DOCTORAL EDUCATION FUTURES

Research and Doctoral Education into the Future

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Head EUA Council for Doctoral Education
• **Membership service** of the European University Association (EUA)
• **Gathers** a community of universities, bringing together academic leaders and professionals from 276 universities in 38 countries
• **Drives** doctoral education policies and promotes cooperation and exchange of good practices on issues of common interest
• **Organises** regular conferences, workshops, focus groups, webinars and thematic peer groups, addressing fundamental and emerging topics of doctoral education
• **Identifies** and monitors the trends in doctoral education, inside and outside Europe
• **Participates** in policy dialogues on the European and global level
• **Provides** policy advice to the EUA Board and Council.
A bottom-up process leading to the reform of doctoral education in Europe
Building the Foundation of Research

The 2022 EUA-CDE Vision paper
Revisiting our Foundations

Origins of EUA-CDE in *The Salzburg Principles* established in 2005 as part of Bologna Process. At core:

- centrality of original research and doctoral candidates as early stage researchers
- widening range of career paths available
- importance of diversity of structures
- institutions to provide structures and environment necessary for support

Principles hold but world has changed

- time to renew the vision and anticipate what may be on the horizon
Developing the Vision

- Development process of the vision
  - Key insights from previous EUA-CDE activities 2017-2021 (workshops, annual meetings, thematic peer groups)
  - EUA documents incl. *Universities Without Walls – a Vision for 2030*
  - Results of 2017 and 2021 surveys on current challenges in doctoral education
  - Reflections within the EUA-CDE Steering Committee (several SC meetings between October 2021-March 2022)
  - EUA-CDE 2022 Focus Group foresight workshop with members from 24 countries
  - **Draft vision paper**
  - Consultation process on draft document with EUA-CDE membership and EUA Council
  - **Vision paper**
Trends and Drivers

**Extrinsic**
Opportunities, expectations & challenges for doctoral education deriving from a changing world

- Digitalisation
- Sustainable Development Goals
- Exchange with Society
- Equality, Diversity & Inclusion
- Academic Freedom
- Funding
- Policy goals

**Intrinsic**
Changes in the ways in which universities organize themselves to deliver doctoral education

- Diverse Institutional Dynamics
- Ensuring Quality & Fair Assessment
- Skills Fit for Purpose
- Key role of supervision
- Adequate funding
- Additional groups (Postdocs, professional in doctoral education)
Top priorities (EUA-CDE 2021 survey)

Please identify which of the following topics you consider most important for doctoral education at your institution. Please indicate max. 3-4.

- Quality of Supervision: 54%
- Funding of doctoral candidates: 41%
- Enabling own doctoral candidates to gain international experience: 40%
- Research Ethics and Integrity: 35%
- Attracting doctoral candidates from abroad: 31%
- Collaboration with other universities: 30%
- Collaboration with non-university partners: 20%
- Mental Health and Wellbeing: 17%
- Co-tutelles/Joint doctorates: 17%
- Supporting postdoctoral researchers: 12%
- Equality and Diversity: 11%
- Open Science: 10%
- Research Assessment: 9%
- Participation in European Framework Programmes: 9%
- Digitalisation: 8%
- Societal Engagement: 6%
- Sustainable Development Goals: 5%
- Funding of doctoral schools: 5%
- FAIR Data and Research Data Management: 4%
- Collaboration with other services (communication, career support, IT services) within the university: 4%
- Science Communication: 3%
- Entrepreneurship: 2%
- Innovation Ecosystems: 1%
- Citizen Science: 1%
- Green Transformation: 0%
Digitalisation transforming research & doctoral education

- **Digitalisation's importance in doctoral education**
  - 71% prioritise digitalisation within their institution (2021 survey)
  - It affects all levels (organisation, content, tagging), but digital divide impacts

- **The role of data**
  - Data management and sharing have become crucial
  - 77% of universities provide FAIR data training

- **Changing dynamics of supervision**
  - Discussion on the role of AI in supervision
  - Potential new actor to the candidate-supervisor-institution triangle

- **Communication and visualisation skills in digitalisation**
  - Importance of research communication and visualisation skills
  - Transformative changes in virtual communication
1. Doctoral schools serve as a place where the opportunities & challenges of new digital technologies are embraced in the pursuit of research goals and in their own enabling frameworks.

