RESEARCH REVIEW

Pedagogical and Educational Sciences

2018-2023

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Contents

Preface

What good research is and how it can be brought about is an open and complex question. It is a question that must be answered by individual researchers, research groups, research programmes, research institutes, faculties, and universities. Answers to the questions are diverse as disciplines and research fields are diverse. Answers evolve over time and contexts make answers more or less suitable. Given the open and complex nature there are no right or wrongs answers although some answers are better and others are worse. Sharing these answers and subjecting them to critical scrutiny in a research assessment exercise is an act of research maturity, despite the vulnerability it may entail.

This document reflects the outcomes of such a research assessment exercise. The report adheres to the guidelines of the Strategy Evaluation Protocol (2021-2027) published under the authority of the Universities of the Netherlands (UNL), the Dutch Organisation for Scientific Research (NWO), and the Royal Netherlands Academy of Arts and Sciences (KNAW). The research assessment focused on the fields of Pedagogical Sciences and Educational Sciences. In addition to the Interuniversity Centre for Educational Sciences (ICO), research programmes, institutes and/or faculties from the following universities participated in the assessment and shared their answers through self-reports: the University of Amsterdam, University of Groningen, Leiden University, Maastricht University, the Open Universiteit of the Netherlands, Erasmus University Rotterdam, and Utrecht University. Self-reports from these institutions were discussed with a review committee comprising scholars from diverse research backgrounds and countries, along with two PhD candidates. The entire process was organised and supported by De Onderzoekerij.

It was my privilege to chair the committee's activities. I extend my gratitude to my fellow committee members for the interesting and open discussions on research, particularly in the fields of pedagogical and educational sciences, as well as for their extensive reading and writing efforts, their dedication and their good spirit. The support by De Onderzoekerij was invaluable. Esther Poort coordinated the entire exercise and, together with Annemarie Venemans, served as secretary during the discussions. Together they also assisted in the elaboration and editing of this report. But importantly, I thank the management, senior and junior staff members as well as the PhD candidates of the participating institutions for all the preparatory work and the candid and open discussions which provided insights and demonstrated a strong commitment to high-quality pedagogical and educational research. This report reflects their answers on what constitutes good research and how it can be brought about, along with our reflections. I hope this report can further strengthen the high quality of research in pedagogical science and educational sciences in the Netherlands.

Jan Elen

Chair of the Committee

1. Introduction

1.1 Terms of reference for the assessment

The quality assessment of research in pedagogical sciences and educational sciences is carried out in the context of the Standard Evaluation Protocol for public research organisations by the Universities of the Netherlands (UNL)), the Netherlands Organisation for Scientific Research (NWO), and the Royal Netherlands Academy of Arts and Sciences (KNAW).

The Committee was asked to assess the scientific quality and the relevance and utility to society of the research conducted by research institutes of eight universities in the reference period 2017-2022, as well as its strategic targets and the extent to which it is equipped to achieve them.

The participating research institutes are:

- Freudenthal Institute, Utrecht University
- Nieuwenhuis Institute for Educational Research, University of Groningen
- Department of Education and Pedagogy, Utrecht University
- Faculty of Educational Sciences, Open Universiteit
- Institute of Education and Child Studies, Leiden University
- School of Health Professions Education, Maastricht University
- Research Institute of Child Development and Education, University of Amsterdam
- Pedagogical Sciences, Erasmus University Rotterdam
- Interuniversity Centre for Educational Sciences, National research school

Accordingly, three main criteria are considered in the assessment: research quality, relevance to society, and viability. During the evaluation of these criteria, the Committee was asked to incorporate four specific aspects: open science, PhD policy and training, academic culture and human resources policy.

This report describes findings, conclusions and recommendations of this external assessment of the research of pedagogical and educational sciences.

1.2 The Review Committee

The Board of the participating universities appointed the following members of the committee for the research review:

- Prof. dr. Jan Elen, KU Leuven, Belgium (chair)
- Prof. dr. Dagmar Strohmeier, Research Centre Linz, Austria
- Em. Prof. dr. Wilma Vollebergh, Utrecht University, Netherlands
- Prof. dr. Roger Säljö, University of Gothenburg, Sweden
- Prof. dr. Jennifer Symonds, University College London, United Kingdom
- Prof dr. Nienke van Atteveldt, Vrije Universiteit Amsterdam, Netherlands
- Brittney Root MA (PhD candidate), Vrije Universiteit Amsterdam, Netherlands
- Bob Kapteijns MSc (PhD candidate), Radboud University, Netherlands

The Boards of the participating universities appointed dr. Annemarie Venemans and drs. Esther Poort of De Onderzoekerij as the committee secretaries. All members of the Committee signed a declaration and disclosure form to ensure that the committee members made their judgements without bias, personal preference, or personal interest, and that the judgment was made without undue influence from the institutes or stakeholders.

1.3 Procedures followed by the Committee

The Committee proceeded according to the Strategy Evaluation Protocol (SEP) 2021-2027. The assessment was based on the documentation provided by the eight research programmes and the research school, as well as interviews with four groups of representatives from each programme: the programme's management, selections of senior researchers, selections of junior researchers, and PhD candidate representatives. On Friday, interviews were held with the national research school ICO, including one with the management and one with PhD candidates. Furthermore, a joint interview was conducted with the directors of the eight research programmes and ICO. The interviews took place from February 3 to February 7, 2025 (see Appendix A).

Prior to the site visit, the Committee reviewed comprehensive documentation, including self-evaluation reports from the eight research programmes and the research school, along with their appendices. Additionally, the Committee was presented with a distinct document titled *Pedagogical and Educational Sciences in the Netherlands, Cover note for research evaluation 2018-2023*. This document provided an overview of the Dutch research landscape at universities, including explanations of the funding landscape, the PhD system in the Netherlands, and recent developments in government policies. It also offered insights into the specific domain of pedagogical and educational sciences. Additionally, this document encompasses the findings of a bibliometric analysis, providing insight into the scientific impact and level of societal connectedness of the research units. In line with the qualitative nature of the current research review —focused on evaluating both scientific and societal impact rather than comparing participating institutes—these results were presented collectively for the entire field. The analysis focused on indicators of scientific impact as well as societal connectedness.

The Committee discussed its assessment of each research programme during several sessions of the site visit. The Committee chair had a coordinating role in the writing procedure and delegated the writing of sections to members of the Committee. The members of the Committee commented by email on the draft report. The draft version was then presented to the research programmes for factual corrections and comments. Subsequently, the text was finalised and presented to the Executive Boards of the eight universities.

2. General remarks

2.1 Introduction

After thoroughly reviewing the meticulously written and edited self-evaluation reports (and their appendices) of eight institutes/faculties/programmes and one research school active in the fields of Pedagogical Sciences and Educational Sciences, the Committee had the privilege of engaging in enriching conversations on research-related issues with the management, PhD candidates, and junior and senior staff members. The Committee reaffirms that the research in Pedagogical and Educational Sciences in the Netherlands is of high quality, often surpassing international standards. The research is diverse, encompassing fundamental and curiosity-driven inquiries on the one hand and applied studies conducted for and/or with societal partners on the other. Despite various contextual challenges, the institutes appear resilient and committed to conducting relevant research at a very high and internationally recognised academic level.

In addition to observations, this report offers recommendations intended to further encourage the strengthening of the excellent work being done.

2.2 Research quality

As evidenced in the jointly written cover note and the specific self-evaluation reports, research in pedagogical and educational sciences is impressively broad and diverse. It addresses a wide range of research questions, rooted in various theoretical perspectives and based on a diversity of epistemological assumptions; it employs a broad range of methodological approaches. The research spans the spectrum from theoretical/fundamental to practical/applied, with a noticeable trend towards more practice-based and practice-oriented studies developed in cooperation with external societal partners. This trend is influenced by funding structures and societal demands. Regardless of the research nature, multiple indicators (from traditional citation indices to popular books and widely used tools and guidelines) attest to the quality of the work.

The institutes employ different context-specific strategies to define their research profiles and to align them with initiatives such as the Sector Plan SSH, with decisions arising from ample reflection and deliberate thought. What unites these institutes is their shared approach to science: they investigate relevant questions while maintaining a strong interest in both fundamental insights and practical applications.

While collaboration already exists through various networks, institutes also reflect on whether their current efforts are optimally structured and effective. A stronger, more coordinated collaboration across institutes could help reinforce their collective position and visibility towards policymakers, ensuring that the importance of pedagogical and educational sciences is clearly articulated. Such collaboration does not mean losing individual institutional identities—on the contrary, differentiation and cooperation can coexist. Strengthening connections within the field can support networking, mutual learning, and identity-building while also fostering interdisciplinary and transdisciplinary research.

This ongoing dialogue is essential: interdisciplinary collaboration can only thrive when rooted in a strong disciplinary foundation. The Committee encourages institutes to continue refining their collective vision, identifying effective platforms for collaboration (also between pedagogical and educational scientists), and maintaining discussions on the role and positioning of pedagogical and educational sciences in the broader research landscape.

2.3 Societal relevance

Research in Pedagogical and Educational Sciences addresses issues that are intrinsically relevant to individuals and societies, presenting advantages as well as methodological challenges. The relevance is easily recognised and made visible, yet the research may also critically examine choices made by individuals and decision-makers. The Committee encourages institutes to reflect on their role with respect to the development of individuals, as well as societies, and to continue enriching the public debate by highlighting scientific insights and findings. Additionally, institutes may combine efforts to reflect on the collective impact of their research on societal issues, and to enhance visibility through collaborative valorisation within shared research themes.

The institutes engage with practice in various ways, including numerous dissemination activities and intensive collaboration with societal partners who may request the investigation of particular research questions and participate in the research. Societal partners can be research users, partners, or co-researchers (e.g., 'external' PhD candidates). In these collaborations, the processes are increasingly valued as much as the research outcomes.

However, while societal relevance is widely acknowledged, a clear overarching strategy on how to approach and enhance it deserves continuous attention. The Committee recommends that each institute further develop its own strategic approach to societal engagement, ensuring balance in their research programmes. This includes defining target audiences, clarifying objectives, considering publishing in Dutch, and identifying effective modes of collaboration to maximise impact.

2.4 Viability

The Committee is impressed by the enthusiasm and engagement of junior and senior staff members, as well as PhD candidates. Clearly, conducting research in the reviewed institutes is more than just 'work'; researchers are passionate about their studies, engaged in in-depth analyses and conceptual clarifications, and proactive in sharing both the research process and its outcomes. Together with good research facilities and effective support structures, this provides a solid foundation for future research.

Institutes are aware of challenges related to budget cuts, political decisions, and societal viewpoints that may not always favour research. In response, they recognise the need for strategic choices and acknowledge that some developments may impact their research. One pressing issue is the significant time investment required for grant applications, combined with the low success rates. Within institutes, examples have shown that a more targeted approach—focusing resources on the most promising funding opportunities rather than multiple researchers competing for the same grants—can be more efficient. The Committee recommends exploring whether this principle can be applied more broadly, not only within but also between institutes, to optimise efforts and increase overall success rates.

2.5 Academic culture

Discussions with PhD candidates and junior and senior staff members revealed signs of an academic culture that is open, supportive, targeted, and increasingly collaborative. Relationships across generations appear strong, creating an environment where people enjoy their work and feel recognised. This culture fosters intensive academic discussions and high research productivity. It is important to note that such a culture requires deliberate efforts from all involved, as highlighted during and after the COVID-19 period.

Workload is broadly recognised as high, and various measures are taken to manage it. Despite these efforts, some experience workload as work pressure due to high research ambitions and external

funding requirements. The Committee observed a broad recognition of this issue, numerous attempts to reduce pressure, and an openness to discuss it. Increased financial pressures may result in initiatives that disproportionately affect dedicated research time. The Committee recommends that institutes continue to prioritise quality over quantity to alleviate work pressure and safeguard research time. Collaboration, including team science, interdisciplinary and transdisciplinary research, and exchanging ideas and practices among institutes, is seen as an effective response to these challenges.

During the review period, clear initiatives were taken regarding research integrity and privacy. Open science is embraced by the institutes, with a large majority of publications being 'open access' in various formats, increased preregistration of research initiatives, implemented data management policies, and accessible data sets in repositories for reuse. Ethical review committees have taken a prominent position, and GDPR rules are complied with. While these contributions are significant for scientific integrity, institutes also report challenges, such as the need for more support (e.g., data stewards, data infrastructure), increasing bureaucracy when applying for and implementing research and difficulties in recruiting sufficient research participants. Institutes make important efforts to support their researchers, and it is recommended that they further discuss the implications of integrity and privacy regulations to minimise any potential negative consequences.

2.6 Human Resources Policy

During the review period, various human resources-related decisions were made. Thanks to provisions from the Sector Plan SSH, several assistant professors were hired and appointed to permanent positions, contributing to more manageable workloads. It is observed that the tasks and support for assistant professors vary across institutes, with dedicated research time differing significantly.

All institutes are engaged in implementing the recent 'Recognition and Rewards' policy, although the degree of implementation varies across institutes. This policy shifts the focus from primarily quantitative research indicators to a broader evaluation framework that includes qualitative elements, as well as accomplishments in teaching, leadership, and societal impact. The adoption of the policy will support staff in experiencing greater fulfillment in their roles and to achieve their career goals, even in an environment where promotions may be challenging. The Committee is highly positive about this development, as it fosters a more balanced and inclusive approach to academic careers.

While the policy is generally welcomed, especially for its emphasis on a more holistic assessment of academic careers, there are still concerns about its practical implementation. In particular, assistant professors expressed a need for greater transparency regarding promotion criteria and the long-term implications of the policy for career progression. Even at institutes that have made significant progress in implementation, questions remain about how different career tracks will be evaluated in practice. It seems important to develop clear markers of recognition for excellence in teaching or excellent contributions to societal impact and find ways to celebrate these achievements in the same way excellent research is recognised.

The Committee recommends that institutes actively work to build trust in the system’s sustainability and ensure clarity on how different academic profiles—whether focused on research, teaching, leadership, or impact—are defined and assessed. In particular, the role of research within non-research-dominant career tracks should be explicitly addressed to avoid uncertainty about career development opportunities.

2.7 PhD candidates

The Committee values the candid discussions with PhD candidates and observes that the group of PhD candidates is large, with a growing number of external PhD candidates. Institutes invest significantly in PhD supervision, with junior and senior staff members dedicating substantial effort.

PhD candidates are in diverse situations depending on their funding sources and the amount of time they can dedicate to research (some full-time, others part-time). While institutes strive to offer similar working conditions for all PhD candidates, trajectories and experiences differ, particularly between internal and external candidates. Required teaching time for internal PhD candidates differs between universities.

PhD projects are intensively supported by supervisory teams, closely monitored according to institutional procedures, and using dedicated tools. This is especially the case for PhD candidates in educational sciences who also are monitored and supported by ICO with positive effects (also on the duration of the trajectory).

PhD trajectories often exceed the predefined four years due to personal circumstances and systemic factors. Some institutes have reconsidered dissertation requirements to make PhD trajectories more realistic, for instance reflecting the particularities of applied research projects. External PhD projects tend to be longer and have higher dropout rates, possibly due to weaker links with the academic culture and/or the combination of research with other pressing obligations. The Committee recommends that institutes re-evaluate how they assess the progress of PhD trajectories, to take into account the time external PhD candidates realistically can devote to research. This evaluation can help institutes align PhD expectations with candidates' specific circumstances. It is further recommended to consider greater standardisation of PhD monitoring systems, by, for example, setting up review panels where senior researchers outside of the supervision team give PhD candidates formative feedback on their work.

PhD candidates receive training in various local graduate schools, including methodological training, open science, scientific integrity, privacy, and professionalisation initiatives for future careers. Some candidates attend discipline-specific courses and connect with other researchers in specific research schools. For PhD candidates in the field of Educational Sciences, ICO plays a crucial and valuable role. The Committee enjoyed conversations with PhD candidates and the management of ICO, which balances setting and monitoring standards with supporting PhD candidates in achieving high-level research ambitions. ICO creates a safe academic community for PhD candidates to exchange research experiences and provide mutual support, clearly enhancing the more general support offered by local graduate schools. Unfortunately, not all PhD candidates in the field have the opportunity to participate in a domain-specific research school like ICO.

2.8 Recommendations

To further strengthen research in Pedagogical and Educational Sciences, the Committee suggests the following general recommendations:

- As a group of outstanding research institutes, the ambition should be to continue conversations about future research directions, strengthening collaborations between pedagogical and educational scientists, and fostering the growth of interdisciplinary and transdisciplinary research.
- Reflect on the role of the institutes towards the development of individuals as well as societies and continue to enrich the public debate by highlighting scientific insights and findings on

current issues/challenges within our society. Combining efforts to valorise the relevance of research in these fields will enhance visibility and impact.

- Continue discussing research priorities across institutes to avoid undesirable competition and wasted effort. Collaborations within the context of sector plan priorities already provide a strong starting point.
- Prioritise quality over quantity to alleviate work pressure and safeguard research time. If this is a shared priority across institutes, the focus on quality versus quantity will not lead to unfair competition.
- Continue developing strategic approaches to societal engagement, ensuring balance in their research programmes. Adequate approaches may imply the definition of target audiences, the clarification of objectives, deliberate publishing in Dutch, and the identification of effective modes of dialogue and collaboration to maximise impact.
- Further discuss the implications of integrity and privacy regulations to mitigate undesirable side effects in research activities.
- In the further implementation of the Recognition and Rewards system, institutes should seek to promote trust in its sustainability and provide clarity on the academic nature of different profiles, specifically the role of research in teaching, leadership, and impact profiles.
- Reconsider progress reporting practices for PhD trajectories, taking into account the time external PhD candidates realistically can devote to their research, ensuring that expectations and monitoring align with their specific circumstances.
- Consider both further standardisation of PhD monitoring systems and the inclusion of external senior researchers in these processes to enrich them.

3. Freudenthal Institute, Utrecht University

3.1 Organisation, strategy and targets

The Freudenthal Institute (FI) is part of the Faculty of Science, Department of Mathematics, and is dedicated to promoting scientific literacy for life. Originally a research institute focused on mathematics education research and educational development, FI has evolved into a multidisciplinary unit engaged in science and mathematics education research, public engagement in science, science communication, and the history and philosophy of science. The Institute maintains strong connections with a large network of secondary schools. Its mission is to contribute to resolving societal issues through fostering scientific and mathematical literacy of students, citizens and professionals. The Committee finds this broadening of the research profile particularly interesting, given FI's strong track record in educational research and development over many decades.

More specifically, FI's research aims to: 1) empower all citizens and professionals to engage with socio-scientific issues (e.g., sustainability, the use of AI) by equipping them with tools and knowledge to assess information, navigate technology, and promote inclusivity in higher education and careers; and 2) improve education for scientific literacy by deepening the understanding of what science and mathematics entail, and how they can be applied to address challenges in both personal and professional contexts.

To achieve these goals, FI strives to cultivate a collaborative and dynamic academic environment, attract and train young talent who can contribute to its research themes, and optimise synergy through interdisciplinary teams that secure grants and conduct research projects. For the period 2021–2026, FI focuses on four key themes: 1) science in society; 2) scientific and mathematical literacy education; 3) digital technology for scientific literacy; and 4) scientific literacy in tertiary and teacher education.

These themes were chosen based on shared interests among FI research groups and serve as a productive foundation for research, fostering interdisciplinary collaboration and engagement with external stakeholders.

Based on the interviews, the Committee observed that FI's research themes have developed organically over time, shaped by existing collaborations and expertise. While this approach offers flexibility, it also raises questions about whether the current structure optimally supports FI's long-term strategic objectives. The Committee encourages the Institute to reflect on whether adjustments may be needed to better align research efforts with its strategic themes and societal impact.

3.2 Research quality

Based on the self-evaluation report, the Committee finds that FI research staff contribute to high-quality scholarly publishing. The quantitative output is very respectable and has been increasing in recent years, driven by grants and a growing number of PhD candidates. The publication profile and the breadth of research topics are appropriate given FI's focus areas. Case studies in the report further highlight the scientific and societal relevance of the research, as well as the originality of ideas and approaches.

In the field of mathematics education research, FI is widely recognised and internationally renowned. The visibility and leadership of FI staff are reflected in editorships of key scientific journals, chairing and delivering keynotes at international conferences, and memberships in scientific committees. The Institute also attracts visits from international scholars. The self-evaluation report provides notable examples of influential papers, applied products, and design frameworks (e.g., Numworx).

Regarding earning capacity, FI has secured impressive grants, including individual ERCs and a Horizon 2020 consortium grant. However, overall research funding has declined in recent years, particularly in 2022 and 2023, while contract research has increased proportionally.

The Committee aiates the way the FI leadership has responded to the recommendations from the previous research review. The self-evaluation report outlines concrete initiatives taken in response to external feedback, demonstrating a commitment to quality assurance and strategic development.

The Committee notes the presence of the Teaching and Learning Lab, which is described as innovative. While clearly the facility enables the collection of interesting data, the Committee encourages FI to elaborate a strategy to ensure the investments also results in scientific outcomes.

3.3 Societal relevance

FI was founded with a strong focus on conducting research with high societal relevance. Based on the self-evaluation report, the Committee believes that this commitment continues to thrive within the organisation. This is evident in the recruitment of PhD candidates, involvement in developmental activities and research projects, and collaboration with teachers through in-service training. While FI's impact is most prominent in mathematics education, it also extends to broader STEM fields and sustainability. Recently, FI established a chair for public engagement and science communication (0.2 FTE). Additionally, it collaborates with the Utrecht University of Applied Sciences through joint professorships (*lectoraten*).

FI staff also contribute to curriculum development and are frequently invited to provide expertise at the governmental level. The Institute's societal relevance is reflected in both its extensive outreach activities and the case studies of collaboration included in the self-evaluation. Its partnerships with schools, such as U-Talent, serve as excellent examples. The impact and uptake of FI's work by societal partners are demonstrated through various initiatives, including teaching materials, digital learning experiences, professional development programmes (*Bèta4all*), and teacher conferences. FI also influences educational policy, as seen in its designation by the Ministry of Education, Culture and Science (OCW) as a centre of expertise for mathematics education and basic skills.

The Committee commends FI's strong societal relevance. However, a more systematic approach to stakeholder involvement could further enhance agenda-setting and strategic alignment, e.g., by installing an advisory board.

3.4 Viability

The future strategy builds on the strengths of the current portfolio while placing increasing emphasis on societal and environmental challenges, such as diversity, inclusion, and emerging technologies. One key initiative is the development of a policy on performing and connecting research on various educational levels. As a response to teacher shortage, FI continues initiatives like Bèta4all and efforts to attract more students in its teacher education programmes. Given the range of disciplines within FI, the Institute appears well-positioned to tackle future challenges, such as the rise of AI, where the philosophy of science provides a valuable perspective.

As noted in the SWOT analysis of the self-evaluation report, the Committee agrees that FI's strong focus on mathematics and science—particularly in their interaction with society—is a key strength, as it helps define a clear institutional profile. Other notable strengths include sustained collaborations with stakeholders, such as schools (e.g., U-Talent), and the Institute's physical lab space, which fosters

interdisciplinary collaboration. However, identified weaknesses include the strain on staff due to the broad range of activities FI engages in and the challenge of maintaining a healthy balance between these responsibilities and research.

Additionally, the Committee observed that the physical space available to FI seems limited, especially considering its ambition to grow. Ensuring sufficient space within a single building would help maintain social cohesion and a collaborative spirit as the Institute expands. Likewise, adequate support staff is essential to sustain FI's activities effectively.

FI is not overly dependent on direct funding, which is an advantage given the upcoming budget cuts. During the interview, the management expressed confidence in navigating financial challenges, citing their strong experience and networks when securing external funding. FI also benefits from excellent support for grant writing, provided by resources such as the grant office and peer collaborations. However, other types of support staff remain limited.

