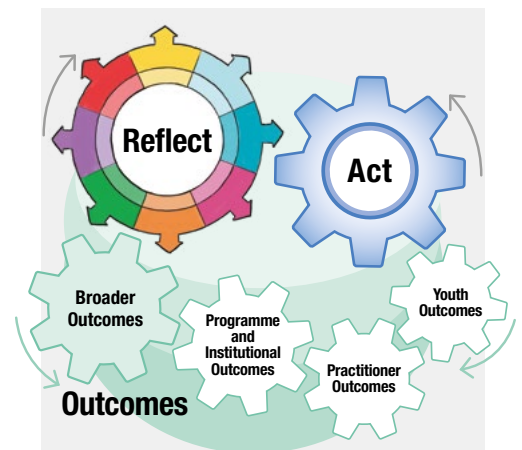# The Equity Compass:
A tool for supporting socially just practice

YESTEM Insight #1

What is the Issue?

- Diversifying participation in science, technology, engineering and mathematics (STEM) remains a key challenge for policy and practice internationally.

- While informal STEM learning (ISL) settings have considerable potential to engage diverse communities, on the whole the sector does not have a diverse participation profile.

- The sector would benefit from improved capacity to understand and engage with the complexity of issues pertaining to equity and social justice, in both policy and practice.

- *Equity* refers to a model of social justice that attempts to challenge and transform social inequalities and work towards more just power relations. Whereas equality often means treating everyone the same and/or providing the same opportunities to all, an *equity* approach advocates differential treatment according to need, while also recognising and valuing differences between people.

**YESTEM Model** for equity in ISL

The Equity Compass is the basis of the Reflect component of this model. Please see **yestem.org** for the full model and related Insight documents detailing each component.

The Equity Compass: A tool for supporting socially just practice

- Equitable practice is not just about what you do, but how and why you do it. The stance taken and the principles underlying a particular programme or activity will profoundly shape its potential for either reinforcing, or transforming social inequalities.

