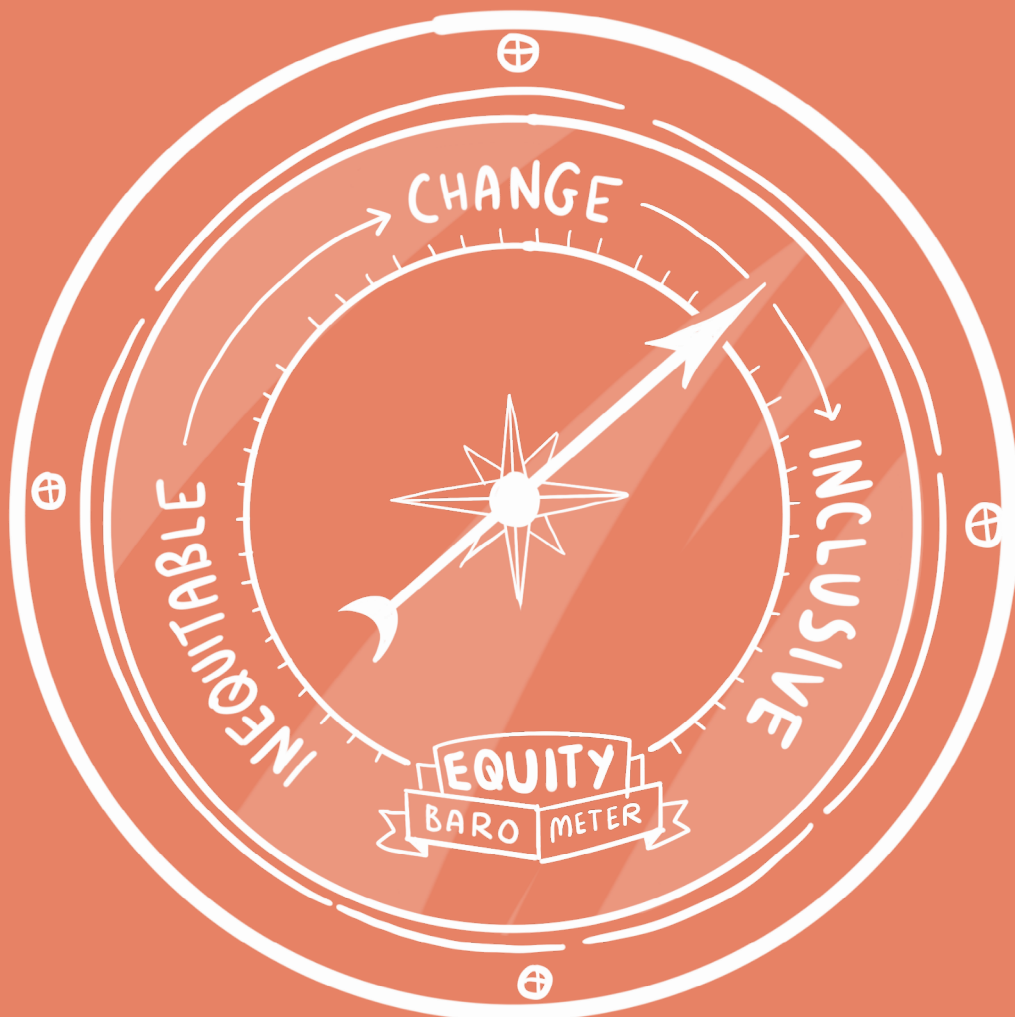


# Towards equitable makerspaces

Equity Barometer Survey



## Equity Barometer Survey

### Guidelines for conducting the Equity Barometer Survey

The Equity Barometer Survey has been designed in collaboration with practitioners in our partner makerspaces and participating young people. It aims to give you insight into your makerspace's equitable practices, as viewed through the eyes of young people. It is also intended to support reflection on your practice, and identification of strengths to build on and areas for improvement.

The survey has 31 main questions, plus two optional questions: one about how closely young people feel the activities in the makerspace are to school subjects, and one asking for any further comments. When preparing the survey to give out, you can drop the optional page if you prefer not to ask these questions.

There is a space at the top of the survey to enter the name of your makerspace (or, if more appropriate, your programme). We suggest that you enter this before copying and handing out the survey.

The survey begins with seven questions about the activities that young people do in the space. This is followed by twelve questions about the staff or practitioners in the space. You may need to clarify to young people that we are referring to the staff (or volunteers, if applicable) who they interact with when undertaking activities in the makerspace. They can also think about the members of staff with whom they have the most frequent interactions. Next, there are six questions about how the young people experience the space, and the final section has five items focused on the relationship between what they do in the makerspace and the world beyond, as well as a question about learning. This is followed by the optional questions, though please make sure to remind your young people that they can skip any question if they prefer not to answer it.

