

"Catalyst: Transforming and Shaping Education Together"

Technology and Innovation Network


International Council for Open and Distance Education

Collaborative Team Project 2025



ICDE TIN Goal 1: Leading through uncertainty - Care, Curiosity, Challenge

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ABSTRACT

This research, conducted for the International Council for Open and Distance Education (ICDE) and its Technology and Innovation Network (TIN) during Spring 2025, examined the "Three Cs" approach – Care, Curiosity, and Challenge – as essential elements of inclusive, scalable, and sustainable leadership in higher education. It aligns with the ICDE Strategic Plan (2025–2028) and the UN UNESCO Agenda 2030 Sustainable Development Goals, particularly Goals 4 and 17. The study aimed to equip leaders with resilience, agility, and adaptability to navigate uncertainty. A survey methodology assessed how higher education leaders are responding to uncertainty and complexity in contemporary educational contexts, culminating in a presentation of the findings at ICDWC25 in New Zealand in November 2025. The study identified five key themes: (i) AI transformation and digital opportunities, (ii) people-centred and value-driven leadership, (iii) proactive shaping of change, (iv) challenges beyond technology, and (v) collaboration and shared leadership. The implications and calls to action were threefold: (i) reframing leadership, (ii) the Three Cs – Care, Curiosity, and Challenge, and (iii) leading for the future. By fostering glocal, human-centred leadership, institutions can navigate uncertainty with purpose and shape a more equitable and sustainable digital future.

BACKGROUND

- Where did the idea come from?
- What research and resources informed the project development?

In an unpredictable global landscape, leaders face increasing challenges that demand ethical, transparent, and adaptive approaches. This project idea originated at a workshop during the International Council for Open and Distance Education (ICDE) Leadership Summit in Geneva in June 2024, where the current Leader for Goal 1 participated and presented the topic as a potential goal for the Technology and Innovation Network's (TIN) upcoming work. At the same time, ICDE was developing its new strategy for 2025–2028, focusing on inclusive, scalable, and sustainable education for all, and leading with a culture of care, curiosity, and challenge. The Leader for Goal 1, who was a Board member at that time, believed it would be beneficial to conduct research that also supported the new strategy. When the call was announced, she proposed this goal and presented an initial pitch at one of the TIN meetings in 2024. Members were invited to vote on suggestions and join the approved goals. The four approved goals are presented in Figure 1.

Tangible - Ingenious - Noticeable (TIN collaborations)

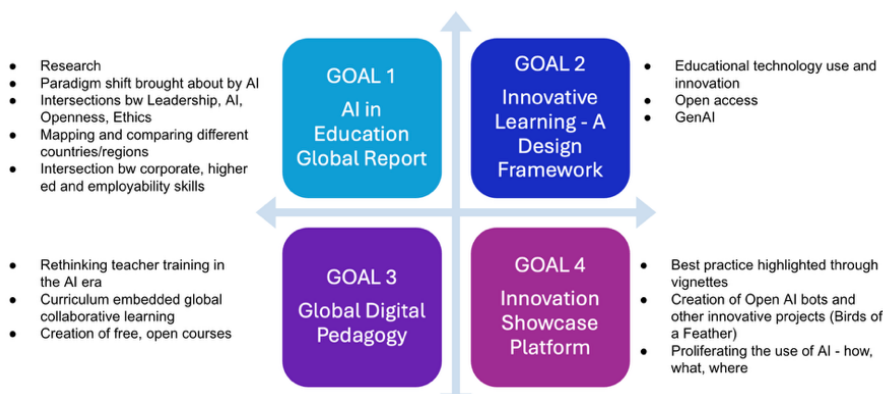


Fig. 1. The four approved ICDE TIN goals

The research began with a literature review, using criteria defined by the scoping review of Mak and Thomas (2022). References were analyzed both manually and with specialized AI tools; specifically, ICDE TIN Goal 1: Leading through uncertainty - Care, Curiosity, Challenge 2026 February, 20

NotebookLM was used for thematic synthesis and organization, while Scite.ai was used to verify citation reliability and analyze the context of supporting or contrasting evidence. This study used a qualitative descriptive research design within an interpretive framework. It explored how higher education leaders conceptualize and enact leadership during times of uncertainty. Drawing on ICDE's Three Cs framework – Care, Curiosity, and Challenge – the research examined leadership priorities, values, and practices as expressed in survey responses. The study aligned with the UN UNESCO Agenda 2030 Sustainable Development Goals, particularly Goals 4 and 17.

