the scale of the opportunities and resources we see. To achieve organizational change and structural sustainability, we need to take several steps. These steps include the description of a clear thematic focus, feasible and easy to communicate groupings, and the building a guiding group of diverse professionals committed to implementing changes.

9.1 DoY thematic focus: Embracing the complexity of youth development

Global challenges raise the stakes for investing in youth and improving youth development. So, the crucial question is how can we promote equal opportunities for all youth to thrive? What do young people need to adapt and respond to contemporary challenges, fulfill their promise, overcome setbacks, and recover from adversity? To answer these questions, DoY connects different disciplines, perspectives, methods, and stakeholders to inspire innovative research and provide new answers to sometimes longstanding questions. Only by connecting science and society can we build the unique and enduring collaborations that are necessary to make a difference for youth, now and in the future. To realize this connection, DoY collaborations share three foundational principles. They recognize the necessity of an interdisciplinary perspective to analyze, examine, and understand the multiple factors determining and shaping youth development and explain why some youth thrive and others do not. They adopt a developmental **life-course perspective** to appreciate that developmental periods and transitions from conception to emerging adulthood offer particularly important windows of opportunity for positive change, learning, and development, but simultaneously represent enormous risks for negative changes and dysfunctions. They embrace complexity by adopting a systemsperspective for a deeper understanding of the inseparable and interactive influences of individuals and their environments on youth development and the unfolding of behavior.

9.2 DoY groupings: Research domains

To better accommodate the diversity of groundbreaking research necessary for all youth to thrive, we will consolidate and expand our networks in **four research domains** (see section 6). The four domains span the diversity of themes that characterize youth development and socialization in a changing world. Their main functions are threefold. First, the domains are accelerators for the trends in science and academia described in Section 6. Second, they provide an organizing structure to optimize visibility by accommodating a larger diversity of researchers, stakeholders, existing and ongoing research programs, and data collections. Third, the four domains collaborate to achieve our vision and mission by continuing to innovate youth research, sharing science, facilities, data, and expertise, providing even better training and education, and accelerating dissemination and outreach. They innovate together with our partners, regionally, nationally, and internationally.

9.3 DoY guiding group: Domain chairs

Each research domain is chaired by two Domain chairs at the intersections of disciplines and UU/UMCU entities. These Domain chairs allow DoY to increase capacity by involving promising young scholars in DoY governance. They also strengthen enduring collaboration between UU/UMCU entities (faculties, departments) and accelerate interdisciplinary collaboration. Ideally, domain chairs will be joint chairs appointed by at least two organizational entities. A joint chair is a (tenure track toward a) professorial position designed to tackle fundamental, practical, and methodological challenges in youth research and bridge different disciplines examining similar questions and topics central to one of the DoY research domains. The assignment implies that the entities have shared goals regarding interdisciplinary research on youth, that both entities express the intention to actively collaborate with each other and DoY, and that they also share responsibility for the entirety of the appointment. The teaching related to the appointment will focus on the DoY domain where interdisciplinary collaboration is sought. One day of the domain

chair (0.2 fte) will be financed by DoY. Roles at this level will have a significant impact on the direction, strategy, objectives, and results of the DoY research domain by influencing and shaping the available resources as appropriate to meet the current and future needs of DoY.

DoY Strategy 2021-2025

10. Strategic goals DYNAMICS OF YOUTH Vision: Connecting science and society to promote equal opportunities for all youth to thrive in all domains of life STRATEGIC PLAN Mission: Generate and provide independent, trustworthy evidence that raises awareness and identifies opportunitie **OVERVIEW** to successfully respond to complex challenges facing youth by facilitating networks, expertise, practice, and support for interdisciplinary collaborations (2021-2025)Core Values: Trustworthiness, independence, rigor, impact, interdisciplinarity, participation, inclusivity, sustainability Goal 1 Goal 2 Goal 3 **Expand and strengthen DoY Develop and strengthen DoY** Accelerating the connection sustainability between science and society networks 3.1: Facilitate and promote interdisciplinary collaborations 1.1: Enhance impact 2.1: Strengthen DoY governance Strategies 3.2: Expand reach and impact to new 1.2: Enhance visibility and outreach 2.2: Optimize use of DoY committees 3.3: Invest in collaborative learning and innovation 1.3: Invest in resource mobilization 2.3: Optimize balance between focus and expansion 3.4: Increase capacity teaching and education