3.5 PhD policy and programme

The PhD programme is part of the Graduate School of Natural Sciences at the Faculty of Science. FI PhD candidates can choose from a wide range of research topics in education in mathematics, natural sciences, social sciences, and humanities. FI collaborates with the ICO research school and other institutions, leading to joint PhD projects. Each PhD candidate has a formal training and supervision agreement, which helps ensure the feasibility and quality of their trajectory.

FI has three types of PhD candidates: internally funded, externally funded (grant), and externally funded (no grant). External candidates with grants are often teachers, who submit their own proposals, sometimes with research staff collaboration. These grants are typically funded by the government (e.g., NWO or DUDOC), with 0.4 FTE allocated per candidate and a 5-year trajectory. FI only receives supervision payment if the candidate successfully completes the PhD. Despite the associated risk, the FI management believes it is important to invest in external PhDs to strengthen connections between research and practice, although future teacher grants are uncertain due to budget cuts.

All PhD candidates (including external ones) attend office days at least once a week on Thursdays to foster community. They also participate in an annual PhD weekend and meet with the scientific director two to four times a year to discuss progress and working conditions. Interviewed candidates (both internal and external with grants) felt comfortable seeking support during these meetings and from supervisors. PhD candidates reported feeling involved in the community. To encourage interdisciplinary collaboration, PhD candidates are often co-supervised by researchers from different theme groups within FI. Weekly research meetings further support collaboration and strengthen social cohesion—an aspect that PhD candidates particularly value.

Regarding career prospects, PhD candidates are encouraged to attend career events by Utrecht University (UU). Career paths within FI are discussed individually between supervisors and candidates. Additionally, the UU TRIPLE model for career path diversification considers the diverse experiences of PhD candidates. The Committee encourages improving access to information on career opportunities beyond academia, especially regarding paths common among FI alumni.

Of the 30 PhD candidates who started between 2015 and 2020, only one discontinued, which is positive, though 9 (30%) took 6-7 years, with some still working on their trajectories. The COVID-19 pandemic contributed to delays. The Committee suggests that FI continue monitoring PhD trajectory durations to assess whether extended completion times persist and identify potential causes.

3.6 Open Science

Based on the self-evaluation, the Committee recognises FI's commitment to open science, as also advocated by Utrecht University. For instance, FI members are actively involved in the Faculty Open Science Team (FOST), and over 95% of publications were made open access in 2023. Measures are in place to organise research data in a way that ensures transparency and accessibility for external scholars, supported by data stewards. The FAIR principles are being adhered to. A notable example is the "Journal of Trial and Error", led by FI members, which aims not only to publish research but also to broaden the understanding of what constitutes research work.

To enhance the relevance and accessibility of research, FI has a long-standing tradition of collaborating with external stakeholders, initially focused on mathematics education. Stakeholders such as teachers, schools, policymakers, curriculum developers, and school communities have been involved with the Institute. FI has been engaged in activities like design research, lesson study, and curriculum development strategies, which foster collaboration between schools, teachers, and researchers. This established tradition provides a strong foundation for the current focus on open science.

3.7 Academic culture

From the interviews, the Committee gathered the impression that FI is an exciting and enjoyable place to work, characterised by strong social cohesion and an open culture. Although the SWOT analysis identified limited collaboration between some groups as a weakness, the Committee observed a strong spirit of team science during the interviews. For example, with new grant calls, there are discussions about potential collaborations across the Institute. Similarly, several PhD candidates are co-supervised by researchers from different groups. There are also highly successful teaching collaborations, such as joint courses. The opportunities to work with colleagues across disciplines within FI are highly valued. Weekly research meetings, attended by both PhD candidates and staff, are particularly appreciated across the various groups the Committee interviewed.

FI implements the UU TRIPLE model for career path diversification, which has been positively evaluated in the interviews. However, the Committee noted some insecurity among researchers on temporary contracts.

3.8 Human Resources Policy

Various efforts have been made to increase diversity at FI, and these appear to have been successful. For example, a Westerdijk Professor has been appointed to promote the recruitment of female talent with leadership potential. The Westerdijk Fellowship was established by the Faculty of Science to attract outstanding female scholars and support their career progression toward leadership roles. FI actively recruits staff, PhDs, and postdocs internationally, with notable success.

Measures are also in place to facilitate the integration of new staff members (including PhDs), such as making policies, information, and other essential resources available in English. An on-boarding strategy has been developed by the university to make new employees feel at home quickly and learn about the organisation and the Dutch research landscape. In addition to this strategy, in September 2023, the Faculty of Science started a faculty onboarding programme with features such as a buddy system.

The promotion process was streamlined in 2022 with the establishment of the Departmental Promotion Advisory Committee (DPAC), comprising the Scientific Director, the Director for Education, an external faculty member, and a PhD representative. DPAC evaluates candidates using the UU TRIPLE model for

career path diversification, which operationalises Utrecht University's Recognition and Rewards framework. The DPAC provides a well-substantiated recommendation to the department head, along with constructive feedback for the candidate. The head forwards the documentation and their recommendation to the Faculty Promotion Advisory Committee, which advises the dean of the Faculty of Science. The dean makes the final decision and appointment. This process is expected to ensure a more transparent promotion procedure that stimulates diversity in profiles and career paths with qualitative and narrative driven goals, rather than using quantitative indicators.

3.9 Conclusions and recommendations

3.9.1 Conclusion

In conclusion, the Committee believes that FI is very strong in research, with a clear focus on societal relevance. Additionally, the Committee finds that FI has been highly successful in building a strong community. Its location within the Faculty of Science further strengthens both its research and societal impact. The Institute's sustainability is ensured through its extensive experience in securing competitive and contract funding. This is a benefit as it reduces FI's reliance on direct funding provision, which may soon be limited due to the foreseen budget cuts. The UU TRIPLE model for career path diversification is effectively implemented and highly valued by its members.

3.9.2 Recommendations

To improve the quality and relevance of the Institute's research even further, the Committee would like to make the following recommendations:

- Establish a clear structure for research themes to align with strategic goals.
- Elaborate a strategy to ensure the investments in the Teaching and Learning Lab also result in scientific outcomes.
- Adopt a more systematic approach to societal relevance by establishing a clear structure for continuous stakeholder involvement in research themes and strategy.
- Ensure that FI has sufficient physical space within a single building to facilitate growth while maintaining social cohesion and a collaborative work environment.
- Invest in adequate support staff to sustain FI's broad range of activities.

4. Nieuwenhuis Institute for Educational Research, University of Groningen

4.1 Organisation, strategy and targets

The Nieuwenhuis Institute for Educational Research (NI), part of the Faculty of Behavioural and Social Sciences (FBBS) of the University of Groningen, integrates research for the departments of Pedagogical and Educational Sciences together with the Teacher Education. In 2023, NI had 85 academic staff members (38 FTE). The Committee was pleased to hear in the interviews that the decline in research staff, as presented in the report, has turned in a positive direction in the last year.

The NI is managed by the Director of Research, in collaboration with the Director of Education, the Head of Financial Control, and the Human Resource Advisor from the management team of the Department of Pedagogical and Educational Sciences. Researchers within the NI work collaboratively across six closely related research units, each chaired by a full professor. These units focus on pedagogics, inclusive and special needs education, as well as education and learning.

The mission of the NI is to conduct high quality interdisciplinary research in the main fields of pedagogical and educational sciences with scientific and societal impact. The aim is not only to research challenges and questions facing the current society but also to ensure that the research has direct visibility and tangible impact. The NI aims to understand and explain the underlying dynamics of complex problems in pedagogical and educational practices and society, and to help solve these problems by developing, implementing and evaluating interventions. There is a strong emphasis on a multi-system perspective in which the relation between the (cultural-international) context and individual is seen as interrelated. The target groups include the general population of children, youth, and young adults, as well as those considered “at risk” and specific groups with complex and specialised needs.

The long-term research strategy of the NI consists of four interrelated objectives: 1) increase the evidence base of education, parenting and support, 2) contribute to the prevention and solution of problems and training of (future) professionals and parents, 3) evaluate and inform policy making, and 4) inform the general public of the outcomes and implications of the conducted research. To achieve these long-term objectives, NI aims for 1) high quality staff, 2) substantial collaborations within and between research units and other national academic partners, 3) strong involvement of stakeholders, and 4) clear and visible position in the scientific and social landscape with demonstrable societal impact.

In addition to these general goals, the NI is dedicated to preserving specialised research areas, such as the History of education and studies on individuals with congenital and acquired deaf-blindness or multiple disabilities. These fields are becoming increasingly rare within Dutch pedagogy, and the Committee values the NI's commitment to maintaining these vital focus areas. Notably, the NI’s Groningen Institute for Deaf-Blindness is a unique institution globally.

The Committee observes that the mission and strategy are broad and encompassing, potentially covering the full spectrum of pedagogical and educational research. This wide-ranging approach provides individual researchers with significant freedom to select specific topics in which they can excel. However, the Committee recommends developing a more focused 'Groningen profile' that emphasises forward-looking goals. While acknowledging that not all ambitions can be realised, the Committee believes that adopting a more aspirational approach would be beneficial. The Committee further advises involving all researchers at the NI in shaping this future profile, in order to fully leverage the considerable enthusiasm for ongoing research among both senior and junior staff. By doing so, the

Institute can strengthen its direction in a proactive and strategic way, ensuring that the enthusiasm for research is effectively harnessed in pursuit of its long-term goals.

4.2 Research quality

The Committee is impressed by the volume of the research output. Between 2018 and 2023, a total of 873 publications were produced. 95% of journal papers are open access. Additionally, 79 PhD theses have been completed, along with 35 books and 150 book chapters. Over the past six years, research output has remained stable. Over 80% of the publications fall under the broad category of resilience/mental health of youth, which are somewhat general terms. It is not entirely clear how this output connects to the six research groups united within the NI.

The description of the use of research products by peers focuses predominantly on citation rates and the impact scores of publications. While the citation rates and overall impact of NI's publications are commendable, these metrics are not the only meaningful indicators of how research products are utilised by peers. Greater emphasis could be placed on the extent to which datasets or scientific/ statistical methods are adopted by other researchers or on ongoing (international) collaborations. Nonetheless, based on traditional metrics such as the number of publications, citations, and external funding, the research quality at NI is very high.

Many researchers at NI are active members of academic committees, editorial boards, and scientific networks, and have received several awards and prizes. This is illustrated in the self-evaluation report with a wide range of compelling examples. Overall, the researchers at NI are highly visible.

The external funding capacity is strong, indicating substantial depth in several research fields. The Institute has secured prestigious grants, including NWO-NRO, NWO-Veni, NWO-Vidi, and ZonMw. Given the information in the tables in the self-evaluation report on individual and consortium grants above €200,000, it appears that funding related to mental health and resilience topics is most prominently represented in the prestigious individual grants, while the collaborative programmes tend to be more applied and are more commonly focused on educational topics.

In one of the appendices of the self-evaluation report, the NI presented the results of an international benchmark tailored to the institute's main disciplinary focus. The aim of this benchmark analysis was to provide additional insight into NI's research activity and its position within the global pedagogical and educational research community. The international bibliographic benchmark revealed that the top 18 research topics at NI account for roughly 30% of the institute's output. The University of Groningen Board requested the Committee's assessment of the NI's primary disciplinary focus, as reflected in the 18 core areas identified through this benchmark.

The Committee would like to begin by noting that it did not have sufficient opportunity within the scope of this review to conduct a comprehensive analysis. However, it observed that the presented analysis reflects a broad research focus, demonstrating the opportunity for staff members to engage in curiosity driven research. As a result, the overview of these 18 topics does not offer a clear depiction of a distinctive disciplinary focus. The Committee believes that the Nieuwenhuis Institute might benefit from developing a profile that is aligned with its future ambitions, as also outlined in section 4.1.

4.3 Societal relevance

Overall, the public visibility and the related societal impact of the NI and its researchers is very high, with clear cooperation between the university and external organisations to apply knowledge in the field. The overview of applications, as illustrated in the case studies, is quite impressive. The NI has also

developed several expertise centres focused on societal issues, where scientific knowledge intersects with societal partners. NI demonstrates strong societal engagement both locally (e.g., '*Noordelijke Educatieve Alliantie*', 'C4Youth', 'University of the North') and internationally, with collaborations across various regions, including South America, Southeast Asia, and Africa.

The outputs produced for the professional field and general public are substantial, with a total of 365 publications during the evaluation period. Books, book chapters, materials, instruments, and interventions for special target groups (e.g., individuals with multiple disabilities such as deaf-blindness, training for parents, professionals in daycare, and teachers working with children with ADHD) have also been developed. Additionally, policy documents have been produced, resulting in national guidelines for families with multiple problems and guidelines on meaningful participation in child protection.

The public visibility of the research and its individual researchers is high. For instance, in 2018, one professor from NI was named by *Opzij* as the most influential woman of the year for her dedicated work advocating for children's rights in the Netherlands. Between 2018 and 2023, five endowed professors were affiliated with NI, demonstrating the strong commitment of societal partners to practice- and policy-oriented research. Research collaborations with non-academic partners (e.g., *Gemeente Groningen*, NIDOS) further highlight the successful and strong relationships with societal stakeholders. Many NI staff members are involved in national and international advisory and review boards, further demonstrating the visibility and societal recognition of NI and its researchers.

FBSS and/or NI have technicians and advisors who support not only experimental work and data management but also outreach and valorisation activities (e.g., websites, infographics, and 'one-minute video clips').

The proposed plan to allow staff members to record a 1.5-minute video explaining their research to the public sounds promising. The report does not clarify whether this opportunity will be extended to internal and external PhD candidates. The Committee strongly recommends that it be.

Regarding outreach, the Committee believes that the web pages of the NI and its six research units could be better utilised to maximise visibility and accessibility for all NI projects and researchers (including PhD candidates). For example, not all six units provide a comprehensive list of their ongoing projects, and many project descriptions lack clear researcher contact details or clickable links to further information such as (personal) websites or publications. Enhancing the amount of information available, ensuring it is up to date, improving website navigation, and standardising the structure of the web pages across the six units could significantly increase the NI's online visibility and accessibility.

4.4 Viability

Aligned with the FBSS Strategic Plan, the future strategy focusses on the following opportunities and challenges: Education is leading, thematic profile building, greater attention to interaction with society, excellent quality assurance and professional development and proper use of resources.

The Institute is divided into six units, which operate relatively independently, with variations in success (in terms of publications and valorisation). Cooperation within the Institute seems to be beneficial, as the most important and influential papers were based on internal collaborations, followed by national and international partnerships. During the evaluation period, the six units developed cross-unit collaborations, such as discussions on joint grant applications to address urgent societal issues. Additionally, various exchange options are available, such as regular brown bag sessions and opportunities to develop expertise centres. However, the interviews indicated that the existence of the six units is primarily driven by educational needs. This makes sense, as the NI's future strategy

emphasises education as a leading priority, also for thematic profile building. Consequently, professorships are created based on teaching demands. Thematic profile building is used as a strategy to strengthen the NI's output by leveraging existing staff, finding synergies, and building strategic consortia that can apply for major grants. Interaction with society is also a key component for securing funding through contract research, where relevant research is conducted for stakeholder groups. The Committee believes these actions form a viable strategy, as resilience against potential government budget cuts is essential.

The previous assessment Committee (2012-2017) advised NI to closely monitor the research time of staff, as high teaching loads and ongoing work pressure could limit effective research time and jeopardise the quality and impact of research. The report shows that in recent years, NI has implemented several actions to improve and secure research time for their staff. These measures have indeed resulted in more available research time for all research staff, including PhD candidates.

While it is commendable that the available research time for staff and PhD candidates has increased on average, it does not automatically imply that work pressure has decreased or work-life balance has improved, as other factors may still be at play. Interviews revealed that this remains an ongoing concern.

The SWOT analysis highlights that recent budget cuts by the Dutch government have caused unrest among research staff and PhD candidates, with concerns about job opportunities, increased workload, and potential declines in work-life balance. This is a national challenge. Overall, the actions taken and the strategy outlined in the report provide the Committee with confidence that NI will be able to address these challenges to the extent that it is within their control.

4.5 PhD policy and programme

All PhD candidates at NI are members of the FBSS Graduate School and belong to one of the six NI research units. Their PhD training follows a tailor-made plan that includes general courses from the graduate school, such as research ethics and career planning, courses from the FBSS Research Master, and courses offered by national research schools like ICO (for PhDs in educational sciences) and BCN (Research School of Behavioural and Cognitive Neuroscience). PhD candidates who are members of ICO or BCN appreciate the added value these programmes provide in terms of course quality, networking opportunities, and the connection between research and practice.

PhD candidates typically teach 15% of their time, which is more than at other institutes. Some PhDs feel that the actual teaching load is often slightly higher than 15%. Nonetheless, PhDs generally view teaching as an important and relevant aspect of their training, as many intend to pursue an academic career.

Each PhD candidate has at least two supervisors. They typically meet with their daily supervisor(s) weekly and with their promotor(s) at least once a month.

The discontinuation rate among external PhD candidates at NI is notably high (38%). The management aims to address this by 1) providing better training for new supervisors, particularly in supervising non-EU candidates, 2) facilitating regular face-to-face meetings between supervisors and external PhDs to monitor progress, 3) optimising feasibility checks at the start of each project, and 4) clarifying mutual expectations at the start of new (external) PhD projects. NI management remains committed to investing in and supporting external PhD projects, as these are viewed as valuable collaborations with societal partners.

All PhD candidates at NI are assigned a mentor, typically a senior staff member who is not involved in the candidate's project or supervision. Work pressure among PhD candidates is relatively high, as it is in many institutes. Overall, PhDs feel that they can communicate openly and effectively with their supervisors and mentors about any issues they face, including work pressure.

During the interviews, both management and PhD candidates expressed concerns about career prospects following the completion of the PhD programme, particularly in light of the recent budget cuts. Management is fully aware of the stressful situation that is created by the current situation. Given the situation, PhD candidates feel insecure about their prospects in academia. There is a future career course available, and PhD candidates have found this course quite helpful for career orientation, both inside and outside academia.

4.6 Open Science

Open science is still an integral and viable part of the research strategy at the NI. The NI contributes to the Open Science agenda through various lines of research, such as replications, the misuse of statistics, and multiverse analysis. Within the Faculty, there is an Open Science Committee that advises and supports researchers on open science issues and collaborates closely with the University of Groningen's Open Science Programme and the Open Science Community Groningen. A Data Management Protocol is in place, and since 2022, a working group on Data Policy has been active. Publishing Open Access and making data available for external use have become standard practices.

Moreover, it is commendable that the NI explicitly aims to co-create knowledge with societal stakeholders. These efforts are especially evident in several Expertise Centres, where external partners collaborate in both generating and applying knowledge to address societal issues. A prime example of this is the Centre for Children, Migration, and Law, where child rights organisations, legal authorities, and children and families involved in migration proceedings work closely together to address this urgent societal issue.

4.7 Academic Culture

Improving the atmosphere within the Institute is a central focus of the policy aimed at enhancing the Academic Culture. Various courses are offered, and satisfaction and experiences related to inclusion are regularly monitored. The NI also prioritises research integrity, with procedures in place to assess the integrity of ongoing research.

Hybrid working is supported for up to two days per week, and each staff member has a desk in fully equipped offices. Efforts to strengthen inclusion have been made, including the launch of a social safety campaign. Training courses, such as the active bystander training, have also been offered to staff.

The research time of staff is closely monitored with the goal of securing adequate time for research activities. Additionally, more staff members have been hired to reduce workload, and teaching responsibilities have been more evenly distributed across units. The Committee was pleased to note that to safeguard research time, managerial tasks are explicitly accounted for within the educational part of staff members' roles.

4.8 Human Resources Policy

Until 2020, nearly all permanent academic positions were tenure-track positions. However, in 2021, the tenure-track system was abandoned, and as a result, newly appointed staff are no longer able to benefit from this system, leading to diversity in career perspectives among the staff. During the interviews, it was explained that the Tenure Track system was no longer financially feasible, but that addressing the potential tensions arising from the new policy is a priority in HR policy for new staff, with the Recognition and Rewards systems in place for all.

The Committee advises that, given the recent discontinuation of the Tenure-track system and the development of a new system yet to be implemented, it is crucial to communicate the new Recognition and Rewards system to junior staff and provide clear guidance on how they can develop their careers.

Concrete steps have been taken to reduce work pressure. Due to the impact of Covid-19, research projects were delayed, resulting in 16 PhD and junior researchers' contracts being extended by 2 to 12 months. To streamline administrative, financial, management, and leadership tasks, a 'Governance Plan' was implemented. Additionally, a 'Professorial Chairs Plan' was developed by the departments to facilitate a structured approach to managing professorial chairs.

The Committee recommends establishing a support structure for junior staff members, as their workload appears to be particularly high. This could include a mentoring system, where senior staff are paired with juniors, or securing funding to provide additional time for grant writing, an important yet relatively new aspect of their role.

4.9 Conclusions and recommendations

4.9.1 Conclusion

Overall, the Committee is highly positive about the accomplishments of the Nieuwenhuis Institute. The research is well-embedded within six strong and viable units, each addressing significant topics that are important both scientifically and societally. There is ample room for curiosity-driven research, which has proven successful, both in terms of publications and prestigious funding. Furthermore, collaboration with external societal partners to tackle urgent societal issues has become a key feature of the research at NI.

The enthusiasm of the staff, both senior and junior, was evident during all meetings and is undoubtedly a significant asset to the Institute, fostering confidence in its future.

4.9.2 Recommendations

To improve the quality and relevance even further, the Committee would like to make the following recommendations:

- Develop a more focused 'Groningen profile' with an emphasis on forward-looking goals. Involve all researchers at the NI in shaping this profile to leverage the enthusiasm of both senior and junior staff, strengthening the Institute's direction in a proactive and strategic manner.
- Address the high workload of junior staff even more strongly by creating a support structure that includes mentoring and additional time for grant writing.
- Given that a tenure track system was abandoned and a Recognition and Rewards system is being installed, clearly communicate the new Recognition and Rewards system to junior staff and provide guidance on career development.

5. Department of Education and Pedagogy, Utrecht University

5.1 Organisation, strategy and targets

The research programme *Raising Future Generations* (RFG) is part of the Faculty of Social and Behavioural Sciences (FSBS) at Utrecht University (UU). RFG integrates research on youth development, socialisation, and education across five sections within two departments: Education & Pedagogy and Interdisciplinary Social Sciences. It is embedded within two of FSBS's research priority areas: Child and Adolescent Studies (CAS) and Education and Learning (EL). Furthermore, RFG is closely aligned with two of Utrecht University's strategic themes: Dynamics of Youth (DoY) and Institutions for Open Societies (IOS). Notably, FSBS is responsible for the governance of DoY.

RFG does not have a centralised scientific director; instead, interactions and activities across sections and departments are dynamically coordinated by the chair of the Department of Education & Pedagogy, the section chairs, and the vice-dean of research and impact (FSBS).

While RFG operates within a layered structure—including sections, research priority areas, and university-wide themes—this complexity sometimes obscures its distinct purpose and identity. Junior researchers, whom the Committee spoke with feel a stronger affiliation with their section, CAS, or DoY than with RFG itself. To enhance cohesion and visibility, the Committee advises RFG to clarify its unique role both internally and externally. Senior staff, who have a well-developed perspective on RFG's added value within the existing structures, can definitely help in this process.