While the survey included some closed-ended questions to collect demographic data, its primary focus was on detailed open-text responses. These responses were thematically analyzed to identify recurring patterns and insights related to leadership in uncertain times. The interpretive lens provided a deeper understanding of how leaders navigate evolving educational environments and situated participant perspectives within broader discussions of educational change and leadership theory. ICDE provided an ethical Letter of Support for this research project, "Leading Through Uncertainty: The Three Cs Approach to Inclusive, Scalable, and Sustainable Leadership in Higher Education," and supported outreach to members to obtain responses. Thirty-three leaders from 23 countries participated, with respondents from all six regions (see Figure 2). The analyses were based on Braun and Clarke's reflexive thematic analysis, and AI tools such as Notebook LM were used for initial clustering and then verified manually.

Geographic Location: In which country or region do you work?

33 responses

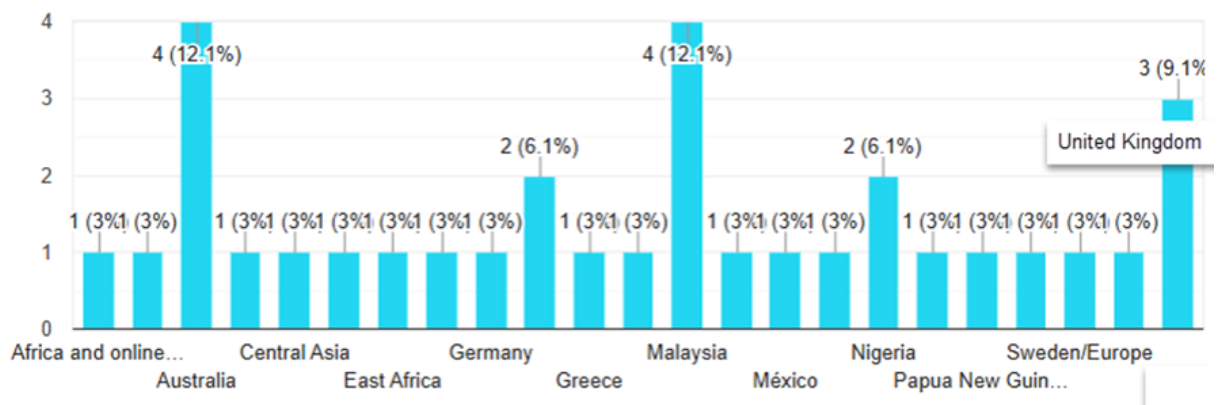


Fig. 2. Data overview. Geographical location of participants.

DESCRIPTION

Use these points as a guideline:

- What is the project about?
- Why was it attempted?
- What did you create?
- Who is the intended audience and who will benefit?
- What has been created, written etc.? What format is this in?
- Comment on current status of the project - is it complete and ready to share globally?
- How was it shared with the intended audience (or how would you like it to be shared/disseminated?)

Project Overview and Rationale (What and Why)

This project examines the "Three Cs" framework – Care, Curiosity, and Challenge – as the core pillars of leadership that foster inclusivity, scalability, and sustainability in higher education. In an era marked by radical uncertainty, including the COVID-19 pandemic, climate crises, and the rapid rise ICDE TIN Goal 1: Leading through uncertainty - Care, Curiosity, Challenge 2026 February, 20

of Generative AI, this study aims to equip global education leaders with the resilience and agility to navigate change. Grounded in the ICDE Strategic Plan 2025–2028 and the UN Sustainable Development Goals (SDG 4 and 17), the research seeks to move beyond traditional leadership paradigms toward a values-based, glocalized, and inclusive model.