Digitalisation transforming research & doctoral education

• **Connection between digitalisation and employment**
  - Public sector needs **experts to understand digitalisation**, and the ethical and societal dimensions attached to it
  - Even more demands for the **specific capacities of doctoral candidates, open to new question and research** driven by curiosity

• **Internationalization through digitalisation**
  - Easier selection of supervisors worldwide towards a “**global doctorate**”
  - **Skills needed** for developing regulations

• **Mental health**
  - Impact of **digitalisation on the wellbeing**
  - Impact of **isolation** due to increase of virtual exchanges
Sustainable Development Goals

• **International framework**
  - UN Sustainable Development Goals provide international framework for more sustainable & equitable development of the planet
  - Greening, response to climate change & greater engagement with Global South all imperatives for doctoral education
  - Need to include the perspective of the global south – internationalisation of doctoral education

• **Connecting diverse areas and topics**
  - SDG shape research topics, redirect funding, and impact careers.
  - Need of caution against excessive focus on certain thematic areas at expense of fundamental research
  - Universities must balance the essential global connectivity and reduced carbon emissions in doctoral candidates' mobility.

2. Universities should embrace the Sustainable Development Goals as a holistic framework providing a context for and supporting the delivery of doctoral education
Exchange with Society

• **Building bridges**
  - Doctoral candidates are bridgebuilders between academia, research and society & can serve as the ‘glue’ in collaborations with business, public or NGO organisations
  - Doctoral education **contributes to society** by **providing future academics and highly skilled knowledge workers**
  - Role of communication: Continuous exchange and co-creation of knowledge

• **Maintaining what’s at the core of doctoral education**
  - When addressing key societal challenges, it remains important to maintain the **foundational research focus**
  - Public exposure of research **can expose contested values & beliefs**. Early-career researchers are particularly vulnerable to personal attacks in social media or otherwise

3. Even when not connected to a specific mission, research and education at doctoral level contributes to the resolution of the environmental, demographic, socio-economic, and political challenges that Europe and the world are facing. The path to resolving these challenges may lie in addressing fundamental research questions where the application is not evident at the time.
• Diversity as a base of success
  • Diversity increases the quality of doctoral education, bringing varies perspectives & experiences to the table
  • Institutional Changes: Institutions should foster inclusivity, provide flexible working hours, support networks and mentoring (first generation doctorates).

• Need to ensure appropriate access
  • Access to doctoral education from under-represented groups remains a problem.
  • Long duration, lack of flexibility, care-giving responsibilities and subsequent precarious employment are all deterrents for under-represented groups
  • Immigration and Language Barriers: Immigration policies and language barriers can limit diversity in doctoral programs.

4. A diverse doctoral education must be sensitive to the different backgrounds that doctoral candidates bring with them. Doctoral education should encourage reflection on and the overcoming of any social, economic or cultural barriers. It should foster a diversity that goes hand in hand with excellence and a shared understanding of research quality.
Academic Freedom

- **Doctoral candidates as academics**
  - Academic freedom is an inseparable part of doctoral education as it is essential for high quality research.
  - Importance to raise awareness among doctoral candidates about what does academic freedom entail
  - Institutional autonomy gives the freedom and flexibility to meet the needs of a diverse doctoral candidates

- **Different threats to academic freedom**
  - Threats to freedom come in direct and less overt attempts to steer the content and direction of research. Doctoral candidates can be particularly vulnerable.

