

Figure 1. Flower Model of a Whole Institution Approach adapted from Wals & Mathie (2022, p.4)

Contexts to use the activity

- □ Project development
- Institutional development
- Course development
- Collective 'living' vision tool

What is needed

- Printouts of the individual flower petals and other resources provided
- Large paper, bluetac/glue and colourful pens
- Groups between 2 and 6 people
- □ Between 1 and 3 hours (activity can be adapted to suit the timeframe)

Before the activity: Introducing the Whole Institution Approach (WIA) flower model

- ☐ This activity is a creative participatory tool for envisioning, co-developing and planning WIA-aligned sustainability-oriented education in practice.
- ☐ Familiarise yourself with the WIA framework by utilising the resources and references on P. to introduce a WIA to all the participants before starting the activity.
- ☐ If using this activity in a professional development setting involving multiple groups, end the activity with a plenary session where each group has time to share their ideas so the participants can learn from and with each other.

Considerations for the activity facilitator:

- ☐ Refine and adapt the instructions to suit your unique context
- ☐ We have provided step-by-step instructions for utilising this WIA flower activity to co-develop WIA-aligned sustainability-oriented course and projects. However, by adapting the questions slightly, the activity can be used in multiple other contexts such as:
 - 1. Institutional development: involving multiple stakeholders in envisioning and planning sustainability-related institutional and educational change.
 - 2. Group assignment: Planning and developing group projects related to sustainability
 - 3. Vision: For multiple stakeholders to be part of co-creating and envisioning a 'living and evolving' sustainable education institution.
- ☐ The length of the activity can also be adapted. For example, in a professional development course, ensure ample time for the plenum discussion, especially when there are over 10 participants. Or replace the plenum step with additional actionable planning time for interdisciplinary project or course development within a smaller team.
- ☐ On p.5 and p.6, examples of different contexts in which the activity has been practised help to visualise different ways it can be utilised.
- □ P. 8 and p.9 offer two printable flower models, one for a school setting and one suitable for broader institutional organisations such as university, college or other formal and non-formal settings.



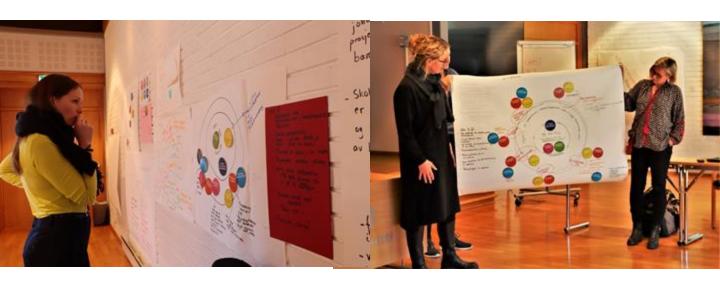
WIA flower activity example in a sustainability-oriented course/project development context:

	_		
Round 1 (5-10 mins): Decide in your group on a course or project (length can vary) that you would like to develop further, connected to sustainability:			
Write down the following in the middle of the page			
☐ What is the course/project title?			
☐ Main aim/objective of the course/project?			
☐ What 'main' subjects/topics/themes does it include?			
Once done, draw a circle around this.			
Round 2 (10-20 mins): Reflect on the course/project plan by discussing the following:			
☐ Which 'WIA' strands/petals best represent the main theme of the course/project? Using the printed-out petals, attach the chosen strand to the centre of page.			
☐ If there are any other WIA strands that are already involved, add these to the paper, and write down how these other strands are already involved.			
Once done, draw another circle around this.			
Round 3 (10-20 mins): Reflect on making connections to more of the WIA strands – can your course/project somehow involve more of the WIA strands/petals?			
☐ Are there any ways to strengthen the plan by incorporating additional elements? For example, what type of support could be helpful from leaders? Could you collaborate with other educators or departments?			
☐ What ideas can come out of making these interconnections? Write any ideas down and attach the relevant WIA strand/petal to the idea.			
Once done, draw another circle around this.			

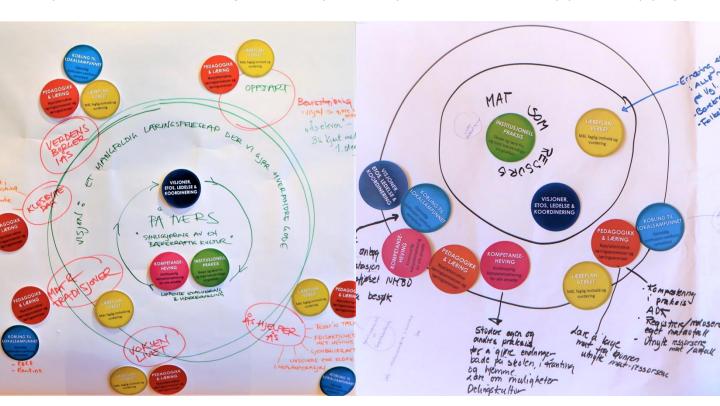
WIA flower activity example: Interdisciplinary course or project development for educators (Please adapt the timeframe accordingly)

Round 4 (15-30 mins): Spend time collectively developing a rich picture of how thinking systemically 'beyond a single subject or physical classroom' can strengthen your course/project. Continue to discuss in your group and visually map out (see, for example collective mind mapping, Tarnowski, 2015) to see what connections you can find:			
strands/p	eas emerge from establishing interconnections between different 'WIA' etals. Utilise multiple strands/petals, explore their connections, and if they can strengthen the course/project.		
_	a broadened 'whole institution context,' continue to observe and write additional ideas and aspects you could develop to strengthen the roject.		
	exploring how thinking systemically by bringing in these different 'WIA' rands could strengthen the planned course/project.		
the concret	5-30 mins): Revise and develop the course/project plan - returning to e. Using a new piece of paper, discuss, answer and write down the onses to the following questions:		
the concret group responsion. How can in practice?	e. Using a new piece of paper, discuss, answer and write down the		

