

Ethical and Responsible Research Training for the Humanities – A Work in Progress

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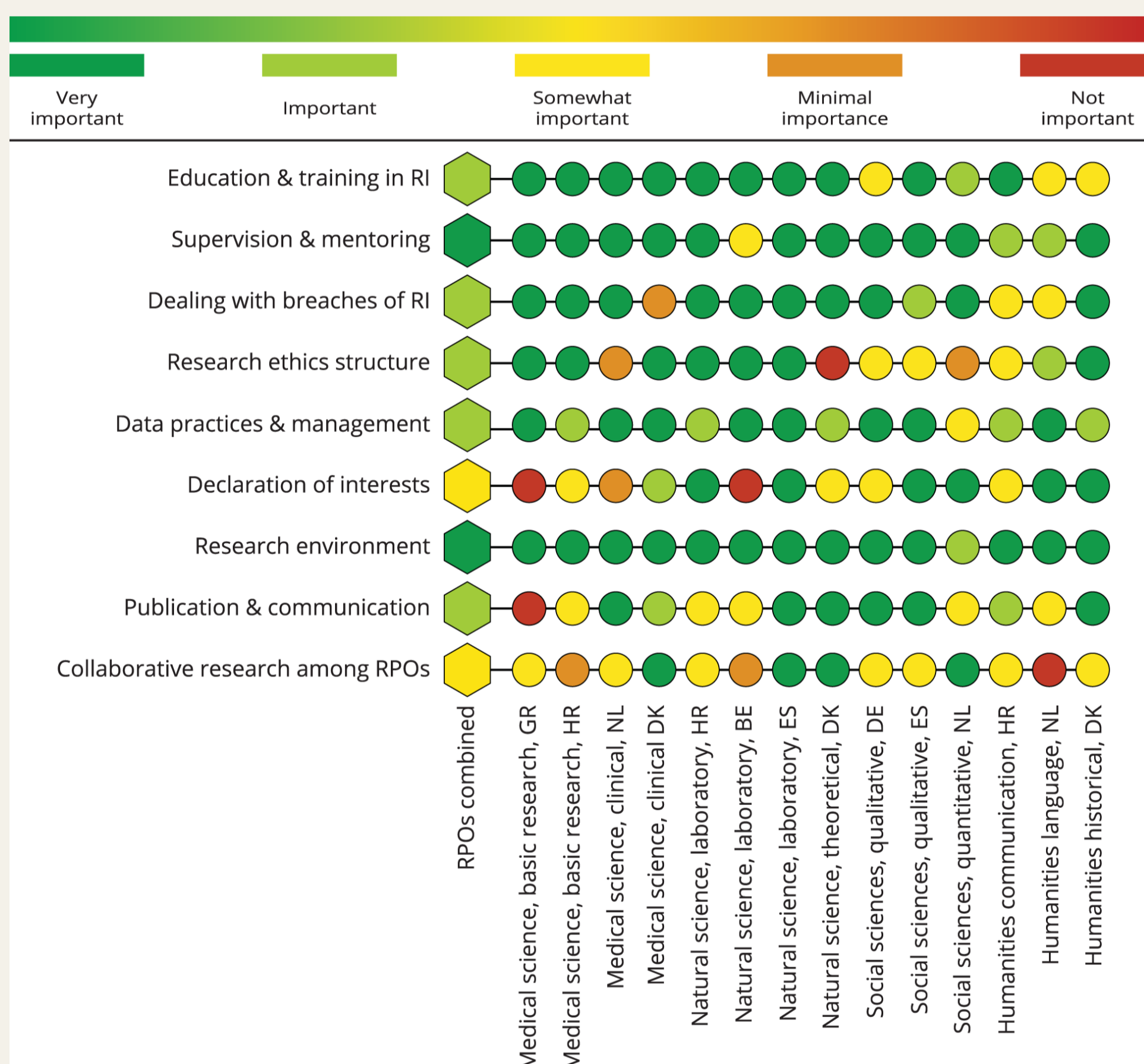
Introduction

Research integrity (RI) and standards of professional conduct are cornerstones of training for post-graduate and advanced degrees in the United States. Students studying to become future doctors, business leaders, and scientists take both formal coursework and informal studies on the topic. The federal government and professional associations (e.g. the American Medical Association) have established requirements around research integrity training and the continuous education/recertification of its practitioners. Despite that over 13,000 Ph.D. are awarded every year in the humanities and social sciences in the U.S. (almost 25% of all PhDs awarded), most U.S. institutions do not require or maintain any formal ethics/research integrity training as part of the degree program for these students.

Specifically, research practices in the humanities and social sciences have changed in the last 20 years. Today's technology, including digitized archives, enhanced imaging, and artificial intelligence, has radically impacted the way humanities scholars pursue research. These advances are also outpacing traditional mentoring relationships, where students are knowledgeable and employ research tools that their mentors simply have never used and might not even understand. Consequently, there is a need to discuss the responsible conduct of research and the importance of personal and professional integrity in the humanities and social sciences.