RFG's mission is to generate scientific knowledge on the development, socialisation, and education of children and youth, grounded in societal challenges. The programme aims to enhance youth competency development by optimising developmental contexts and services. Research within RFG is structured around six complementary cross-sectional research themes that foster interdisciplinary collaboration and societal impact. To achieve its mission, RFG focuses on three strategic aims: 1) Conducting high-quality, relevant research that prioritises scientific excellence and societal relevance, with the goal of securing (inter)national funding and fostering structural collaborations with societal partners and government bodies, such as academic workplaces; 2) Investing in connections between people and ideas by stimulating team science and interdisciplinary collaboration; and 3) Strengthening research infrastructure to support innovative research, leveraging FSBS- and UU-wide facilities such as research labs.

5.2 Research quality

The Committee finds the research quality within the Raising Future Generations programme to be impressive. The programme consistently produces high-quality publications, datasets, and apps that are valuable tools for peers. Citation metrics show that the programme's scientific outputs are on par with national productivity and are recognised as world-class. The use of Data Archiving and Networking Services (DANS) for archiving datasets is a commendable practice. Research quality is well-distributed across the six themes, each of which demonstrates strong performance. The examples of research from each theme highlight a diverse range of outputs and products, showcasing contributions from academics across different sections. Several high-impact publications include empirical papers on adolescent mental health, social media use, literacy development, and parenting dynamics, as well as meta-analyses and systematic reviews on topics such as loneliness, social anxiety, empathy development, and self-regulated learning.

RFG is home to internationally renowned researchers in the fields of educational and pedagogical sciences, many of whom have received significant accolades, such as the title of distinguished professor and recognition as the most influential female researcher in educational psychology. Early career researchers have also garnered numerous awards from international organisations. Peer recognition is further evidenced by prestigious grants and awards, including both personal and consortium grants, which highlight the programme's focus on team science. Additionally, programme members hold influential roles in funding committees and editorial boards, further cementing the programme's strong presence in international organisations. Staff members are also appointed to national and international scientific boards, such as the *Nationaal Regieorgaan Onderwijsonderzoek* (NRO) steering board and Open Data Infrastructure for Social Science and Economic Innovations (ODISSEI).

5.3 Societal relevance

The RFG programme produces a remarkable range of products aimed at societal target groups, including educators, families, youth, youth services, and policymakers. Examples of research tools developed by the programme include Filter Bubble (designed to filter social media content for youth) and Multi-STEM (promoting engagement of multilingual children in Science, Technology, Engineering, Mathematics (STEM)). Programme members actively participate in youth networks and digital platforms to support parenting and child development. Other notable outputs include podcasts, platforms, and activities for gifted and talented children, handbooks for practicing psychologists and teachers, as well as interventions and screening tools for parents and children. These products extend beyond traditional scientific outputs, significantly broadening both the academic and societal contributions and impact of the research.

The department has gained recognition from societal groups through the appointment of two chairs (Developmental Language Disorder in Inclusive Education and Youth Mental Health Promotion), science communication awards, and advisory roles in childcare, education, and youth mental health organisations. Programme members have also advised governments and international organisations, chaired national committees (e.g., on youth violence and the Dutch Health Council), and represented the programme in the European Council and European Commission.

Looking ahead, the Committee advises RFG to define thematic research through more direct interaction with stakeholders, ensuring the research aligns even more closely with what different stakeholders perceive as the most pressing societal challenges, both now and in the future.

5.4 Viability

The future strategy of the RFG programme revolves around the same mission and aims as those in the current assessment period. In the next period, they aim to contribute to three inter-related societal challenges: 1) increasing equality and inclusiveness in education and society; 2) fostering competency, attitude, and skill development for societal participation; and 3) improving the quality of education and care, enhancing synergies between families, schools, and services. More specific aims include continuing with open science, supporting researchers with grant applications, and helping PhD candidates prepare for the future.

The research themes are viable as they are not tied to individual researchers or section chairs. Even if a researcher leaves, the themes remain relevant and integral to the programme. However, the Committee also recommends that RFG continue to develop its research themes strategically, ensuring they remain adaptive to societal changes and future challenges. In dialogue with stakeholders, the

programme is encouraged to sharpen and redefine its focus themes periodically, ensuring that they are both forward-looking and responsive to evolving external circumstances.

Future leadership among senior researchers is already anticipated and encouraged, ensuring that the programme maintains a sustainable direction.

The Institute mentioned the high work pressure among staff as a lingering concern. An increase in burnout cases has been observed since the Covid-19 pandemic. Work pressure may also stem from the many opportunities available in the programme, requiring decision-making support from supervisors.

An eminent external threat is budget cuts imposed by the government. The discontinuation of starter grants for assistant professors is a setback, as this initiative was also meant to reduce work pressure (e.g., the pressure to acquire external funding). Although the threat surrounding the budget cuts is felt, management and senior staff are optimistic about the programme's resilience to such financial setbacks. For example, further encouraging team science to reduce grant acquisition pressure was mentioned, as well as the viability provided by societal collaborations that can also lead to funding. Moreover, the teaching model is being revised to avoid increased work pressure.

Based on the achievements of the past six years, the Institute is well-positioned for continued success in the coming years and demonstrates strong viability. At the same time, the panel observed that the Institute presented itself with limited self-criticism in both its self-evaluation and the site visit discussions. While the institute's strong position is evident, the panel emphasises that continuous self-reflection remains essential to maintaining excellence and further strengthening its research and impact.

5.5 PhD policy and programme

The PhD training programme is managed by the Graduate School of Social and Behavioural Sciences (GSSBS) and is linked to two research master's programmes (Development and Socialisation in Childhood and Adolescence (DaSCA) and Educational Sciences: Learning in Interaction (EdSci)), which provide a significant number of PhD candidates. The training consists of two parts: a general component focusing on academic skills and methods, and a specialised component related to the themes of the current research programme, provided by either Interuniversity Centre for Educational Sciences (ICO) or Child and Adolescence Studies (CAS), depending on the PhD candidates section.

Regular PhD candidates are hired on projects funded by external or internal grants, while external (part-time) candidates often hold personal grants and collaborate closely with supervisors to develop their research proposals. PhD candidates appreciate the autonomy to shape their own projects. They generally teach 10% of their time and are offered courses to improve their teaching. They meet with their daily supervisor weekly and with their promotor at least monthly. The PhD programme boasts a high rate of timely completions and a low discontinuation rate, with junior researchers and PhD candidates winning several awards, reflecting the programme's quality.

PhD candidates feel a strong sense of belonging to their specific research group or project, but the cohesion across groups, facilitated by the research schools (ICO and CAS), is also valued. While they are aware of the RFG programme, most don't feel a strong connection to it, seeing it mainly as a higher-level structure offering opportunities like courses.

Although PhD candidates generally report satisfaction, some of the candidates the Committee spoke with have indicated that the high workload can be overwhelming at times. While they feel the pressure to meet the minimum requirements for obtaining a PhD is manageable, the large number of opportunities available can create a sense of being overwhelmed, particularly for highly ambitious

candidates or those who fear missing out on these opportunities. Additionally, expectations from the start are not always clear, which adds to the stress. Candidates believe that guidance from their supervisors is crucial to navigate these challenges effectively.

Management is concerned about career prospects, particularly given recent budget cuts. The unit is focusing more on developing career skills and supporting PhD candidates in exploring broader career paths. PhD candidates are trained in both career skills and societal valorisation, preparing them for roles with societal partners and research institutes like the Trimbos Institute. Additionally, they receive training in teaching, equipping them for future teaching roles at applied universities.

5.6 Open Science

Open science has become a key priority, with significant efforts made in areas such as open access publishing, preregistrations/preprints, and the application of FAIR principles for data and software. Staff members actively contribute to the Open Science Community Utrecht. These efforts have yielded impressive results, with 97% of journal articles published open access and many datasets shared online for use by other researchers.

FSBS has recently committed to incorporating open-source software in its methodology and statistics courses, transitioning from SPSS to JASP and R. This move is beneficial not only from an Open Science standpoint but also from a financial and viability perspective, as JASP and R are free compared to SPSS. Additionally, since coding skills, such as proficiency in R, are increasingly valued in the job market, this decision positively impacts the career development of PhD candidates.

5.7 Academic culture

The Committee finds that the necessary structures are in place to ensure a positive academic culture, which was confirmed during the member interviews. Social safety and PhD candidate mentoring are primarily organised at the UU level or within sections. Additionally, the RFG programme has designated staff members to address inappropriate behaviour.

All research within the programme adheres to the FSBS ethical committee guidelines. Library staff supports the writing of data management plans, and there are online modules on data protection. Academic integrity commissions are well-established, with active contributions from programme members.

5.8 Human Resources Policy

The programme is committed to the university's Equality, Diversity, and Inclusion (EDI) agenda. For example, staff members participate in EDI training courses. Diversity is also a key focus in the hiring process, with the programme adhering to an HR policy that aims to promote staff diversity in terms of age, gender, ethnicity, nationality, socio-economic status, and cultural background. Efforts have been made to increase cultural diversity, such as implementing implicit bias training during interviews. However, the Committee notes that there is still room for improvement in the ethnic-cultural diversity of the staff, and efforts to further enhance this are ongoing.

The programme follows the university's TRIPLE model for career path diversification. Promotions and appointments are managed by departments in alignment with strategic personnel plans. Staff development is supported through annual assessment and development interviews, and diverse career tracks are encouraged. The Committee observed that the UU TRIPLE model has increased transparency,

particularly in terms of promotion pathways. However, promotion prospects ultimately depend on the financial situation, which remains an uncertain factor.

An example of the UU TRIPLE model in action is the recent recruitment of associate professors with varying profiles (e.g., research-focused vs. impact-focused). While the model allows for specialisation, some staff members feel that the expectation to excel in multiple areas ("the 'sheep with five legs' syndrome") persists. Additionally, although team science is promoted, the Committee advises maintaining awareness of potential challenges, especially when collaborating internationally, where other indicators might be prioritised.

The Committee believes that there is adequate attention to the career development of junior staff, especially through the programme's emphasis on team science and collaboration. Additionally, the availability of extensive existing datasets reduces the pressure on junior staff to secure new grants.

5.9 Conclusions and recommendations

5.9.1 Conclusion

In conclusion, based on the self-evaluation report and interviews, the Committee believes that the RFG programme is a dynamic, productive, and highly relevant research unit within FSBS at Utrecht University. Although its organisational structure may appear complex and layered from the outside, it functions effectively for most researchers, offering numerous opportunities for interdisciplinary collaboration. RFG produces high-quality, societally relevant research, and the academic culture is positive at all levels of seniority, with team science being a core value. Despite the anticipated budget cuts, the Committee assesses the programme as viable.

5.9.2 Recommendations

To improve the quality and relevance even further, the Committee would like to make the following recommendations:

- Clarify RFG’s purpose and unique identity to strengthen both internal cohesion and external recognition.
- Continue to strategically develop the research themes, ensuring they remain adaptive to societal changes and emerging challenges, and periodically sharpen and redefine the focus themes in dialogue with stakeholders.
- Increase efforts to improve the ethnic-cultural diversity of the staff and continue ongoing initiatives to enhance this aspect.
- Encourage continuous self-reflection to maintain excellence and further strengthen RFG’s research and impact.
- Strengthen the team science approach, while being mindful of potential downsides in international contexts.

6. Faculty of Educational Sciences, Open Universiteit

6.1 Organisation, strategy and targets

The Faculty of Educational Sciences is one of six faculties at the Open Universiteit. The Faculty focuses on research in the areas of a) distance education and b) educational technology that supports such teaching and learning. This focus reflects the position of the Faculty within the Open Universiteit and its mission to offer distance/online learning to serve student populations whose access to higher education relies on such flexible modes of studying. The Faculty was established in 2020, when a research institute (the Welten Institute) was transformed into a university faculty. This transformation, which took place during the period covered by this evaluation, represented a major shift in the organisation and responsibilities. The changes involved new leadership, a new research programme, and integration into Open Universiteit structures. Understandably, this reorganisation required significant attention and a reconsideration of how research should be conducted. For the staff, a significant consequence of being in a faculty structure was an increase in involvement in Open Universiteit education. This, in turn, meant that the time available for research was reduced. Other challenges during this period included the departure of some leading scholars, budget cuts, and delays in the recruitment of a new dean.

The Faculty has four departments: Conditions for Life-Long Learning (CLL), Technology Enhanced Learning and Innovation (TELI), Online Learning and Instruction (OLI), and Social Learning. The responsibilities of these departments are indicated by their names, and together they carry out research that covers the various areas significant for an organisation with responsibility for distance and online learning. In the self-evaluation, it is noted that the Faculty seeks to increase collaboration between these units in research, and the Committee sees considerable value in this ambition based on the interviews.

The Faculty has a clear research strategy in the sense that it focuses on questions concerning the conditions for teaching and learning for students and teachers in contexts of distance education and online learning. This implies a focus on learning processes, the use of innovative methods in instruction (multimedia, AI, etc.), educational design, design-based research, assessment, collaborative learning, and similar issues related to the delivery of instruction in a distance education context. The objective for the future is to continue developing research in these areas, with an emphasis on higher education, and to increase the relevance of the research for the programmes offered by the Open Universiteit.

The strategic work of the Faculty over the past few years has been guided by two previous evaluations: one regular research evaluation for the period 2012-2017 and another midterm review in 2023. Both reviews made similar points, and the strategic conclusions with respect to research were a) to focus on the evolution of ongoing activities (rather than a revolution), b) to focus the research more on supporting and developing the OU's own educational activities, and c) to emphasise higher education in general as a major area of research and innovation. A third element of the strategy was to focus on issues related to the staff (filling vacancies, etc.) and to support PhD candidates in their work.

The strategic goals of the Faculty over the past six years have been summarised in relatively general terms and concern contributing to educational research at a national and international level, focusing on practice-relevant research in the area of higher education, and making use of the broader multidisciplinary potential of the Faculty when developing research. The Committee finds the general direction of these principles relevant but would also argue that now is the right time to formulate and commit more concretely to some of the ideas for developing the research profile, as mentioned in the self-evaluation and highlighted during the discussions with management and staff members.

6.2 Research quality

The Faculty is well-known for its research and ranks highly in an international perspective. The scholars publish their research in international and national journals, as well as in books and handbooks within the fields of learning and instruction. They are also active with contributing to research conferences and organisations. There is also a relatively large number of publications in professional journals, which is to be expected for an institution with a strong focus on practical impact. In addition, 38 PhD dissertations have been successfully defended during the period.

So far, the level of publishing does not seem to have been seriously affected by budget cuts, the reduction in research time, or the retirement of some senior academics. While the output varies from year to year, the general pattern suggests that it has remained relatively stable.

With regard to the Faculty's strategic ambitions in the areas of distance education, edtech and related fields, the publishing patterns confirm this research direction. Additionally, there are publications of a more general nature in the areas of learning and instruction, assessment and educational design, though these remain closely aligned with the Faculty's specific research interests. This publication pattern appears to have been rather stable over many years.

In terms of scholarly impact, some of the leading scholars (including those who have retired in recent years) are visible on the international stage and highly cited in relevant citation indexes.

A pressing threat to the research is the substantial reduction in research and in the number of FTEs allocated to research. This decline is particularly noticeable in external funding sources (research council, EU), which now account for only a small percentage of the total research budget. An important observation is that this downward trend has been ongoing throughout the period, with a significant drop around 2020—coinciding with the Faculty's reorganisation and the Covid-19 pandemic. Thus, it seems as if the research lost some of its momentum when it comes to attracting external funding during this period, and it has not yet recovered. Such a low level of external project funding is unsustainable in a faculty setting. Addressing this issue is one of the most urgent priorities in current strategic planning.

6.3 Societal relevance

The Open Universiteit is an institution founded on the idea of strengthening the societal relevance of higher education, and of the world of research more generally, by reaching out to a wide range of students. This mission is reflected in the Faculty's consistent emphasis on the impact of its research, particularly in terms of improving the educational practices of Open Universiteit programmes and advancing higher education instruction in general. These ambitions are clearly demonstrated through a variety of collaborative projects with external partners across the departments, as documented by numerous examples in the self-evaluation. The scope of these projects includes issues such as lifelong learning, assessment, and the experimentation with collaborative forms of learning, all of which align with the Faculty's commitment to innovation in education.

Moreover, the Faculty's academic output extends beyond traditional research papers, with faculty members producing books and texts in applied and popular science. These publications have garnered considerable readership, particularly evident from the downloads in the Open Universiteit's open science portal, highlighting the Faculty's ability to engage a broad audience.

Collaboration with external partners is further strengthened through the substantial involvement of PhD candidates, who, despite being based in their regular workplaces—primarily educational institutions—are actively pursuing their PhD training. The research projects conducted by these candidates, both

internal and external, directly contribute to advancing instructional practices, particularly in the use of educational technologies.

Additionally, the Faculty has established endowed chairs in central areas of vocational education and career development, which fosters strong collaborations with stakeholders in key sectors. This is complemented by the regular publication of a newsletter, which has attracted a large and growing number of subscribers.

The valorisation of the Faculty's work takes place not only within the Open Universiteit framework but also in partnership with external stakeholders who benefit from the Faculty's resources and expertise. Taken together, these efforts and indicators effectively demonstrate the Faculty's commitment to its goal of societal relevance.

6.4 Viability

The Faculty is well ahead in its strategic discussions and has identified several weaknesses and challenges in the rather frank SWOT analysis. A key concern is how the Faculty can maintain its identity as a leading research unit in a changing academic landscape. In the past, the Faculty was at the forefront of research on distance education and educational technology, both nationally and internationally. However, other universities are now increasingly active in these fields, leading to greater competition. As a result, maintaining the Faculty's position has become more challenging, especially given its relatively limited research capacity. This challenge has been further amplified by the substantial decline in research capacity following the transition from the Welten Institute to a university faculty. The SWOT analysis also notes that the Faculty's national and international recognition seems to rely more on past achievements than on current research output. The Committee sees this as an important observation that should be addressed in future strategic planning.

Recognising these challenges, the Faculty's response has been to remain focused on its established research themes rather than expanding into entirely new areas. This approach seems reasonable, provided that new developments are carefully integrated in activities where they align with existing expertise. One promising direction is the study of Generative AI in teaching and learning within higher education and distance education. However, given the rapid growth of interest in AI across many universities, it is both important and urgent to define the specific aspects of Generative AI that the Faculty will explore in relation to its core mission of advancing online learning and higher education.

It is evident that the Faculty has extensive expertise in analysing the conditions for distance education and online learning. These strengths should be leveraged to maintain a competitive edge. Faculty researchers have considerable experience conducting field-based educational research aimed at developing innovations that benefit both Open Universiteit students and distance learners more broadly. This background provides a solid foundation for maintaining a leadership position in these areas.

Another critical challenge, which the Faculty shares with other universities, is the impact of budget cuts and the resulting increase in workload. Addressing this issue will require careful adaptation of current workloads to ensure long-term sustainability. Additionally, securing more external funding for research in the Faculty's key areas of expertise will be essential for maintaining viability.

6.5 PhD policy and programme

The Open Universiteit Graduate School (OUGS) oversees PhD programmes across different faculties. Many PhD candidates also participate in external research schools such as ICO, where they take courses

in various academic areas and become familiar with open science principles. The Faculty of Education (FOW) at the OU consists of four departments with diverse research focuses, and as a result, PhD candidates pursue a wide range of research topics. Nevertheless, much of the research is centred on higher education, particularly within the OU itself.

The Faculty distinguishes between internal and external PhD candidates. Internal PhD candidates have a physical workspace within the Faculty, and their progress is well documented. They also have teaching responsibilities in addition to their research. However, they report that these responsibilities are manageable due to the flexible nature of online courses. External PhD candidates, who make up approximately 80% of the PhD population, often propose their own research ideas for their projects. While this allows for academic freedom, it is important to maintain a collective research direction. The Committee recommends that the Faculty define clearer research priorities to guide the selection of external PhD projects.

PhD candidates benefit from a flexible supervision structure. Each PhD candidate creates an individual research plan, and the amount and scheduling of supervision time are adjusted to individual needs. Meetings can be conducted online or in person, but PhD candidates must be physically present at least two days per week. Despite this flexibility, the Committee notes that PhD candidates often work individually on their projects. Although external PhD candidates may align with one of the four departments, fostering a stronger academic culture and research community is important. Currently, all PhD candidates work on the same floor, but they attend meetings within their respective departments, which are located on different floors. While interviewed PhD candidates expressed a sense of belonging to their departments, there is little interaction—especially informal—between departments. The Committee suggests increasing interdisciplinary collaboration to strengthen the research culture. Given that the OU is an online university, fostering a strong academic community requires special attention.

The Faculty's PhD programme has a low dropout rate, which is a positive indicator. However, several candidates take longer than expected to complete their degrees. It is unclear whether these delays are due to extracurricular factors, but closer monitoring of PhD candidates' progress could help prevent the impression that such delays are the norm. Additionally, given the commitment required for supervising and training PhD candidates, it is surprising that detailed documentation on their progress and dropout seems missing. The Committee recommends improving tracking mechanisms to ensure better oversight, particularly for external PhD candidates.

Junior researchers also reported challenges in recruiting OU students for their studies. Since many PhD candidates focus their research on OU students, this could become a major obstacle for data collection. The Committee recommends evaluating whether this research focus is sustainable in the long term.

The Committee also notes that junior staff carry much responsibility for supervision, which is positive but may also cause some concern when it comes to the career development of junior staff members. Ensuring that supervision responsibilities do not hinder the career development of junior staff should be a priority in future strategic planning.

6.6 Open Science

The Faculty aligns with the Open Universiteit policy of promoting the principles of open science. Open access publishing is encouraged and funded, partly through a special OU funding scheme and through other sources. The Open Universiteit has a research portal (PURE), where the principles and practical guidelines for open access publishing are explained in detail, and where publications by Open Universiteit scholars are made available. There is a clear strategy for making published research available to broad audiences, which includes publishing newsletters, maintaining a LinkedIn channel,

and making digital versions of some of the more general publications available for download. Adhering to open access can be seen as self-interest for an organisation such as the Open Universiteit, which has made the ambition to make research available one of its core missions. These principles also appear to be well-known among the staff and are communicated through activities within the Open Universiteit Shared Graduate School and ICO.

There is only a brief mention of adherence to other open science principles, such as those related to storing, organising, and reusing data from research projects (the FAIR principles). While the Faculty actively promotes open-access publishing and science communication, it is less explicitly stated how data management and reuse are structurally implemented. This is particularly relevant given the Faculty's extensive collaboration with stakeholders and the large number of external PhD. candidates working in schools and other institutions. Many of these datasets could be valuable for further analyses inside or outside the Faculty.

6.7 Academic culture

The Faculty reports having systematically worked on fostering an academic culture during this period. Measures taken include maintaining a high proportion of permanently employed research staff and offering flexible work arrangements, allowing staff to work from home part of the time if they wish. As a result of these initiatives, many qualified and talented scholars apply for positions.

The Faculty has a Recognition and Rewards Committee aimed at increasing transparency regarding promotion and career development. During job appraisal interviews, staff members and their mentors assess how much time the scholar in question has devoted to each of the committee's four focus areas: research, teaching, leadership, and valorisation. More recently, impact has also been incorporated as a key element in these evaluations. The underlying idea is that clearly defined criteria and transparent procedures for assessing individual contributions will positively influence the academic culture. The Committee finds this structured approach to defining criteria valuable in providing as much transparency as possible. However, during interviews, some concerns emerged regarding trust in the system, particularly in the context of recruitment, career advancement, and applications for positions at other universities. Questions were raised about whether strong performance in just one or two of these areas is sufficient and how external employers will evaluate the different profiles that emerge from this system.

The Committee also notes that the Faculty has a high number of external PhD candidates working part-time. This strategy aligns with the institution's ambition to maximise impact, but it also places a significant supervisory burden on the Faculty. A considerable portion of this responsibility appears to fall on junior staff members, some of whom supervise multiple external candidates. The potential consequences of this situation—both for the workload and career development of junior scholars and for the overall academic culture—require careful attention.