Activity Resources: Examples of collective mind mapping outcomes created during the activity



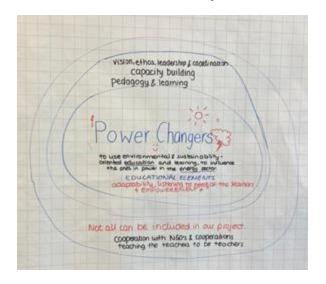
Activity outcomes created during a leadership workshop for a school-university partnership project

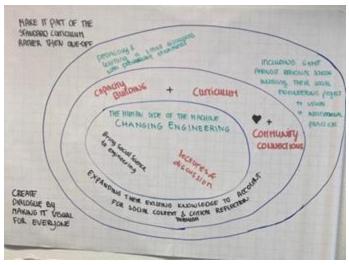


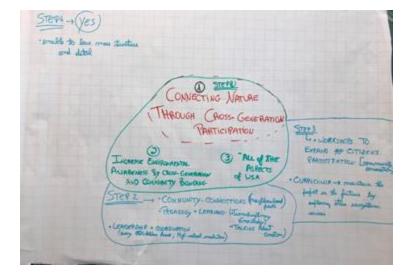
Activity outcomes created during leadership workshop, planning how their institutional setting could integrate a WIA into their year plan (left) and teacher workshop (right), planning interdisciplinary lessons

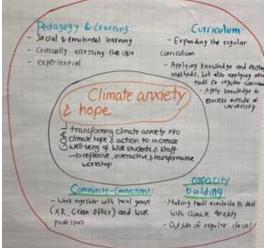
Activity Resources:

Here are some examples of the activity outcomes created during a Master's degree student course based at Wageningen University, where the activity was utilised to support students in their group project-development concerning sustainability education within the local community.









Activity Resources: Additional reflexive questions relating to the WIA flower model

A Whole Institution Approach: Supporting transformation towards sustainability

- Institutional culture, ethos & practices what is taught and experienced on location What does a sustainable location imply for how we interact, structure and utilise our surroundings to co-create placebased sustainability?
- Continuous quality staff development & reflexivity focusing on the continued professional development of all staff and authentic reflection - What does a sustainable institute imply for the type of continuous professional development of all our staff?
- Local community, family & wider society involvement focuses on the institute society interface, place-based local community links, and involvement with society on a larger level What does a sustainable institute imply for how we involve the local community and society further afield?
- Formal & informal learning content & processes concerning formal, informal, non-formal and hidden curricula, finding new types of alternative learning processes and environments What does sustainable education and learning imply for how and where we teach, measure, and critique learning?
- Research concerning new types of alternative learning processes and learning environments being explored What does a sustainable university imply for how we do research and what we research?
- Proactive leadership, policy & coordination focuses on the role of coordination within an institute involving all stakeholders. Institutional culture and ethos also need to align with the vision. Consistency between thinking and doing is essential. What does a sustainable institute imply for how we coordinate, operate, and lead?

Additional questions to help prompt participant dialogue around WIA-aligned sustainability-oriented education:

sustainability-oriented education:		
	Is there anything you could change or build upon to support wider institutional change at your institution?	
	Any 'low hanging fruit'? What easy changes/developments can be made, and what could be changed and acted on now?	
	What if I shift the focus/centre of the course/project plan? Look at the course/project plan, for example, not in terms of curriculum (meeting the requirements of the curriculum), but in terms of Professional development, or vision and leadership?	
	What other colleagues could I collaborate with to further develop this type of course/project?	

Activity Resources: Whole Institution Approach version of the flower model and individual flower strands/petals to print



Activity Resources: Whole School Approach flower model and individual flower strands/petals to print





References and sources suggested for further reading:

Eikeland, I., Sinnes, A. (2024). Activating the Petals in the 'WSA Flower Model': Critical Factors for Sustaining Schools' Pathways Towards a Whole-School Approach. In: Wals, A.E., Bjønness, B., Sinnes, A., Eikeland, I. (eds) *Whole School Approaches to Sustainability*. Sustainable Development Goals Series. Springer.

Mathie, R. G. (2023) 5. *Strengthening School-Community Links through a Whole School Approach*. https://eepro.naaee.org/community/blog/community-engagement-school-based-environmental-education#section-5

Mathie, R.G. (2024). A Whole School Approach: A Synthesis of Interconnected Policy, Practice, and Research Conceptualisations. In: Wals, A.E., Bjønness, B., Sinnes, A., Eikeland, I. (eds) *Whole School Approaches to Sustainability*. Sustainable Development Goals Series. Springer.

Mathie, R. G., & Wals, A. E. J. (2022). Whole school approaches to sustainability: Exemplary practices from around the world. http://www.wur.nl/wholeschoolapproach

Tarnowski, M. (2015, June 1). *Collective Mind Mapping*. Plays In Business. https://www.plays-in-business.com/collective-mind-mapping/

Wals, A. E. J., & Mathie, R. G. (2022). Whole School Responses to Climate Urgency and Related Sustainability Challenges. In M. A. Peters & R. Heraud (Eds.), *Encyclopedia of Educational Innovation* (pp. 1-8). Springer Singapore. https://doi.org/10.1007/978-981-13-22624 2631

Thank you to all the school-university partnership participants involved in the research project who contributed to creating this activity. For more info contact createlearnsustain@gmail.com.