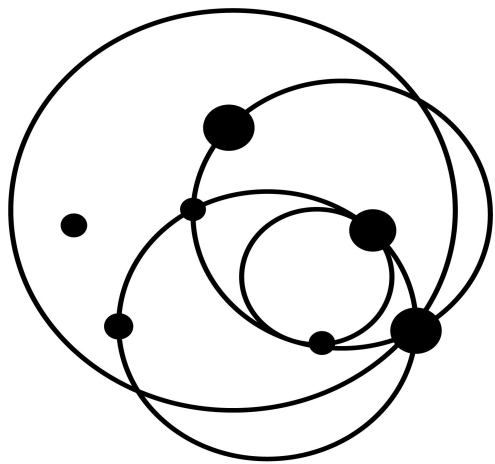


Policy Brief Extract

N°1

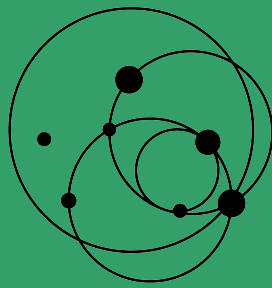


FEDORA

**Integrating futures
thinking in schools through
active interdisciplinarity
and new collaborations**
May 2022

FEDORA - Future-oriented Science EDucation to enhance
Responsibility and engagement in the society of Acceleration
and uncertainty This project received funding from the European
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This policy brief, produced in collaboration with 3 work packages,* draws on the first progressive reports elaborated during the first half of the project.

They inform about the preliminary approach to address the alignment of science teaching/learning in formal contexts, the exploration of new languages, narratives and arts and the futurisation of science education.

These findings will be revised on the basis of the results of the Delphi study.

*WP1, WP2 and WP3 of the FEDORA PROJECT

INSTITUTIONAL RECOMMENDATIONS

To foster interdisciplinarity, institutions should consider:

- **Contexts** to create “third spaces”, that is, spaces that do not belong to any disciplinary context but that are inhabited in both safe and creative ways in multiple disciplines that enhance meaningful learning.



- **Cultural change** to foster new professional identities that are based on interdisciplinarity. Structural support from policy making should be given to institutions for deconstructing the hegemony of sciences through revision of KPIs of institutional evaluation.

- **Organisational processes** to detect gaps creating paradoxes and discouraging interdisciplinarity. Human resource management practices such as recruitment and evaluation are of crucial importance to directing individuals or their groups to foster co-teaching, open schooling and collaboration between disciplines.

TEACHING AND LEARNING RECOMMENDATIONS

To enhance and support schools and teachers to explore new collaborations with artists and creative professionals, teaching and learning practices should capitalise on:

- **Fostering immersive experiences** including theatre, dramatization arts, music which can be helpful to understand complex issues such as global health, climate crisis, and the impact of technology on society.
- **Including storytelling**, a social and educational practice that predisposes to "making a memory", sharing collective experiences from learning to entertainment. Storytelling stimulates creativity and is essential for developing empathic and listening skills.
- **Prioritizing timely themes** to bridge the gap between formal and informal education and the critical issues of everyday life. Fostering critical thinking gives students the capacity to talk about contemporary challenges and tools to understand our present.



TEACHING AND LEARNING RECOMMENDATIONS

- ***Making use of traditional and digital tools*** whose roles have become even more pronounced during the COVID 19 pandemic. To sustain the importance of sociability and relationships in building knowledge, tools should be considered meaningfully.



- ***Going beyond frontal teaching*** to promote peer exchanges among students, getting students to work in inverted classes, meaning students study a subject and then teach it to their peers.

- ***Fostering inclusive practices in lessons*** taking into account capacity and difference among students to discover the richness of diversity.

CURRICULUM RECOMMENDATIONS

To enhance curriculum content, national curricula should provide opportunities for integrating futures thinking in school subjects and programs by:

- ***Clarifying the concept of futures*** in national curricula. Although existing curricula include flexibility and concepts that provide opportunities for integrating futures thinking in school subjects and programs, they are often highlighted without explicit mention of futures thinking skills.



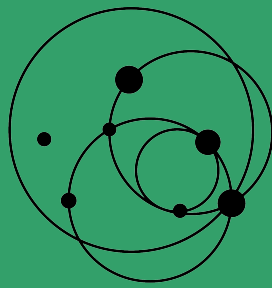
- ***Address ongoing trends or developments***, not only present-day issues. This will help the curricula to be more dynamic and open to evolve with time.

CURRICULUM RECOMMENDATIONS

- ***Addressing students' perceptions of time to help students deal with*** complex socio-scientific problems which often cause anxiety and distortions in the perception of time among students. Students tend to create “bubbles of rituals” where they can avoid dealing with otherness and uncertainty.



- ***Incorporating the five dimensions of Futures Consciousness*** in curricular aims in a balanced way. Focusing too much on the personal level of agency beliefs can result in harmful performance stress but combined with an emphasis on openness to alternatives helps seeing there is more than one future and more than one way to get there.



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