The Faculty emphasises the importance of research integrity and follows the directives provided by the Open Universiteit, ensuring that these standards are consistently applied across all levels of research activities.

6.8 Human Resources Policy

The Faculty is committed to inclusion, which is also reflected in the Open Universiteit's expectations to provide online teaching for groups who might otherwise face difficulties accessing higher education, such as working adults, individuals living in remote areas, students with disabilities, and other groups.

This commitment is evident in both daily practices and planning. There is significant gender diversity, with 42.6% of professors being female. While the Faculty includes staff from various nationalities, there remains a lack of ethnic diversity, which is likely influenced by the location of the main campus.

The Faculty outlines several strategies for talent recruitment and development. These include offering career planning and integrating newly appointed staff into the various networks and activities the Faculty participates in. Collaboration across the four departments and research groups is also crucial for ensuring career progression for young scholars and for recruiting new staff in key areas.

Although the Faculty is relatively small in terms of resources and currently facing financial pressure, active coaching and mentoring of current staff, alongside recruiting new expertise in areas essential for future research, must be seen as vital. However, such recruitment must align with the Faculty's strategic direction regarding its future research goals.

6.9 Conclusions and recommendations

6.9.1 Conclusion

The Faculty has a strong history of successful research in distance education and educational technology, which aligns well with the Open Universiteit's role in the Dutch educational system as a provider of distance learning opportunities. Its contributions to higher education have been substantial, with research that has made a significant impact. However, the Faculty went through a number of structural changes which have provided opportunities as well as challenges. The main concern is the decline in research capacity following the transition from the Welten Institute to a university faculty.

Another key challenge is the increasing research competition and, hence, the need to define clearcut research priorities that may help to attract crucial external funding. This is evident in the significant drop in external funding, which has now reached a critical level. It will be difficult for the Faculty to maintain research productivity and quality without a substantial increase in external funding.

Despite these financial challenges and the retirement of senior staff, the Faculty's research remains highly relevant, particularly through the large number of external PhD candidates. Academic output has been maintained, but strategic decisions must be made in the near future regarding the prioritisation of specific research areas.

6.9.2 Recommendations

To improve the quality and relevance even further, the Committee would like to make the following recommendations:

- Establish taskforces within and between departments to develop new research initiatives and ensure effective collaboration, while actively monitoring opportunities for external funding and avoiding internal competition for resources.
- Clarify the Recognition and Rewards system within the Faculty, ensuring it clearly outlines career paths for junior scholars. This should include how PhD supervision is distributed among junior and senior researchers, particularly for external PhDs, and how the system supports junior staff in developing various profiles, both within the Faculty and externally.
- Analyse the strategic choice behind the large number of external PhD candidates and assess their involvement in and contribution to the Faculty's academic culture.

- Engage in strategic discussions with the University to ensure that research innovations can be incorporated into the curriculum, maintaining the credibility and impact of both the research and the educational programmes.

7. Institute of Education and Child Studies, Leiden University

7.1 Organisation, strategy and targets

The Institute of Education and Child Studies (IECS) at Leiden University consists of six programme groups, each chaired by a program group chair, together forming one of the five institutes within the Faculty of Social and Behavioural Sciences. In its strategic mission 2022-2027, the Faculty defines four core values: open, supportive, safe, and connected. These core values also characterise the IECS. In research, this translates into fostering innovation while maintaining strong connections—with external partners as well as colleagues and stakeholders—and upholding the responsibility to create an inclusive academic community. In 2021, a new position—Research Director—was created and filled to oversee the implementation and sharpening of the IECS research strategy.

The major aim of the IECS is to contribute to enhancing the resilience of future generations, so that they are better able to cope with personal and societal challenges and can contribute to shaping a healthy and resilient society. IECS achieves this by studying both children and the context of their development—conducting fundamental research while also exploring the practical implications of its findings. This approach integrates the study of fundamental processes that drive development and learning with the study of the influence of various contexts, particularly family and school, on children's growth and well-being. A key strength of the Institute is its explicitly interdisciplinary approach, fostering collaborations with experts in law, psychology, criminology, psychiatry, among other disciplines.

To achieve this mission, the IECS has outlined three strategic goals: (1) strengthening internal collaboration by ensuring sufficient senior staff in each subfield of research, reinforcing the methods and statistics expertise, enhancing the interdisciplinary approach, maintaining success in grant applications, and investing in research facilities; (2) increasing societal impact through expanded collaborations with societal partners, supporting outreach activities, and establishing a science communication and impact committee; (3) fostering an open, safe, inclusive, and supportive work climate by focusing on team science, open communication, and adherence to research integrity (open science and FAIR principles).

During 2016 and 2017, the IECS encountered significant challenges concerning academic culture and social safety, leading to substantial restructuring. This process, also guided by the previous research evaluation covering 2012–2017, resulted in a series of initiatives aimed at strengthening research, enhancing internal collaboration, and refining the Institute's research profile. Key measures included establishing research programmes with open boundaries, fostering a more team-based research approach, reinforcing interdisciplinarity, improving grant application procedures, and investing in research facilities.

These efforts have contributed to a stronger academic culture and increased the societal relevance of the Institute's work. Interviews with staff at all levels—management, senior, and junior researchers—revealed widespread enthusiasm for the direction the IECS has taken. Staff members consistently expressed appreciation for the changes and optimism about realising the Institute's renewed goals. The Committee values the approach taken to implement these reforms and is confident that the restructured organisation, along with its core values, provides a solid foundation for future research.

7.2 Research quality

The accomplishment section of the self-evaluation report clearly outlines how the unit aims to achieve its strategic goals as stated in the mission:

- Increasing internal collaboration is supported by creating numerous opportunities for researchers to connect and by integrating members from different groups. Currently, approximately one-third of all research projects involve researchers from multiple groups, which is commendable.
- Senior staff and methodological expertise are well represented across all subfields. A significant number of new professors have been appointed, whose expertise aligns well with the programme's strategic goals.
- Interdisciplinarity is strengthened through collaboration across disciplines within the university, extending beyond the Faculty of Social and Behavioural Sciences. The IECS is actively involved in several university-wide interdisciplinary programmes.

The evidence provided for scientific quality demonstrates that the research groups are engaged in a wide range of projects. However, the Committee found the rationale behind the selection of these projects somewhat unclear. Establishing a more coherent underlying programme could, in the future, help streamline efforts by focusing on fewer projects that align more closely with the unique expertise within the Leiden programme groups. At present, the research focus remains broad and general (e.g., understanding underlying processes of learning, child development, and caregiving).

During the interviews, as well as in the self-evaluation report, it was emphasised that five research areas have recently been developed, though their implementation is still in progress. According to the self-evaluation report, these research areas will be further developed and used to better communicate what the programme stands for and how it contributes to society. The five themes are intended to guide strategic decisions, particularly when difficult choices arise regarding future research investments. The Committee considers this a promising step toward developing a more structured and focused programme. It encourages the management and senior staff to continue developing a clear implementation plan for these five research areas, clarifying their role in prioritising research topics, career planning, grant acquisition, as well as in the monitoring of these processes.

The IECS maintains a high level of academic output with international recognition. The majority of its 505 peer-reviewed publications have appeared in high-impact international journals. Additionally, 40 PhD candidates have successfully completed their degrees. The members of the research leadership are well-known for their scholarly contributions and are well cited in the literature in areas that are related to child development and resilience.

It is important to acknowledge the multidimensional nature of research on child development and well-being, which involves numerous stakeholders, including schools, preschools, healthcare agencies, and parents. This complexity results in research with complex designs and extensive datasets. To support handling such challenges, the IECS has invested in research infrastructure and specialised training to equip its staff and PhD candidates with the necessary skills.

The analysis of funding indicates that an increasing number of researchers has been successful in securing external funding. Balancing this aspect has been a key strategic goal during the review period. Moreover, funding now comes from a wider range of sources, including not only major research funding bodies but also NGOs, municipalities and other organisations.

Research funding has fluctuated throughout the review period. While an overall decline in research funding can be observed, funding levels appear to have stabilised in more recent years.

7.3 Societal relevance

Conducting socially relevant research is a central goal of the research programme. Considerable effort has gone into developing and maintaining an extensive network of societal partners. However, it is not entirely clear to what extent this network has translated into scientific output, grants, or dissertations. The presentation of results highlights numerous examples, including an impressive total of 150 different societal partners over the years, 30 of which are still active. While this breadth demonstrates strong engagement, a more strategic, selective, and focused approach is recommended, one that leverages Leiden's unique expertise more effectively. The Committee is of the opinion that the Institute's unique expertise is not sufficiently articulated at present and could be communicated more clearly.

In terms of content, the research conducted at IECS addresses issues of significant societal relevance. The development and wellbeing of children testify to the ability of societies to handle the consequences of the increasing complexity of social life and the many factors which risk having adverse effects on children (stress, rapid technological changes etc.). The IECS is acutely aware of these challenges and is actively exploring ways to address them in collaboration with external partners. The Committee believes that this strategy ensures that the Institute has a substantial social impact, which could be further enhanced by clarifying its focus and collaborations.

7.4 Viability

In 2023, the Institute has 34 PhD candidates (internal and external), supported by 56 assistant, associate, and full professors. The Committee finds this ratio somewhat imbalanced as the number of faculty exceeds the number of PhD candidates. Furthermore, the data on research staff show that the support staff has decreased from 24 in 2018 to only 3 in 2023.

The management is clearly aware of these challenges and has already implemented several strategies to address them, such as enhanced support for writing large grant proposals. Furthermore, the increased emphasis on team science has promoted greater collaboration within the Institute, resulting in a broader base of researchers who have been more successful in securing grants compared to the previous assessment period. The Committee is pleased to note that IECS has successfully secured several additional grants, which officially began in 2024, including a Vidi grant, participation in a large NWA consortium, NWA science communication grants, and LUF grants. Securing funding from sources beyond the Dutch Research Council (NWO) will help strengthen IECS's resilience in light of anticipated NWO budget cuts. The Committee encourages the Institute to continue expanding this capacity in the coming years.

The Committee believes the Institute is well-positioned due to its advanced research facilities. Staff have complementary access to labs equipped for measuring physiological responses (e.g., eye-tracking, ECG, EEG), VR equipment, one-way screens, a digital video observation system, and storage for hormonal assessments. A new state-of-the-art laboratory space, available free of charge to faculty, has recently been built. Given that much of the research is conducted outside the laboratory in settings such as schools, family homes, and clinical facilities, the Institute has also invested in high-quality ambulatory equipment.

7.5 PhD policy and programme

PhD candidates are embedded in the Graduate School of the Faculty of Social Sciences. PhD candidates have at least two supervisors and are required to create a personalised training and supervision plan, which must be approved by their supervisors and the scientific director. Overall, PhD candidates seem to receive quality training and supervision. However, a significant proportion of candidates take six years or more to complete their degree. While there are various reasons for extended PhD durations (e.g., COVID-19, candidates with young children, or 0.8 FTE appointments or less), Leiden has implemented measures to improve PhD completion rates through a new PhD monitoring system, which began in 2017. This system includes three types of meetings between the PhD coordinator and candidates: (1) an initial meeting to discuss the supervision plan, (2) annual monitoring meetings to assess progress and well-being, and (3) a midterm meeting to evaluate planning and feasibility.

Interviewed PhD candidates report feeling supported by their supervisors and by the meetings with the PhD coordinators, especially the midterm meeting, which helps evaluate the feasibility of completing the remaining trajectory. The Committee recommends continuing these meetings and further monitoring their effects on PhD trajectory duration.

To address concerns raised in the previous evaluation regarding the PhD community (e.g., integration across research areas), the IECS has established a PhD committee to organise meetings aimed at enhancing integration among PhD candidates. While candidates are embedded within their programme groups, they also participate in meetings with other groups for collaboration. Additionally, they can attend colloquia within the Institute and participate in ICO, which offers broader PhD coursework and opportunities to strengthen their networks. Interviewed PhD candidates were positive about the academic culture, describing it as “supportive” and “inviting”.

Half of the PhD candidates are external, and while there is no specific policy regarding the ratio of external to internal candidates, management emphasises that the selection of external candidates is rigorous. Projects must align with the Institute's goals and be feasible to complete. External PhD candidates have access to the same support, such as coordinator meetings, as internal candidates. Interviewed external candidates noted that balancing their PhD with outside positions can be challenging, but they value the structure because it keeps them connected to their professional practice. Internal PhD candidates dedicate 10% of their time to teaching and report receiving adequate support, including intervision meetings and teaching courses. Interviewed early career researchers also reported feeling supported by IECS in providing PhD supervision. Overall, PhD candidates (both internal and external) appear to be well-supported within the Institute.

Regarding career paths, interviewed candidates mentioned discussing their plans with their supervisors and noted that additional information is available from the graduate school. The graduate school also organises events where former PhD graduates from Leiden University share their career paths with current candidates. The Committee recommends continued support for individual career planning and encourages participation in these graduate events.

7.6 Open Science

The IECS adheres to the principles of open science in its scholarly work and publishing practices. Several measures have been implemented to ensure that data are managed in accordance with established standards, and the Institute shows a strong commitment to the FAIR principles (Findability, Accessibility, Interoperability, and Reusability). Data steward roles have been established to assist researchers and PhD candidates in navigating the complex regulatory frameworks that govern research in the areas in which IECS operates.

7.7 Academic culture

As previously noted, significant efforts have been made at Leiden to address the challenges related to academic culture and safety that existed prior to this assessment period. The actions undertaken demonstrate a clear recognition of these issues, coupled with an understanding that achieving the desired outcomes will require time and sustained effort. Comprehensive procedures have been established across all aspects of the Institute's operations to promote an open climate and uphold integrity and ethics. These initiatives have also involved reinforcing elements of the code of conduct for integrity, as outlined within the Dutch context.

In the interviews, IECS staff demonstrated strong confidence and optimism about the future in this regard. All interviews were conducted in an open atmosphere, where staff members were willing to share not only their concerns but also their satisfaction with the progress made thus far. Based on these interviews, the Committee concludes that these efforts have contributed to improvements in job satisfaction among staff members. The vision for the future of the academic culture can be summarised as open, supportive, safe, and connected.

7.8 Human Resources Policy

The IECS strives for transparency across all policy measures. Rules and regulations for all members are outlined in policy documents that are accessible to all employees via an MS Teams channel. Workload norms are established for all tasks, with researchers allocated 40% of their time to research. This is a key asset for protecting research time. There is explicit adherence to the principles of the Recognition and Rewards programme, which values quality over quantity, promotes transparent career policies, encourages teamwork, supports Open Science, and emphasises leadership.

A clear strategy has been implemented for recruiting and promoting scholars to maintain momentum and breadth in research. This strategy also includes efforts to provide permanent positions for scholars. Talent management is clearly developed, with many new professors appointed.

The IECS monitors the reception of its policies through a Personnel Monitor, with the most recent survey conducted in 2022. The results revealed a significant improvement in personal satisfaction across several aspects of work (e.g., work enjoyment increased from 6.9 to 8.0). These are promising results. The Committee recognises the effort invested in this important work and finds that it provides a strong platform for future research.

7.9 Conclusions and recommendations

7.9.1 Conclusion

It is evident that IECS has faced significant challenges due to events that occurred prior the evaluation period. These challenges have resulted in considerable stress, and recovering from such a period, especially with the added impact of the COVID-19 pandemic, is a demanding process. Nevertheless, the research units deserve commendation for maintaining the high quality of their work and for establishing new frameworks for conduct and cooperation across research groups.

During the interviews, it became clear that a deliberate decision was made to develop the new programme through a bottom-up process, allowing all staff, both senior and junior, the opportunity to collaborate and contribute. This approach was reflected in the enthusiasm demonstrated by all staff members for the current endeavour.

In this context, the Committee observed that the work at IECS demonstrates both high scientific quality and significant societal impact. The relevance of the research is further enhanced by ongoing efforts to engage with societal partners. The institute's viability appears promising, given the quality and enthusiasm of its staff. Overall, the Committee was impressed by the work presented, both in the report and during the interviews.

7.9.2 Recommendations

To improve the quality and relevance even further, the Committee would like to make the following recommendations:

- While the bottom-up approach for identifying the five research themes has fostered individual talent and trust, the Committee recommends shifting towards a more focused and coherent research programme that better leverages IECS's strengths. The Committee encourages the management to continue developing a clear implementation plan for these themes, clarifying their status, prioritising research topics, and outlining plans for career development, grant acquisition, and monitoring progress.
- The Committee acknowledges the Institute’s strong societal engagement. To further enhance focus and impact, it recommends adopting a more strategic and selective approach, prioritising partnerships closely aligned with the research programme.
- Continue PhD coordinator meetings to support progress, well-being, and feasibility, while evaluating the impact on completion rates.
- Further expand the success in securing grants beyond the Dutch Research Council (NWO) to ensure resilience in the face of anticipated budget cuts.

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8. School of Health Professions Education, Maastricht University

8.1 Organisation, strategy and targets

The predecessor of The School of Health Professions Education (SHE) was founded in 2005 as a research unit of the Faculty of Health Medicine and Life Sciences (FMHL) at Maastricht University and converted into a graduate school in 2014. Currently, SHE is one of seven research institutes at FMHL. SHE is led by a scientific director, a management team, and a managing director. Its three closely interconnected core activity domains are SHE Research, SHE Educates, and SHE Collaborates.

Since its inception, SHE has focused on impacting healthcare globally through research in healthcare education and translating insights into educational innovation. SHE's core activities revolve around research and development in healthcare education, a focus that is clearly reflected in both its documentation and in the discussions with management and staff. SHE places a strong emphasis on educational innovation, as well as research- and evidence-based implementation across a broad range of areas in healthcare education. As a widely recognised international leader in the field, SHE continues to strengthen its position as a hub for research on training in healthcare professions.

Since the previous evaluation covering the period 2012–2017, several changes have been introduced, refining and sharpening SHE's profile. This process has incorporated insights from earlier evaluations (2018) and a self-initiated midterm review covering the period from 2018 to 2020. A key conclusion from these evaluations was the need to strengthen internal processes to enhance synergy between research, education, and external collaboration—three core pillars of the organisation. The midterm review also led to the implementation of new procedures for monitoring progress. For example, a yearly evaluation cycle, led by the management team, was introduced to analyse and discuss core elements of SHE's activities. Additionally, new strategic priorities were formulated, with a strong focus on increasing the interaction between research and education, as well as fostering international collaboration.

Overall, the documentation reflects that SHE and its management take strategic issues seriously and continuously attempt to work proactively by considering current activities and their feasibility for implementing strategies. SHE maintains a clear and focused strategy aimed at enhancing the education of health professionals.

8.2 Research quality

SHE holds a strong position in research at the intersection of the evolving responsibilities of health professions and the organisation of learning and instruction relevant to these fields. The quality of its research is impressive, as evidenced by its publications and citation scores. SHE publications contribute both to theoretical advancements and to the development and evaluation of learning activities within the sector. Moreover, SHE's research is widely cited across various academic disciplines, extending beyond health professions education into areas such as cognitive architecture, instructional design, and cognitive load theory.

While some leading research staff members have retired, these transitions have been well managed, ensuring that academic output remains at a high level. Indicators described in the self-evaluation report confirm that SHE maintains a strong reputation both nationally and internationally. Its scientific director and senior scholars are widely cited, and the Institute boasts an extensive network of international partners. While direct funding has fluctuated, SHE has maintained a stable success rate in securing

competitive research grants. Its earning capacity remains strong, with over 50% of funding acquired through external competition.

Despite the drop in internal funding, the number of researchers and PhD candidates has not decreased; in fact, staff numbers have grown across various levels, and the number of external PhD candidates has increased by nearly 70% over the period. Academic publishing in peer-reviewed journals has remained stable. However, concerns have been raised about the future, particularly regarding internal and external funding, which could present challenges moving forward.

8.3 Societal relevance

Relevance and impact are cornerstones of SHE strategies. Its relevance is rooted in the strong synergy between research and education, specifically for health professionals. This dynamic collaboration ensures that research drives innovation in educational practices, while advancements in education, in turn, inform and enhance research efforts.

The societal impact of SHE's research is evident both directly—through its application in training in a wide range of healthcare professions—and indirectly, through the activities of SHE Educates and SHE Collaborates**.** The breadth of SHE's partnerships, spanning clinical settings and health education institutions at regional, national, and international levels, demonstrates the successful realisation of its ambitions for societal relevance and impact.

At the regional and national levels, SHE contributes research-based expertise to areas such as palliative care, the evaluation of cross-border healthcare collaborations, and the development of the Study Smart programme, which has led to the implementation of learning strategy training within and beyond the health sciences. Internationally, SHE collaborates with numerous institutions worldwide, including those in the Global South. Its PhD programme is internationally oriented, serving as key platforms for collaboration during training and fostering long-term partnerships with alumni who hold influential positions in institutions across the globe.

8.4 Viability

As a sizable research unit, SHE has the capacity to effectively address challenges. The main strategy for the future at a general level is to build upon existing strengths—enhancing impact, fostering synergy between core activities, and expanding research output. A key priority is to further solidify SHE's role on the international stage, serving as a hub for research and development in healthcare education.

In December 2023, SHE launched its Research Program 2024–2030, which is structured around three main themes. The first focuses on creating healthcare environments that support learning and development for both teams and individual professionals. The second theme addresses how healthcare professionals can be prepared to meet the specific demands of their work contexts and how they can remain competent throughout their careers. The third theme explores which educational designs work for which goals, and in which contexts. A core strength of SHE is its ability to drive these themes through a collaborative cycle embedded in SHE's three main activities: research, education, and collaboration.

While the Committee recognises the significance of these research areas, it also sees opportunities to further strengthen alignment with the rapid transformations taking place in healthcare education. Emerging technologies—such as virtual reality (VR), augmented reality (AR), extended reality (XR), simulations, and generative AI—are playing an increasing role in health professions education. Many universities and teaching hospitals now have dedicated virtual training centres, where instruction, supervision, and assessment take place using these advanced resources. Although SHE may not be

primarily responsible for developing such technologies, their growing integration into health professions education makes them a highly relevant focus for research and development, one that aligns well with SHE's existing expertise and ongoing activities.

SHE's management and staff are deeply embedded within the healthcare sector and the Faculty responsible for training healthcare professionals. This unique positioning provides a strategic advantage, enabling a comprehensive understanding of the field and fostering strong collaborations at the local, regional, national, and international levels. With extensive experience in research and development, SHE remains well-positioned to contribute meaningfully to advancements in healthcare education.

8.5 PhD policy and programme

SHE has a very active and large PhD programme with 125 active candidates (January 2024). There is an internal PhD programme with 11 to 17 PhD candidates funded through internal resources. These PhD candidates are employees who actively engage in academic life, including participation in the Netherlands Association for Medical Education (NVMO) and the Interuniversity Centre for Educational Sciences (ICO). These networks provide valuable opportunities for academic collaboration and interaction with fellow PhD candidates.

In addition, SHE offers an external PhD programme with 64 to 106 candidates during this review period. These external candidates, who study part-time, receive funding from various external sources and pay tuition and service fees.

Admission to the PhD programme is linked to the course 'Writing a PhD proposal', where candidates receive guidance on proposal writing. At the start of the course, candidates are matched with a pair of supervisors, and their proposals undergo a review at the end of the course for acceptance into the programme. While proposals developed outside the course are also considered, they have a much higher likelihood of being rejected.