The research collected practical insights from global leaders, primarily within the ICDE TIN community, resulting in a conference paper for ICDWC25 to share the findings. The original plan included producing a white paper and a series of video narratives to present findings and real-world examples from diverse global contexts. These outputs would support international leadership development initiatives, enhance cross-institutional collaboration, and advance ICDE's mission to promote equitable, future-focused education worldwide. However, during the first phase of the project, the focus was on the paper and conference presentation to assess audience responses, with plans to complete phase two later. We are now entering phase two, aiming to transform our findings into a practical 'Leadership Toolkit' for global scalability.

The literature review identified Care, Curiosity, and Challenge as essential for leadership success in dynamic environments. Survey results from the TIN community demonstrated how these principles are applied worldwide to address glocalisation (global, regional, and local challenges) and drive innovation in education.

The Three Cs framework bridges theory and practice, enabling leaders to foster resilience and adaptability. Its emphasis on inclusivity and openness aligns with sustainable educational goals, though challenges remain in scaling these practices across diverse contexts. Special attention is given to how the 'Care' element supports staff well-being and institutional sustainability. By proposing the Three Cs leadership framework, the study addresses critical issues such as educational equity, digital inclusion, and ethical leadership in the context of generative AI and global uncertainty (OECD, 2025). Together, these contributions support a strategic, values-driven approach to advancing sustainable and scalable leadership in education (European Commission, 2024).

Recommendations included incorporating the framework into leadership training, promoting cross-institutional collaboration, and conducting further research on implementation barriers.

This work demonstrates a strong commitment to collaboration across borders and sectors, aiming to co-create leadership models that are adaptable, forward-thinking, and rooted in shared values.

1. The research aimed to address the challenges leaders encounter when leading amid uncertainty. Uncertainty can take many forms; for example, the COVID-19 pandemic posed large-scale challenges for educators and leaders. It became clear worldwide that leaders and institutions prepared to face uncertainty with resilience, agility, trust, and innovation performed better than those who were not. The importance of well-being and care for students and staff also increased, and leaders who prioritized these achieved greater trust, comfort, and commitment. Other forms of uncertainty include new technologies, such as the introduction of AI in November 2022, which created significant uncertainty. Additional crises include wars and the challenge of sustaining education during such times. Uncertainty can also result from climate crises and unforeseen climate damages such as floods and fires.

During the project, the team conducted an in-depth literature review to establish the study's conceptual foundation, using agreed-upon research criteria as outlined in the methodology's

scoping review. The analyses were conducted manually, and NotebookLM was used for the internal thematic synthesis of our review, while Scite.ai was used for external validation and smart citation analysis to ensure academic rigor. The next phase involved a global survey, primarily targeting members of the ICDE Technology and Innovation Network (TIN). This survey aims to gather international perspectives on how educational leaders are applying the Three Cs in practice, particularly in advancing inclusive access, enabling scalable innovation, and promoting long-term institutional resilience across diverse educational contexts. Survey results will be presented at the ICDE World Conference in November 2025. We developed and piloted the survey, which was analyzed using both an AI tool and manual methods. This review examined how the Three Cs intersect with established leadership paradigms, such as transformational, inclusive, and distributed leadership, and how they support more inclusive, scalable, and sustainable educational practices in open, digital, and flexible learning environments.

The outcome was the submission of a proposal for ICDEWC25. After it was approved as a research paper, we prepared the paper, as well as the speech and presentation slides for the conference. The research has also been presented at other conferences, such as ICODL 2025 in Greece, which was organized by one of our authors. The results were also shared as a podcast.

A qualitative survey was conducted via the ICDE Technology and Innovation Network (TIN) for Goal 1: Leading Through Uncertainty. Figure 3 below presents survey results on the leadership qualities most valued by respondents navigating change in uncertain environments.