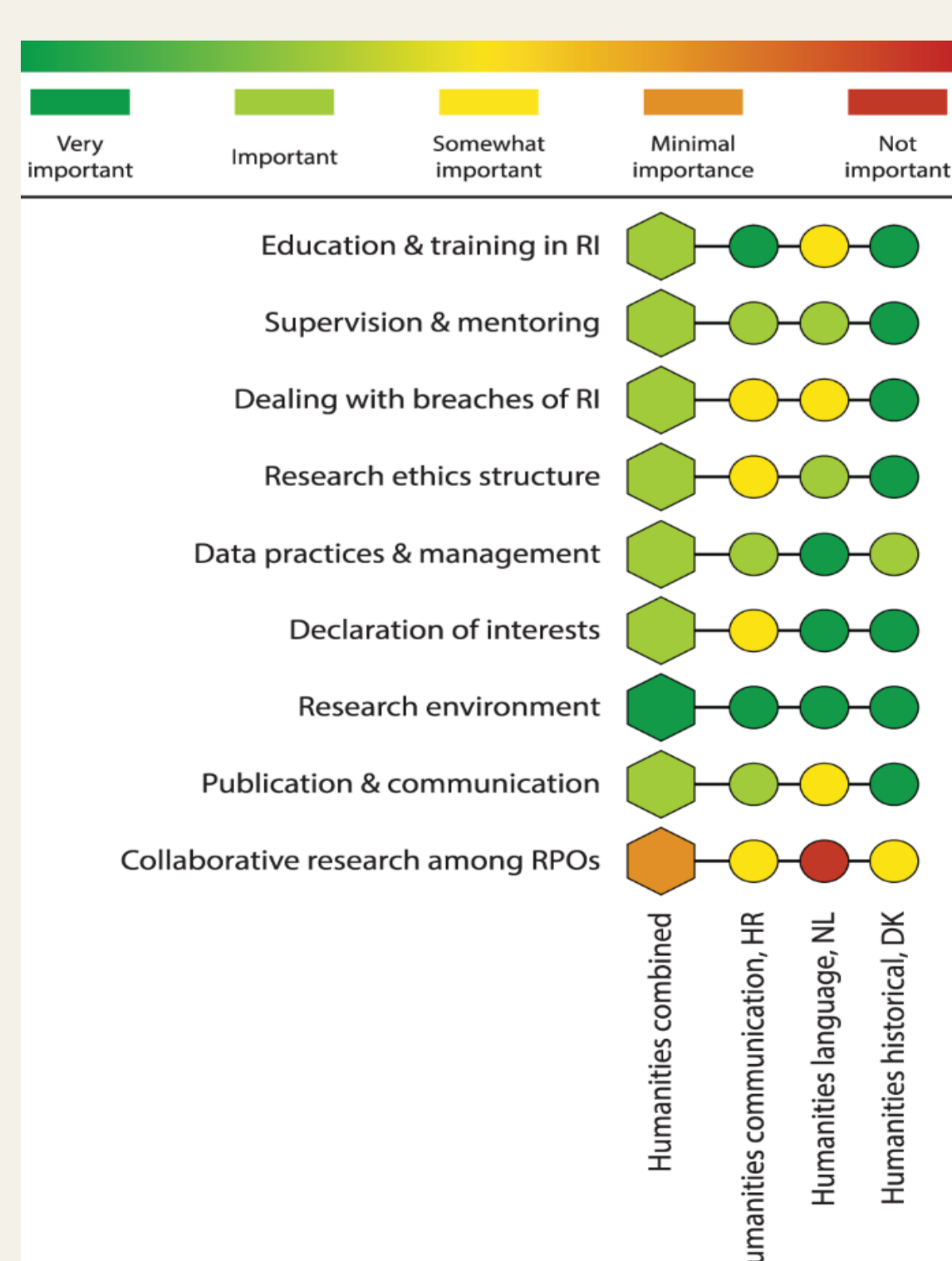
Currently, Vanderbilt RI training for the humanities is a box most check. We propose to create the necessary habits of the mind that join integrity to the research enterprise through a bottom-up approach.

Need for Discipline Specific RI Training



Thirty focus groups by discipline and geography were surveyed across Europe to answer the questions: "Which RI topics would stakeholders from the four main areas of research (humanities, social sciences, natural sciences, and medical sciences) prioritize for RI training?" The heat map displays the results of the research integrity topic survey by sorting nine research integrity (RI) topics (horizontal rows) across 14 discipline/geographic focus groups (vertical columns). The color chart at the top explains the corresponding heat map colors.

Focus on the Humanities



Heat map highlights the results of the analysis across the humanities focus groups. The horizontal color on the left side with hexagons shows the combined results of all three focus groups.