Internal and external PhD candidates differ in their expected trajectory duration. Internal PhD candidates are expected to complete their PhD trajectory within five years if they have a 0.8 FTE appointment, while external PhD candidates can extend their trajectory through a continued agreement between SHE and their professional institution. Although the duration of the external PhD trajectory is not a financial concern, the Committee recommends that SHE still take steps to closely monitor and reduce the length of these trajectories, to promote a more standardised PhD experience, regarding PhD culture and academic expectations.

In the previous evaluation, concerns were raised about international PhD candidates feeling disconnected from the local PhD community. Since then, SHE has introduced a range of opportunities for all PhD candidates to participate in hybrid journal clubs, scientific meetings, and presentation sessions, including a conference, SHE Academy, organised by SHE. Interviewed candidates, including international candidates, reported feeling well connected within the PhD community. This is facilitated through hybrid meetings, including special interest group meetings. Additionally, candidates highlighted that attending the SHE Academy, which takes place every two years, has helped them build stronger connections. The Committee recommends continuing these efforts for hybrid meetings and in-person opportunities such as SHE Academy.

PhD candidates are supervised by at least two supervisors, one of which is a junior staff member who is expected to meet on a more regular basis with the PhD-candidate. Supervisors meet at the beginning of the trajectory, and the training and supervision plan outlines the roles of all involved parties at both SHE and the local institution. Internal PhD candidates are members of ICO. Both SHE management and PhD

candidates have expressed positive feedback about the coursework and networking opportunities ICO offers.

The Committee values the large PhD programme, which includes many external PhD candidates from around the world. However, the responsibilities of selecting, monitoring, supervising, and addressing the diverse research interests of these candidates appear to be quite demanding. Additionally, with both SHE and local supervisors involved, there are obligations to adapt to local requirements regarding research procedures, ethics, and other institutional guidelines.

Furthermore, it was explicitly stated in the interviews that the junior supervisor's area of expertise does not necessarily need to align with the PhD candidate's research topic, aiming to broaden research perspectives. The Committee feels that, given most junior staff members supervise four to five PhD candidates, this may impact the quality of supervision—particularly in terms of theoretical and scientific guidance. Additionally, this may also place too much burden on the workload of the junior staff members. While the interviewed early-career researchers did not express concerns about the pressure, the Committee remains concerned that the high supervision load may limit their ability to focus on their own academic development. Therefore, the Committee strongly recommends that SHE re-evaluate supervision policies and establish clearer limits on the number of PhD candidates early-career researchers can oversee (and that SHE can ultimately accept), ensuring alignment with research interests and supervisory capacity.

To support PhD progress tracking, SHE has implemented PhD TRACK**,** a digital monitoring system that records and follows candidates' development. Given the large number of PhD candidates and supervisors involved, the Committee finds this tool particularly valuable.

8.6 Open Science

SHE follows the principles of open science. The share of publications in open access journals has steadily increased and now accounts for approximately two-thirds of all published articles. Since 2016, SHE has adhered to the FAIR principles of data management, and at the start of each new project, a comprehensive data management plan is established.

To ensure long-term accessibility and security, all SHE research data is safely stored in the Dataverse data management system for a minimum of ten years. Additionally, PhD candidates participate in university courses covering open science, research integrity, and ethics, further reinforcing SHE's commitment to responsible and transparent research practices.

8.7 Academic Culture

The self-evaluation report outlines the system in place for monitoring and fostering the academic culture that defines SHE. The unit is highly research-oriented, with both management and staff sharing a common understanding of contemporary research. There is a strong emphasis on maintaining an open and safe environment that can accommodate the inherent uncertainties of conducting research.

Additionally, SHE is international and diverse in multiple respects. Various initiatives and workshops have been introduced to promote inclusiveness and to provide support for staff and PhD candidates, SHE has actively integrated diversity into its teaching and research by framing healthcare education (and healthcare itself) as a fundamentally contextual field—one that must be responsive to the needs of diverse groups and cultural traditions. Efforts have also been made to "decolonise" curricula and critically examine the hidden or implicit cultural norms that may shape both teaching and research.

8.8 Human Resources Policy

SHE operates in a matrix structure, with all staff appointed at their respective departments. Research is what unifies the activities at SHE, and it is a part-time occupation for most of the staff. SHE has implemented the Recognition and Rewards policy in alignment with national initiatives and Maastricht University rules.

To further support career development, SHE has introduced a Faculty development programme for early career SHE academics, which includes mentoring for newly appointed staff. Additionally, there are courses designed to help junior staff prepare applications for external funding.

The Committee appreciates the efforts made to support PhD candidates and junior scholars in planning their careers. However, there remains a need for stronger mentorship regarding career pathways, improved access to career supporting activities that support these pathways, and greater clarity on the implications of the Recognition and Rewards system, particularly for early-career researchers.

8.9 Conclusions and recommendations

8.9.1 Conclusion

SHE is a stable research unit with a clear focus in its research and scholarly activities. The collaborations with the stakeholders in health professions education, nationally and internationally, are extensive and productive. Over the evaluation period, SHE has reorganised itself, and the current organisational structure with the three main activities, education, research and collaboration, is effective and well-founded. The research output is strong, and the commitment to open science is evident in its progress over recent years. The PhD programme is extensive and involves a large number of external PhD candidates. The programme also generates collaborative activities, which build the academic capital of SHE at the local, regional, national and international levels. The Committee regards SHE as a dynamic and sustainable organisation.

8.9.2 Recommendations

To improve the quality and relevance even further, the committee would like to make the following recommendations:

- While SHE is a dynamic and internationally recognised unit, the Committee encourages further strategic development of new research areas, particularly in further integrating innovative technologies (VR, AR, XR, AI, and simulations) into healthcare education.
- Analyse the strategic choice behind the large number of external PhD candidates and re-evaluate and define clearer guidelines on the number of PhD candidates that early-career researchers can supervise, ensuring alignment with research interests and capacity.
- Enhance mentorship regarding career choices and the implications of the Recognition and Reward system, especially for early-career staff.

9. Research Institute of Child Development and Education, University of Amsterdam

9.1 Organisation, strategy and targets

The Research Institute of Child Development and Education (RICDE) is one of four research institutes within the Faculty of Social and Behavioural Sciences of the University of Amsterdam (FMG, Faculteit Maatschappij en Gedrag). RICDE is led by a research director who together with the department chair, the graduate school director and the college director form the executive committee. The executive committee is led by the dean. RICDE houses two research programmes: Child Development (RPCD) and Education (RPEDU).

RICDE's mission is to promote healthy, prosocial, and resilient development and meaningful learning and achievement of children, adolescents, and young adults through high quality research on developmental processes and contexts. To accomplish this, RICDE employs a diverse range of methodologies to produce impactful, high-quality research. A key goal is to generate scientific knowledge that has significant societal impact, benefiting policymakers, professionals, practitioners, and society at large. Integral to RICDE's mission is the promotion of a healthy and safe academic culture, optimising training and support, and encouraging open and ethical research practices.

RICDE had several strategic goals in the 2018 – 2023 period: 1) to increase the visibility of the Research Priority Area (RPA) 'Yield' by establishing a signature project of five PhD research projects on self-regulation and socialisation, 2) to improve the research infrastructure by intensifying collaborations with schools, the municipality, the University Medical Centre Amsterdam, the Netherlands Youth Institute and other healthcare and knowledge institutes, 3) to support early career researchers through a joint research master track with the Graduate School of Psychology and Child Development and Education (GSCD) and by developing Yield as a national research school, and 4) to increase the international visibility of RICDE through inviting international scholars as examiners, keynotes, and collaborators. Furthermore, the two research programmes had specific objectives. RPCD focused on investigating normative youth development, psychopathology, developmental risks, and intervention strategies, while RPEDU explored education, cognitive and social-emotional skills (SEL), educational processes, contexts, and interventions.

Overall, the Committee believes that the strategic goals of RICDE effectively capture the breadth and depth of developmental and educational sciences in a highly coherent manner. Additionally, the main aims and objectives of RPCD and RPEDU during the 2018–2023 period were both clear and well-aligned. RICDE's initial goal to expand Yield was discontinued due to the establishment of a new priority area, which RICDE now leads. Plans to create a joint master's programme were not realised, because it turned out to be not feasible. However, RICDE's goals related to collaboration, international visibility, and research productivity were successfully achieved throughout the evaluation period.

9.2 Research quality

The Committee finds the research output of RICDE to be exemplary, consistently producing high-quality work in the field of pedagogical and educational sciences. The research projects are innovative and world class. The staff demonstrate a high level of intrinsic motivation, contributing to a robust and dynamic research environment.

The Committee is impressed by RICDE's efforts to enhance interdisciplinary focus and collaboration through its signature project for RPA Yield on self-regulation, a key concept for pedagogical, communication, social, and psychological sciences. Yield's high visibility within the Faculty (FMG) during 2018-2023 led to its continuation as RPA Youth Digitality from 2022 onward. In addition, RICDE staff coordinated another RPA, Real Emotion, and the IP theme Healthy Future, fostering interdisciplinary research across various faculty disciplines.

There is evidence of plentiful publishing in pedagogical and educational sciences, with RICDE academics publishing approximately one fifth of all national output. The quality of journals published in is high and papers published by RICDE are cited seven times on average, while 15% of the research is published in the top 10% of articles in the highest-cited group. For example, staff in RPCD have published in Child Development, Psychological Bulletin, Nature Scientific Reports, and Developmental Psychology, and staff in RPEDU have published in the Journal of School Psychology, the Journal of Educational Psychology, Educational Review, Review of Educational Research, and Learning and Individual Differences. RPEDU staff have developed validated questionnaires for measuring teacher-student relations, diversity in educational practices, and curiosity. Particularly commendable is the high amount of scientific output that results from interdisciplinary and/or (inter)national collaborations.

RICDE is firmly embedded in both national and international research networks. For numerous institutes in the Netherlands specialising in pedagogical and educational sciences, RICDE serves as one of the primary collaboration partners. The visibility and impact of RICDE's research are underscored by the prestigious awards and nominations received by both junior and senior researchers. Notable examples include the KNAW Early Career Award, Early Career Researcher Awards, best paper awards, and a nomination for the Franqui Chair at KU Leuven. RICDE staff also contributes significantly to the academic community, serving on editorial boards of top-tier international journals, publishing edited volumes, and delivering numerous keynote presentations. Additionally, they hold prominent leadership positions, including presidencies of major academic associations.

The quality of research is further demonstrated by the prestigious and substantial funding RICDE has secured through highly competitive grant schemes. Over the past six years, RICDE has maintained a stable acquisition of research funding across its two research teams. Overall, the expenditure covered by grants increased by 17%, from 7.33 million euros to 8.56 million euros. The impressively high amount of funding was secured by international research grant agencies such as ZonMw, NWO, ERC, NRO-PROO, NRO-PPO, and NRO.

9.3 Societal relevance

A focal point of the RICDE research mission is to deliver an impactful and meaningful contribution to promoting healthy development and learning of youth. RICDE accomplishes this primarily through the design and evaluation of intervention programmes, educational tools, and screening methods. Examples of programmes developed by RICDE staff include interventions targeting children's anxiety, externalising problems, sleep issues, and trauma, as well as a programme aimed at fostering interest in science. Additionally, RPEDU staff have created a widely used reading intervention, implemented in 80% of Dutch schools. RPEDU staff are also experts in developing instruments and assessments, including measures of teacher-student relationships, dyslexia identification tools, and educational materials for history instruction. Evaluations conducted by RICDE include programmes on parental support, anti-bullying initiatives, social-emotional skills development, and delinquency prevention. Furthermore, the Kohnstamm Institute has commissioned RPEDU staff to assist with large-scale survey work.

Both research programmes regularly communicate their research to practitioners, funders and professional groups. RPEDU staff have authored articles for educators and policy makers on topics such as educational inequalities, teacher education, lifelong learning, and literacy. They have also published reports on supplementary education, online learning during the COVID-19 pandemic, and educational inequalities. RPCD staff have published reports for policy and practitioner audiences on youth wellbeing and behaviour. Examples of RPCD reports include an evaluation of Amsterdam Family Schools, a review of junior offending, and an evaluation of Better Start (a parenting programme for ex-detained mothers). There is expertise in RPCD in working with youth and parents in the criminal justice system, and regarding disability.

Nearly 1 in 10 RICDE publications is cited in policy documents worldwide, further highlighting the societal relevance of RICDE's work. These publications are used in news outlets, advisory documents, and clinical guidelines, demonstrating their extensive use by policymakers, opinion leaders, and (clinical) professionals. RICDE has also launched its own podcast, "About Education and Parenting", to communicate research findings to a broad audience.

There is also impressive evidence of ongoing and active collaborations with non-profit, education and health organisations. RPCD staff are involved in scientist-practitioner networks including the Network of Effective Youth Care Amsterdam and UvA Minds. RPEDU staff collaborate with and hold positions with school boards, school counselling services, and museums. RPEDU has developed a collaboration with primary school boards in Amsterdam – the Educational Research Lab Amsterdam (ERLA) which works collaboratively with PERDU researchers on evidence-informed practice in schools.

RICDE also hosts several endowed professorships funded by societal groups, including a special appointment for a professor with expertise in implementation science.

Overall, the Committee acknowledged that RICDE has a strong foundation in applied research, with staff expressing a desire to expand this area further. The Committee recommends exploring opportunities to enhance the mobilisation of RICDE's research at the national level, such as promoting its work to policymakers, government departments, and key national organisations.

9.4 Viability

RICDE has established a set of ambitious and responsive goals to guide its six-year plan, with a primary focus on further enhancing the quality and impact of its research. These goals are based around identified needs and weaknesses and, in many cases, leverage existing networks and organisations. The broader goals are to 1) increase societal and scientific impact, 2) to stimulate a positive, transparent, and more diverse academic culture, and 3) to improve research support.

To enhance the high research quality, staff will be encouraged to apply for NWO and ERC scholarships, broader NWO and EU collaborative funding schemes. Support sessions will be organised. A more diverse, transparent and positive academic culture will be fostered by requiring staff to attend social safety workshops, renew the department’s leadership policy, pioneer a Recognition and Rewards policy within the university, realise a gender-representative balance at the professor level, counter work pressure by giving staff members three “development days” annually and by offering junior staff (assistant professors) more academic supervision. Research support will be enhanced by working together with the Methods and Statistics department and by offering workshops, consultancy and education on specific data science and methodological issues for staff. Data stewards will monitor preregistrations, especially for studies concluded before 2024 and help to register all materials if needed. The use of the FMG research lab will be increased via targeted activities.

Overall, the Committee finds the strategy highly robust and stable. The goals are seen as innovative and aligned with best practices in research, including the establishment of an impact lead group, the promotion of non-academic career pathways for early-career researchers, and close collaboration with data stewards. The Committee also appreciates the concrete measures developed across various areas and their planned implementation. A notable example of a specific action is to develop a social venture that will be linked to the newly developed REC-IMPACT centre at the UvA. This venture aims to scale and implement RICDE's interventions, educational programmes, screenings, and tools. In addition, RICDE will connect with the Impact Committee of the FMG. As another notable initiative, stakeholders will be actively invited to RICDE meetings to stimulate science-practice alignment. Lastly, RICDE will start an IMPACT LEAD group consisting of four members linking research to press, practice, education, and policy.

The Committee believes that RICDE is ideally suited to contribute to close the science–practice gap by helping to implement and to sustain the programmes and tools that were developed at RICDE and that will be promoted in the newly developed social venture that will be linked with the REC-IMPACT centre at the UvA. The Committee advises strengthening implementation science as a key research field to better understand the complex processes around sustainable implementation of evidence-based programmes and tools in diverse settings and to assist the social venture that will be developed at RICDE.

The SWOT analysis is realistic, highlighting internal and external challenges and opportunities. National funding cuts and work pressure in academia are two external threats that RICDE has to manage. Furthermore, work pressure at the RICDE (as in many academic institutes) is perceived as relatively high, especially among younger assistant professors. High levels of work pressure may lead researchers to have less time for personal and skill development and may also negatively affect group cohesion and between-group collaboration inside and outside the institute. RICDE will implement several measures to mitigate external and internal risks.

9.5 PhD policy and programme

RICDE collaborates with the Graduate School (GSCDE) to provide its PhD programme, which maintains a relatively even balance between internal and external PhD candidates. Newly appointed internal PhD candidates develop a PhD plan with their supervisors, outlining the expected dissertation chapters and an education plan, both of which require approval from the RICDE director and PhD coordinator. External PhD candidates submit a research plan that is evaluated by the RICDE director, the PhD coordinator, and one or two relevant experts from within the RICDE staff. External (self-funded) PhD candidates have access to the same courses as internal PhD candidates.

Since 2021, PhD candidates have been given greater autonomy and responsibility in shaping their own learning process and setting personal learning goals. RICDE offers PhD courses on methods and statistics, research integrity, and data management. Additionally, PhD candidates can take courses from research master's programmes and national research schools such as ICO. Many PhD candidates interviewed during the site visit were ICO members and highlighted its value, particularly for networking opportunities.

PhD candidates at RICDE typically allocate 10% of their time to teaching. Each PhD candidate has at least two supervisors: a promotor (full or associate professor) and one or two co-promotors (daily supervisors). At the start of their trajectory, PhD candidates are informed about the resources available for social safety concerns, including the RICDE PhD mentor, FMG confidential counsellors, and the ombuds officer. The PhD council also provides additional guidance and mentoring.

Between 9 and 12 months into the PhD trajectory, both internal and external PhD candidates have an evaluation meeting with their supervisors. Formally, this meeting determines whether the PhD contract will continue, but in practice, a 'no-go' decision is extremely rare. Instead, most PhD candidates view the evaluation as a valuable opportunity to reflect on their progress and discuss any ongoing challenges with their supervisors.

The yearly progress of PhD candidates is monitored by the PhD coordinator, in collaboration with the RICDE and GSCDE directors and the PhD mentor. However, no external party is involved in this evaluation. Based on these yearly reviews, PhD plans are updated as needed. The PhD candidates interviewed during the site visit were highly positive about the supervision at RICDE, appreciating the time, support, and guidance provided by their supervisors.

The rate of timely PhD completions at RICDE is comparable to that of other institutions. Supervisors actively help candidates stay on track by encouraging them to prioritise their core project and avoid excessive additional commitments. PhD candidates receive ample funding to attend international conferences or undertake research visits abroad. Additionally, they are offered career guidance throughout their contract. Upon completing their PhD, 56% continue in academic positions, while others pursue careers in non-academic research institutes (15%), universities of applied sciences (10%), clinical practice (10%), policy (5%), or business (3%).

9.6 Open Science

Since 2020, 95% of publications have been open access. There is a clear strategy to achieve full open science, leveraging the University of Amsterdam's agreements with publishers and the Dutch Copyright Act Taverne Agreement, which allows researchers funded by Dutch public funds to make their papers open access after six months.

RICDE hosts annual workshops on open science for PhD candidates and plays a key role in research integrity and data management within UvA. RICDE staff actively engage with the media to communicate research findings, and a RICDE podcast has been launched.

Additional support is needed to ensure that interventions, educational programmes, screening methods, and tools are effectively implemented in practice. The future goal is that more of the evidence-based developed interventions, tools, and programmes are used by stakeholders and implemented in society.

9.7 Academic Culture

The culture of academic work at RICDE is highly coherent, with a strong focus on well-being, integrity, and impact. Researchers have a high degree of autonomy in pursuing projects and determining how their workload is distributed. This degree of autonomy and responsibility is also visible at the level of PhD candidates, who are offered much freedom and responsibility to design their own learning process, and to set their own personal learning goals.

Social safety is a key priority, emphasised through workshops for staff. A specific policy for PhD candidates is the requirement of supervision by two supervisors. At the start of their trajectory, PhD candidates are informed about who they can approach with questions or concerns about social safety, including the RICDE PhD mentor, FMG confidential counsellors, and an ombuds officer.

Regular lab meetings, feedback, and exchange are part of RICDE's academic culture. Research meetings are held in English to be inclusive of academics who do not speak Dutch, and at the same time, non-Dutch academics are encouraged to learn Dutch.

RICDE upholds high standards of research quality and integrity. Clear instructions, protocols, and support documents are available in open online spaces. The Faculty-level ethics review board includes four representatives from RICDE, and data stewards are available to assist with privacy agreements. All research projects must be registered along with a description of the study design, data management protocol, and ethics protocol. After study completion, all data must be archived.

Furthermore, team science is highly valued. Researchers from the two research programmes often collaborate with each other and with national and international colleagues. This activity helps to strengthen relationships between colleagues and promotes a more diverse and inclusive academic culture.

9.8 Human Resources Policy

Overall, RICDE is attractive for potential employees because of its good academic standing and its collegial and stimulating work atmosphere.

Assistant professors experience very good support for their research, including access to modern laboratories with high-quality equipment, technical assistance, press office support, grant advisors, and feedback from senior colleagues on their draft grant applications. Additionally, they benefit from a reduced teaching load in their first year. Staff are entitled to a six-month sabbatical every seven years, though a waiting list means the interval between sabbaticals can extend to as long as nine years.

Staff across RICDE are predominantly female. There is a notable gender imbalance among the (full-time) PhD candidates at RICDE: in 2023, 78% of PhD candidates were women.

In recent years, some RICDE staff have raised concerns about development and promotion opportunities—concerns that may grow due to the current financial climate. As outlined in the 'Future Strategy,' RICDE plans to explore the possibility of pioneering a Recognition and Rewards policy. The FMG and RICDE aim to draft an initial concept policy for Recognition and Rewards within the Department of Pedagogical and Educational Sciences by the spring of 2026.

The Committee fully endorses this initiative and recommends fostering a culture of celebration and trust around recognition and rewards. This will allow staff to feel fulfilled in their roles and achieve their career goals, even in an environment where promotions may be challenging. It is crucial to integrate impact into the Recognition and Rewards framework, enabling staff to develop holistically while also pursuing impact-driven careers within academia. Furthermore, the Committee encourages increasing transparency and predictability regarding promotions for assistant and associate professors. This would help build trust in the promotion guidelines. Consider the needs of those for whom the rules have changed midway through the promotion process. Additionally, develop clear markers of recognition for exceptional teaching and societal impact, and find ways to celebrate these achievements in the same way excellent research is recognised.

To further support assistant professors, the Committee recommends implementing a mentorship programme where senior academics (not directly managing the assistant professors) serve as buddies for new hires during their first year.

RICDE incorporates scientist practitioners on its staff. These staff members work part time at RICDE and part time in external organisations such as clinical practice. It can be challenging staff in these dual roles to develop their research programmes and PhD supervision due to time constraints stemming from the

dual role. The Committee advises creating more opportunities and systems to involve RICDE's highly skilled scientist practitioners in co-supervision, and team science. This could also include reducing their administrative burden—for example, by exempting them from non-essential meetings—so they can make more effective use of their time at RICDE.

9.9 Conclusions and recommendations

9.9.1 Conclusion

RICDE is a dynamic community of researchers bridging science and practice. Its research is both innovative and impactful on national and international levels. RICDE has made a significant impact on youth development through innovative intervention programmes and tools, and it maintains strong, active collaborations with non-profit, education, and health organisations. Staff foster a respectful, welcoming, and collaborative environment. Challenges remain in the promotion process and career prospects, largely due to factors beyond RICDE's control. However, RICDE is actively working to address these issues through internal innovations.

9.9.2 Recommendations

To improve the quality and relevance even further, the Committee would like to make the following recommendations:

- Strengthen opportunities to build on RICDE's strong research impact at the national level by promoting its work to policymakers, government departments, and key national organizations.
- Consider strengthening implementation science as a key research field to better understand the complex processes around sustainable implementation of evidence-based programmes and tools in diverse settings and to assist the social venture that will be developed at RICDE.
- Foster a culture of celebration and trust around the Recognition and Rewards policy, particularly by establishing clear criteria to recognise exceptional teaching and societal impact alongside research achievements.
- To further support assistant professors, consider implementing a mentorship programme where senior academics (who are not directly managing the assistant professors) act as a buddy for new hires in their first year.
- Create more opportunities and systems to involve RICDE's scientist practitioners in co-supervision, and team science. This could also involve reducing their administrative burden e.g., non-essential admin meeting attendance, so that they can make more of their time working for RICDE.