- The Equity Compass tool helps users to adopt a social justice mindset when developing and reflecting on their policy and/or practice. It prompts them to consider multiple dimensions of equity, as represented by the eight segments of the compass.
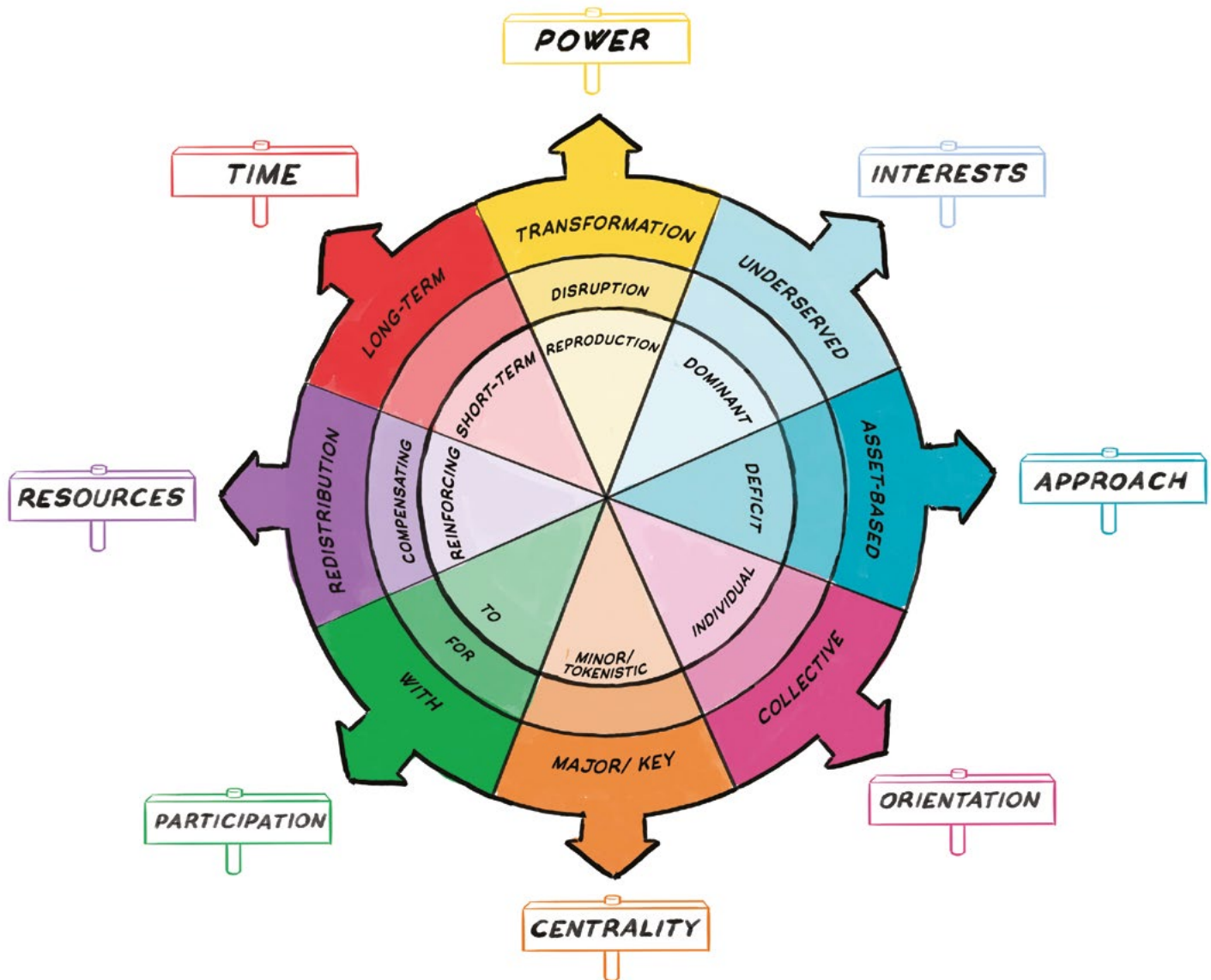
Things to consider

- The Equity Compass helps to identify how and why particular examples of practice may be more or less equitable. By mapping your practice, the compass can help support planning for improvements in equitable practice.

- By attending to each of the segments, the Equity Compass helps practitioners to identify ways to support young people's critical STEM agency. STEM agency is the capacity for young people, particularly those from underserved communities, to use STEM to take action in their lives on issues that are meaningful to them and which help challenge societal injustices.

- While the Equity Compass has been developed and tested within ISL settings working with young people, it has also been applied by practitioners working with adults, by teachers and educators working in formal education and in contexts beyond STEM.

How to use in practice: Reflect and Act

- Each axis of the Equity Compass has a set of associated Guiding Questions to help you to reflect on your policy and/or practice. You can apply the compass either generally or specifically, using it to consider anything from an organizational top level policy down to a single session within a programme.

- Use the Guiding Questions to help you reflect critically on each compass axis – where would current practice 'sit' on each arrow? You can draw or map it on to the compass.

- Use the compass to identify areas that you would like to work on further. For instance, you might want to prioritise areas where your mapping sits in the centre zones of the compass. Use the questions and axes to help prompt ideas about how future programmes and activities might be planned in line with the eight dimensions of equity.

- Track your progress towards more justice-oriented practice by charting outwards movement on the Equity Compass axes.

