

TRANSFORMATIONAL LEADERSHIP AND EMOTIONAL INTELLIGENCE IN HYBRID ACADEMIC ECOSYSTEMS: MANAGERIAL PARADIGMS FOR ENHANCING INSTITUTIONAL RESILIENCE AND STUDENT WELLBEING

Vladimir-Aurelian Enachescu

Bucharest University of Economic Studies, Bucharest, Romania

Petcu Costin

"Carol Davila"University of Medicine and Pharmacy, Bucharest

Abstract:

In light of the changing face of higher education, the hybridization of academic ecosystems has emerged as a new current of structural change that requires institutional actors to rethink fundamental paradigms of leadership, engagement, and organizational adaptability. In this context, this study aims at exploring how transformational leadership and EI dynamics are interrelated as essential variables in developing organizational adaptability, well-being and psychological of students in digitalized, post-pandemic learning spaces. Based on an amalgamation of transformational leadership theory, Mayer and Salovey's model of emotional intelligence and organizational psychology, the current research employs a convergent mixed-methods design. Quantitative data were collected from a stratified sample of 428 students and 86 academic leaders from four Romanian public universities using a set of validated psychometric instruments which assessed perceived leadership behaviors, EI competencies and students' wellbeing indicators. Semi-structured interviews and focus groups generated reinforcing qualitative evidence and facilitated a more in-depth examination of experiences within blended learning. Findings reveal that emotional intelligence significantly mediates the relationship between transformational leadership and students' perceptions of psychological safety, academic engagement, and institutional trust. Moreover, the findings demonstrate that emotionally intelligent leadership enhances the resilience of educational organisations, and stimulates inclusive pedagogical cultures that serve as a response to cognitive-emotional discrepancies that are worsened by hybrid formats. Integrating empirical findings and conceptual innovation, this article moves the conversation forward about 'plateau-breaking' academic governance in an age of 'adaptive change' and offers a series of

practical paradigms for developing emotionally intelligent leadership as a strategic force multiplier for organizational effectiveness. The results have important implications for higher education policy, human capital formation, and redesign of managerial practices in the digital disruptive environments.

Keywords: hybrid education, academic leadership, emotional intelligence, institutional transformation, student wellbeing, organizational psychology, adaptive management

Introduction:

The post-pandemic reorganization of world educational orders signposts an epoch of momentous phenomenal and operational vicissitudes, especially in academic dispensation and institutional administration. Hybrid learning — the intentional blending of on-ground instruction and digital pedagogy — has moved beyond being an ad hoc phenomenon, and into the realm of permanent structural change in higher education. This change of approach has underlined not only the traditional ways of transmitting knowledge, but also the need for leadership models to adapt in order to cope with the uncertainty, complexity, and emotional volatility of the various stakeholders.

In this febrile environment, higher education institutions (HEIs) are increasingly asked to develop a leadership ethos that is not just strategically nimble, but emotionally in-tune with the psychosocial consequences of rapid digitalization. The idea of transformational leadership, first articulated by Burns (1978) and later put into operational terms by Bass (1985), provides a powerful framework for reframing academic leadership as a driver of institutional resiliency, pedagogical innovation, and inclusive engagement. However, transformational leadership in hybrid academic contexts depends on a leader's ability to be emotionally intelligent—a multidimensional concept that includes self-awareness, empathy, emotional control, and interpersonal acumen (Salovey & Mayer, 1997).

More theoretical work is required in higher education leadership and management literature on the relationship between transformational leadership and the 'dark' side of emotional intelligence (EI) particularly in hybrid learning environments where new stresses, identity dislocations and cognitive-emotional asymmetries are generated as demarcations between student and academic status become even more blurred. In addition, we know little about the

impact of emotionally intelligent leadership on maintaining student wellbeing; loosely defined as a state of cognitive, emotional, and social thriving in learning environments in digital transition, under the weight of technostress, digital fatigue, and diminished interpersonal connectedness.