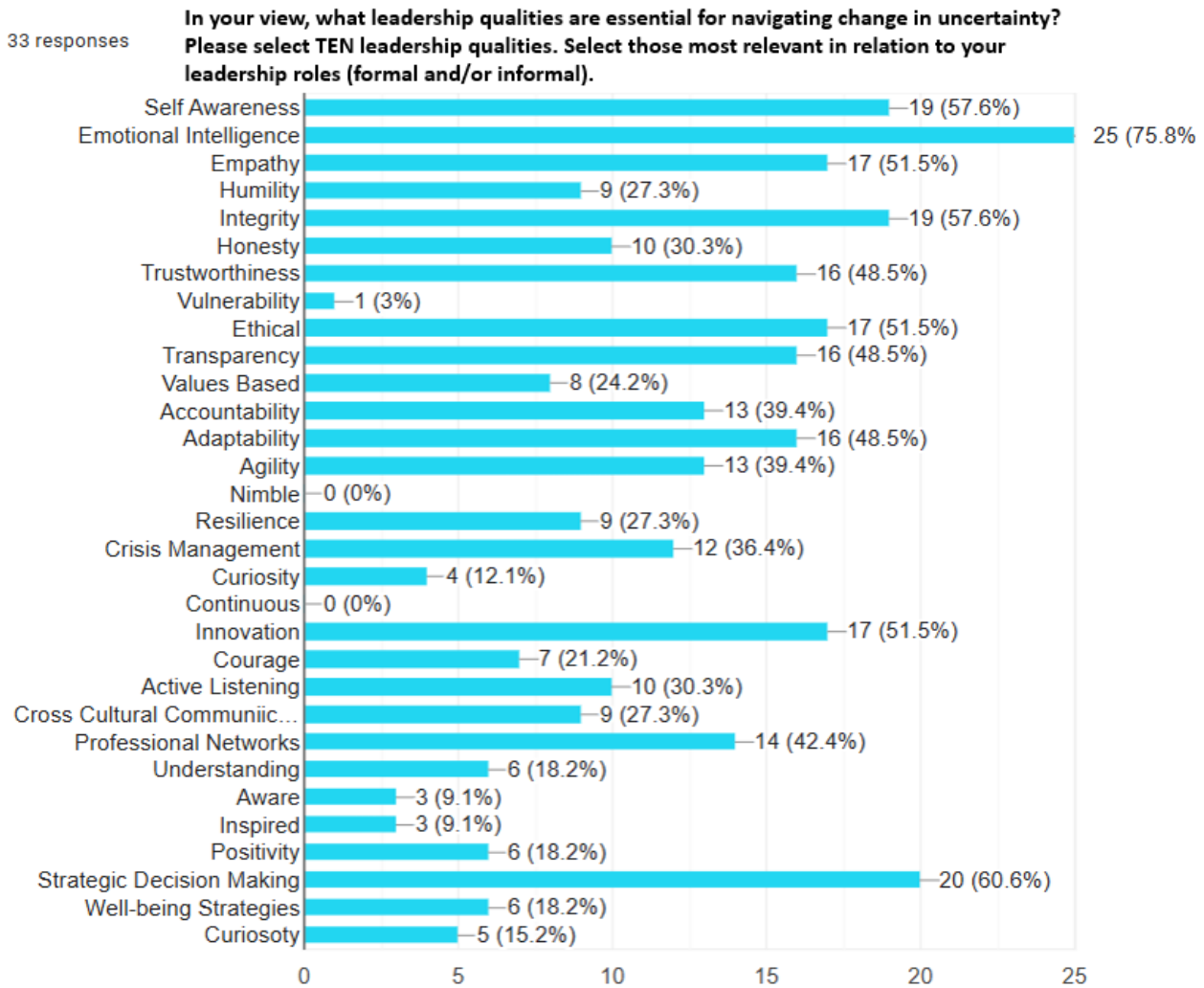


Fig. 3. Survey results on the leadership qualities most valued by respondents navigating change in uncertain environments.

The study identified five key themes (see also Figure 4):

- AI Transformation and Digital Opportunity – AI has moved from experimental to mainstream; leaders must balance innovation and ethics.
- People-Centred, Value-Driven Leadership – Care and integrity are essential for building trust and inclusivity.
- Proactive Shaping of Change – Curiosity drives foresight, experimentation, and continuous learning.
- Challenges Beyond Technology – Funding, resistance, and governance barriers require courageous action.
- Collaboration and Shared Leadership – Empowering teams and glocal partnerships ensures scalability and sustainability.

