

Innovative Ideas and Academic Realpolitik: Building Global Competence Development into a European University Alliance

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Abstract— This work-in-progress innovative paper outlines the development of a recently adopted policy on multilingualism and multiculturalism to enhance global competence in engineering education within one of the first European University Alliances (EUA), comprising nine universities from nine European Union countries. The policy represents a creative and ambitious response to not only the call to embed such competencies in curricula but also to invite all stakeholders in the alliance to become agents of change in order to leverage existing linguistic and cultural assets in all their work. In terms of content, the policy builds on and extends a rich foundation of established scholarship on the development of intercultural, plurilingual, and global competence in engineering education and fills a gap in current educational practice by operationalizing these concepts in the context of a EUA.

Applying complex systems theory, the paper describes how the policy’s development, endorsement, and planned implementation reveal the complex interactions among multiple stakeholders within the EUA’s organizational ecosystem and its constituent institutions. By highlighting the policy’s potential to catalyze adaptive change and foster resilience within the system, as well as to inspire actors outside the Alliance, the policy not only addresses immediate educational needs but also anticipates the challenges of engineering education and practice in a world characterized by cultural and linguistic diversity, and confronts a reality in which such diversity is not universally celebrated as a beneficial resource, despite the European Union’s motto of “united in diversity.” The policy is further supported by an innovative guide for implementation, offering practical activities for individual growth, collaborative engagement, and community enhancement, embodying the policy’s comprehensive approach to fostering global competence through multilingualism and multiculturalism.

While the content of the policy is well aligned with the explicit goals of the Alliance and the broader European Union project ethos of which the EUAs are a part, the policy is deliberately general in its description of its agenda to allow for flexibility in responding to the different local contexts, challenges, resources, and priorities of the Alliance’s partner universities, none of which have a policy as ambitious as that of the Alliance. While the policy is closely linked to and must be seen in the context of the emergence and partly unpredictable future development of the Alliance, the built-in non-linearity of its implementation makes it vulnerable to factors at play within the Alliance that could effectively nullify the implementation of the policy or reinforce negative feedback loops that serve to maintain the status quo at partner universities. While the trajectory of the policy demonstrates the importance of initiatives at both the individual

and group levels, the realization of the policy and its prescribed practices ultimately depends on political decisions within the Alliance and within the educational leadership of the European Union, where an agreed vision for the future of EUAs has yet to crystallize.

Keywords: *Global competence, multilingualism, multiculturalism, European University Alliances, educational policy implementation*

I. INTRODUCTION

A. The European context

This paper presents the development and recently initiated implementation of a “Policy on Multilingualism and Multiculturalism” within a European University Alliance. In order to contextualize the policy, a brief overview of recent developments in the educational landscape of the European Union is necessary.

The European Commission’s concept of a European Education Area (EEA), launched in 2020 with the goal of being established by 2025, embodies a vision to transform higher education across Europe. It aims to promote an inclusive and high quality education system characterized by increased mobility, enriched learning environments that foster both civic and professional skills, and increased educational resilience [1].

Within this still-emerging framework, European University Alliances (EUAs), first publicly proposed by French President Macron in the fall of 2017, are intended to serve as a vehicle for realizing some of these ambitious goals. These transnational consortia aim to integrate higher education across borders, facilitating seamless mobility of students and staff while fostering collaborative innovation, as a logical step to deepen the internal integration of the EU’s education landscape, with the natural inclusion of multilingualism [2].

In 2019, the European Commission launched the first 17 European University alliances, incorporating over 100 higher education institutions from across Europe. This initiative expanded in 2020 to include 41 alliances, encompassing more than 280 institutions from 27 EU member states, along with partners from Iceland, Norway, Serbia, Turkey, and the United Kingdom. While seeking to build the European Education Area and boost the EU’s global competitiveness by addressing key economic, societal, and environmental challenges, it also aims

to promote “European values”, champion multilingualism and strengthen European identity, reflecting the EU’s motto “united in diversity.”