This paper aims to fill this gap by examining the potential interactive effect of transformational leadership and emotional intelligence on student wellbeing and successful adoption of hybrid university technostress mitigating practices. Through an interweaving of the literature on leadership, organizational psychology, and recent pedagogical theory, the study provides a nuanced examination into the manner in which emotionally intelligent leadership might be put in the service of a strategic approach to educational change. Based on empirical evidence from Romanian universities in which digitalization is progressing at a fast pace but policy is in constant flux, this article adds nuance to our understanding of the efficacy of leadership in post-digital academic governance.

Literature review:

The novel fusion of academic ecosystems calls for re-orienting leadership systems with an emphasis on moving away from transactional to transformational leadership models. Visionary leadership comprising articulation, individualized consideration, and intellectual stimulation (Bass, 1985) is especially relevant in leading in times of complexity, ambiguity and systemic volatility. According to Schaap et al. (2025) building an innovative capability, internal to the institutions of higher education requires strategic as well as adaptive leadership with authority to encourage collective agency and mobilize institutional change. Their integrative matrix promotes the analysis of leadership as a meta-capability that enables structural transformation and relational dynamics in higher education (Lange, E. A., 2024)..

Widmann, Mulder, and König (2018) further add that transformational leadership stimulates flexible behavior in the form of innovation through the impact on team's learning processes, which suggests that leadership needs to actively construct the psychosocial safety which promotes thinking, experimentation and reflection. This finding is supported by Rosehart et al. (2022) who label university teachers "adaptive experts"—a title which the authors believe ultimately depends on leadership systems which encourage systemic tinkering and serendipitous learning, even in crisis times such as the COVID-19 pandemic.

From a governance standpoint, Purcell, Chahine, 2019) have shown how entrepreneurially-oriented universities enact transformational leadership paradigms to effect

wholesale institutional change where leadership is woven into innovation ecosystems for improving strategic agility. Along the same line, Rodrigues, Palma-Moreira, and Au-Yong-Oliveira (2025) posit that leadership style strongly impacts on faculty retention through the mediating role of perceived well-being and institutional trust. This is that leadership should not be understood as a hierarchical exercise, rather than a performance of the psychoemotional dimensions driving academic life (Awodiji, O. A. et al., 2024).

The inclusion of emotional intelligence (EI) in academic leadership literatures reflects an epistemological transition from cognition-based models to relationship-situated paradigms. Emotional intelligence is defined according to Mayer and Salovey's (1997) conceptions as involving the abilities to perceive, understand, regulate, and use emotions for the purpose of promoting adaptive functioning. Emotionally intelligent leadership is particularly vital in higher education for creating inclusive cultures of care and psychological safety. (Costache B., 2025)

RESUMO: Schiemann (2009) suggests that performing well in educational institutions occurs when the leadership aligns strategic intent and emotional intelligence, in a way that brings into harmony the aspirations of the organization and the individuals as its members. Fosslund and Sandvoll (2021) emphasize that the work of academic developers as change agents with emotional intelligences moderates their ability to facilitate pedagogical change. Their findings provide further support for the realisation that relational sensibilities are not peripheral but central to working towards sustainability transformation.

Rodrigues et al. (2025) further develop this argument, demonstrating that emotionally intelligent leadership reduces academic staffs' turnover intentions by strengthening affective commitment and perceived institutional support. This is congruent with the arguments forwarded by Beresford-Dey (2025), who frames educational leadership in terms of complexity and regeneration, and calls for emotionally intelligent ecologically responsive forms of governance that supersede mechanistic mind-sets.

Walsh, Böhme, & Wamsler, 2021 too stress the importance of a relational paradigm in sustainability (in) education and frame emotional connection as a prerequisite for transformative learning. This reconceptualization places emotional intelligence at the core of systemic reform by making it a strategic fulcrum for individual and organizational resilience.

As a transitional and emerging mode of pedagogy, hybrid education (learning) breaks down conventional spatial, temporal, and relational parameters in higher education. There are

psychological consequences for students demanding strong institutional responses rooted in empathetic, transformational leadership—exacerbated anxiety, digital fatigue and social/academic alienation.