Five Key Themes

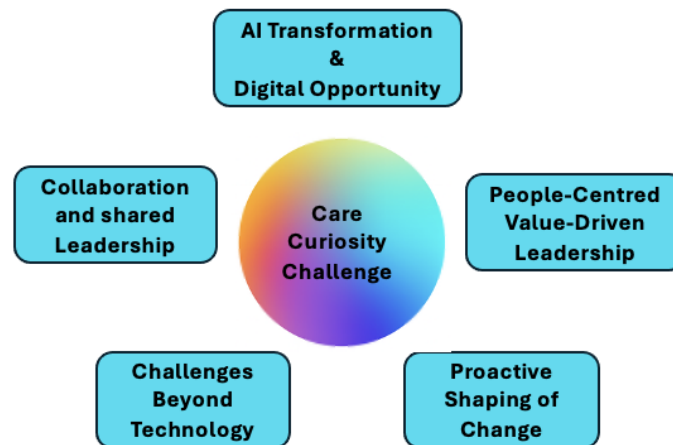


Fig. 4. The findings from the research study identified five key themes.

The findings from the research study identified implications and called for three actions:

- **Reframing Leadership:** Effective leadership in higher education must move beyond traditional models to meet the demands of an AI-enabled, globally connected world.
- **The Three Cs – Care, Curiosity, and Challenge:** Scalable and sustainable leadership is rooted in empathy, ethical integrity, and emotional intelligence, fostering inclusion, innovation, and courage.
- **Leading for the Future:** By cultivating glocal, human-centred leadership, institutions can navigate uncertainty with purpose and shape a more equitable and sustainable digital future.

2. This research examined the “Three Cs” framework – Care, Curiosity, and Challenge – as essential foundations for leadership that foster inclusivity, scalability, and sustainability in higher education. Grounded in the ICDE Strategic Plan 2025–2028, the project aimed to provide global education leaders with strategies to develop resilient, values-based responses to uncertainty and transformation. The targeted audiences are leaders at all levels, including both senior and middle management. The study aimed to equip leaders with resilience, agility, and adaptability to navigate uncertainty.

3. The current status of this research project is that the first phase has been completed, resulting in a paper, a presentation at ICDEWC25 in New Zealand, and a report for the pre-workshop on ICDE TIN. From the outset, the project aimed to produce a white paper and a series of video narratives to disseminate findings and real-world examples from diverse global contexts. These outputs are intended to contribute to international leadership development initiatives, strengthen cross-institutional collaboration, and support ICDE’s mission to advance equitable, future-focused education globally. The second phase, which will likely include a white paper for leaders, is under consideration and may take place in the coming year.

4. The results have been disseminated to various audiences and venues, including the main target, ICDEWC25, as well as ICDE TIN Meetings and the ICODL25 conference. See more below.

EVALUATION

- Comment on the process you went through developing the project - did you achieve what you intended?
- Share other project evaluation data, if any. Have you shared this with anyone? Presented at a conference? Collected feedback (official or narrative)

The working process was very interesting and involved extensive learning, discussion, reading, piloting, meetings, editing, and reaching final agreements. It is worth noting, as is often the case in many communities and groups, that many colleagues expressed interest in joining from the beginning, and the group was much larger at first. However, we agreed early on to commitments and criteria for authorship recognition. Later, likely as a result, the group became smaller as colleagues realised the workload and commitments required. This was not just a group for associating one's name, but a true joint working group requiring dedicated effort and commitment. In any case, we felt this was fair, as those who were committed and contributed to the work should be recognised and valued.

From the beginning, we established our working platform in Trello (see Figure 5) and set up a shared folder in Google Drive (see Figure 6). We held regular online meetings and used email and WhatsApp as additional communication channels. During this period, we regularly participated in and presented our work at the large ICDE TIN Community online meetings.