10. Pedagogical sciences, Erasmus University Rotterdam

10.1 Organisation, strategy and targets

The Pedagogical Sciences research unit at Erasmus University Rotterdam (PED EUR) was founded in 2011 and is part of the Department of Psychology, Education, and Child Studies (DPECS) within the Erasmus School of Social and Behavioural Sciences (ESSB). During the evaluation period, PED EUR experienced steady growth. By 2023, it comprised 18.8 full-time equivalents (FTE) in research, with 45 academic staff members, 80% of whom hold tenured positions.

The vision and mission of PED EUR are to empower future generations by studying and strengthening the systems that shape their development: families, schools, neighbourhoods, and care services. The main goal is to combine fundamental and applied research to help create environments in which youth can thrive among others, in Rotterdam, a superdiverse urban context. The research unit of Pedagogical Sciences aims to generate the knowledge, skills, and solutions that are needed to foster supportive rearing and learning environments and to create state-of-the-art knowledge, novel solutions, and societal impact.

The programme director of research oversees the unit's research strategy, management, and evaluation. At the faculty level (ESSB), four programme directors of research, led by the vice-dean, are mandated to implement research policy and perform research evaluations in their units.

Within the Pedagogical Sciences research unit, two teams collaborate on its joint mission: Youth and Family and Educational Sciences. Since 2021, these two teams have gained greater organisational autonomy, working independently according to their own strategic plans in line with faculty strategy. Overall, the themes of the "Educational Sciences" team are very diverse (professional capacity in urban contexts, accessibility and belonging in higher education, reading and family literacy programmes in multilingual contexts), while the themes of the "Youth and Family" team appear more cohesive (youth care and youth protection, youth resilience, social inequality, inclusion, diversity and challenges of parenting in daily life). The "Youth and Family" team seems to engage more deeply with the superdiverse contextual conditions in Rotterdam, for example, by studying development in relation to social inequality, inclusion, ethnic diversity, and focusing on parental stress within this context. The "Educational Sciences" team stands out for its applied methodology, using ethnographic, (quasi)experimental, and both quantitative and qualitative methods, and is dedicated to close collaboration with societal stakeholders. In this way, their research both informs and is shaped by educational practice. The Committee advises capitalising on the complementary expertise of the two teams by initiating fundamental discussions on pedagogical, educational, and developmental sciences, and finding a balance between impact-driven and basic research.

10.2 Research quality

PED EUR is experiencing significant growth in its research output, with the number of publications increasing by 25% over the evaluation period. Three new labs have been established, and total research grants have been impressively high, amounting to €13.8 million over the past six years. Overall, there is strong evidence of high-quality research. PED EUR has published in high-quality journals. The research unit produces primary research, research syntheses, and reviews, with strong evidence of collaborative research and publishing. The ideas are original, and there is supreme diversity in the types of research being produced. The journal articles are cited an average of 9 times, with citations surpassing

international averages. Furthermore, 23% of the publications appear in the top 5% of journals in the field.

Academic output is also demonstrated through the creation of research infrastructures, including the Erasmus Love Lab (established in 2021 with 10 members across 4 teams in ESSB) and the Erasmus Family Lab (founded in 2023, with 120 families visited), both part of the larger Erasmus Behavioural Lab. In 2023, PED EUR also launched the Rotterdam Experience Sampling Methods (ESM) group, which now includes 100 members across 10 EUR departments.

The quality of the research is further demonstrated by the funding record during the evaluation period, with € 11.5 million allocated to Youth and Family and € 2.3 million to Educational Sciences. This includes prestigious individual talent grants, such as ERC Starting and Consolidator grants. Additionally, there was an increase in collaborative consortium grants (e.g., NWA-ORCs), along with NWO Veni and Vidi grants, and further ERC Starting and Consolidator grants.

The content analysis of the research output revealed that PED EUR covers a broad range of topics, with a strong focus on parenting. Despite its small size in terms of FTE, the unit demonstrates notable productivity in scientific outputs. The unit has also made significant contributions to the scientific field, such as theoretical syntheses and historical studies, which may not always be captured by traditional, quantifiable metrics. Overall, there appears to be a balance between highly cited publications and more specialised, theoretical contributions. However, the overview of grants (provided as an appendix to the self-evaluation report) does not seem to include research projects that are explicitly designed to understand cultural, religious, or ethnic diversity. Given that over 50% of children in Rotterdam have migrant backgrounds, this seems to be a relevant research avenue.

10.3 Societal relevance

PED EUR aims to bridge the gap between science and practice, firmly believing that multidisciplinary science is essential, as well as strong collaborations with regional, national, and international stakeholders. Examples of high-quality collaborations with societal stakeholders include the Convergence Initiative (in partnership with Erasmus Medical Centre and TU Delft), the Healthy Start programme, and the PROTECt ME initiative. Additionally, PED EUR has several other partnerships with societal organisations to address issues related to youth care and educational/pedagogical challenges (e.g., *Voorleesexpres*, Feyenoord FC, and the Municipality of Rotterdam). These collaborations are described as bidirectional: PED EUR works with societal organisations to refine research questions, while societal organisations engage them as research partners to evaluate the effectiveness of their work.

Aligned with EUR's focus on societal impact, PED EUR actively engages in initiatives that foster positive change. The outreach activities are diverse and impressive, including books, apps, advisory reports, workshops, and appearances in popular media. PED EUR provides both professionals and the general public with valuable insights into the latest research findings, as evidenced by the fact that 78% of journal articles have been mentioned at least once in news, policy documents, and social media posts. Additionally, there is evidence of research products influencing educational practice, such as guidelines for effective reading strategies. Notably, during the COVID-19 pandemic, PED EUR researchers offered valuable support to various societal stakeholders through an app, online workshops, critical insights, and evidence-based recommendations.

The unit’s strong engagement with external stakeholders is reflected in its impressive record of contract research funding, where societal organisations collaborate with PED EUR researchers to address relevant questions or assess the effectiveness of practical work. Notably, three endowed chairs have

been established and maintained over the last six years: one chair on family violence, residential youth care, and childhood poverty.

Overall, the research unit addresses issues that are very important for society. They do so in one of the largest cities of the Netherlands, where all issues accompanying present societal change are present. The Committee commends the unit for its dedicated efforts in addressing these challenges.

10.4 Viability

The Pedagogical Sciences research unit integrates fundamental and applied research with an entrepreneurial team-science approach to generate positive societal impact. Its future strategy focuses on several key areas, with a major emphasis on transdisciplinary research—bringing together researchers from various disciplines and external stakeholders to address complex societal challenges. The priorities include strengthening collaborations within the unit as well as at national and international levels. Furthermore, to navigate a shifting financial and political landscape, the unit remains committed to maintaining a diverse research portfolio by balancing multiple funding streams, which is essential in light of national budget cuts for universities.

The Committee observed that the increased autonomy of the two research teams within PED EUR creates a challenge regarding the role of the programme director of research. Currently, there is no overarching research strategy for the two teams. Instead, each team autonomously pursues its own independent research strategy. The interviews revealed that collaboration between the two teams is minimal, as each team autonomously selects its preferred research partners and collaborators. This arrangement appears to function effectively without presenting significant issues. However, as a result, a coherent research strategy for the whole Pedagogical Sciences research unit does not exist.

During the evaluation period, the two teams followed different trajectories. While the Youth and Family team experienced growth, the Educational Sciences team lost its full professors due to retirement, reducing its research capacity to less than 4 FTE in 2023. As a result, the teams do not have the same number of researchers. Moreover, while the Youth and Family team has a balanced distribution across academic positions (PhD, postdoc, assistant, associate, and full professor), not all academic roles are represented in the Educational Sciences team. This disparity in team size and composition makes collaboration between the groups particularly challenging for the smaller team. While the “Youth and Family” team has been highly successful in securing funding for their research in the coming years, this has been less evident for the “Educational Sciences” team. Therefore, stronger future cooperation could help ensure the sustainability of both groups, given their uneven capacity to attract external funding.

The self-evaluation report notes that the Pedagogical Sciences research unit does not have an associated research master. In collaboration with PSY, PED developed early plans for a Research Master ‘Social and Behavioural Sciences – From Lab to Society’ in 2018–2019, but these plans were halted due to financial reasons. As a result, many talented students from ESSB’s bachelor’s programme have enrolled in master’s programme at other Dutch universities. In the long term, the lack of a research master may weaken the PED research programme’s ability to attract talented, research-oriented master’s and PhD candidates, posing a threat to its future viability. The Committee recommends exploring the development of a research master's programme to enhance EUR's profile, for example, by creating a programme focused on research and societal impact.

10.5 PhD policy and programme

The PhD training at PED EUR is provided by the Erasmus Graduate School of Social Sciences and the Humanities (EGSH). Due to the relatively small size of the PED EUR research group, it accommodates a limited number of PhD candidates (13 PhDs in 2023, including both internal and external candidates). The PhD training programme encompasses courses that develop both research-specific skills and broader professional competencies, preparing PhDs for careers within academia as well as in other sectors.

PhD candidates in the Educational Sciences team are members of ICO. For them, ICO provides the main part of their PhD training, which is supplemented by the EGSH graduate school. The candidates who are members of ICO are very positive about the quality of its courses, and about the broad networking opportunities. Open science is strongly featured in the PhD training (both at ICO and EGSH), and PhDs are encouraged to apply it in practice, for instance by preregistering their studies. Moreover, since the senior researchers at PED EUR also practice open science effectively, they serve as role models for their PhD candidates.

The PhD candidates are typically supervised by a promoter and at least one other supervisor. At the start of their projects, PhDs draft a training and supervision plan (TSP) together with their supervisors. This plan outlines the expected research trajectory, including research timeline, training, and teaching, and it needs to be approved by the research programme director. In 2021, a 'go/no go' decision after the first 9 months was implemented, to have an honest and timely conversation about continuation of the PhD trajectory before the end of the first year. PhD supervisors receive comprehensive training and mentorship, including targeted training to strengthen their supervisory skills.

The teaching load for PhD candidates was 15% during the evaluation period (2018 – 2023), but this has been reduced to 10% from 2024 onwards. Despite this reduction, the PhDs interviewed during the site visit noted that teaching can still lead to work pressure during the busier periods. However, they still view teaching as a valuable opportunity to develop their instructional skills. They also suggested that some PhDs would benefit from additional training and guidance, before starting their teaching roles. The Committee recommends expanding training opportunities to better prepare PhD candidates for their teaching responsibilities.

Ensuring the well-being of PhD candidates is a priority for PED EUR. Promoters and supervisors are highly attentive to their PhDs' overall well-being, offering guidance and support beyond academic mentorship. PED EUR also provides flexible arrangements for PhD candidates who take parental leave during their contracts. While delays in the PhD trajectories during the 2018–2023 period initially raised concerns, these figures were somewhat inflated by the high number of external PhDs and the fact that some internal PhDs work part-time (0.8 FTE). Additionally, delays caused by the COVID-19 pandemic and parental leave have also inflated the apparent increase in completion times.

With regard to the guidelines for PhD dissertations, PED EUR firmly upholds a 'quality over quantity' approach. Moreover, dissertations may include chapters that are more like reports (such as policy-related reports), alongside (empirical) research papers. Dissertations may also include a chapter in Dutch, if appropriate given the nature of the research and/or the societal partnerships. Career guidance for PhDs is offered by their supervisors, as well as workshops about non-academic careers and the opportunity for personalised career counselling sessions with a career coach.

10.6 Open Science

There is a strong commitment to open science at PED EUR, primarily through publishing in open-access journals, research data management (including storage and accessibility), preregistration, and

adherence to FAIR principles. The Pedagogical Sciences research unit is at the forefront of the open science movement, actively contributing to the development and promotion of best practices. ESSB has provided various training opportunities to support the adoption of open science practices.

To improve data management, a data management plan is required as part of the ethical approval process, and a dedicated platform offers a systematic archiving solution at EUR. The unit's commitment to open science is reflected in the increase in open-access academic publications from 76% in 2018 to 100% in 2023. Other positive developments include allocating budgets for open-access publishing in grant proposals and encouraging PED researchers to publish preprints and prioritise open-access journals when possible. The university library also provides additional support for open-access publishing. Additionally, 14 researchers are members of the Open Science Community Rotterdam and a PhD candidate from the Pedagogical Sciences research unit won the community's open science award.

10.7 Academic culture

There is a strong commitment to promoting transparency, open dialogue, and (interdisciplinary) collaboration. In this context, openness, mutual respect, personal responsibility, and decentralisation are core values within both the research unit and the university as a whole. ESSB actively raises awareness and encourages open discussions on inclusivity and social safety, providing clear and transparent guidelines. Within the 'Youth and Family' team, the 'Deep Democracy' method has been introduced to ensure all voices are heard during group discussions.

To monitor staff well-being, the Pedagogical Sciences research unit conducts regular surveys on job satisfaction. These surveys consistently highlight high work pressure among staff, a challenge common to many universities and research institutes. The Committee advises maintaining focus on this issue and exploring ways to reduce workload, such as prioritising projects and collaborations based on shared goals or by enhancing mentorship for junior staff (assistant professors) on strategies to optimise limited research time.

10.8 Human Resources Policy

Recruiting young talent has been a strategic focus, and this has been successfully achieved over the past six years. In the last two years alone, six PhD candidates and six post-docs were recruited. Given the staff's productivity in securing funding through highly competitive selection procedures, the Pedagogical Sciences research unit has been highly successful in talent recruitment. Additionally, five assistant professors were recruited through the Dutch Ministry of Education, Culture, and Science SSH Sector Plan. Overall, 80% of the academic staff hold permanent positions. Seed funding for early-career researchers has been made available, and team-based collaborations have been strongly supported. Notably, all full professors are women, compared to 0% in 2018. However, diversity in terms of ethnic or cultural background is not frequently highlighted.

A Recognition and Rewards policy has been implemented to acknowledge and reward a diverse range of academic achievements. Through this policy, ESSB aims to recognise various academic talents and promote "team science." The Pedagogical Sciences research unit believes that not every researcher needs to be an entrepreneur or equally successful in securing personal grants. It is commendable that the unit strongly encourages team science, emphasising that complementary qualities within teams contribute to better scientific outcomes, reduced interpersonal competition, and increased team spirit and enjoyment. Furthermore, the implementation of the Recognition and Rewards policy within the Faculty (ESSB) has introduced differentiated career paths for assistant and associate professors, such as academic "focus profiles." These profiles allow for deviation from the standard 60% teaching, 40%

research balance to focus on funding acquisition or social impact. However, currently, no staff members are in such focus profiles. The Committee advises strengthening transparency regarding the Recognition and Rewards policy and to implement measures to put the different profiles into practice.

Yearly evaluations prioritise growth over performance, and the criteria for promotion are clearly outlined and transparent. It is commendable that the university (EUR) provides a €15,000 research budget after parental leave, offers seed funding (Dragon's Den) for early-career researchers, and allocates €500 annually for staff research expenses. The PhD research day and personal career budget are also positive HR initiatives that support the development of research talent.

10.9 Conclusions and recommendations

10.9.1 Conclusion

The Pedagogical Sciences research unit has produced a substantial amount of high-quality research across the broad fields of educational and pedagogical sciences. The researchers have demonstrated strong capabilities in securing competitive national and international research funding, as well as fostering robust collaborations with local stakeholders. With a focus on impact-driven research, the unit's projects and products have significant societal relevance. During interviews, the staff expressed enthusiasm for generating cutting-edge knowledge, developing novel solutions, and driving societal impact. In response to external challenges, such as budget cuts, the unit is committed to maintaining a diverse research portfolio and balancing various funding streams to ensure its continued viability.

10.9.2 Recommendations

To improve the quality and relevance even further, the Committee would like to make the following recommendations:

- Consider updating the role of the programme director of research in light of the organisational autonomy of the research teams since 2021.
- Strengthen inter-team collaboration between "Youth and Family" and "Educational Sciences" to ensure the future sustainability and vitality of both teams within the unit. Leverage the teams' complementary expertise through fundamental discussions on pedagogical, educational, and developmental sciences.
- Offer additional training for PhD candidates to better prepare them for their teaching roles.
- Explore ways to reduce workload, such as prioritising projects and collaborations based on shared goals, or enhancing mentorship for junior staff (assistant professors) to optimise their limited research time.
- Explore the development of a research master's programme to enhance EUR's profile, such as creating a programme focused on research and societal impact.

11. Interuniversity Centre for Educational Sciences, National research school

11.1: Organisation and strategy

The Interuniversity Centre for Educational Sciences (ICO) is a graduate school and research network, bringing together researchers in the educational sciences from twelve Dutch and two Belgian universities. ICO plays a key role in the training programme of its PhD members by supplementing the general training offered by local graduate schools with more in-depth training in their specific field of research. ICO offers and facilitates training, research support, and networking opportunities for PhD candidates. ICO's three main objectives are: (1) To promote the quality of education for PhD candidates conducting scientific research in the educational sciences; (2) To organise an all-encompassing educational programme; and (3) To stimulate (international) collaboration within the educational sciences.

To achieve the first goal, ICO aims to promote and safeguard the research progress of its PhD members as well as the quality of their supervision at their local universities. The second goal is achieved through a variety of courses, workshops, and Spring School conferences specifically tailored to PhD candidates in the educational sciences. Third, ICO aims to stimulate (international) collaborations by providing broad, high-quality networking opportunities. Overall, ICO aims to provide a solid foundation that complements the general PhD education offered by local graduate schools.

ICO uses three committees to manage the research school: (1) the ICO *governing board* consisting of 14 representatives from each participating university and the chair of the educational committee; (2) the *educational committee* consisting of one or two PhD members from each participating university, which monitors ICO's educational programme and provides solicited and unsolicited advice to the ICO board and directors; and (3) the *scientific committee* and *examinations committee* which oversee the quality and feasibility of PhD projects. ICO has two directors; the scientific director oversees scientific and financial matters, while the educational director manages the educational programme.

11.2 ICO educational programme

The ICO educational programme consists of several components. First, ICO offers an Introductory Course (5 ECTS), covering various topics such as research integrity, data management, and open science. Additionally, PhD candidates can choose from a variety of courses (amounting to 9 ECTS). These courses include 'Thematic courses' about recent developments in the field, as well as 'Methodology courses' about various research methods. Full-time PhD candidates need to acquire 18 ECTS in total to complete their training at ICO. In addition to the selection above (14 ECTS), PhD candidates also participate in the ICO International (3 ECTS) or National (1 ECTS) Spring School. Part-time PhD candidates (≤0.8 FTE) are not required to attend the full program; only the Introductory Course and one ICO conference.

The educational programme at ICO is specifically tailored to the PhD candidates' research interests and practical needs, with a focus on the latest developments in educational sciences. The quality of courses is monitored by the PhD members in the educational committee, who review the course manuals of upcoming courses and evaluate the courses after implementation. Most of ICO's courses receive a high average score, with 80% of the courses scoring over 4 on a 5-point Likert scale. In general, the programme emphasises both *fundamental* and *applied* research. This approach enables PhD practitioners with applied backgrounds and research interests (e.g., teachers) to integrate their doctoral

training with their professional practice. The goal is to both advance their practice and contribute to practice-focused research.

In recent years, the ICO programme has become more flexible. PhD members can now choose from a wider range of courses, with some parts of the programme available online. Certain courses are divided into shorter modules, making them more accessible for part-time PhD candidates. This increased flexibility has led to a growing number of part-time PhD candidates enrolling in courses and even completing the full programme. Nevertheless, the Introductory Course still includes two in-person course days to facilitate networking opportunities and to foster a sense of community.

The Committee finds that the PhD candidates highly value the programme's scientific and educational benefits. They particularly appreciate that courses are taught by domain-specific experts from participating universities—an advantage that individual local graduate schools cannot always offer. Moreover, the interviewed PhD candidates were unanimously positive about the networking opportunities at ICO. This was true not only for the PhD candidates interviewed for the ICO review, but also for candidates interviewed for the reviews of the other institutions/universities. Specifically, PhD candidates value the opportunities for networking across sub-disciplines and participating institutions. Additionally, the PhD candidates point out that the Introductory Course and the Spring Schools are especially beneficial for connecting with the other PhD candidates from different universities on a more personal level, while learning about mutual research interests. The PhD candidates believe that the 'community building' aspect of ICO is very important, and they feel included in their own 'ICO cohort'. This is especially true for PhD members from universities where the educational sciences units are relatively small. ICO offers them a sense of 'identity' within a larger community that their local universities cannot provide.

11.3 Academic culture

ICO aims to train junior researchers to become responsible scholars. During the Introductory Course, PhD candidates learn about research integrity, data management, and open science, helping them to navigate the international academic culture, with a particular focus on the Netherlands and Belgium.

Moreover, ICO strives to foster openness, (social) safety, and inclusivity, ensuring that PhD candidates receive the support and feedback necessary for their personal and academic development. To achieve this, ICO: (1) hosts PhD conferences (Spring Schools) where candidates can present their work in a supportive environment before participating in larger events; (2) provides access to ICO counsellors for guidance and advice; and (3) administers the ICO Monitor, a confidential survey that gathers feedback on PhD candidates' satisfaction and progress.

At the Spring Schools, candidates present their work and receive feedback in a structured manner: feedback forms are provided for attendees, and candidates are assigned a peer and a more senior ICO member to read their scientific text beforehand and prepare structured feedback. The Committee finds that PhD candidates appreciate this process, reporting this experience as a very productive opportunity to learn in a structured context surrounded by their community of peers and familiar ICO members. Importantly, PhD candidates also experience the benefit of attending courses alongside PhD candidates in educational sciences across different universities.

The ICO counsellor is available for PhD members who encounter difficulties during their projects, such as supervision issues or concerns to ICO courses. The counsellor listens to the concerns of the members and gives advice, and there is also an option for the counsellor to be present with the PhD during meetings with their supervisor(s). The ICO Monitor encourages PhD candidates to reflect on their progress, identify challenges, and discuss concerns with ICO or their supervisors.

11.4 Open Science

Like many other matters of scientific integrity and data management, open science practices are primarily the responsibility of the local graduate schools, which means that ICO is not able to exert much influence in this regard. Nevertheless, ICO has included open science principles and practices in its educational programme and monitoring, such as using the ICO monitor to keep track of the PhD candidates' use of (and questions related to) open science. It will be informative to see the developments of the practices among PhD candidates over time. The results of the ICO monitor are also discussed during the board meetings, where all the participating universities are also present.

11.5 Human Resources Policy

Beginning PhD candidates (in educational sciences) at any of the participating universities can become a member of ICO, if certain conditions are met. First, the PhD candidate must be employed at an institute participating in ICO, and at least one of the supervisors must be an ICO fellow (with some exceptions). Before becoming an ICO member, the PhD project proposal must be reviewed and approved by the ICO scientific committee. This project proposal also includes a comprehensive training and supervision plan, which outlines the supervisors' time investment, course work schedules, project timelines, and other professional responsibilities, such as teaching.

The review of the project proposal is not intended as a selection procedure, but rather as a check to ensure that projects are both of high quality and feasible, for instance with regard to time investment and/or the required number of participants. While proposals are almost never rejected, they may be temporarily put 'on hold' if clarifications or adjustments are needed. Approximately 25% of all proposals – sometimes even those that are already funded by grants – are put on hold in order to improve the feasibility and quality of the proposal. The interviewed PhD candidates reported this process as very useful, as it helped them to improve their plans by allowing them (and their supervisors) to further detail all aspects of the proposal with an eye on the feasibility of their project.

