

Steps of Biomimicry Thinking

What do you really want to do?

Why? How would Nature do it?

STEP I – Scoping – Setting the vision (completed by or before Dec. 10, 2016)

- During this meeting (September) you took time to set up logistics for your group: facilitator(s), meeting calendar (in person, via Zoom, conference call); create a group email and any other platforms that will help move your work forward. Will you need any financial resources? In brief take care of the logistics that will help your work and set up your ‘ecotone’ team to move forward. It would be important to share how much time you are able/willing to give to this venture. If you have not done so already, you may need additional time to attend to your group’s logistics.
- As soon as you can, take time to harmonize your team: are there skills missing? Is there someone else you’d like to invite to join you? Invite this person as soon as possible and bring her/him up to date.
- You are working as a group focused on the topic that you chose. All topics are broad and you cannot do it all. So you have started to narrow your field a bit via a **question**. You will need more time to continue the formulation of the question that will guide your work. The question has to do with **function**.
- Begin by dreaming a bit more (note the ideas that have the most energy for your group or seem intriguing and inviting). Remember that you cannot do it all, but you can address an aspect of the issue very well and with depth. The STF thought that the spiral would be a suitable symbol for the work you are doing – from simplicity to deeper complexity.
- Continue to identify **context/criteria/constraints** for your work.
- Once your question is clear and you have a sense of context/criteria/constraints, you may attend to **mapping**. Identify the systems that relate to your group’s

question. What are the relationships to each one? What would feed this idea? What are the feedback loops that will facilitate it? What will nurture the design team to move this forward? What will nurture the community to support this?

- Focus on priorities. Let's say your question relates to poverty and that you know 10 organizations doing great work addressing this issue. How about deciding to explore three of these, perhaps those that are the most innovative? Then set criteria that will guide your exploration and further dreaming. Set some limits and share the work that needs to be done. When is good enough, good enough?
- Define success. We are creating a new story, so what would success mean in this context? We will know we have arrived when ...
- Define your boundaries. Example: you chose food as your issue. Your question looks something like this: How can we source the food consumed at the Motherhouse with locally grown/produced food? One boundary would be to reach 50 percent the first year 70 percent the next year, etc.
- Set up parameters: what can you do and do well?
- Use the *Hearts, Minds, Structure* handout to integrate the core DNA of the community that will be invited to join you in this dream. Note: community may include IHM but it could go further.

SUMMARY

- So what you are doing with this first step of the biomimicry process is exploring the dream; **setting up your question**; identifying **context, criteria, constraints**.
- Don't narrow the dream too soon or arrive at the question too quickly.
- Operate out of abundance and keep close to Nature, your teacher and guide.
- Pay attention to the Life Principles that can be your guide

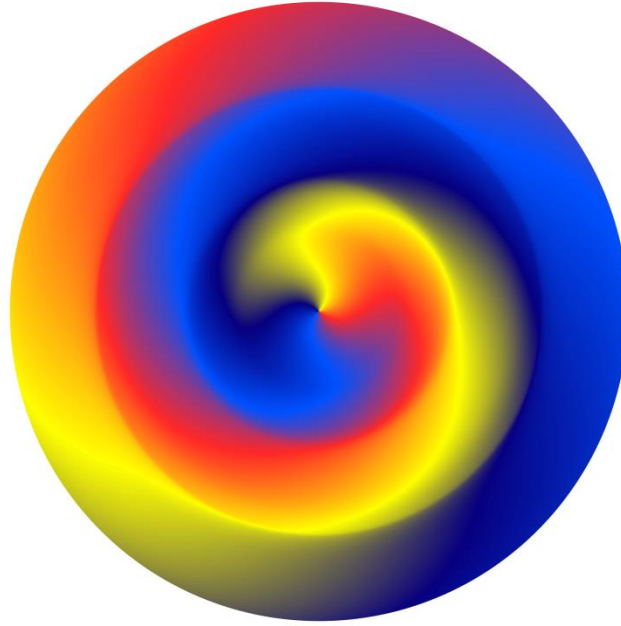


STEP II – Discovery (to be completed by end of February)

- Once you have a sense of what you are pursuing via your question begin to engage in a period of research. Check out magazines, internet, others doing this work.
- Look at your idea through a variety of lenses and in particular check it out against the Life Principles that apply. This will help guide your process.
- Go back to the core IHM values. How are these reflected in your ideas?
- Think about the community's DNA, the characteristics of the group that will be invited to implement this. For example, let's say your question relates to food on campus. The DNA would include the company that currently provides the food; companies that supply the food; health care system; management system currently in place; those who eat the food.
- What new system(s) or structure(s) will be needed to implement the idea(s)? What might be the impact on current systems and structures?
- Ask Nature: how does nature do it? Throughout the process, reconnect with Nature, your mentor and teacher. Spend time outside and check out www.asknature.org
- Ask who, why, what, when and where questions. For example, the overall vision we have is sharing our resources from the Ministry grant fund. Let's say you are particularly interested in bringing all those who apply for a grant to be part of the decision-making for the allocation of funds. That is your vision. A question to guide you may look something like: How can we set up a network among the potential grantees so all of them have input into the allocation of the available funds? The question for Nature could be "How does Nature network?" Or "how does Nature communicate?" Once you learn, you abstract from Nature to apply to your question.
- Bring to your dream the skills, experience, other disciplines, traditions, legacies that are part of the whole.