2.4: Strengthening DoY community from within

Goal 1: Expand and strengthen DoY networks

In the second period (2016-2021), DoY built a robust foundation for its networks and efforts to bridge disciplines and connect science and society. During the next period, as mentioned above, we build on this knowledge development and realized impact foundation by continuing well-functioning forms of collaboration, best practices, and high impact generation, and by welcoming new topics and collaborations. We invite the DoY community to contribute to fields that are particularly relevant in light of the challenges facing youth in a changing world, including digitalization, globalization, diversity, climate change, and social inequalities. Therefore, in the next period, DoY must strengthen and expand its already rich portfolio of activities. These activities need to be designed to meet the needs of its stakeholders, both within and beyond the university. They also need to improve science and academic scholarship and implement Open Science practice at all levels of our work.

- Strategy 1.1 Enhance impact: To enhance DoY impact in alignment with Open Science practices, we need to develop new ways to measure, monitor, and evaluate the impact our activities. The collection of the varied evidence on the types and quantity of impact that DoY generates will be an important first step (e.g., scientific articles, factsheets, public reports, YouTube, social media dissemination, public engagement as realized for the Lustrum "even over morgen"). Consistently measuring progress and strategically building DoY's activities to align with its unique strengths and opportunities will help enhance impact. Weaknesses will need to be identified, evaluated, and addressed. DoY

E: Balance priorities

will also need to better leverage DoY community members as ambassadors and promoters of its work. DoY contributes to changes in youth research, education, and policy which require a more comprehensive baseline understanding of its current and potential new stakeholders, including who they are, why they engage with DoY, and how DoY best interacts with them.

Actions Strategy 1.1

- **Develop Impact framework.** Build upon the dimensions of the impact areas we identified in the second period. **(1) Research impact**: Contribute to advancing understanding and advancing scientific method, theory and application across and within disciplines by conducting and supporting excellent, robust and <u>FAIR</u> research on youth development; **Societal impact**: Contribute to solving societal challenges in the field of youth development; and **Capacity building**: Increase professional skills and qualifications of students, researchers, policymakers and practitioners in the field of youth development, thereby also contributing to a changing sector that recognizes and rewards talent in research, societal impact, knowledge exchange and education.
- Monitor, evaluate, and develop different types of impact. Based on the impact framework, DoY will advise and provide support toward the development of improved strategies and policies for the impact framework; create and support implementation of internal communication workflows for stakeholders in accordance with the DoY impact strategy (but also see 6.1).
- Strategy 1.2 Enhance visibility and outreach through communication: Enhancing the impact of our work will require significant ongoing attention, adaptability, and investment to update and extend the influence of our work. To this end, DoY needs to strengthen its internal and external communication strategy. Efforts need to focus on community building to enlarge and strengthen DoY's internal network and cooperation with current social and academic stakeholders. To enhance visibility and outreach in our science communication, DoY focuses on the use of digital platforms, press and public engagement activities to ensure it is communicating effectively through media and other interactive channels that diverse stakeholders find most accessible and influential. Examples include expanding the use of (virtual) convening mechanisms to reach new partners in innovative ways and digitizing the development of DoY expertise, practice, and publications.

Actions Strategy 1.2

- Investing in community building. Develop Impact framework. Together with the domains and faculties, accelerate and facilitate community building for sharing expertise across boundaries of disciplines and sectors through (digital) platforms; organize relevant trainings, webinars, develop toolboxes with academic and societal partners and stakeholders.
- **Provide advice and coordinate digital networks**. Enhance use of an internal online communication platform and workflow and external platforms such as social media channels of UU faculties, corporate affairs, DoY and individual researchers.
- Increase flexibility and diversity of communication. To accelerate communication and (community-based) outreach, DoY is dedicated to investing in new and more diverse ways to reach out to a broad audience based on perception 'Show don't tell' (storytelling, factsheets, podcasts, newsletter, animations, public engagement events, data visualization, e-Learning Platforms).
- Stimulate open dialogue and participation of special groups of stakeholders. DoY needs to increase efforts to engage specific groups of stakeholders, such as professionals that work with youth or look after their interests or sounding board groups of youth themselves. Such efforts can take different forms, including polls, public engagement events, research participation, or public engagement events organized together with university museum.
- Strategy 1.3 Invest in resource mobilization: Enhancing DoY impact resides in the development and facilitation of sustainable interdisciplinary collaborations on youth research, education, and outreach. Also, increasing DoY's societal impact will require more structural support and consultancy. This is further underlined by recent (inter)national initiatives and developments that require the gathering, analysis, and review of political and legislative information and funding opportunities (e.g., groeifonds, recovery fund for Europe, Horizon Europe, Nationaal Programma Onderwijs, Deltaplan Jeugd). To proactively respond to such opportunities, DoY must develop comprehensive strategies to enhance its ability to support the DoY community and intensify lobby and advocacy efforts. This will require new types of products and services that meet the needs of the expanded set of communities and explore the potential of targeting engagements with specific communities such as the ministries, municipalities, and the European Union.