AXIS	GUIDING QUESTIONS
POWER	To what extent are dominant relations (e.g. ideas of scientists as white men; hierarchical relations between educators and students, narrow/elitist representations and forms of science knowledge and practice; differential experiences of ownership and belonging within STEM spaces) being reinforced vs. challenged and changed? Who has agency, power and legitimacy? Are dominant, unjust relations and conditions being reproduced, challenged or meaningfully transformed?
INTERESTS, NEEDS & VALUES	Whose interests, needs and values drive the policy and/or practice? Those of the dominant (e.g. the institution, STEM pipeline, industry, economy) or underserved young people and communities?
APPROACH	How are the interests, knowledge, identities and resources of underserved young people and communities being recognised and valued (an 'assets-based' approach)? Are (some) participants treated in deficit terms (as 'lacking' information, aspiration, interest and somehow being 'out of place')? To what extent are all participants valued and recognised for who they are, rather than who they are not?
ORIENTATION	To what extent does the practice contribute to individual outcomes? To what extent are the outcomes also collective (e.g. for families, wider communities) and/or the wider field? Do the outcomes extend beyond the specific experience or programme?
CENTRALITY	How central, major, intentional and foregrounded are equity issues in the programme and organisation? Are equity issues everyone's core business or are they minor, token, peripheral concerns (e.g. restricted to special programmes, and temporary funding)? How are issues and experiences of injustice recognised and challenged?
PARTICIPATION	Is the practice being done 'to', 'for' or 'with' underserved young people and communities? Who has ownership and voice in decision making? How participatory is the practice? Are young people producers or just consumers of science? Is the practice exploitative/ tokenistic? Are young people valued partners? How is youth identity and agency being supported?
RESOURCES	Are resources and efforts mostly directed at more privileged people and those who already feel 'science-y'? How are the STEM knowledge, skills, social networks, and chances of underserved people being supported? Is the approach/experience reinforcing dominant relations and conditions, taking a compensatory approach or is it more meaningfully redistributing resources and changing ideas about what resources are valued?
TIME	Is the practice one-off, short-term or longer-term? Is attention being paid to supporting young people's trajectories and progression over time and across contexts? How are youth pathways being brokered and supported both within the experience and beyond the moment/ programme/ setting?

Spotlight on practice

The Equity Compass is already proving to be a useful tool within ISL settings. Project partners have told us it has helped them rethink how they work with underserved young people, introduce more participatory approaches, improve professional development and better articulate where they want to be going.

For instance, practitioners at a city science centre in the UK (with over 200 staff and volunteers) described how, despite their embracing of the centre's public commitment to prioritising underrepresented communities and improving inclusion and equitable practice, they struggled to align these goals with the complexities of practice. Tessa, who worked with young people, was sometimes frustrated by **"institutional box ticking"** approaches and Barbra similarly felt that there is **"never enough head space"** to engage with equity issues within her busy role. For Scott, 'equity' was a new concept that he was trying to understand and put into practice.

Like many others, these busy practitioners struggled to translate complex equity and social justice issues from individual practices to a collective stance on reflective action and tracking change.

They found the Equity Compass useful in many ways. For instance, Barbra felt that it helped her to articulate changes needed to better support more equitable practice and to present these to the management team: "It's great to be able to say, we considered this programme/ activity using the equity compass and look, our approach falls short, so let's re-address". Tessa and Scott both found it helpful for individual reflection and planning and for having equity-based conversations with others in the organisation.

Cole, an ISL practitioner in a community zoo, felt that the approach **"has truly contextualised my teaching methods and highlighted areas in which I can improve"**.

He felt it gave him new motivation, inspiration and ideas and helped him **"more formally, clearly and confidently assist other practitioners in my industry"**. Cole added: **"I've used the equity compass on existing and new programmes, and identified areas in which we can improve on our equitable practice, ensuring the sessions we run are more socially just."**

About the YESTEM project

- Over four years, our project involved researchers, ISL educators and young people working in partnership to develop new understandings and insights about how ISL might better support equitable outcomes for young people aged 11-14 from minoritized communities.

- Our project partnership involved data collection in the UK and the USA with partners in two science centres, two community STEM clubs, a zoo and a digital arts centre.

- Overall, 260 young people and 30 practitioners took part.

- In the wider project we also conducted surveys with 2,783 young people (1,873 in the UK and 910 in the US).

Additional resources

- Click here or visit our website to see a 2-minute animation explaining the Equity Compass.

- For the full range of Insights documents summarising the project's tools and resources, including Core Equitable Practices and Equitable Youth Outcomes Model, please see yestem.org

yestem.org

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