The motivation for universities to join these alliances varies, influenced by different perceptions of the initiative’s importance and the varied challenges and opportunities it presents. In engineering education, which positions itself at the nexus of basic and applied research, there is a critical focus on producing graduates equipped to address major global challenges and work in culturally diverse environments. This need aligns with the increasing expectation for engineering graduates to possess intercultural or global competencies [3, 4].

Universities often seek to use internationalization to enhance global competence among students. The European University Alliances, along with other Erasmus programs, support this through both student and staff mobility, but aim to go beyond regular internationalization by constructing transnational virtual campuses, with the potential long-term objective of establishing “real” European universities from the alliances.

B. The Alliance

The alliance in focus for this paper, here called “the Alliance,” was one of the first 17 EUAs formed in 2019. It consisted in its first phase (2019-22) of seven universities with a history of previous collaboration, and was enlarged by two more universities in the second phase (2022-27). This alliance, with partner universities in Germany, Finland, France, Sweden, Italy, Portugal, Spain, Austria and Poland, aims to be a leading model in technology and engineering education, focusing on innovation and addressing the United Nation’s Sustainable Development Goals through the twin green and digital transitions, which is also one of the six core dimensions of the European Education Area. To successfully work towards this goal, the Alliance from the start identified the linguistically and culturally diverse community it formed as an asset upon which the project hinged.

The significance of multilingualism and multiculturalism in higher education is recognized for having the potential to help develop cognitive flexibility and cultural empathy, thereby fostering an inclusive academic environment that contributes to broader societal cohesion. These elements are particularly relevant for the EUAs, where diverse cultural and linguistic backgrounds are the norm rather than the exception, offering a rich tapestry of perspectives that can greatly enrich the educational experience [5].

C. Problem of matching rhetoric and reality

Despite the visionary objectives of the EEA, the EUAs, and the linguistic and cultural diversity of the Alliance, there remain persistent gaps in the actual implementation of multilingualism and multiculturalism policies within European engineering education. Traditionally, technical universities have had limited the emphasis on language and cultural competences, perceiving these skills as peripheral compared to technical expertise [6]. Such an oversight is problematic as it aggravates the challenges in developing global competence, leaving students underprepared to thrive in diverse professional environments.

These might be problems serious enough at individual universities, but the problem grows in complexity when several

institutions are collaborating across national borders. During the first phase of the Alliance, the group informally known as “the M&M team,” tasked with addressing issues of multilingualism and multiculturalism, increasingly felt frustrated. They perceived a significant gap between the ambitious rhetoric of multilingualism and multiculturalism outlined in the project’s proposal and plan, and the reality where problems like the aforementioned, together with a lack of resources and mandate, severely hindered their efforts [7].

D. Research objectives and contribution

The European Education Area and its European Universities are recent, but potentially very significant, developments well worth studying in their own rights, but the focus in this paper is on their potential for a more effective transformation of educational practice in the area of global competence through a case study of the Alliance and its Policy on Multilingualism and Multiculturalism. This is done by outlining the development, endorsement and planned implementation of the policy, analyzing the potential impact of the policy in bridging the existing gap between rhetoric and practice within European engineering education, and finally assessing the potential of such a policy to serve as a model for other EUAs and for the general landscape of higher education.

While the call for integrating global competence into engineering education has been longstanding, it remains insufficiently met [8, 9, 10]. The Alliance’s policy, though specifically within a European framework, may also offer broader insights relevant to advancing global competence in engineering education globally.

Regardless of the ultimate success of the policy’s implementation, the process and model developed for integrating multilingualism and multiculturalism into engineering education provide valuable insights. These efforts exemplify a robust framework for enhancing global competence, serving as a foundational model that can guide similar initiatives. The study of this policy is an interesting case in educational policy development and implementation across a complex trans-European network, enriching the discourse and literature on educational transformation and policy studies.

II. METHODOLOGY

Complex systems theory elucidates the multifaceted, dynamic interactions inherent in educational policy implementation. Policies within such frameworks are adaptive, shaped by and shaping the environments in which they are enacted, involving multiple stakeholders and feedback loops that can either stabilize or transform educational systems. This theory applies well to the multifaceted ecosystems of EUAs, where multiple layers of interaction at various scales dictate the success and adaptability of educational policies [6].