Overall, the Committee finds that ICO's evaluation of PhD proposals and its focus on detailed training and supervision plans provide valuable external support to complement the support offered by the universities. This plan promotes transparency and accountability in the quality of supervision.

In 2023, ICO revised its membership classifications to align with the Recognition and Rewards programme at its universities, expanding eligibility beyond research-focused academics to include early career researchers and teaching-focused scholars. The new structure also encourages members to take on senior roles and actively participate in organising ICO courses and events, with post-PhD classifications now including Associate Fellow, Fellow, Senior Fellow, Emeritus Fellow, and ICO Alumnus.

ICO has a large PhD membership, with 183 PhD candidates in 2023 (both full-time and part-time). PhD candidates who are members of ICO have a relatively high success rate, as indicated both by high number of timely PhD completions and very low discontinuation rates. The Committee sees this as a testament to the quality of the educational programme at ICO.

Although the diversity of members (both PhD candidates and fellows) is not directly under ICO's control, there is still a substantial degree of diversity among ICO members in terms of gender, age, and cultural, disciplinary, or professional background. The gender distribution for PhD candidates and early career fellows appears to be more balanced than at other institutions. Diversity in educational and/or methodological backgrounds and professional experience among PhD candidates is increasing, since PhD members increasingly have a background in teaching.

The yearly ICO Monitor tracks the progress of PhD projects and the well-being of PhD candidates. The monitor includes questions about expected delays, the experienced quality of supervision, and any other issues that PhD candidates might face. The results of the monitor are discussed within the governing board, which includes representatives from each participating university. For example, during the COVID-19 pandemic, data from the ICO Monitor were used to evaluate the potential needs of PhD candidates during this period, such as changes in the educational programme.

The Committee recognises the importance of the ICO Monitor and sees its potential for evaluating and discussing the PhD candidates' needs in terms of academic progress and personal well-being. This is especially crucial at present, considering the current budget cuts and concerns regarding career prospects. Given ICO's strong presence across universities, it has the potential to highlight cross-institutional trends and inform collective decision making in support of PhD candidates in the educational sciences.

11.6 Future strategy and viability

Across recent years, ICO has demonstrated solid results in terms of the quality of their training programme, the success rates of their PhD projects, and the overall well-being of its PhD members. While many other interuniversity research schools (in related scientific fields) have disappeared in recent years, ICO is still surviving and even thriving.

In recent years, PhD membership trends have slightly shifted in a way that could strengthen ICO's long-term viability. Since the introduction of the 'part-time' membership category in 2012, the number of part-time PhD candidates has increased significantly, driven mostly by changes in national funding schemes. Many of these part-time members are educational practitioners, offering ICO valuable opportunities to integrate fundamental and applied research within its educational programme. Their practical insights can enrich the perspectives of PhD candidates with a fundamental background, while those with a more theoretical background can contribute to practice-focused discussions. In the long run, this exchange can help bridge the gap between research and practice in the educational sciences. The presence of both perspectives is highly valuable and deserves to be monitored.

When it comes to financial matters, the participating universities fully cover ICO's budget. The costs for ICO's training programme are shared between the participating universities based on the number of participating PhD candidates. In 2023, the annual fee was €759.43 for full-time PhD candidates and €455.66 for part-time PhD candidates. This fee grants free access to all ICO educational activities. External participants in an ICO course pay a fee of €1,000 per course.

Lecturers at ICO do not receive a fee (or teaching time) for teaching, only reimbursement for travel expenses. This currently limits ICO's ability to recruit teachers for their courses (although, according to the senior staff, teaching in ICO is seen as attractive) and to invite (international) guest speakers. These financial limitations might become more pressing in the upcoming years, as the budget cuts from the Dutch government might limit the funding possibilities for ICO membership. In order to alleviate these potential financial risks, the self-assessment report from ICO already listed some potential approaches, such as: (1) expanding the network to include non-affiliated universities, to generate additional financing from new PhD members; (2) pursuing more permanent funding from the government or institutions like the Netherlands Initiative for Education Research (NRO); and (3) collaborating with other institutions, to combine training programmes.

Additionally, the Committee would recommend that ICO consider whether it would be beneficial to increase their 'formal presence' at international conferences (such as the European Association for Research on Learning and Instruction (EARLI), for instance by facilitating specific "ICO-focused

symposia". This would offer the PhD members of ICO a platform to present their work along with their ICO colleagues and increase the visibility of ICO within the international research community. Participation in such conferences could stimulate international scholars to provide commentary on the research output by ICO members.

ICO has a strong network with dedicated members, including senior members who have themselves been PhD members. Despite the financial constraints, this strong community allows ICO to continue offering courses, as lecturers volunteer to teach. While this volunteer-driven model supports ICO's sustainability, the quality of the programme still depends on securing lecturers. The committee finds it promising that some universities recognise teaching at ICO as part of faculty teaching hours and recommends that ICO management continue**s** discussions with participating universities to explore additional ways to reward and/or compensate teaching at ICO.

Overall, the Committee highly appreciates the significant value that ICO adds to the educational sciences community, particularly for its PhD candidate members but also for senior staff. Despite the financial concerns, the viability of ICO is promising as it has continued to thrive by having a cost-effective structure. It is commendable that ICO has been able to maintain such a strong role as a research school. To sustain this success, the continued investment by and collaboration between participating universities are essential.

11.7 Conclusion and recommendations

ICO plays a pivotal role in the training and development of PhD candidates in educational sciences by providing high-quality courses, facilitating networking opportunities, and offering guidance that complements the support available at local graduate schools. The organisation has demonstrated its capacity to adapt to evolving academic and professional landscapes, particularly in response to the increasing number of part-time PhD candidates and the growing emphasis on practice-oriented research.

To address financial challenges, ICO is exploring strategic measures, including expanding its network to non-affiliated universities, securing sustainable funding from governmental or research institutions, and fostering collaborations with other institutions to integrate training programmes. The Committee endorses this approach and further recommends the following actions:

- Continue discussions with participating universities to identify and implement additional mechanisms for recognising and compensating teaching contributions.
- Strengthen ICO's presence at international conferences to enhance its academic standing and broaden its institutional impact.

Appendix A - Programme of the site visit

Sunday February 2, 2025

Time	Part
16:00 -19:00	Preparatory meeting committee
19:00	Committee dinner

Monday February 3, 2025

Time	Part
Freudenthal Institute (Utrecht University)	
08.30 - 09.00	Preparation Freudenthal Institute
09.00 - 09.35	management
09.35 -09.45	evaluation
09:45 -10:15	PhD candidates
10.15 -10.20	short break
10.20 -10.55	senior staff
10 .55 - 11.10	evaluation
11:10 - 11:45	early career staff (for example postdoc, starting assistant prof)
11.45 - 12.05	preparing questions for 2nd meeting management
12:05 -12:30	2nd meeting management (additional questions)
12:30 -13:00	reflection on Freudenthal Institute
13:00 -13:30	Lunch
Nieuwenhuis Institute for Educational Research (University of Groningen)	
13:30 -14:00	Preparation Nieuwenhuis Institute for Educational Research
14:00 -14:35	management
14:35- 14:45	evaluation
14:45 -15:15	PhD candidates
15.15 -15.20	short break
15.20 -15.55	senior staff
15:55 - 16:10	evaluation
16:10 -16:45	early career staff (for example postdoc, starting assistant prof)
16.45 - 17.05	preparing questions for 2nd meeting management
17:05 -17:30	2nd meeting management (additional questions)
17:30 -18:00	Reflection on Nieuwenhuis Institute for Educational Research

Tuesday February 4, 2025

Time	Part
Department of Education and Pedagogy (Utrecht University)	
08.30 - 09.00	Preparation Department of Education and Pedagogy
09.00 - 09.35	management
09.35 -09.45	evaluation

09:45 -10:15	PhD candidates
10.15 -10.20	short break
10.20 -10.55	senior staff
10 .55 - 11.10	evaluation
11:10 - 11:45	early career staff (for example postdoc, starting assistant prof)
11.45 - 12.05	preparing questions for 2nd meeting management
12:05 -12:30	2nd meeting management (additional questions)
12:30 -13:00	reflection on Department of Education and Pedagogy
13:00 -13:30	Lunch
Educational Sciences (Open Universiteit)	
13:30 -14:00	Preparation Educational Sciences
14:00 -14:35	management
14:35- 14:45	evaluation
14:45 -15:15	PhD candidates
15.15 -15.20	short break
15.20 -15.55	senior staff
15:55 - 16:10	evaluation
16:10 -16:45	early career staff (for example postdoc, starting assistant prof)
16.45 - 17.05	preparing questions for 2nd meeting management
17:05 -17:30	2nd meeting management (additional questions)
17:30 -18:00	Reflection on Educational Sciences

Wednesday February 5, 2025

Time	Part
Institute of Education and Child Studies (Leiden University)	
08.30 - 09.00	Preparation Education and Child Studies
09.00 - 09.35	management
09.35 -09.45	evaluation
09:45 -10:15	PhD candidates
10.15 -10.20	short break
10.20 -10.55	senior staff
10 .55 - 11.10	evaluation
11:10 - 11:45	early career staff (for example postdoc, starting assistant prof)
11.45 - 12.05	preparing questions for 2nd meeting management
12:05 -12:30	2nd meeting management (additional questions)
12:30 -13:00	reflection on Education and Child Studies
13:00 -13:30	Lunch
School of Health Professions Education (Maastricht University)	
13:30 -14:00	Preparation School of Health Professions Education
14:00 -14:35	management
14:35- 14:45	evaluation
14:45 -15:15	PhD candidates
15.15 -15.20	short break

15.20 -15.55	senior staff
15:55 - 16:10	evaluation
16:10 -16:45	early career staff (for example postdoc, starting assistant prof)
16.45 - 17.05	preparing questions for 2nd meeting management
17:05 -17:30	2nd meeting management (additional questions)
17:30 -18:00	Reflection on School of Health Professions Education

Thursday February 6, 2025

Time	Part
Research Institute of Child Development and Education (University of Amsterdam)	
08.30 - 09.00	Preparation Research Institute of Child Development and Education
09.00 - 09.35	management
09.35 -09.45	evaluation
09:45 -10:15	PhD candidates
10.15 -10.20	short break
10.20 -10.55	senior staff
10 .55 - 11.10	evaluation
11:10 - 11:45	early career staff (for example postdoc, starting assistant prof)
11.45 - 12.05	preparing questions for 2nd meeting management
12:05 -12:30	2nd meeting management (additional questions)
12:30 -13:00	reflection on Research Institute of Child Development and Education
13:00 -13:30	Lunch
Pedagogical Sciences (Erasmus University Rotterdam)	
13:30 -14:00	Preparation Pedagogical Sciences
14:00 -14:35	management
14:35- 14:45	evaluation
14:45 -15:15	PhD candidates
15.15 -15.20	short break
15.20 -15.55	senior staff
15:55 - 16:10	evaluation
16:10 -16:45	early career staff (for example postdoc, starting assistant prof)
16.45 - 17.05	preparing questions for 2nd meeting management
17:05 -17:30	2nd meeting management (additional questions)
17:30 -18:00	Reflection on Pedagogical Sciences

Friday February 7, 2025

Time	Part
ICO (national research school)	
08.30 - 09.00	preparation ICO (national research school)
09:00 -09:45	ICO management
09.45 - 10.00	evaluation

10.00 - 10.45	PhD candidates
10:30 - 10:45	reflecting ICO
10.45 - 11.00	break
10 .55 - 11.10	evaluation
Joint meeting directors of all participating institutes	
11.00 - 11.15	preparation of the joint meeting
11:15 -12:30	joint meeting (all institutes)
12.30 - 13.00	Lunch (committee)
13:00 - 15:00	final committee meeting (discussion /preparation report)

Appendix B- Quantitative data

Tables Freudenthal institute, Utrecht University

Table 1 Research staff in # and FTE – Freudenthal institute

	2018		2019		2020		2021		2022		2023	
	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Assistant prof	13	2.3	12	2.3	12	2.3	14	2.6	16	3.2	19	3.7
Associate prof	5	0.8	6	1.0	6	1.0	7	1.1	8	1.4	7	1.3
Full prof	4	1.0	4	1.0	4	1.1	5	1.1	5	0.9	6	1.3
Postdocs	7	5.2	5	3.9	7	5.0	7	3.7	6	4.0	4	2.8
PhD candidates	10	6.8	11	7.7	10	6.3	9	6.4	11	8.6	10	8.2
Total scientific staff	**39**	**16.1**	**38**	**15.9**	**39**	**15.7**	**42**	**14.9**	**46**	**18**	**46**	**17.4**
Support staff	30	3.1	26	3.0	27	3.4	24	3.3	24	3.4	25	3.1
Visiting fellows	18	7.7	24	11.3	15	6.8	20	7.5	16	9.4	17	9.6
Total staff	**87**	**26.9**	**88**	**30.2**	**81**	**25.9**	**86**	**25.7**	**86**	**30.8**	**88**	**30.2**

Note 1: Comparable with WOPI categories HGL, UHD and UD; tenured and non-tenured staff. Note 2: Comparable with WOPI category Onderzoeker.
Note 3: Only PhD candidates with a contract at the UU are included in this table (UNL category 1).
Note 4: Support staff at the FI includes a variety of staff members (secretarial staff, educational and IT developers and project managers; U-Talent staff members are excluded). Research support is distributed among all support staff, resulting in small contributions per support staff member (in most cases 20% of their appointment).

Table 2 Funding – Freudenthal institute

	2018		2019		2020		2021		2022		2023	
Funding in fte/%	*fte*	*%*	*fte*	*%*	*fte*	*%*	*fte*	*%*	*fte*	*%*	*fte*	*%*
Direct research funding	7.1	44	7.0	36	9.8	55	11.8	61	14.6	72	13.1	63
Research grants	6.9	42	8.9	46	7.2	40	5.7	30	1.6	8	0.9	4
Contract research	2.3	14	3.3	17	1.0	6	1.7	9	4.1	20	6.8	33
Total research funding	**16.3**		**19.2**		**18.0**		**19.2**		**20.3**		**20.8**	
Expenditure in €												
Personnel costs	1,108,399		1,145,722		1,132,771		1,034,553		1,222,180		1,333,723	
Material costs	55,420		57,286		56,639		51,728		61,109		66,686	
Total expenditure	**1,163,819**		**1,203,008**		**1,189,410**		**1,086,281**		**1,283,289**		**1,400,409**	

Note 1: Direct funding (basisfinanciering / lump-sum budget).
Note 2: Research grants obtained in national scientific competition (e.g., grants from NWO and KNAW). Note 3: Research contracts for specific research projects obtained from external organisations, such as industry, government ministries, European organisations (e.g., ERC grants) and charitable organisations. Note 4: Funds that do not fit into the other categories.
Note 5: this table excludes PhD candidates with funding like Dudoc or NWO Lerarenbeurs (UNL categories 2 and 3)
Note 6: An average of 5% of the budget was used to calculate material costs.

Table 3 PhD completion – Freudenthal institute

Enrolment				Success rates					
Starting year				≤ 4 yr +3 months	≤ 5 yr	≤6 yr	≤7 yr	Not yet finished	Discontinued
	M	F	M+F	#	#	#	#	#	#
2015	1	2	3				2	1	
2016	3	9	12		3	3	3	2	1
2017	2	2	4	1	1			2	
2018	1	2	3			1		2	
2019	4	1	5		1			4	
2020	1	2	3					3	
Total	**12**	**18**	**30**	**1**	**5**	**4**	**5**	**14**	**1**

Tables University of Groningen

Table 1 Research staff in # and FTE– University of Groningen

	2018		2019		2020		2021		2022		2023	
	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Assistant prof	30	10.5	33	10.9	34	10.7	33	10.4	36	11.1	36	11.5
Associate prof	14	5.2	16	5.9	17	6.3	17	6.3	17	6.4	20	7.4
Full prof	10	3.9	9	3.5	7	2.5	7	2.5	9	3.2	7	2.2
Postdocs	5	3.2	6	3.3	4	2.2	3	1.3	2	1.7	4	2.8
PhD candidates	48		42		39		38		33		18	
Total scientific staff	**107**	**60.8**	**106**	**56.7**	**101**	**51.3**	**98**	**49.3**	**97**	**47.1**	**85**	**37.9**

All figures are provided for 1 January of the given year.
Our administrative system records total FTE employment per staff member and the following conversions to research FTE: assistant/associate/full professors 40% research, PhD-candidates 85% research, postdocs 100% research.
The Nieuwenhuis institute does not employ any support staff, as support staff is employed for all departments at the faculty level.

Table 2 Funding – University of Groningen

	2018		2019		2020		2021		2022		2023	
Funding in k€/%	*k€*	*%*	*k€*	*%*	*k€*	*%*	*k€*	*%*	*k€*	*%*	*k€*	*%*
Direct funding	8,706	69	9,035	71	9,001	72	9,180	72	10,292	74	11,211	73
Research grants	1,486	12	1,525	12	2,024	16	2,074	16	1,888	14	2,366	15
Contract research	1,748	14	1,467	11	924	7	949	7	941	7	1,002	6
Other	630	5	773	6	619	5	594	5	720	5	868	6
Total funding	**12,570**		**12,801**		**12,568**		**12,797**		**13,841**		**15,447**	
Expenditure in k€/%												
Personnel costs	13,152	91	12,292	92	11,091	94	10,738	94	11,260	93	11,817	93
Material costs	57	1	62	1	37	1	33	1	37	1	44	1
Other costs	1,273	8	996	7	593	5	636	5	759	6	849	6
Total expenditure	**14,482**		**13,350**		**11,721**		**11,407**		**12,056**		**12,710**	

Note 1: Direct funding (basisfinanciering / 1ste geldstroom, lump-sum budget).
Note 2: Research grants obtained in national scientific competition (e.g. grants from NWO and KNAW).
Note 3: Research contracts for specific research projects obtained from external organisations, such as industry, government ministries, European organisations and charitable organisations.
Note 4: Funds that do not fit into the other categories.

Table 3 PhD completion – University of Groningen

Enrolment				**Cumulative success rates**											
Starting year				≤ 4 yr		≤ 5 yr		≤6 yr		≤7 yr		Not yet finished		Discontinued	
	M	F	M+F	#	%	#	%	#	%	#	%	#	%	#	%
2015	3	17	20	0	0	4	20	9	45	13	65	1	5	3	15
2016	0	7	7	0	0	2	29	4	57	4	57	1	14	1	14
2017	2	17	19	1	5	4	21	8	42	13	68	2	11	4	21
2018	3	4	7	0	0	1	14	1	14	1	14	3	43	3	43
2019	2	6	8	0	0	2	25	3	38	3	38	5	62	0	0
Total	**10**	**51**	**61**	**1**	**2**	**13**	**21**	**25**	**41**	**34**	**56**	**12**	**20**	**11**	**18**

2015: 3 PhD's took more than seven years to complete. 2016: 1 PhD took more than seven years to complete

Tables Department of Education and Pedagogy, Utrecht University

Table 1 Research staff in # and FTE – Department of Education and Pedagogy

	2018		2019		2020		2021		2022		2023	
	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Assistant prof	40	15.57	37	14.62	38	15.16	37	12.94	51	19.26	61	24.90
Associate prof	10	3.87	8	3.94	9	3.40	12	4.99	14	4.43	14	5.06
Full prof	15	6.69	17	8.03	15	7.07	15	7.10	15	7.65	16	7.13
Postdocs	24	16.87	21	11.35	14	8.04	24	15.09	16	10.59	11	7.40
PhD candidates	36	29.30	38	30.96	51	42.04	49	33.11	46	29.77	51	34.41
Total scientific staff	**125**	**72.30**	**121**	**68.89**	**127**	**75.67**	**137**	**73.24**	**142**	**71.70**	**153**	**79.08**
Support staff	9	4.58	3	1.96	9	4.71	11	4.80	13	9.03	14	6.92
Visiting fellows	23	0	29	0	29	0	28	0	17	0	19	0
Total staff	**162**	**76.88**	**157**	**70.85**	**173**	**80.38**	**182**	**78.04**	**178**	**80.73**	**193**	**86.0**

Note. PhDs include employee and non-employee PhDs. Support staff does not include student assistants. Visiting fellow numbers include emeriti who still have a guest researcher account.

Table 2 Funding – Department of Education and Pedagogy

	2018		2019		2020		2021		2022		2023	
Funding in €/%	*€*	*%*	*€*	*%*	*€*	*%*	*€*	*%*	*€*	*%*	*€*	*%*
Direct funding	2,668,730	34	3,045,313	31	3,233,327	35	3,523,738	38	3,640,583	44	3,808,611	42
Research grants	2,399,141	30	1,956,799	20	2,983,819	33	3,622,112	39	1,985,024	24	3,342,799	36
Other	2,852,197	36	4,731,263	49	2,911,689	32	2,057,902	22	2,715,186	33	2,026,631	22
Total funding	**7,920,068**		**9,733,375**		**9,128,835**		**9,203,752**		**8,340,793**		**9,178,041**	
Expenditure in €/%												
Personnel costs	5,633,627	84	6,089,710	79	5,841,116	83	5,688,751	86	6,647,72	91	6,773,730	92
Other costs	1,045,163	16	1,603,762	21	1,154,342	17	924,174	14	654,257	9	557,514	8
Total expenditure	**6,678,790**		**7,693,472**		**6,995,458**		**6,612,925**		**7,301,979**		**7,331,244**	

Figures represent money received from funding sources, often in multiple tranches during the lifespan of the grant (instead of everything at once during the first year of the grant)

1. *direct funding (lump sum budget without matching or grants)*
2. *research grants obtained in national or European scientific competition (e.g. NWO, KNAW, ERC, Horizon 2020); funding is registered at the time a specific grant was received*
3. *all other grants (ministries, governmental or professional organisations, contract research)*

Table 3 PhD completion – Department of Education and Pedagogy

Grad. year	M / F		Total (M+F)	Grad. in year 4 or earlier	Grad. in year 5	Grad. in year 6	Grad. in year 7	Grad. in year 8 or later	Discon-tinued
Employee PhD candidates									
2018	2	5	7	1	1	1	2	0	2
2019	2	9	11	1	2	0	1	3	4
2020	2	9	11	2	1	3	2	2	1
2021	2	7	9	0	5	1	0	1	2
2022	1	7	8	0	4	0	2	1	1
2023	0	6	6	0	1	2	1	2	0
Total	**9**	**42**	**51**	**4**	**14**	**7**	**8**	**9**	**10**
Non-Employee PhD candidates									
2018	0	1	1	0	0	0	1	0	0
2019	4	4	8	3	1	0	1	0	3
2020	0	7	7	0	1	0	1	4	1
2021	1	7	8	0	1	2	3	1	1
2022	1	3	4	0	1	1	0	1	1
2023	**1**	**4**	**5**	**0**	**1**	**0**	**1**	**2**	**1**
Total	**7**	**26**	**33**	**3**	**5**	**3**	**7**	**8**	**7**

Tables Open Universiteit

Table 1 Research staff in # and FTE – Open Universiteit

	2018		2019		2020		2021		2022		2023	
	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Assistant prof	26	16.7	23	15.4	19	8.5	23	10.1	25	11.4	23	10.2
Associate prof	12	7.8	9	5.4	7	3.4	6	3.1	6	3.0	7	3.5
Full prof	5	3.7	6	4.1	6	3.5	7	3.9	8	4.0	7	2.7
Postdocs	3	3.0	3	2.6	2	2.0	1	1.0	1	0.6	3	3.0
PhD candidates	20	15.6	18	12.0	10	7.3	14	10.1	12	8.9	12	9.3
Total scientific staff	**66**	**46.8**	**59**	**39.5**	**44**	**24.7**	**51**	**28.2**	**52**	**27.9**	**52**	**28.7**
Support staff	1	0.8	1	0.8	-	-	1	0.5	2	0.9	2	0.9
Visiting fellows	-	-	-	-	-	-	-	-	-	-	-	-
Total staff	**67**	**47.6**	**60**	**40.3**	**44**	**24.7**	**52**	**28.7**	**54**	**28.8**	**54**	**29.6**

Reference date is 31 December
Presented are average research fte's given in a year, including management tasks; when a member is promoted, the average time in each position is used.
Presented are the absolute numbers of scientific staff
Until 2020; 80% research time applies to full professor, associate professor, assistant professor
From 2020; 60% research time applies to full professor, associate professor
From 2020; 50% research time applies to assistant professor
For postdocs; 100% research time applies
For PhD candidates (also with employee status) 80% research time applies
Postdocs refers to all researchers 1-4 in the UFO system, thus including those that have not yet received their PhD
Due to the combined faculty PenOW up to 2018, the dean in the function of full professor is included for 0.5 fte. In 2019 there was no formal dean.