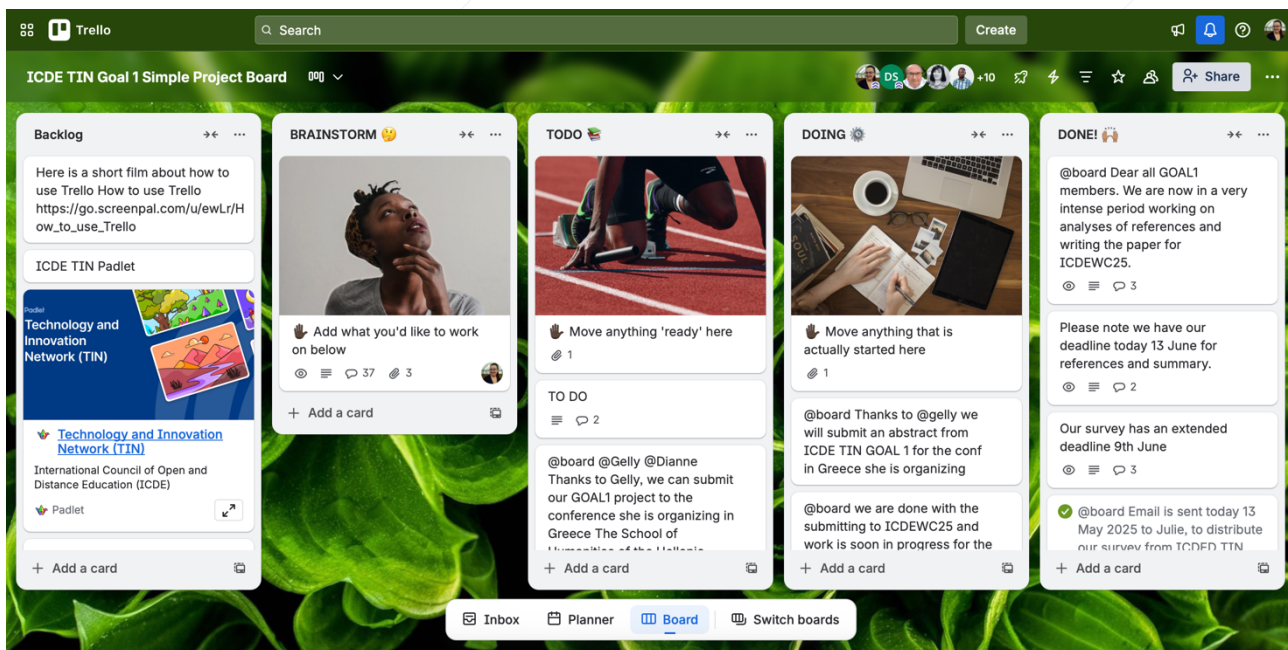


Fig. 5. Our joint communication platform in Trello GOAL 1

Min enhet > ICDE TIN GOAL1 2025

Typ Personer Ändrad den Källa

Namn	Ägare	Ändringsdatum	Filstorlek
Dissemination	jag	12 mars 2025	—
ICDE Strategy 2025-2028	jag	12 mars 2025	—
ICDE TIN info	jag	24 mars 2025	—
Meetings 2025	jag	12 mars 2025	—
Research Leading through uncertainty	jag	2 maj 2025	—

Fig. 6. ICDE TIN Goal1 joint folder in Google Drive GOAL1


We achieved our goals, at least in the first phase, culminating at ICDEWC25.

The work has been shared at conferences such as ICDEWC25 and ICODL25, see Figures 7 and 8.

Leading through Uncertainty: The Three Cs Approach to Inclusive, Scalable and Sustainable Leadership in Higher Education

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ABSTRACT

As global landscapes continue to evolve, leaders, organisations, and individuals are increasingly confronted with challenges in navigating uncertainty. Exploring the intersections of leadership, ethics, openness, and emerging trends, this research highlights the Three Cs of Care, Curiosity, and Challenge as essential components of effective leadership in higher education amid an unpredictable world. These principles, central to the ICDE Strategic Plan for 2025-2028, are integral to developing leadership practices that foster resilience, agility and adaptability.

This research will support leaders navigating uncertainty while embodying core values of inclusivity and openness to foster transformative change. A comprehensive literature review will explore the key strengths of effective leadership and how they align with Care, Curiosity, and Challenge, demonstrating their role in fostering success in complex, rapidly changing environments.

Emphasising inclusion, sustainability, and scalability in leadership, this research aligns with the values that ICDE champions in promoting equitable access to education. Insights from the Technology and Innovation Network community will highlight how leaders worldwide are adapting to change and integrating the Three Cs into practice.