This study employs a qualitative participatory action research methodology, with the author being one of the main drivers behind the policy in focus. Action research is well suited to exploring complex educational systems where the researcher’s active participation can drive substantial insights into policy dynamics. The choice of action research, a methodology characterized by its iterative cycling through planning, action, observation and reflection phases, is further justified by its potential to integrate empirical inquiry with

practical policy engagement, fostering an environment where educational changes are simultaneously developed and assessed, while being responsive to the nuanced needs of a diverse educational consortium [11, 8, 12].

III. INNOVATIVE PRACTICE, DEVELOPMENT AND IMPLEMENTATION

E. A policy wished for

An explicit frustration over the gap between rhetoric and reality in the first phase of the Alliance led the M&M team to successfully advocate for the introduction of a comprehensive policy for the second phase, designed to be much more ambitious in scope than the more commonly found language policies. The idea was that the Alliance's "Policy on Multilingualism and Multiculturalism" should strategically address experienced challenges by presenting a comprehensive framework to support global competence development across all its member universities.

During the policy's drafting phase, in the winter and spring of 2023, parts of the M&M team engaged in an iterative process of refinement and external validation, incorporating feedback from a broad spectrum of stakeholders including the Alliance's participants, language and culture experts, teachers, researchers, administrators, and students.

F. Content of the Policy

The Policy on Multilingualism and Multiculturalism, formally adopted in the fall of 2023, represents a significant shift towards a more inclusive and integrative educational approach where the purpose of multilingualism and multiculturalism is explicitly to foster the ability to understand, communicate, and work effectively and appropriately with people from different backgrounds to address global challenges, in the policy called global competence. The policy details several strategic directions:

Commitment to global competence development: By emphasizing the importance of global competence and the multifaceted and non-essentialistic nature of cultural identities, the policy aims to equip graduates with the necessary skills to tackle global challenges effectively. This commitment not only enhances the educational quality but also aligns with the broader objectives of the European Education Area.

Language use and functional multilingualism: The policy promotes a shift from the dominance of English to embracing the linguistic diversity present within the alliance. This move towards functional multilingualism aims to maximize inclusivity and leverage the linguistic richness of member institutions, thus enhancing communication and mutual understanding across diverse cultural backgrounds.

Integration into educational, administrative, and research activities: The policy mandates the integration of multilingualism, multiculturalism, and global competence education into all aspects of the educational provision, research activities, and daily operations. This comprehensive integration ensures that these critical elements are not peripheral but central to the academic and professional development of students and staff.

Monitoring and evaluation: To ensure the effective implementation and sustainability of the policy, a robust

monitoring and evaluation framework must be established, facilitating ongoing assessment based on stakeholder feedback, enabling continuous improvement and adaptation of the policy to meet emerging needs and challenges.

G. A Guide to implementation

Because the language of the policy (a one-page document) is potentially abstract and opaque to readers unfamiliar with the subject, a subgroup of the M&M team drafted an implementation guide in the spring of 2024. After a brief summary of the policy's main points, the bulk of the guide is dedicated to "strategies for good practice," divided into four sections. The first three sections focus on what individuals can do on their own (personal development), with others (collaborative engagement), and for others (community enhancement). The first two sections are intended for everyone, while the community enhancement section includes specific subsections for students, teachers, researchers, and administrative and support staff, providing more targeted content. Finally, there is a section offering general suggestions for management. Below are some examples from the different sections.

Personal development: Focus on your individual learning and growth in language, culture, and global awareness. Building on transformational learning theory, the guide encourages individuals to proactively engage in learning more languages and gaining an understanding of culture starting with their own. It has three subheadings, each with some elaboration, examples and explanations: Stay curious and open-minded; Strengthen your competences; Take advantage of existing opportunities; Apply your language and cultural competence in everyday life.

Collaborative engagement: The guide advocates for the formation of inclusive environments with diverse teams to work on joint projects that enhance multilingual and multicultural engagement. This collaborative approach for individual gain is designed to foster intercultural exchange and learning, enriching the academic and social experience within the alliance and has two subheadings: Benefit from a diverse, welcoming and inclusive environment; Benefit from multilingual and multicultural engagement.