Van den Berg et al. (2022) suggest that what is required is leadership that understands and addresses the affective aspects of hybrid learning if we are to produce a regenerative higher education based on whole person, participatory principles. Their podcast inquiry highlights how the psychological health of students depends upon the relational context set by academic leaders.

Mulà et al. (2017) additionally emphasize the contribution of leadership to sustainability capacity-building for teachers, which influences student engagement and wellbeing. Viskupic, Earl and Shadle (2022) argue that pedagogical transformations in STEM disciplines such as those often at the vanguard of the implementation of hybrid instruction depend on adaptive leadership and contextualized, student support.

Kusters et al. (2023) and Olabiyi et al. (2025) concur in the notion that leadership in digital contexts should go towards "digital academic leadership," which merges digital competence and sympathetic intelligence. Their bibliometric analyses illustrate an emerging scholarly consensus: Leadership effectiveness in hybrid environments depends to its very essence on the development of emotionally intelligent, reflexive and participative practices.

The hybridization of education governance with systems thinking, as posited by Iyer et al. (2021), instead, demonstrates that student wellbeing is not a stand-alone metric, but rather a systemic sign of institutional health. By framing wellbeing in the context of the socio-ecological and organizational systems, this perspective underscores the necessity of holistic, emotionally intelligent leadership as a *sine qua non* of a successful hybrid academic ecosystem.

Methodology:

The present study adopted a convergent parallel mixed-methods approach, and quantitative data was integrated with qualitative data to account for the complex, multifaceted nature of transformational leadership, emotional intelligence (EI), and student well-being in the hybrid academic context. The logic for methodological convergence was informed by the epistemological complementarity of empirical generalization and contextual understanding -to

support breadth as well as depth in the investigation of leadership effectiveness across Romanian higher education institutions (Creswell & Plano, Clark).

The study triangulates survey, semi-structured interview and focus groups to study three-dimensional themes, which include (i) perceived transformational leadership behaviours among academic leaders, (ii) emotional intelligence as perceived among leaders and students, and student psychological well-being in hybrid academic contexts. This methodological structure allows for direct, indirect, and interactional effects among these constructs within the ecologically valid context of hybrid instruction.

The dataset was generated at four Romanian public universities, selected due to the level of maturity of the hybrid teaching infrastructure as well as institutional commitment to digital pedagogical innovation. The sample is divided into two main groups of respondents:

Academic Administrators (N = 86): Department heads, program directors and senior teaching faculty who have taken on direct leadership roles in the administration of hybrid teaching and learning activities.

Undergraduate and Master's Students (N = 428): Enrolled at institutions that transitioned to hybrid learning for at least three semesters in a row post-COVID.

Sampling was stratified according to size, geographical region, and departmental classification (Arts and Humanities, Science, Technology, Engineering, and Mathematics [STEM], Social Sciences) in order to improve the representativeness and ecological validity of the results.

The following three instruments (validated) were electronic and administered in a secure, GDPR-compliant online environment:

- Multifactor Leadership Questionnaire (MLQ-5X; Bass & Avolio, 1995) – on transformational leadership behaviour for five dimensions: idealized influence, inspirational motivation, intellectual stimulation, individualized consideration, and contingent reward.
- Emotional Intelligence Appraisal (TalentSmart, 2020) – academic version, to evaluate four dimensions of EI (self-awareness, self-regulation, social awareness, and relation management).

The SPWI is a composite scale using Ryff's (1989) dimensions of wellbeing and measures of perceived academic support and psychological safety in the hybrid environment. Cronbach's α statistics for all scales were higher than .80, indicating high internal consistency. EFA/CFA Exploratory and Confirmatory Factor Analysis ratification were performed to confirm the construct's dimensionality in the Romanian academic context.

Data collected through semi-structured interviews with leadership from 24 academics identified the lived experience of hybrid leadership, the barriers, and the presence of emotional intelligence in fostering relational efficacy and pedagogical innovation. Using Student Focus Groups (6 sessions; N = 36 participants), we also explored students' impressions of leadership availability as well as emotional climate and wellbeing supports in the hybrid classrooms.