The survey should be completed individually, rather than in groups, in order to capture the perceptions of each young person directly. However, please support young people in understanding the questions when needed, especially in terms of what the items refer to (e.g. the space, activities, staff, and so forth – rather than in general, or activities they do elsewhere). You may also want to read the questions to the group and you may wish to remind them that they can skip any questions they would prefer not to answer. It is up to you to choose when you would like to implement the survey. That said, it is likely to be more useful if done closer to the end of a series of sessions, or after young people have been coming to the makerspace for a while, so that they have enough experience of the space, people and activities to feel confident in answering the questions.

### Using the Equity Barometer Survey as a reflective tool

This survey is not to be used as a test, but rather as a tool that can help you reflect on young people's experience and perceptions of your space. It will be useful in identifying areas that may need attention, and will also help you to see how your own practice and your space are evolving towards equity. It can also be useful to supplement other, more qualitative, ways of gathering feedback.

The survey captures eight key areas related to equitable practices and spaces. There are also three further areas that are represented by single questions. We encourage you to look through the survey responses to help you reflect on which area, or areas, you may want to focus on in your practice, moving forward.

Area	Definition	Questions
<b>1. Equitable, enjoyable and meaningful experiences</b>	The extent to which young people have enjoyable, interesting experiences that connect to their identity, community and things that are important to them.	<p>Q1: I find most sessions or activities interesting.</p> <p>Q2: I make and/or do things here that are important to me.</p> <p>Q3: I do things here that will help me in the future.</p> <p>Q4: I do things here that make me feel confident.</p>
<b>2. Equitable approaches to developing and using STEM knowledge and skills</b>	Whether and how young people's STEM capital is being valued, supported and enhanced –including their perceptions of whether their skills are appreciated and used.	<p>Q23: I get to use my knowledge and skills to help others.</p> <p>Q25: Young people at the makerspace appreciate each other's knowledge and skills.</p>
<b>3. Supporting equitable STEM trajectories</b>	The extent to which young people's STEM trajectories and path-making through STEM are being supported.	<p>Q15: They have helped me to make useful contacts and expand my support network.</p> <p>Q16: They have told me about other activities, services or opportunities that might interest me.</p>
<b>4. Inclusive approaches to supporting young people's identities in STEM</b>	Young people being able to express themselves and feeling comfortable and valued for who they are in the space.	<p>Q21: I feel valued for who I am here.</p> <p>Q22: I feel I fit in here.</p> <p>Q24: I feel safe here.</p>
<b>5. Supporting young people's agency and social action</b>	The extent to which young people feel that their agency is developed and supported, within the makerspace itself and in the wider community and beyond.	<p>Q5: We can do things here that try to challenge inequities in society.</p> <p>Q6: Some things I do or make here could help people in the community.</p> <p>Q7: Some things I do or make here could help the environment.</p> <p>Q26: Some things I learn and do at the makerspace will help me at school or in other educational settings.</p> <p>Q27: The knowledge and skills I've developed here will help me achieve my goals in life.</p> <p>Q28: The activities I do here will help me get into work I want to do in the future.</p>

Area	Definition	Questions
<b>6. Inclusive views of STEM</b>	The extent to which the makerspace programme has broadened or changed young people's views around STEM.	<p><b>Q29: The makerspace has broadened my views about who does science, computing and/or engineering.</b></p> <p><b>Q30: Coming here has helped me feel connected to science, computing and/or engineering.</b></p>
<b>7. Caring and supportive relationships</b>	The extent to which young people perceive they are treated by staff with caring, respect and support.	<p><b>Q8: They care about me as a person.</b></p> <p><b>Q9: They know me well.</b></p> <p><b>Q11: They are happy for me to share what's important to me.</b></p> <p><b>Q17: I would feel comfortable talking with someone who works here if something upset me.</b></p> <p><b>Q18: I would feel comfortable talking with someone who works here about my mental health.</b></p> <p><b>Q19: I can trust people who work here.</b></p>
<b>8. Inclusive makerspace structures and spaces</b>	Perceptions of how equitable and participatory the practices of makerspace staff are.	<p><b>Q10: They listen to my views.</b></p> <p><b>Q14: They make sure that everyone taking part has a say, and that everyone's opinions count.</b></p> <p><b>Q20: My ideas and opinions are taken seriously here.</b></p>
<b>Staff emphasis on equity</b>	A single item about whether staff directly raise or foreground equity-related issues.	<b>Q13: They raise and discuss issues of inequity (e.g. racism, homophobia).</b>
<b>Staff knowledge of community</b>	A single item about whether staff understand young people's communities.	<b>Q12: They understand my community.</b>
<b>Perceptions of learning</b>	A single item about the extent to which young people feel they learnt from makerspace activities, which is a part of STEM capital.	<b>Q31: How much do you feel you have learned from activities in the makerspace?</b>