Actions Strategy 1.3

- Consolidate research support and lobby/advocacy action.
- Monitor and support structural resource mobilisation efforts. Invest in the landscaping and analysis of funding opportunities to provide better matching and ensure high quality grant applications.

Strategy 1.4 Enhance interdisciplinary teaching and education: To effectively pursue our mission, DoY needs to further invest in education and teaching on youth, youth development, science, and interdisciplinarity. It is pivotal that youth researchers and professionals are informed and engaged with DoY's vision on the efforts needed to lead to a better world for our youth and our future. Therefore, it is vital that DoY facilitates education and teaching targeting both state-of-the-art knowledge on youth and youth development and interdisciplinary competencies and skills that are neglected in current curricula (e.g., communicating with policymakers; skills to organize co-creation and long-term collaborations with partners in the private and public sector). Additionally, consistent with our framework conditions described above, DoY needs to develop systematic and robust monitoring, as well as evaluation of DoY organized teaching and education if we are to know what really works, why, and with whom.

Actions Strategy 1.4

- Create efficient workflow and communication between research and teaching activities within Dynamics of Youth.
- Invest in development of innovative education and teaching that contributes to faculty curricula. These investments span education about science (e.g., Open Science practices, what is robust science, why do scientists contradict each other), dissemination (e.g., communicating with policymakers, workflow for collaborations with societal stakeholders, pitfalls of transdisciplinary science), expertise (e.g., data visualization, eyetracking, data mining), and knowledge on youth development.
- Strategy 1.5 Contribute to and foster infrastructures within and beyond DoY:
 Enhancing impact also requires that DoY increases its support and development of research and knowledge infrastructures within and beyond DoY. DoY is committed to participate in national and local efforts to accelerate (digital) data exchange, harmonization, sharing, archiving, and storage (e.g., groeifonds Health-RI; UU-IT, Child Health/UMCU; ODISSEI). Therefore, DoY must proactively push for and contribute to FAIRification, Open Science practices, and awareness and information about the Ethical, Legal, and Social Implications of such practices and interdisciplinary collaborations.

Actions Strategy 1.5

- **Continue and strengthen research support**. In collaboration with partners Child Health/UMCU, research support, and UU research IT, expanding support for researchers so that they can receive support throughout the research chain: this can be from application/honoring, through research process, data management, data analysis and citizen science to closure, accountability, archiving and valorization.
- **Develop and maintain connection with digital (data) infrastructures within and beyond UU/UMCU**. Examples are ODISSEI, Health-RI UMCU, and disease cohort study Child Health/UMCU.

Goal 2: Develop and strengthen DoY sustainability

To promote DoY sustainability and the effective pursuit of its goals, DoY needs to strengthen its governance, monitor adherence to its mission and core values, expand the portfolio of its activities, facilitate interaction within and between networks, and become more inclusive and accessible (see 9.1). At the same time, DoY needs to further its focus to enable individuals from within and outside the UU to recognize what we stand for. We also need to enable stakeholders to actively participate. The four tenets described above are fundamental to this endeavour. In addition to investing in the growth of the foundations of interdisciplinary collaboration that have been laid in the previous periods of DoY, in the third period, DoY will also need to take risks, while recognizing the realities of the current university organization (e.g., faculties) and scientific culture (e.g., funding agencies).

- **Strategy 2.1 Strengthen DoY governance**: Although DoY and its community found ways to organize their activities, efforts are needed to explicitly outline the governance structure and processes for decision making, accountability, control, and behavior. We need to clarify the process of becoming, appointing, or electing members both of DoY and various boards. Guidance should also be provided on the internal structure of DoY, such as mechanisms to create and discontinue committees, programs, and/or divisions, and general guidelines for key DoY management positions.