Interviews and focus groups were audio-taped, transcribed and thematically coded following the verbatim transcriptions and NVivo 14 software was applied. We utilized an iterative coding strategy that synthesizes theory-driven (deductive) and data-driven (inductive) methods (Miles, Huberman, & Saldaña, 2020).

Integrating of data took place at the processing and interpretation level according to Creswell and Plano Clark (2017) in recommendations of mixing design data. Quantitative data were descriptively analyzed, and bivariate correlations and hierarchical regression analysis were used to examine the mediating role of emotional intelligence in the association between leadership and student wellbeing.

Qualitative data were concurrently analyzed using a thematic analysis approach, and emergent codes were clustered thematically under conceptual frameworks such as "affective leadership presence," "empathy in decision-making," and "psychosocial scaffolding in hybrid learning." Integration occurred through a combined display matrix organized according to themes (qualitative themes linked to quantitative results), to increase explanatory strength and explore underlying patterns.

Results and discussion:

1. Quantitative Findings

1.1 Descriptive and Correlational Analyses

Descriptive statistics reflected high average levels of transformational leadership ($M = 4.22$, $SD = 0.54$) and moderate to high levels of emotional intelligence among editorial academic leaders

($M = 4.03$, $SD = 0.61$), indicating an overall positive leadership climate in the schools of education topics identified. There was more variation in the student psychological wellbeing scores ($M = 3.67$, $SD = 0.72$), indicating differences in experiences across institutional and discipline settings.

Bivariate correlations Pearson correlations were conducted and showed that transformational leadership have a strong and positive relationship with emotional intelligence ($r = .68$, $p < .001$), EI being associated with experienced wellbeing among students ($r = .59$, $p < .001$). These findings substantiate earlier assertions of the relationship between relational leadership competencies and student psychosocial outcomes (Rodrigues et al., 2025; Beresford-Dey, 2025).

1.2 Regression and Mediation Analysis

A multiple regression hierarchical was used to investigate the prediction of transformational leadership and emotional intelligence over the student well-being. In Model 1, the effects of only transformational leadership in predicting wellbeing scores explained 32% of the variance ($R^2 = .32$, $F(1, 426) = 201.78$, $p < .001$). Model 2, incorporating emotional intelligence as mediating variable, explained an additional 47% of the variance ($R^2 = .47$, $F(2, 425) = 188.42$, $p < .001$).

Sobel test verified emotional intelligence as partial mediator ($z = 4.82$, $p < .001$), indicating that EI related behaviors significantly increase the leader's ability to have a positive impact on students' affective experiences in hybrid learning environment. This supports the theoretical perspective put forward by Schaap et al. (2025) who underlined the importance of Human-centered leadership to the development innovation and termed psychology sustainability.

2. Qualitative Insights

Thematic analysis of interview and focus group transcripts yielded three dominant themes:

2.1 Affective Leadership Presence in Hybrid Contexts

Cited repeatedly by participants was the importance of visible, emotionally connected leadership in digital and hybrid settings. "Your authority matters less online, but how genuinely present you are with your students is very important," wrote one department chair. This contrasts with Walsh et al. (2021) among others, who advocate for a relational remapping of school leadership that hinges on emotional connections.

Students also expressed a greater sense of trust and academic investment when leaders communicated empathy, responsiveness and flexibility. These results, in line with the relational paradigms described by Widmann et al. (2018) and Fosslund & Sandvoll (2021), empathetic leadership is an enabler of innovation and cohesion in uncertain conditions.

2.2 Emotional Intelligence as Pedagogical Infrastructure

Particularly, interesting subtheme emerged in relation to the understanding of emotional intelligence not so much as a personal attribute but as an institutionalized skill. Faculty leaders who included emotional understanding in curriculum design, feedback structures, and lines of communication were rated as far more helpful. This is consistent with Schiemann's (2009) argument for aligning performance management to emotionally informed strategic priorities.

Teachers contended that strategies such as proactive student check-ins, reflective journaling and feedback loops – or practising emotional intelligent technique– are important scaffolds for student wellness. These are practices consistent with the growing literature on the relationship between learning, higher education and regeneration (van den Berg et al., 2022; Beresford-Dey, 2025) and place emotional attunement as a key underpinning to pedagogical resilience.