Community enhancement: The guide provides concrete and targeted recommendations (for students, for teachers, for researchers, and for administrative and support staff) for enhancing the linguistic and cultural competence of the academic community. All groups are also encouraged to see it as a shared responsibility to welcome newcomers by providing insights to help them understand and navigate the local academic, linguistic and cultural environment, and to document and share good practices.

Strategies for management: At the institutional level, the guide highlights the need for attracting diverse students and staff, emphasizes the need for supporting and enabling language learning, comprehensive internationalization, and global competence training. It also promotes an inclusive campus culture through initiatives such as Internationalisation at Home, collaborative grass-root projects that reflect the Alliance's commitment to diversity and inclusion, and community outreach programs.

IV. THE ROAD AHEAD

H. Current challenges and foreseeable obstacles

The Policy is designed to be a tool for change, and several challenges lie ahead that need to be reckoned with.

Resource disparities: Variations in funding and infrastructure across universities profoundly impact the availability of language and cultural programs. This discrepancy not only affects the quality of education but also the inclusivity and diversity within the educational framework. Within the Alliance, there were at least three different systems for funding (or not) of language studies, and a spread from required language learning to a lack of opportunities to study.

Resistance to change: Educational institutions and practices are notoriously difficult to change. In as much as a “sense of urgency” is needed to start a successful change process, the urgency within the Alliance is primarily connected to the deliverables in the project plan, with little or no interest in making the changes have too much impact on local practices [13, 14].

Perceived irrelevance of language and culture training: In many technical universities, there is a prevailing belief that multilingualism and multiculturalism are peripheral to the core curriculum, with the “hard sciences” seen as strangely decultured [15]. Within the Alliance, concerns related to language were quite diverse and sometimes nearly opposite. At some institutions, the dominance of English over the national language was seen as a major problem, while at others, the lack of English proficiency was more pressing. Additionally, one of the partner universities faced a significant issue with balancing the regional language against the national language.

Lack of incentives: Faculty members often lack sufficient motivation or incentives to participate in global competence training or to incorporate intercultural learning into their courses. Without institutional recognition or rewards for such efforts, these initiatives are not prioritized, perpetuating a cycle of minimal engagement with the policy’s objectives. Again, economy is often a convenient argument for not investing in recognizing linguistic and cultural learning.

Lack of strategic alignment: When existing, educational policies frequently failed to align robustly with the EEA’s goals, nor did they sufficiently incentivize the integration of global competence into core curricula, underscoring a significant misalignment between policy intentions and educational practices. This misalignment, or lack of alignment, was also obvious when comparing the Alliance with its constituting partner universities.

Organizational silos: The structural separation of departments within universities can impede interdisciplinary collaboration. Language and culture centers, which do not exist as such at all the partner universities, are often somewhat isolated from technical departments, restricting the integration of global competence education into the engineering curricula. This organizational siloing not only diminishes the potential impact of comprehensive educational reforms but also complicates the implementation of cohesive policies that span multiple academic and administrative areas.

The silo structure is also present in the Alliance project organization itself, with different groups working on parallel

tracks with limited time to communicate, despite regular transversal meetings. Indeed, one of the issues the policy sought to address was the need for a common - and shareable - view of multilingualism and multiculturalism, but the policy implementation team still has limited time to check in with all groups and gauge their understanding.

Language and cultural barriers: Despite the policy’s emphasis on enhancing linguistic diversity and cultural understanding, several barriers persist that can stifle these efforts, especially the dominance of English, the common language of the Alliance. English is the lingua franca within some parts of the alliance’s institutions, and almost always within the Alliance, which can discourage the active use and development of other languages. This dominance can undermine efforts to promote functional multilingualism and may inadvertently perpetuate a monolingual mindset, contrary to the Policy’s, and the EU’s, goals.

Cultural stereotyping and biases: Cultural stereotypes and biases continue to challenge the creation of a genuinely inclusive and understanding educational environment. Misunderstandings and simplifications of complex cultural identities can lead to tensions and a lack of genuine multicultural integration. Addressing these issues requires more than policy changes; it necessitates a shift in the cultural attitudes and perceptions of all members of the university community, from administrative staff to students [13].