Ultimately, this research aims to provide practical guidance through a white paper and video

Fig. 7. ICDE TIN Goal 1 paper submission for ICDEWC25



Fig. 8. Goal 1 presentation at ICDEWC25

The feedback received during ICDEWC25 and ICODL25 was overwhelmingly positive, especially regarding the practical applicability of the 'Three Cs' in diverse cultural contexts. Informal discussions with attendees highlighted a growing need for values-based leadership models amid AI-driven uncertainty. Narrative feedback from participants indicated that our framework provides a 'human-centric' anchor often missing from purely technological discussions about the future of education.

FUTURE FORWARD

- What is your expectation of the impact of this project?
- What suggestions do you have for extending the life of this project? Does it need updating every year? Every 2 years?
- Could another project be built from this one as an extension in 2026? In other words, what do you suggest for further research and collaboration in the future?

1. The intention was to highlight the demands of leading through uncertainty, especially regarding the new ICDE Strategy, where a culture of care, curiosity, and challenge is central to inclusive, scalable, and sustainable education and aligns with the SDGs, particularly SDG 4 and SDG 17.

2. We aimed to conduct phase two with a white paper, which may need updating and a "BEST BEFORE DATE," likely every two years.

3. In 2026, we plan to build on phase one of the project and begin phase two, which will include a white paper and possibly narratives.

Impact and Vision: Our primary expectation is that the "Three Cs" framework will serve as a strategic guide for higher education leaders navigating the complexities of the digital age. By proposing the Three Cs leadership framework, the study addresses critical elements such as educational equity and ethical leadership in the context of generative AI, aligning with the European Commission's (2024) ethical guidelines for the use of AI and data in education. By moving beyond ICDE TIN Goal 1: Leading through uncertainty - Care, Curiosity, Challenge 2026 February, 20

crisis management toward a proactive culture of Care, Curiosity, and Challenge, we anticipate a significant shift in how institutional resilience is developed. This project directly supports SDG 4 (Quality Education) and SDG 17 (Partnerships) by providing a glocalized roadmap that ensures no student or staff member is left behind during technological or social upheavals. We expect that as leaders adopt these values, there will be increased digital inclusion and more ethical, human-centric implementations of generative AI.

Sustainability and Lifecycle: To keep the project relevant, we propose a biennial update cycle. Given the rapid pace of technological change, especially in AI, a "Best Before Date" of two years is appropriate for our strategic recommendations. This timeframe allows the framework to be tested in real-world scenarios while providing flexibility to incorporate emerging trends. Regular updates every two years will ensure that the "Three Cs" remain aligned with the evolving ICDE Strategy and the changing global educational landscape.

The 2026 Horizon: Phase Two and Beyond

Looking ahead to 2026, we envision a strong expansion of this work. While Phase One established the conceptual foundation and gathered initial community feedback, Phase Two will focus on producing tangible results. Our goals for 2026 include:

The White Paper: A comprehensive strategic document that translates our research into actionable policy recommendations.

Video Narratives: Showcasing diverse, real-world stories of leadership from global contexts to provide narrative-based learning for the ICDE community.

The Leadership Toolkit: Building on our successful hybrid methodology, we propose further research into integrating AI-assisted workflows (using tools such as NotebookLM and Scite.ai) into leadership training to reduce administrative burden and increase research rigor.

Further collaboration in 2026 could take the form of an Erasmus+ KA220 or a larger-scale partnership, using this small-scale project as a successful pilot. We aim to build a global Community of Practice where the Three Cs are not just research topics, but lived institutional values.

ACKNOWLEDGMENTS

The authors thank the International Council for Open and Distance Education (ICDE) for the Letter of Support for the research project "Leading Through Uncertainty: The Three Cs Approach to Inclusive, Scalable, and Sustainable Leadership in Higher Education" and for supporting outreach to members to obtain responses. The authors also thank the ICDE Technology and Innovation Network (TIN) for the opportunity to conduct this research. The authors thank the respondents of this study. The authors acknowledge the use of Scite.ai for citation analysis and academic source verification, and NotebookLM for the structural organization and synthesis of the research notes. These tools were used to enhance research rigor and linguistic clarity, while the conceptual framework and final analysis were conducted solely by the authors

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