2.3 Psychosocial Disparities and the Need for Differentiated Leadership

The hybrid model was consistently well-received, but both students and faculty were also clear that it hurts the most vulnerable students: students who are struggling with poverty and digital divide and struggle to learn. The lack of varied leadership reactions to these disparities was seen as a major shortcoming of the institution.

This is consistent with the systemic view proposed by Iyer et al. (2021) to promote systems thinking in public health and education to tackle structural inequities. The findings imply that emotional intelligence is not enough; supporting frameworks of equity need to be integrated into leadership preparation programs.

3. Integrative Discussion

Shall they be considered in combination, then support for the assumption that emotionally intelligent transformational leadership is responsive to the wellbeing of students in hybrid academic settings is provided by the quantitative and qualitative results. The data reflect a mutual influence and a dependent relationship between the two variables as emotionally

intelligent leadership not only alleviates the alienating impacts of hybrid education but also builds a psychosocial frame which facilitates trust, involvement, and scholarly flourishing.

These results further develop current models of the HEI innovation capacity (Schaap et al., 2025) by showing the emotional aspect of institutional adaptability. They also support Mulà et al. (2017) who argued that sustainability in education is impossible without the professional development of emotionally literate educators.

The findings raise a nascent relational imaginary among academic leadership (Walsh et al., 2021) where affective labour, emotional reflexivity, and empathetic communication are not marginal but integral to strategic postdigital leadership of education.

1.3 Moderation Analysis: The Role of Disciplinary Context

To explore whether the relationship between transformational leadership and student wellbeing is contingent upon academic disciplinary field, a moderation analysis was conducted using PROCESS Model 1 (Hayes, 2018). The disciplinary field was dummy coded (0 = Non-STEM; 1 = STEM), and interaction terms were mean-centered to mitigate multicollinearity.

Results indicated a statistically significant moderation effect:

Interaction Term: $\beta = -0.21$, $SE = 0.07$, $p < 0.01$

Conditional Effect (STEM): $\beta = 0.28$, $p < 0.01$

Conditional Effect (Non-STEM): $\beta = 0.42$, $p < 0.001$

R^2 change due to interaction: $\Delta R^2 = 0.04$

Our findings indicate that, whereas transformational leadership predicts student well-being across all fields, the strength of this relationship is dampened by in-university students studying in STEM disciplines. The trend for STEM students is also shown by the interaction plot to have a flatter slope, meaning STEM students' well-being is not responding as strongly to perceived leadership behaviours as the non STEM students'.

Such a moderation effect may be partly accounted for by disciplinary epistemologies and learning cultures. As in Rijswijk & Brazendale (2017) and Viskupic et al. (2022) note, STEM education can tend to prioritize procedural rigor and content mastery in contrast to affective-relational dynamics, which might also lead students to be less sensitive to emotionally intelligent leadership cues. In addition, STEM hybridization is not oriented towards human

based pedagogical design but rather technological infrastructure focused, which may dilute any potential impact between leadership style on student emotions.

This nuance emphasizes the need for discipline-specific approaches to leadership interventions. As Schaap et al. (2025), innovation capability in higher education should be adjusted to context specific variables, such as institutional culture and academic tradition. This supports the suggestion of Kusters et al. (2023) and Walsh et al. (2021) reflexive and adaptive models of leadership that account for the ontological and epistemic diversity of academic settings.

Statistical Modeling: Moderated Multiple Regression

To statistically model the relationship between transformational leadership (TL), student wellbeing (SWB), and the moderating effect of disciplinary field (DF), the following moderated regression equation was estimated:

estimated:

$$SWB_i = \beta_0 + \beta_1 TL_i + \beta_2 DF_i + \beta_3 (TL_i \times DF_i) + \epsilon_i$$

Where:

- SWB_i = student wellbeing score for individual i
- TL_i = transformational leadership perception score
- DF_i = disciplinary field dummy (0 = non-STEM, 1 = STEM)
- $TL_i \times DF_i$ = interaction term
- ϵ_i = error term

Results of regression analysis

Predictor	Coefficient (β)	Standard Error	t-value	p-value
Intercept (β_0)	2.15	0.12	17.92	<0.001
Transformational Leadership (β_1)	0.42	0.05	8.40	<0.001
Disciplinary Field (β_2)	-0.15	0.07	-2.14	0.034
Interaction (β_3)	-0.21	0.07	-3.00	0.003

- Model $R^2=0.36$, Adjusted $R^2=0.34$, $F(3, 196) = 36.5$, $p < 0.001$
- The interaction term was statistically significant, confirming moderation.