## Scoring the Equity Barometer Survey

In addition to looking over the completed surveys and reflecting on how young people have responded to individual items, you may wish to calculate scores for the eight areas of equitable practice (Equitable, enjoyable and meaningful experiences; Equitable approaches to developing and using STEM knowledge and skills; and so forth). Scores are calculated by adding up the score for each young person for each question in each area and this total is compared to the maximum possible score for the area. [Please download this Excel spreadsheet to enter your data](#), and have the scores for your space calculated automatically and expressed as graphs. The scores (i.e. proportions of max possible for each area) are expressed as percentages (see the Excel spreadsheet for more details). The closer an area's score is to 100%, the more equitable your space and practice is perceived to be by participating young people.

If you choose to use the Excel spreadsheet to calculate survey scores for your space, you may want to share the findings with other members of staff to further support reflection. You may find it easiest to look at the graphs generated and you could consider questions such as:

- What surprised us about the findings?
- What findings were in line with what we'd expected?
- In which areas are we further along in our equity journey?
- What further actions could we take to build on this good foundation?
- Which areas need additional attention or focus?
- What steps might we take to support equity in these areas?

Looking at specific items within the areas may also spark ideas about where to place your efforts or what actions to take.

Building equitable practice is a journey and one that takes time. In line with this, we encourage you to use the equity survey sparingly – perhaps once a year. While you are likely to observe progress along the way, quantitative measures, like this survey, can only ever provide a snapshot and may miss some of the nuance of your practice. This is why we encourage use of the survey as a reflective tool to support your journey, rather than a summative assessment of your practice.

Your views of \_\_\_\_\_ [Makerspace]

This is a survey to collect your feedback on your experiences at the makerspace named above.

We want to hear your feelings and thoughts about the things you do there and the team who work there so we can keep improving. No one will be able to identify you from your answers, so please feel free to be honest! Please leave blank any questions that do not apply to you or that you would prefer not to answer.

**Activities**

How much do you agree or disagree with these statements about what you do here at this makerspace?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I find most sessions or activities interesting.					
2. I make and/or do things here that are important to me.					
3. I do things here that will help me in the future.					
4. I do things here that make me feel confident.					
5. We can do things here that try to Challenge inequities in society.					
6. Some things I do or make here could help people in the community.					
7. Some things I do or make here could help the environment.					

**Staff in the space**

How much do you agree or disagree with these statements about people and staff who work here at this makerspace and help with activities?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
8. They care about me as a person.					
9. They know me well.					
10. They listen to my views.					
11. They are happy for me to share what's important to me.					
12. They understand my community.					
13. They raise and discuss issues of inequity (e.g. racism, homophobia).					
14. They make sure that everyone taking part has a say, and that everyone's opinions count.					
15. They have helped me to make useful contacts and expand my support network.					
16. They have told me about other activities, services or opportunities that might interest me.					
17. I would feel comfortable talking with someone who works here if something upset me.					
18. I would feel comfortable talking with someone who works here about my mental health.					
19. I can trust people who work here.					

**My experience in the space**

How much do you agree or disagree with these statements about your experience in the makerspace?



	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
20. My ideas and opinions are taken seriously here.					
21. I feel valued for who I am here.					
22. I feel I fit in here.					
23. I get to use my knowledge and skills to help others.					
24. I feel safe here.					
25. Young people at the makerspace appreciate each other's knowledge and skills.					

**Myself, the makerspace and beyond**

How much do you agree or disagree with these statements about how the makerspace might connect with other parts of your life?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
26. Some things I learn and do at the makerspace will help me at school or in other educational settings.					
27. The knowledge and skills I've developed here will help me achieve my goals in life.					
28. The activities I do here will help me get into work I want to do in the future.					
29. The makerspace has broadened my views about who does science, computing and/or engineering.					
30. Coming here has helped me feel connected to science, computing and/or engineering.					

How much do you feel you have learned from activities in the makerspace? (Circle it) A lot | Some | A little bit | Not at all | I'm not sure

To what extent do you feel that the activities you do at the makerspace relate to the following subjects?



	A lot	Some	A little bit	Not at all	Not sure
Science					
Technology/computing					
Engineering					
Art					
Maths					
Other subject (Which one: _____)					

Any other comments you would like to share?

**Thank you for sharing your ideas!**

# MAKING SPACES

[m4kingspaces.org](http://m4kingspaces.org)

[UCL webpage](#)

X:@m4kingspaces



The Making spaces project is funded by  
Lloyd's Register Foundation

## Partners



Kathmandu



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