Table 2 Funding – Open Universiteit

	2018		2019		2020		2021		2022		2023	
Funding in k€/%	*k€*	*%*	*k€*	*%*	*k€*	*%*	*k€*	*%*	*k€*	*%*	*k€*	*%*
Direct funding												
Collegegelden[1]	589	14	542	13	548	16	439	10	422	14	552	18
Rijksbijdrage[2]	1.956	46	2.185	54	2.371	69	3.411	81	2.244	77	2.034	66
OCW	-	-	-	-	-	-	-	-	-	-	-	-
Research grants NL	683	16	772	19	351	10	223	5	81	3	82	3
Research grants EU	914	22	544	13	100	3	103	2	79	3	157	5
Contract research	87	2	4	0	36	1	2	0	10	0	40	1
Other	-	-	-	-	-	-	-	-	-	-	-	-
Bijdrage multidisciplinair stimuleringsfonds[3]	21	0	5	0	12	0	15	0	94	3	-	6
Total funding	**4.250**		**4.053**		**3.418**		**4.192**		**2.929**		**3.060**	
Expenditure in k€/%												
Personnel costs[4]	3.699	89	3.363	90	2.511	95	2.613	94	2.493	93	2.655	91
Other costs[5]	456	11	369	10	116	5	172	6	190	7	247	9
Total expenditure	**4.156**		**3.733**		**2.631**		**2.785**		**2.684**		**2.903**	

[1] *Before 2020, OW and PSY were part of PenOW*
[2] *Up to and including budget 2022, the government contribution was not allocated to the components (faculties/services/centers); this concerns budget from the allocation model. Subsequently, 50% of time for research was assumed.*
[3] *This does not concern direct revenues, but is a cost budget allocated by the Executive Board*
[4] *Including 50% from first funding stream*
[5] *Including 50% from first funding stream*

Table 3 PhD completion – Open Universiteit

Enrolment				Cumulative success rates											
Starting year				≤ 4 yr		≤ 5 yr		≤6 yr		≤7 yr		Not yet finished		Discontinued	
	M	F	M+F	#	%	#	%	#	%	#	%	#	%	#	%
2013	1	3	4	3	75	-	-	-	-	-	-	-	-	1	25
2014	3	1	4	3	75	1	25	-	-	-	-	-	-	-	-
2015	1	2	3	-	-	1	33	2	67	-	-	-	-	-	-
2016	3	4	7	4	58	1	14	1	14	-	-	1	14	-	-
2017	4	4	8	4	50	-	-	1	12.5	-	-	2	25	1	12.5
2018	-	3	2	-	-	-	-	-	-	-	-	1	50	1	50
2019	1	-	1	-	-	-	-	-	-	-	-	1	100	-	-
2020	-	2	2	-	-	-	-	-	-	-	-	2	100	-	-
2021	-	4	4	-	-	-	-	-	-	-	-	4	100	-	-
2022	2	4	6	-	-	-	-	-	-	-	-	6	100	-	-
Total	**15**	**26**	**41**	**14**	**35**	**3**	**7**	**4**	**10**	**-**	**-**	**17**	**41**	**3**	**7**

External PhD candidates are not included in this overview; from 2023-2028 the faculty counted 43 external PhD candidates

Tables Leiden University

Table 1 Research staff in # and FTE – Institute of Education and Child Studies, Leiden University

	2018		2019		2020		2021		2022		2023	
Scientific staff[1]	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Assistant prof	37	9.5	31	9.7	31	9.0	30	9.8	33	10.8	36	11.0
Associate prof	7	1.6	7	2.1	10	3.6	9	3.4	9	3.5	11	3.8
Full prof	9	2.9	8	2.6	10	2.7	10	2.6	9	3.1	9	3.1
Postdocs[2]	13	6.9	11	3.0	10	3.7	10	2.8	11	4.1	9	3.8
PhD candidates[3]	36	22.9	28	16.1	25	11.7	19	12.6	17	11.2	17	11/2
Total scientific staff	**102**	**43.8**	**85**	**33.4**	**86**	**30.6**	**78**	**31.4**	**79**	**32.7**	**82**	**32.9**
Support staff[4]	24	7.4	11	3.0	15	5.9	11	5.3	9	4.2	3	0.8
Visiting fellows	0	0	0	0	0	0	0	0	0	0	0	0
Total staff	**126**	**51.2**	**96**	**36.4**	**102**	**36.5**	**89**	**36.7**	**88**	**36.9**	**85**	**33.7**
Professors by special appointment	**3**		**2**		**2**		**3**		**3**		**3**	
External and Scholarship candidates	**10**		**8**		**13**		**19**		**18**		**17**	

Note 1: Comparable with WOPI categories HGL, UHD and UD; tenured and non-tenured staff.
Note 2: Comparable with WOPI category Onderzoeker.
Note 3: PhD candidates with employment; External and scholarship PhD candidates are listed in the bottom row.
Note 4: All support staff hired to do research or support research on externally funded projects

Table 2 Funding – Institute of Education and Child Studies, Leiden University

	2018		2019		2020		2021		2022		2023	
Funding in fte/%	*fte*	*%*	*fte*	*%*	*fte*	*%*	*fte*	*%*	*fte*	*%*	*fte*	*%*
Direct research funding[1]	27.0	53	19.2	53	17.1	47	17.4	47	19.0	51	20.7	61
Research grants[2]	8.1	16	8.7	24	8.8	24	7.5	21	6.0	16	5.7	17
Contract research[3]	16.1	31	8.5	23	10.6	29	11.8	32	11.9	32	7.4	22
Total research funding	**51.2**		**36.4**		**35.5**		**36.7**		**36.9**		**33.7**	
Expenditure												
Personnel costs	2,698,740/90%		2,397,301 /89%		2,612,879/93%		2,808,459/86%		2,954,505/89%		2,967,652/90%	
Material and other costs	285,368 /10%		300,912 /11%		198,931/7%		455,830/14%		380,966/11%		324,500/10%	
Total expend.	**2,984,108**		**2,698,213**		**2,811,810**		**3,264,289**		**3,335,741**		**3,292,152**	

Note 1: Direct funding (basisfinanciering / lump-sum budget).
Note 2: Research grants obtained in national scientific competition (e.g. grants from NWO and KNAW). Note 3: Research contracts for specific research projects obtained from external organisations, such as industry, government ministries, European organisations and charitable organisations.

Table 3 PhD completion – PhD candidates with appointment, scholarship PhDs and external PhDs
Institute of Education and Child Studies, Leiden University

Enrolment				Success rates						
Starting year				≤ 4 yr	Grad. in year 5	Grad. in year 6	Grad. in year 7	Grad. after 7 years	Not yet finished	Discon-tinued
	M	F	M+F							
2015	1	16	17	1 (6%)	1 (6%)	3 (18%)	4 (24%)	2 (12%)	2 (12%)	4 (24%)
2016[1]	0	5	5	1 (20%)	1 (20%)	0	0	0	1 (20%)	2 (40%)
2017	0	5	5	1 (20%)	0	1 (20%)	2 (40%)	0	0	1 (20%)
2018	1	4	5	1 (20%)	1 (20%)	0	0	-	2 (40%)	1 (20%)
2019	0	5	5	0	1 (20%)		-	-	3 (60%)	1 (20%)
Total	**2**	**35**	**37**	**4 (11%)**	**4 (11%)**	**4 (11%)**	**6 (16%)**	**2 (5%)**	**8 (22%)**	**9 (24%)[2]**

Note. 11 of the 16 PhD candidates who graduated after 6 years or are still working on their dissertation, suffered from severe illness (including long-COVID) or took pregnancy and parental leave.
1 Four PhD candidates with a 1.0 FTE appointment started that year, but because of the leave of their supervisors as a result of substantive problems with social safety which led to a major restructuring of the institute, these PhD candidates left with their supervisor and all graduated at another university. These PhD candidates were not included in the table.
2 Three external PhD candidates continued their project at another university.

Tables Maastricht University

Table 1 Research staff in # and FTE – School of Health Professions Education, Maastricht University

	2018		2019		2020		2021		2022		2023	
Scientific Staff[1]	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Assistant prof	12	3.2	11	3.3	15	4.2	14	3.3	18	3.6	18	4.5
Associate prof	8	2	11	1.7	7	2.6	7	2.6	8	3.2	6	2.8
Full prof	15	3.6	17	3.9	18	3.6	17	3.5	15	3.4	19	2.6
Postdocs[2]	6	3.1	9	4.1	7	2.4	8	4.4	10	3.9	6	2.0
PhD cand. excl. external	14	12.8	14	13.6	11	9.4	11	9.8	12	9.9	17	14.7
PhD candidates	64		67		80		91		97		106	
Collaborates staff	8	5.5	8	5.6	8	5.7	9	6.5	9	6.9	9	6.9
Total scientific staff[3]	**63**	**30.2**	**70**	**33.2**	**66**	**27.9**	**66**	**30**	**72**	**30.7**	**75**	**33.4**
Support staff	17	9.1	12	5.2	8	3.7	14	6.0	14	6.2	13	6.3
Visiting fellows	7		8		9		11		-		-	
Total staff	**80**	**39.3**	**82**	**38.4**	**74**	**31.6**	**80**	**36.0**	**86**	**36.9**		**39.7**

 # Number of persons active on the research unit research activities on Dec 31st
fte: Sum of fulltime equivalents (fte) labelled on the research unit research activities on Dec 31st
Note 1: Comparable with WOPI categories HGL, UHD and UD; tenured and non-tenured staff.
Note 2: Comparable with WOPI category Onderzoeker/Researcher.
Note 3: Excluding external PHD.

Table 2 Funding – School of Health Professions Education, Maastricht University

Funding in fte/%	2018		2019		2020		2021		2022		2023	
	fte	*%*	*fte*	*%*	*fte*	*%*	*fte*	*%*	*fte*	*%*	*fte*	*%*
Direct research funding[1]	15.3	51	17.9	54	14.4	52	11.3	38	12	39	15.2	45
Research grants[2]	5.7	19	6.7	20	5.1	18	7.1	24	6.1	20	8.6	16
Contract research[3]	4.7	15	3.7	11	2.8	10	4.2	14	6.4	21	4.0	12
Other[4]	4.5	15	4,9	15	5.6	20	7.4	24	6.3	20	5.6	17
Total research funding	**30.2**		**33.2**		**27.9**		**30.0**		**30.8**		**33.4**	
Expenditure in €												
Personnel costs	3,363.3/61%		2,745.7/68%		2,691.4/66%		2,690.6/65%		2,975.9/69%		2,882.3/73	
Material costs	2,153.6/39%		1,298.9/32%		1,372.4/34%		1,431.8/35%		1,352.2/31%		1,042.2/27	
Total expenditure	**5,516.9**		**4,044.6**		**4,063.8**		**4,122.4**		**4,328.1**		**3,924.5**	

Note 1: Direct funding (basisfinanciering / lump-sum budget).
Note 2: Research grants obtained in national scientific competition.
Note 3: Research contracts for specific research projects obtained from external organisations.
Note 4: Funds that do not fit into the other categories.

Table 3a PhD completion – excluding external PHDs, School of Health Professions Education, Maastricht University

Enrolment				Success rates					
Starting year				≤ 4 yr	≤ 5 yr	≤6 yr	≤7 yr	Not yet finished	Discontinued
	M	F	M+F	#	#	#	#	#	#
2015	1	7	8	0	3	3	0	1	1
2016	1	2	3	0	0	2	1	0	0
2017	1	5	6	0	5	1	0	0	0
2018	0	1	1	0	0	0	0	1	0
2019	1	0	1	0	0	0	0	1	0
Total	**4**	**15**	**19**	**0**	8	**6**	**1**	**3**	**1**

Table 3b PhD completion – all PHD candidate School of Health Professions Education, Maastricht University

Enrolment				Success rates					
Starting year				≤ 4 yr	≤ 5 yr	≤6 yr	≤7 yr	Not yet finished	Discontinued
	M	F	M+F	#	#	#	#	#	#
2015	10	13	23	3	7	4	2	2	5
2016	10	11	21	2	2	5	6	2	4
2017	6	16	22	1	8	1	1	8	3
2018	7	9	16	3	0	3	0	10	0
2019	7	11	18	0	1	0	0	14	3
Total	**40**	**60**	**100**	**9**	18	**13**	**9**	**36**	**15**

Tables University of Amsterdam

Table 1 Research staff in # and FTE – Research Institute of Child Development and Education, University of Amsterdam

	2018		2019		2020		2021		2022		2023	
Scientific staff[1]	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Assistant prof	38	12.8	41	14.3	42	15.4	44	15.2	44	15.0	50	19.1
Associate prof	8	2.1	7	1.9	8	1.9	9	1.8	11	4.3	12	4.7
Affiliate professors[2]	8	0.9	9	1.0	9	1.0	10	1.1	12	1.3	12	1.3
Full prof	11	4.2	11	4.1	11	4.1	12	3.9	12	4.7	13	4.4
Postdocs[3] (oz1-3)	27	9.9	26	10.6	23	9.1	21	8.0	19	6.8	17	6.8
PhD candidates employed[4]	41	27.9	35	28.4	31	20.8	25	15.6	32	19.3	27	18.5
Employees in PhD track[5]	0	0	1	0	2	0.4	4	0.7	6	2.4	6	2.1
PhD candidates externally funded[6]	40		46		47		50		54		57	
PhD candidates scholarship[7]	3		3		3		4		3		3	
PhD candidates self funded[8]	7		7		8		10		10		9	
Total scientific staff[9]	**175**	**57.8**	**178**	**60.3**	**178**	**52.7**	**183**	**46.3**	**198**	**53.7**	**196**	**56.9**
Permanent Support staff[10]	8	2.8	7	2.4	6	2.4	6	1.7	6	2.0	7	2.2
Temporary researchers and support staff [11]	32	5.2	16	4.1	24	4.2	29	5.7	33	8.2	39	8.4
Visiting fellows	0	0	0	0	0	0	0	0	0	0	0	0
Total staff[12]	**212**	**65.8**	**200**	**66.8**	**207**	**59.4**	**217**	**53.7**	**236**	**64**	**241**	**67.4**

[1] Comparable with WOPI categories HGL, UHD and UD; tenured and non-tenured staff.
[2] Professors by special appointment.
[3] Comparable with WOPI category Onderzoeker 1-3.
[4] Standard PhD candidates (employed).
[5] Staff member with temporary or permanent contract with other primary tasks than a PhD (e.g teaching, research or as a medical specialist).
[6] Externally financed PhD candidates, not employed at UvA and externally funded (f.i.by their employer or NWO Promotiebeurs voor Leraren).
[7] Scholarship PhD candidates other provider, not employed at UvA and funded by a government grant (f.i. EU,or Chinese Scholarship Council).
[8] External PhD candidates not employed and work on their thesis in their own time and at their own expenses.
[9] The total number of (research) staff members is deduplicated (in case of promotion or two part time positions).
[10] Permanent support staff, such as director, administrative, technical (data steward) and Lab staff.
[11] Temporary researchers comparable with WOPI category Onderzoeker 4 and occasional research support comparable with WPOI category Student-assistant.
[12] The total number of (research) staff members is deduplicated (in case of promotion or two part time positions)

Table 2 Funding – Research Institute of Child Development and Education, University of Amsterdam

	2018		2019		2020		2021		2022		2023	
Funding in k€/%[1]	fte	%	fte	%	fte	%	fte	%	fte	%	fte	%
Direct funding[2]	38.8	56.9	33.6	47.8	28.7	45.7	26.3	46.8	31.0	47.8	34.1	50.6
Research grants[3]	23.8	34.8	32.9	46.8	29.8	47.4	25.1	44.6	27.8	43.0	29.2	43.4
Contract research[4]	5.6	8.3	3.8	5.4	4.4	6.9	4.8	8.6	6.0	9.2	4.0	6.1
Total funding	**68.2**		**70.3**		**62.9**		**56.3**		**64.8**		**67.3**	
Expenditure in k€/%	*k€*	*%*	*k€*	*%*	*k€*	*%*	*k€*	*%*	*k€*	*%*	*k€*	*%*
Personnel costs	4,318	65.7	5,051	66.0	4,952	67.8	4,790	69.3	5,346	68.5	5,893	68.9
Material costs[5]	464	6.3	640	8.4	449	6.1	351	5.1	517	6.6	772	8.4
Other costs[6]	2,051	28.0	1,960	25.6	1,909	26.1	1,771	25.6	1,940	24.9	1,941	22.7
Total expenditure	**7,328**		**7,651**		**7,310**		**6,911**		**7,803**		**8,556**	

[1] All funding is expressed in FTE (full time equivalent) of the personnel costs that is covered by the funding.
[2] Government funding of universities, allocated to the institute, through the faculty.
[3] NWO and EU funding.
[4] Funding from external organisations, such as government and industry, for specific research projects (e.g., commissioned research) and funding from sources that do not fit the before mentioned categories.
[5] E.g., fees for test subjects, travel expenses, supplies for the lab etc.
[6] Overhead of personnel costs.

Table 3 PhD completion – PhD candidates full time[1] – Research Institute of Child Development and Education, University of Amsterdam

Enrolment				**Success rates**						
Starting year				≤ 4 yr	≤ 5 yr	≤6 yr	≤7 yr	≤8 yr	Not yet finished	Discontinued
	M	F	M+F	#	#	#	#		#	#
2015	1	8	9	1 (11%)	3 (33%)	6 (67%)	6 (67%)	7 (78%)	0 (0%)	2 (22%)
2016	0	11	11	1 (9%)	6 (55%)	9 (82%)	10 (91%)	10 (91%)	1 (9%)	0 (0%)
2017	0	4	4	0 (0%)	1 (25%)	2 (50%)	2 (50%)	2 (50%)	2 (50%)	0 (0%)
2018	2	11	13	3 (23%)	7 (54%)	7 (54%)	7 (54%)	7 (54%)	4 (13%)	2 (15%)
2019	0	3	4	0 (0%)	2 (50%)	2 (50%)	2 (50%)	2 (50%)	2 (50%)	0 (0%)
Total	**3**	**38**	**41**	**5 (12%)**	**19 (46%)**	**26 (63%)**	**27 (66%)**	**28 (68%)**	**9 (22%)**	**4 (10%)**

[1] PhD candidates with ≥ 0.8 FTE appointment: standard PhD candidates (employed) and scholarship PhD candidates other provider

Tables Erasmus University Rotterdam

Table 1 Research staff in # and FTE – Pedagogical sciences, Erasmus University Rotterdam

	2018[3]		2019		2020		2021		2022		2023	
Scientific staff[1,2]	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Assistant prof	16	5.3	16	4.9	13	4.1	7	2.3	12	2.4	15	3.7
Associate prof	4	1.1	3	1.1	4	1	9	2.1	8	2.6	9	2.9
Full prof	2	0.4	2	0.3	5	1	4	1.3	2	0.8	2	0.8
Postdocs[4]	6	2.4	5	1.3	5	2.5	3	1.8	3	0.9	6	3
PhD candidates[5]	8	5.6	7	4.7	10	6.3	11	7.9	11	7.5	13	8.4
Total scientific staff	**36**	**14.7**	**33**	**12.3**	**37**	**14.9**	**34**	**15.4**	**36**	**14.2**	**45**	**18.8**
Support staff[6]	2	0.5	2	0.8	2	0.3	5	2	6	1.8	6	1.9
Endowed professors	2		3		2		2		3		3	

[1] This table includes only staff members with an appointment of at least 0.1 FTE with 31 December as a reference date.

[2] Research ftes, are calculated as 40% of the employed time for scientific staff and 85% of the employed time for postdocs and PhD candidates.

[3] Based on reference date December 31 2018.

[4] Comparable with WOPI category onderzoeker.

[5]This includes standard PhD candidates with employee status (AiO/Promovendi) and contract PhD candidates without employee status, receiving external funding or a university scholarship, who are conducting research under the authority of EUR-PED with the primary aim of graduating ('beurspromovendus'). External PhD candidates ('buitenpromovendi') are not included in this table.

[6] Only support staff that is directly funded by the Psychology Department. A large part of the support staff is funded by the faculty office which has not been taken into account in this table.

Table 2 Funding – Pedagogical sciences, Erasmus University Rotterdam

	2018		2019		2020		2021		2022		2023	
Funding in fte/%	fte	*%*	fte	*%*	fte	*%*	fte	*%*	fte	*%*	fte	*%*
Direct funding[1]	62.6	45	96.6	61	62.3	51	58.7	41	44.8	35	53.6	43
Research grants	42.2	30	36.5	23	33.7	28	49.3	34	42.3	33	30.7	25
Contract research	35.4	25	25.6	16	25.1	21	36.5	25	41.6	32	39.5	32
Total funding	**140.4**		**158.6**		**121.2**		**144.5**		**128.7**		**123.7**	
Expenditure in k€/%												
Personnel costs[2]	*1,111,6*	77	1,212,4	74	1370,6	83	1,444,4	82	1460,0	83	1923,6[3]	84
Material costs[4]	337,8	23	434,8	26	290,4	18	391,1	18	269,9	17	357,5	16
Total expenditure	**1,449,4**		**1,647,2**		**1,661,0**		**1,763,5**		**1,756,9**		**2,281,1**	

[1] Direct research funding (lump-sum budget, first funding stream (without matching or grants), calculated as 40% of the total budget.

[2] Calculated as 40% of the total personnel costs.

[3] Part of this increase is due to the total staff (including Education) paid by PED, which rose from 45 FTE in 2022 to 54 FTE in 2023. Additionally, the increase is also attributed to the salary raise of that year (9%).

[4] These costs represent the sum of 40% of the first funding stream combined with the total costs of the second and third funding streams. Additionally, material costs have been merged with 'other' costs.

Table 3 PhD completion – Pedagogical sciences, Erasmus University Rotterdam

Enrolment				Success rates					
Starting year				≤ 4 yr	≤ 5 yr	≤6 yr	≤7 yr	Not yet finished	Discontinued
	M	F	M+F	#	#	#	#	#	#
2015	0	4	4	0 (0%)	1(25%)	1 (25%)	1 (25%)	1 (25%)	0 (0%)
2016	1	3	4	0 (0%)	1 (25%)	1 (25%)	2 (50%)	0 (0%)	0 (0%)
2017	0	4	4	0 (0%)	2 (50%)	1 (25%)	0 (0%)	1 (25%)	0 (0%)
2018	0	2	2	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (100%)	0 (0%)
2019	0	2	2	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (100%)	0 (0%)
2020	0	5	5	0 (0%)	0 (0%)	0 (0%)	0 (0%	5 (100%)	0 (0%)
Total	**1**	**20**	**21**	**0**	4	**3**	**4**	**11**	