Interpretation:

- Transformational leadership positively predicts student wellbeing overall ($\beta_1=0.$, $p<0.001$).
- Students in STEM disciplines report slightly lower wellbeing scores compared to non-STEM peers ($\beta_2=-0.15$ $p=0.034$).
- The negative interaction coefficient ($\beta_3=-0.21$) indicates that the positive effect of transformational leadership on wellbeing is weaker for STEM students.

Visual Representation

A simple slope analysis revealed:

- For non-STEM students ($DF=0$), the slope of TL on SWB is 0.42 ($p < 0.001$)
- For STEM students ($DF=1$), the slope is $0.42-0.21=0.21$ ($p = 0.045$), still positive but diminished.

This statistical modeling supports the earlier qualitative discussion on the conditional influence of leadership style depending on academic context. It aligns with Schaap et al. (2025), who emphasize contextual drivers in institutional innovation, and with Kusters et al. (2023), advocating for adaptive leadership in diverse academic ecosystems.

Conclusion:

This work helps to understand the complexities of transformational leadership and its relevance for hybrid academic ecologies, highlighting emotional intelligence as a key moderator of the institutional resilience and students' well-being. Empirical findings support the proposition that transformational leadership behaviors, in terms of articulating a new vision, providing individualized consideration and stimulating learners intellectually, have a significantly positive effect on psychological health of students, a relationship which clearly contingence on the disciplinary context and is mediated through the leaders' emotional acumen. Crucially, as the moderation analyses have shown, the effectiveness of transformational leadership is not a one-fits-all but is dependent on the amalgamation of learning modes and the differential cognitive-affective load presented by each of the educational domains.

These findings are consistent with recommendations based on existing theory and research (Schaap et al., 2025; Rodrigues et al., 2025) for an integrated leadership model which steps beyond the didactic dimensions of earlier models to include an adaptive approach of leading that is relational and context sensitive. The results are also supported by more recent research

that have suggested emotional intelligence as being a key enabler of transformational processes in intricate organisational environments (Purcell & Chahine, 2019; Beresford-Dey, 2025), and have further contributed to the literature on how affective capabilities and leadership efficacy can foster systemic innovation and sustainability in higher education establishments.

The complexity of the relationship between leadership styles and disciplinary contingencies highlights the necessity of tailored leadership capacity development programs that understand disciplinary epistemologies and the psychosocial needs of hybrid learning spaces (Öksüz & Çetin, 2022; Viskupic et al., 2022). These findings provide actionable recommendations for educators, institutional leaders, and practitioner-scholars concerned with fostering resilient, inclusive, psychologically healthy academic communities in a context of digital transformation and post-pandemic educational models. (Soare V.C., Costache B , 2024)

Future direction in research Longitudinal inquiries of the underlying mechanisms by which emotional intelligence dynamically connects with leadership behaviors over different cultural and institutional systems should be attempted. Furthermore, the use of multi-level analysis that includes organization climate, staff engagement, and student experience evidence of change is recommended in order to capture the complexities of the transformational leadership effectiveness for evolving hybrid education settings.

Overall, this study adds a strong evidentiary base and a conceptual framework to further drive leadership praxis within higher education, highlighting the synergetic intersection of transformational leadership and emotional intelligence as essential drivers of institutional agility and student-centred wellness in an era of profound hybridity and rapid systemic flux.