Actions Strategy 2.1

- **-Define the governance structure**. Paralleling the governance structure of Institutions to Open Societies (IoS), and the current efforts to embed the Strategic Themes in both university and faculty structures, DoY wil adopt a "matrix" structure to organize its governance (e.g., scientific director, co-decanaat, scientific board/program team, societal board; see "definitief concept governance IoS 21-09-21")
- **Embed governance in matrix structure.** The managing director will explore the optimal method of governance and cooperation and translate this into concrete plans for future interfaculty cooperation.
- **Strategy 2.2 Optimize use of DoY committees and boards**: To provide stronger support and leadership for research, education, and outreach, DoY needs to implement changes in its committees and boards to engage the DoY community more effectively in making decisions and advising the Scientific board (i.e., Programmacommissie).

Actions Strategy 2.2

- Implementation recommendations of the Utrecht Young Academy. The UYA advises the university about research affairs, including the governance of the Strategic Themes. In April 2021, the UYA started a conversation about DoY's governance. This conversation included three recommendations, which DoY intends to implement, starting with (1) intergenerational diversity in DoY boards and fellowships, (2) transparency in funding allocation and decision-making, and (3) recognition and reward of DoY related activities.
- **Strategy 2.3 Optimize balance between focus and expansion:** DoY covers a broad range of expertise fields and disciplines from all 7 UU/UMCU faculties, from fundamental

scientists to clinicians and practitioners, from blue sky research to applied research, from junior researchers to senior scientists, from individual researchers to large consortia⁴. In practice, this means that there are several subcommunities or networks within DoY that each have their own dynamics and needs. In addition to FAIRifying data, we also need to respond to potential stakeholders' desire for better findability, more transparency, and easier access to members of our community⁵. Despite their success attracting more researchers in the second period, the hubs have insufficient resources to accommodate these needs.

Actions Strategy 2.3

- Establishing DoY research Domains: Paralleling the organization of the Strategic Theme Life Sciences, DoY will develop four research domains, that enhance both DoY's internal and external findability and visibility. These domains are (1) Early Childhood; (2) Thriving and Healthy Youth; (3) Education and Life Skills; (4) Becoming Adults in a Changing World. Each research domain will be chaired by two domain chairs. Each domain is centered around those with common interests—but regardless of who the stakeholders are or where they come from, they are part of the DoY community. To that end, domains are open to all stakeholders, but different roles exist (e.g., affiliate, associate) (for more information on domains, please see 8.2 above).
- **Introducing diversity of roles and tasks.** Different types of memberships can be conceived of (e.g., fellows, associates, ambassadors, research affiliates). These types of memberships have different eligibility criteria, benefits, and tasks.
- **Strategy 2.4 Strengthening DoY community from within**: To build the durability of DoY, increase its flexibility, and adaptively respond to societal questions, DoY will transition to research domains.

Actions Strategy 2.4

- **Appointing joint chairs**. To identify candidates for the eight joint chair positions (2 per domain), DoY will closely collaborate with the deans of the 7 faculties, and the co-decanaat in particular, regarding potential candidates and procedures.
- **Define and give assignment to joint chairs.** The joint chairs will receive, a to further be defined, assignment that gives ample freedom to define goals/ambitions but includes a number of concrete activities. The domain plans will be incorporated into the abovementioned impact framework.

Goal 3: Accelerating the connection between science and society

To accelerate and improve science and academic scholarship regarding youth and increase societal impact, youth researchers and stakeholders need to join forces. Therefore, each research domain must commit to realizing the DoY mission. To realize the full potential of

⁴ See "210615 Notitie adviescommissie onderzoek - Strategische thema's UU Ruimte voor variëteit en inclusiviteit"

⁵ See suggestions for governing the Strategic Themes provided by Utrecht Young Academy "20210413_Three Principles for Governing the ST's UYA"

convergence and collaboration among research domains and with external organizations, DoY and its research domains will need to identify creative ways to overcome current barriers, including the current scientific evaluation and reward system, and establish an episodic process to systematically evaluate the effectiveness of our activities in the pursuit of our mission.

Strategy 3.1 Facilitate and promote interdisciplinary collaborations: Aligning with current trends in science and academia, DoY must develop a funding scheme that responds to the needs of its community. To accommodate the broad range of expertise fields, researchers, and stakeholders, DoY will invest in sustainable collaborations that foster inter- and transdisciplinary thinking on youth issues of societal relevance. It will promote activities that have added value for youth and youth development in research, education, and outreach.

