NPD02 / Challenges in Designing Multi-Disciplinary Praxis in AI Policy Education

Topic : Pedagogy

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GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Challenges in Designing Multi-Disciplinary Praxis in AI Policy Education

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Public Policy education, especially on technology regulation, poses the challenge of acknowledging the diverse narrative lenses across the disciplines involved and the interdisciplinary student community these discussions address. Unlike other fields of study, which have specific objectives and well-defined problems, public policy problems related to AI risks and regulatory challenges are complex due to the diverse actors involved and the rapid pace of technological advancement (Taeihagh et al., 2021), necessitating interdisciplinary expertise to forecast technological developments and identify risks and regulatory challenges.

Another challenge in educating policy students on AI policy is the systemic constraint, especially around balancing between “technology for the greater good” and the risks of rapid innovation (Capano et al., 2024; Sivarudran Pillai & Matus, 2024). AI, unlike many other technologies, transcends sectoral boundaries; hence, deciphering its potential applications, maximising the benefits, and identifying the risks and regulatory challenges requires in-depth sectoral expertise from policy formulators and implementers (Pillai & Matus, 2020). This then raises the question of the required balance between the curriculum and pedagogical approaches: a generalist approach or discussions that require greater sectoral depth. The fact that the policy students come from diverse sectoral backgrounds exacerbates this pedagogical challenge, especially in student engagement and assessment design.

It is then crucial to develop a proper Public Policy praxis that acknowledges the diverse disciplines that transcend disciplinary boundaries, provides the analytical abilities necessary to individuals from diverse disciplines, and balances sectoral depth to capture the intricacies of technology. However, this is challenging due to competing factors, such as job-specific skill requirements, faculty expertise, prevailing and persistent institutional schools of thought, and so on.

Given these challenges, in this panel, I invite theoretical and empirical articles that address the broader theme of how policies for AI are taught in the Public Policy schools, which answer the following questions:

1. How have the different subject areas, such as Economics, Sociology, Law and Political Science, co-existed and influenced the topics covered and pedagogy for teaching AI policies in Public Policy schools?

2. How have the different topics and the pedagogy balanced the general and the sector-specific expertise requirements to address the challenges of rapid technology advancement and the interdisciplinary student community?

3. What are the challenges in deriving curriculum and pedagogical considerations that consider the diverse disciplines and acknowledge the interdisciplinarity among the students, having a trade-off between generalist or greater sectoral depth?

The articles in this panel will contribute to ongoing discussions in the public policy scholarly community on curriculum development and the design of pedagogical approaches, offering insights for academics, practitioners, and even policymakers on leveraging the interdisciplinary nature of Public Policy as an inclusive field of Science to address AI as a policy target.

References:

Capano, G., Alex Jingwei, H., & and McMinn, S. (2024). Riding the tide of generative artificial intelligence in higher education policy: an Asian perspective. Journal of Asian Public Policy, 1–15. https://doi.org/10.1080/17516234.2025.2450571

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in the construction sector. Science and Public Policy, 47(5), 689–704. https://doi.org/10.1093/scipol/scaa073

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Taeihagh, A., Ramesh, M., & Howlett, M. (2021). Assessing the regulatory challenges of emerging disruptive technologies. Regulation & Governance, 15(4), 1009–1019.

CALL FOR PAPERS

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Over the years, courses on Artificial Intelligence (AI) policies, governance, risks, regulation, and regulatory challenges have been taught in public policy curricula and discussed in various workshops, emphasising a mix of disciplines, including Law, Economics, Sociology, and Political Science, catering to audiences from multi-disciplinary backgrounds. While in engineering education, the emphasis was on the development of mechanisms that are analogous to “Engineering Safety Features” (Perrow, 2011), whereas when it comes to educating on AI policies, the diverse contributing disciplines engage in different narratives on the policy problem being targeted (Howlett et al., 2009). An effective praxis should draw on these diverse disciplines to address the wicked problems posed by emerging technologies, such as AI (Head & Alford, 2015). All these disciplines provide a non-redundant but insufficient role in shaping the AI policy discussions in the Public Policy curriculum. Public Policy, as an interdisciplinary field, provides the necessary platform to address these diverse domains and their interactions, especially in the higher education sector. However, acknowledging and addressing the diverse disciplines in AI policy discussions is challenging at times due to competing factors, such as job-specific skill requirements, faculty expertise, prevailing and persistent institutional schools of thought, and so on.

With AI policy learning and curriculum, there is a second challenge due to the diverse sectoral applications of AI, each requiring sector-specific expertise to decipher the underlying risks and regulatory challenges (Pillai & Matus, 2020). This also raises the question of whether AI policy education should be generalist or delve deeper into sectoral depth, a challenge exacerbated by the multidisciplinary nature of the student community, as in postgraduate policy education.

These discussions require exploratory research, including the extent to which AI and its risks and challenges should be taught as distinct constructs in public policy education, acknowledging the different contributing disciplines, and discussing pedagogical design for skill development that is generalist and/or develops the needed in-depth sectoral expertise. From an explanatory lens, the discussions can focus on identifying diverse factors, such as career requirements, themes of the academic/ non-academic conferences, faculty expertise, and other resource constraints, that can impact curriculum design and pedagogical decisions, preventing a multidisciplinary praxis from manifesting in the Public Policy education domain.

In this panel, I expect both explanatory and exploratory research, quantitative and qualitative, both empirical and theoretical, that can rely on secondary or primary data to address the challenges outlined above.

References:

Head, B. W., & Alford, J. (2015). Wicked problems: Implications for public policy and management. Administration & Society, 47(6), 711–739.

Howlett, M., Ramesh, M., & Perl, A. (2009). Studying public policy: Policy cycles and policy subsystems (Vol. 3). Oxford university press Oxford.

Perrow, C. (2011). Normal accidents: Living with high risk technologies-Updated edition. Princeton university press.

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