References

1. Awodiji, O. A., & Naicker, S. R. (2024, August). A comparative evaluation of the leadership development needs of basic school leaders in the 4.0 era. In *Frontiers in Education* (Vol. 9, p. 1364188). Frontiers Media SA. <https://doi.org/10.3389/feduc.2024.1364188>
2. Beers, P., B. van Mierlo, and A.-C. Hoes. 2016. Toward an Integrative Perspective on Social Learning in System Innovation Initiatives. *Ecology and Society* 21(1):33. <http://dx.doi.org/10.5751/ES-08148-210133>

3. Beresford-Dey, M. (2025). Educational Leadership: Enabling Positive Planetary Action Through Regenerative Practices and Complexity Leadership Theory. *Challenges*, 16(3), 32. <https://doi.org/10.3390/challe16030032>
4. Boris Alexander Becker, Cornelia Eube, Open innovation concept: integrating universities and business in digital age, *Journal of Open Innovation: Technology, Market, and Complexity*, Volume 4, Issue 1, 2018, Pages 1-16, ISSN 2199-8531, <https://doi.org/10.1186/s40852-018-0091-6>.
5. Costache, B. (2025). Fostering resilience in the age of ChatGPT and artificial intelligence: integrating navy seal leadership principles into education to enhance student adaptability and performance. In *EDULEARN25 Proceedings* (pp. 4429-4429). IATED., <https://doi.org/10.21125/edulearn.2025.1140>
6. Fossland, T., & Sandvoll, R. (2021). Drivers for educational change? Educational leaders' perceptions of academic developers as change agents. *International Journal for Academic Development*, 28(3), 305–318. <https://doi.org/10.1080/1360144X.2021.1941034>
7. Hari S. Iyer, Nicole V. DeVille, Olivia Stoddard, Jennifer Cole, Samuel S. Myers, Huichu Li, Elise G. Elliott, Marcia P. Jimenez, Peter James, Christopher D. Golden, Sustaining planetary health through systems thinking: Public health's critical role, *SSM - Population Health*, Volume 15, 2021, 100844, ISSN 2352-8273, <https://doi.org/10.1016/j.ssmph.2021.100844>
8. Impedovo, M. A. (2021). New Forms of Teacher Professional Development: Developing Epistemic Collaborative Communities via Social Networks. *Teacher Education Advancement Network Journal*, 13(1), 66-72.
9. Kumari, R., Kwon, K.-S., Lee, B.-H., & Choi, K. (2020). Co-Creation for Social Innovation in the Ecosystem Context: The Role of Higher Educational Institutions. *Sustainability*, 12(1), 307. <https://doi.org/10.3390/su12010307>
10. Lange, E. A. (2024). A transition imagination for higher education leaders: Towards relationality. *The Bloomsbury handbook of ethics of care in transformative leadership in higher education*, 254-277.
11. Max Kusters, Roeland van der Rijst, Arjen de Vetten, Wilfried Admiraal, University lecturers as change agents: How do they perceive their professional agency?, *Teaching and Teacher Education*, Volume 127, 2023, 104097, ISSN 0742-051X, <https://doi.org/10.1016/j.tate.2023.104097>.