The Approach

- Assess the research integrity climate at Vanderbilt and determine a baseline against which to measure the efficacy of efforts.
- Establish stakeholder groups across the humanities.
- Create the curriculum outline.
- Implementation of curriculum through the research integrity stewards network

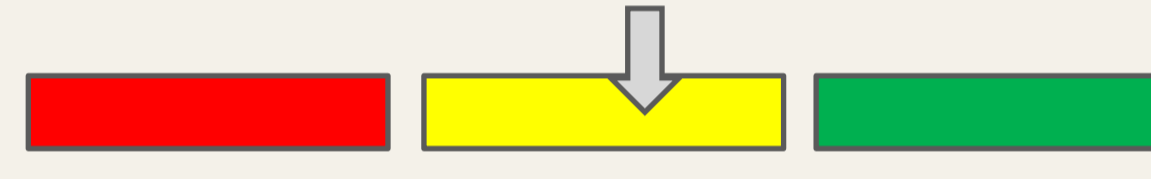
The SOURCE and CARES Surveys

The Survey of Organizational Research Climate (SOURCE) measures across seven topical domains: • Responsible conduct of research resources • regulatory quality • advisor-advisee relations • integrity inhibitors • integrity socialization • departmental expectations • integrity norms.

The Climate of Accountability, Respect and Ethics Survey (CARES) is a validated survey designed to gauge the interpersonal work climate.

We surveyed four schools (Arts and Science, Engineering, Biomedical Sciences, and Education) with 85 unique departments and centers and 4,497 faculty, students and staff.

Institution Performance at a Glance



Vanderbilt University's score is 78% (Good). This score represents the aggregated average score of all participants.

Digging Deeper into Survey Results

1. Microbe-Host Interactions
2. Epidemiology
3. Human and Org. Development
4. Leadership, Policy, and Org.
5. Health Policy and Serv. Research

At Vanderbilt, RI is disproportionately directed towards the biomedical, engineering, and natural science disciplines. This is due to a combination of government requirements tied to funding and an institutional compliance approach to RI issues.

Responsible Conduct of Research Resources

1. Anthropology
2. Spanish and Portuguese
3. English
4. History
5. Economics

The figures highlight those departments which ranked most highly in a survey area (green) and those that ranked lowest (Red). Despite that fact that humanities and social science departments comprise only 15% of the academic units surveyed, they comprised 60% + of the five lowest ranked units. This was true across all topical domains.

1. Electrical and Comp. Eng.
2. Molec. Physiology & Biophysics
3. Cell and Dev. Biology
4. Earth and Enviro. Sci
5. Chemistry

Regulatory Quality

1. Medicine, Health and Society
2. Mathematics
3. Anthropology
4. Spanish and Portuguese
5. Theatre

These results highlight the lack of focused training received by faculty, students, and staff in the humanities and social sciences. Thus, there is an opportunity to create a new, flexible, relevant RI training program.

Integrity Norms

1. Economics
2. History
3. Theatre
4. Chemical & Biomole. Eng.
5. Philosophy

A Departmental Certification Approach

The Research Integrity Stewardship Network (RISN) is a new departmental certification approach, moving away from one-size-fits-all training towards a community of learners engaged in building an environment of trust.

Network Characteristics:

- Departments contribute 1 faculty representative and 1 student representative/10 students for the network steering committee.
- Individual departments create programming in discipline specific manner around twelve major themes. Programming is approved by steering comm.
- Departments earn certification by completing the training course over a year.
- Departments maintain certification for four years by preparing four additional training units per year.
- Training materials are submitted to a central repository, promoting sustainability.

RI Training Curriculum

| Topic | Subject Matter |
|-------------------------|--|
| Ethical Decision Making | What is it? Why is it important? |
| The Big Three | Falsification, fabrication, and plagiarism |
| Collaboration | Internal, external, international |
| Authorship | Responsibilities, citations, corrections, retractions |
| Conflict of Interest | COI, undue foreign influence, traveling with technology |
| Technology Transfer | Ownership, CDA, MTA, Public ramifications |
| The Digital Humanities | A shift towards the quantitative |
| Artificial Intelligence | New technologies, Risks, RI challenges (plagiarism, fabrication) |
| Data stewardship | Data storage, archiving, data sharing |
| Human Subjects | Clinical studies, surveys, human remains, ethnography |
| Cultural Sensitivity | International research, indigenous populations |
| Larger Societal Impact | How do ethical choices impact society? |

Conclusion

A one-size-fits-all approach to RI training does not effectively reach the many different types of researchers at Vanderbilt.

We completed an assessment of the Vanderbilt research integrity climate. Results were reported to leadership.

Survey results highlight the dissatisfaction from humanities and social science disciplines in current RI training practices

We are developing a departmental certification network for RI training for the humanities and social sciences.

Advantages include:

- Regular engagement of faculty, students, and staff.
- Training covers critical topics, but in a discipline-specific way. This makes RI more relevant to all trainees.
- Certification process improves program sustainability by creating new training materials.
- Provides a Vanderbilt-approved certification statement to external organizations. Increasingly, funders are asking for such statements as part of the grant awarding process.

Project Timeline:

- Baseline research climate assessment Complete August 24
- Constitute RISN steering committee
- Compile Training Materials Fall 24
- Pilot 3 modules Spring 25
- Launch network Fall 25

Acknowledgements

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