These challenges are intertwined and reinforce one another, creating a complex environment in which implementing a comprehensive policy becomes a process requiring both nuanced strategies and persistent effort. Addressing these obstacles effectively is, however, crucial for achieving the ambitious goals set forth by the policy and for fostering an educational environment that truly values and utilizes the benefits of multilingualism and multiculturalism [16].

I. Critical questions and broader impact

The implementation of the Policy on Multilingualism and Multiculturalism raises several critical questions that probe both the depth of its integration and the breadth of its impact within the Alliance and potentially beyond.

1) Will the policy be fully implemented?

Sustained commitment from partner universities: The diverse nature of the alliance, encompassing institutions with different levels of resources, priorities, and administrative structures, poses significant challenges. The central question is whether all partner universities will not only commit to but also actively integrate the policy’s objectives into their strategic plans and everyday practices when it comes to Alliance activities. This commitment is crucial for the policy to transcend being a formal agreement and become a transformative element of institutional culture.

Monitoring and evaluation: Effective monitoring and evaluation are vital to ensure that the policy does not stagnate. The alliance must develop robust mechanisms to track the policy’s implementation progress across different contexts and to assess its impact. This involves not only quantitative metrics, but also qualitative assessments of student and faculty depth of intercultural interactions and learning.

Overcoming resistance: Resistance to change is a significant barrier. Determining the most effective strategies to encourage and facilitate change, particularly in institutions where language and cultural training may be viewed as peripheral, is critical. There must be incentives for faculty to integrate global competence into their curricula, administrative support for multilingual program development, and targeted communication that highlight the benefits of enhanced multilingual and multicultural competencies.

2) *Could the Policy influence broader practices?*

One of the policy's ambitions is to embed global competence development deeply into the heart of engineering education, rather than relegating it to elective status. Achieving this, while in itself hardly a new idea, would mark a substantial shift in how technical education is de facto conducted. A first test for the policy would be its ability to alter the foundational structures of both the Alliance's and its partners' curricula and everyday practices, making them more attuned to multilingual and multicultural elements.

Collaborative learning models: The policy emphasizes collaborative learning and interdisciplinary projects as methods to enhance educational outcomes. This focus invites inquiry into whether such models can become a standard practice across the partner universities, influencing pedagogical approaches and potentially leading to a broader shift in educational paradigms within their technical fields.

3) *Policy diffusion and institutional change*

Role of networks in policy diffusion: As a temporarily institutionalized co-creation involving multiple universities, the Alliance is well positioned to act as a conduit for the diffusion of best practices in multilingual and multicultural education. This network effect can amplify the impact of the policy, potentially setting a precedent also for other educational networks and alliances [16, 17].

For the policy to effect meaningful change, it must overcome entrenched practices and organizational inertia. This includes addressing resource disparities, dismantling organizational silos, and shifting institutional cultures towards more inclusive and globally oriented perspectives. The literature on policy diffusion and institutional change suggests that such transformations require sustained efforts and the alignment of policy goals with institutional incentives and rewards [5, 18].

These critical areas of inquiry not only shape the current implementation efforts of the Policy but also set the stage for its future evolution and potential as a model for similar initiatives in other educational contexts. Understanding and addressing these questions is essential for realizing the full potential of the policy in fostering a truly global and inclusive educational environment.

V. THE FUTURE

While the design of the Policy and the guide to its implementation can themselves be considered innovative and concrete steps toward addressing global competence development in engineering education through leveraging multilingualism and multiculturalism, only through the implementation of the Policy, scheduled for the coming years,

will we know how much of its potential will be realized. A successful implementation could give us a usable blueprint for higher education transformation, especially but not exclusively in the context of EUAs, but a failure, for whatever reason and on whatever level, could also be informative and help us avoid the many pitfalls when developing new ways of improving and developing higher education.

In the final analysis, it should also be noted that the political nature not only of the Policy, but also the Alliance, the European University Alliance initiative, and the European Education Area, means that the future may well be influenced by forces beyond the control of the educational institutions involved, including changes in political priorities, shifts in governmental policies, and fluctuations in international relations. For better or for worse, we live in exciting times.

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