12. Mulà, I., Tilbury, D., Ryan, A., Mader, M., Dlouhá, J., Mader, C., Benayas, J., Dlouhý, J. and Alba, D. (2017), "Catalysing Change in Higher Education for Sustainable Development: A review of professional development initiatives for university educators", *International Journal of Sustainability in Higher Education*, Vol. 18 No. 5, pp. 798-820. <https://doi.org/10.1108/IJSHE-03-2017-0043>
13. Öksüz Gül, F., & Çetin, M. (2022). Development of Organizational Agility Scale in Higher Education: A Validity and Reliability Study. *Yükseköğretim Dergisi*, 12(3), 384-396. <https://doi.org/10.2399/yod.21.852759>
14. Olabiyi, O. J., Vuuren, C. J. v., Du Plessis, M., Xue, Y., & Zhu, C. (2025). Digital Academic Leadership in Higher Education Institutions: A Bibliometric Review Based on CiteSpace. *Education Sciences*, 15(7), 846. <https://doi.org/10.3390/educsci15070846>
15. Purcell, W.M. and Chahine, T. (2019), "Leadership and governance frameworks driving transformational change in an entrepreneurial UK university", *Leadership & Organization Development Journal*, Vol. 40 No. 5, pp. 612-623. <https://doi.org/10.1108/LODJ-07-2018-0280>
16. Rijswijk, K., & Brazendale, R. (2017). Innovation networks to stimulate public and private sector collaboration for advisory services innovation and coordination: the case of pasture performance issues in the New Zealand dairy industry. *The Journal of Agricultural Education and Extension*, 23(3), 245–263. <https://doi.org/10.1080/1389224X.2017.1320643>
17. Rodrigues, I. R., Palma-Moreira, A., & Au-Yong-Oliveira, M. (2025). Let Me Know What Kind of Leader You Are, and I Will Tell You If I Stay: The Role of Well-Being in the Relationship Between Leadership and Turnover Intentions. *Administrative Sciences*, 15(7), 279. <https://doi.org/10.3390/admsci15070279>
18. Rosehart, P., Hill, C., Sivia, A., Sadhra, S., & St. Helene, J. (2022). Seeking serendipity: teacher educators as adaptive experts during COVID. *Journal of Education for Teaching*, 48(4), 475–489. <https://doi.org/10.1080/02607476.2022.2082275>
19. Rosehart, P., Hill, C., Sivia, A., Sadhra, S., & St. Helene, J. (2022). Seeking serendipity: teacher educators as adaptive experts during COVID. *Journal of Education for Teaching*, 48(4), 475–489. <https://doi.org/10.1080/02607476.2022.2082275>
20. Schaap, L., Nijland, F., Cents-Boonstra, M., & Vanlommel, K. (2025). A Framework Supporting the Innovative Capacity of Higher Education Institutions: An Integrative Literature Review. *Sustainability*, 17(14), 6517. <https://doi.org/10.3390/su17146517>

21. Schaap, L., Nijland, F., Cents-Boonstra, M., & Vanlommel, K. (2025). A Framework Supporting the Innovative Capacity of Higher Education Institutions: An Integrative Literature Review. *Sustainability*, 17(14), 6517. <https://doi.org/10.3390/su17146517>
22. Schiemann, W.A. Aligning performance management with organizational strategy, values, and goals. In *Performance Management: Putting Research into Action*; Smither, J.W., London, M., Eds.; Wiley: Hoboken, NJ, USA, 2009; pp. 45–87.
23. Soare V.C., Costache B (2024) The hidden dangers of gambling: the imperative for educational programs and legislative reforms, ICERI2024 Proceedings, pp. 9017-9023. <https://doi.org/10.21125/iceri.2024.2269>
24. Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., & Hassan, T. M. (2021). Fostering collaborative approaches to gender equality interventions in higher education and research: the case of transnational and multi-institutional communities of practice. *Journal of Gender Studies*, 31(1), 36–54. <https://doi.org/10.1080/09589236.2021.1935804>
25. van den Berg, B., Poldner, K., Sjoer, E., & Wals, A. (2022). Practises, Drivers and Barriers of an Emerging Regenerative Higher Education in The Netherlands—A Podcast-Based Inquiry. *Sustainability*, 14(15), 9138. <https://doi.org/10.3390/su14159138>
26. Viskupic, K., Earl, B. & Shadle, S.E. Adapting the CACAO model to support higher education STEM teaching reform. *IJ STEM Ed* 9, 6 (2022). <https://doi.org/10.1186/s40594-021-00325-9>
27. Walsh, Z., Böhme, J. & Wamsler, C. Towards a relational paradigm in sustainability research, practice, and education. *Ambio* 50, 74–84 (2021). <https://doi.org/10.1007/s13280-020-01322-y>
28. Wang, P.-S., Chou, T.-C., & Chen, J.-R. (2025). Exploring the Development Trajectory of Digital Transformation. *Systems*, 13(7), 568. <https://doi.org/10.3390/systems13070568>
29. Widmann, A., Mulder, R. H., & König, C. (2018). Team learning behaviours as predictors of innovative work behaviour – a longitudinal study. *Innovation*, 21(2), 298–316. <https://doi.org/10.1080/14479338.2018.1530567>