Actions Strategy 3.1

- Expand funding scheme that responds to stakeholder needs. Examples are: popup grants (e.g., when societal question arises, see <u>taalbaas</u>), organization of flashmob studies (for more information, see <u>science in a flash</u>, for an example, see the <u>excite study</u>); invigoration grants (grants to re-invigorate existing data or methodologies through interdisciplinary collaboration); scientific hackathon (organize intense <u>interdisciplinary events</u> to respond to societal questions), call for rapid expert consultations on societal urgencies (e.g., reports on urgent youth issues raised by societal stakeholders).
- **Strategy 3.2 Expand reach and impact to new audiences:** DoY and the research domains must look outward as well in its community building. Youth science needs to be relevant to the public at large, not just the science-loving members of the public. Which collaborations with stakeholders are effective and sustainable vehicles for inspiring an appreciation for or interest in evidence-based knowledge on youth? Which collaborations are needed to monitor, evaluate, and assess youth adaptability, wellbeing, and thriving?

Actions Strategy 3.2

- **Optimize promotion of our work**. DoY research domains need to develop workflows and communication to optimally leverage expertise, practice, and publications to promote our work.
- Participate in local, national, and international networks. DoY members need to be ambassadors of our work and be linking pins in external academic and non-academic networks (e.g., Jeugdraad, ODISSEI, SGW-tafels).
- Strategy 3.3 Invest in collaborative learning and innovation: Open Science practices and sharing of resources will result in new products, services, and ways of thinking. Nevertheless, these practices also raise important questions regarding the ethical, legal, and social implications of our activities, as well as questions regarding openness (e.g., can anybody join? Under which conditions?), ownership (e.g., who is responsible for maintenance in the long-term), and scalability. These questions and the dilemmas they may cause will require continued investment, attention, and development of guidelines. To illustrate, some products and services may be free and owned by nobody (e.g., code,

educational materials), others will require entrepreneurship (see <u>UU's guide from researcher to academic entrepreneur</u>), ownership, expertise, or training. New, dynamic approaches to DoY activities must be continually developed and routinely evaluated, with feedback loops to ensure that learning is multi-directional. This will require the development of new types of products and services and a comprehensive strategy to explore the potential of engagements with new communities (e.g., ministries, business communities).

Actions Strategy 3.3

- See all goals and actions above.
- Invest in community platforms.
- Strategy 3.4 Increase capacity: Talent is always in short supply and the DoY community
 has a responsibility to build leadership skills and nurture promising young scientists.
 Early career scholars need to be involved in DoY governance and decision making.

Actions Strategy 3.4

- Develop funding and participation opportunities. (see 9.2.2 A)
- **Strategy 3.5 Balance priorities:** To ensure that DoY strengthens its creativity and sustainability, it must balance priorities in multiple domains: meeting stakeholder needs and satisfaction; strengthening organizational infrastructure and key processes; remaining economically sustainable; and staying within the guardrails to ensure that the organization keeps true to its core values.

Actions Strategy 3.3

- Raise awareness, promote and accelerate efforts to implement strategies for <u>work-life balance</u>, Open Science Practices, and DoY values.

Appendix

1. Budget Dynamics of Youth 2022 - 2025

Below please find a preliminary budget in outline. We consider 2022 as a year of transition in which our plans will crystallize in more detail. The budget will follow these refinements, also in its level of detail and in kind matching by the faculties participating.

Preliminary budget

Dynamics of Youth 2022-2025 1)	2022	2023	2024	2025	total
DoY core activity personnel 2)	525.782	533.669	541.674	549.799	2.150.923
DoY core activity material 3)	130.000	180.000	130.000	180.000	620.000
DoY international talent 4)	367.333	344.000	344.000	344.000	1.399.333
DoY infrastructure 5)	183.000	275.000	325.000	350.000	1.133.000
DoY Domains	0	400.000	400.000	400.000	1.200.000
Grand total	1.206.115	1.732.669	1.740.674	1.823.799	6.503.257

¹⁾ Excluding in kind matching by the faculties participating.

²⁾ Including scientific and managing director, public affairs officer, communication advisor, project manager(s); excluding support (F&C, HR, RSO, additional C&M, education, etc.) provided by the faculty/faculties.

³⁾ Material expenses for conferences, public engagement, capacity building, communications etc.

⁴⁾ Joint chairs, visiting professors, invigoration grants, travel grants, etc.

⁵⁾ Research infrastructure, fair data, etc.