5. Doctoral education should promote a dialogue about the different dimensions of academic freedoms and raise awareness about where any are at risk. It should create an open space for critical debate and the exchange of opposite views, while defending the rights of doctoral candidates to engage in these activities.
Ensuring Quality and Fair Assessment

- No one size fits it all approach
  - A variety of quality assessment mechanisms exist across universities and countries. There should not be a one-size-fits-all approach
  - Supervision and the engagement of candidates themselves should also be recognised as a means of quality assurance
  - Ethics and integrity as a quality issue
- Systematic changes of careers and research depend on changes in QA
  - Reform of research and academic assessment connected to an overall change in research assessment
  - Doctoral candidates need to be made aware of these changes

7. A fit-for-purpose quality assurance system is essential but the overarching goal is the quality of research, not the use of a particular tool. The focus should go beyond administrative processes to also value the education and research content. That should include an understanding of core skills and values such as research ethics and integrity and the adoption of a critical approach to research assessment not confined to publication metrics.
8. Doctoral candidates must be equipped with the knowledge and skills to meet the modern demands of research and pursue their chosen career paths. At the same time, they need to map, visualise and verbalise their skills and communicate those capabilities to others. Doctoral education should develop both tacit and explicit skills. Transversal skills should not be seen as an add-on but as a key element of the doctorate, maintaining the essential role of original research as the key feature of doctoral education.

Skills Fit for Purpose

- **Explicit and tacit knowledge**
  - A doctorate equips candidates with crucial skills for research and other career paths but these may not always be fully visible or codified.
  - Regulations and funding should ensure that training is built into doctoral education.

- **The “communication turn”**
  - There is an increased need to communicate the skills. Doctoral candidates need to be aware of what they “bring to the table”.

- **The limits of expectations**
  - In setting training requirements, institutions should be sensitive to the high workloads of doctoral candidates and ultimately the consequences for well-being and mental health.
Supervision Key
but not a Solo Act

• Important developments in the field of supervision
  • Supervision is central to doctoral education but is becoming more complex. Supervisors are involved in all the key elements of doctoral research
  • Single supervisors and teams are now equally prevalent – in all cases there is a joint endeavor between supervisor, supervisee and the environment/school

• Addressing potential conflicts
  • Supervision can lead to issues such as dependency, conflicts related to work organization and ownership, and the complexity of the supervisor’s role.
  • Training for supervisors and agreed-upon guidelines can help address these challenges.

9. Supervision is crucial. Its form adapts to the needs and resources of an institution. Universities should invest in the training of supervisors, enabling them to embrace their roles fully and ensure that the doctoral school or environment plays its appropriate supportive role.
Funding Adequate to Underpin a Successful Outcome

The impact of funding on doctoral research
• Successful completion needs appropriate resources underpinned by adequate funding
• There are very substantial differences in the means and level of funding across Europe

Mismatch between needs and available funding
• Financial worries are a major cause of stress and mental health issues among candidates
• There is often a mismatch between the time needed to complete the doctorate and the duration of financial support

10. The level of living support for doctoral candidates needs to take into consideration the relative attractiveness of the careers and the incomes of early-career knowledge workers in other sectors. This means that the work of doctoral candidates should be appropriately rewarded. Duration of funding should be based on a realistic assumption of the duration of a doctorate. An increase in salaries or duration of the doctorate should not, however, be at the expense of the availability of doctoral positions. The increased need to tackle societal challenges with high-quality research demands the availability of such positions, but this should not lead to a reduction in other university services.
Save the date!

2024 EUA-CDE Thematic Workshop on ‘Leadership in doctoral education’

Prague, 1 and 2 February, 2024
Save the date !

2024 EUA-CDE Annual Meeting «Data in doctoral education»

Topics include:
• What data do we have and need? (Research, Monitoring, ..)
• Quality, quality assurance and governance by numbers
• Research and academic career assessment
• Completion rate, and time to degree
• FAIR data management, infrastructures and open access
• Ethical dimension of dealing with data
• Training doctoral candidates in data literacy
• Data and narratives (CVs, communication etc.)
• Career tracking
• Postdoctoral researchers (Thematic Peer Group report)

Barcelona, 26 to 28 June, 2024
Thank you for your attention

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