SUMMARY

- You have moved from scoping to discovery ... and by now you have a good sense of your **design** sketch.
- Is there anything else missing before you move forward?



STEP III – CREATING (to be completed by end of April)

- Complete your design. Ask Nature for further inspiration.
- Explore how this idea will be moved forward.
- Think about resources – human and financial – that will be needed.
- Flesh out the range of opportunities that it offers.
- Build mind maps and cross-reference existing solutions, flip your ideas inside out and test them.
- Who might be your allies to help bring it to life?
- Maybe you want to invite a couple of them to tea and explore your design with them. Check out how they respond to you. Note their affirmations and engage them in solutions to what they question. Pay attention to the challenges they may offer, but don't let them stop you!
- Continue to use the Life Principles that you have chosen to guide you as quality control of your design.
- What you are doing is putting things together in a new way, perhaps creating something new to you and to the community.
- Ask yourself, “How would Nature solve this issue, design this idea and present it so stakeholders will welcome it?” Ask Nature.

SUMMARY

- You now have a design to implement your idea, your vision.
- Remember your original question? How does your design provide and answer?



STEP IV – EVALUATING your design (ready to present at the May gathering)

- Take a look at your design and once again ask: What would Nature do? How would Nature do it?
- This step will allow you to assess the viability of the solution and process design over the long-term and across a specific context.
- Reflect on your original intentions.
- Did your ecotone team miss something?
- Review all steps of this process to identify gaps and inadequacies.
- Remember that your work is a work in progress.
- How do you envision the implementation of this design?
- Who will be involved in the implementation?
- Ask the questions of resources again. What will implementation need? Where will the resources come from?
- How much time does this need for a solid implementation?

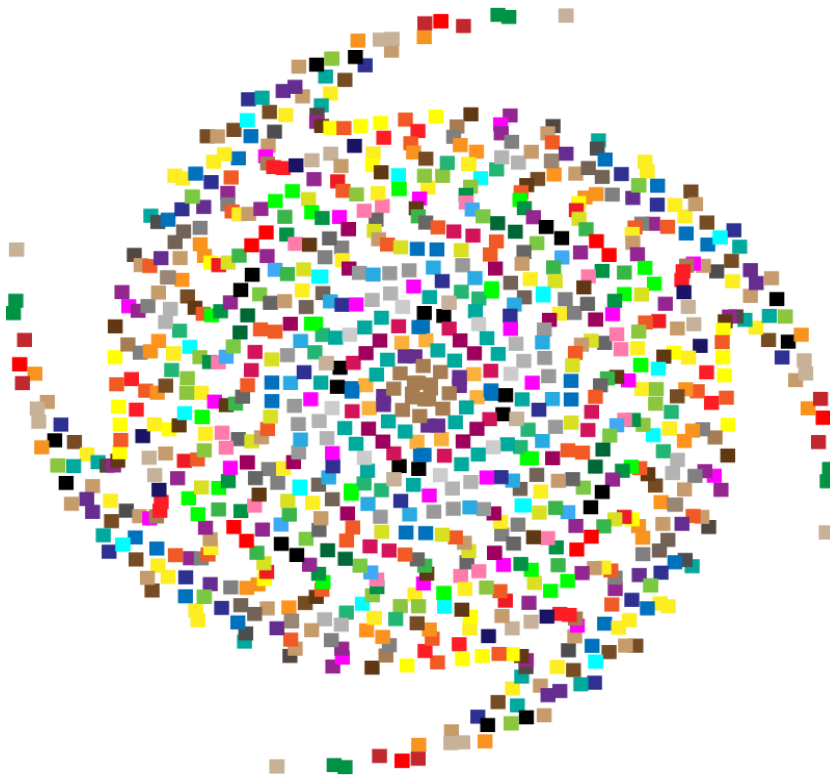
SUMMARY

- We have until the end of June to complete the design process.
- At that point, your design will be recommended for implementation.
- Who will present your design? To whom? How?

Prepared by Gloria Rivera, IHM and STF team in consultation with Toby Herzlich.
(Resource: *Biomimicry Resource Handbook* Dayna Baumeister Ph.D. Copies of this book are in the Motherhouse library.)

ADDITIONAL SUGGESTIONS

- Your creation should be fluid and adaptable. It is a means not an end in itself.
- The four steps above happen throughout the process so you will soon note that they are not linear. Think of the spiral as an image to capture the process.
- As much as possible, biomimicry thinking is incorporated throughout the process and remember that what you are doing is emulating not imitating.
- What you want is to have your idea/vision fit in with Earth not Earth fit in with you.
- Your results will be elegant, doable, simple, yet complex and will address human needs without compromising Earth.
- Celebrate: you have brought LIFE to your design table.



9/29/16