éducation21

SEEC (Swiss Environmental Education Commission)

Guide

Impact and quality in the design and production of learning materials in environmental education (EE) and education for sustainability (EfS)

Bern, June 2019

Contents

Instructions

– The guide aims to be true to the spirit of *Design Thinking*: it poses questions, challenges one's own certainties, and addresses the reader directly as an actor.

– Since the guide aims to increase your awareness and self-reflection and improve your understanding of top-quality learning, design and development processes, it is widely applicable, from a one-page worksheet to fully-fledged, national projects.

– A guide is not a checklist: checklists lead us to believe that there is a perfect and correct answer to every question – if you have ticked all the boxes, then you have done your job. In this case, it is a question of finding individual, tailor-made answers to your challenges using good questions: Define yourself what you understand by the concepts of quality and impact – otherwise someone else will do it for you.

– The guide doesn't work like Harry Potter's magic wand. You don't have to slavishly implement each individual point nor necessarily follow the suggested order. Don't be put off too easily: you can produce useful results in a relatively short time. This is an invitation to play, which enables better-quality and more effective solutions – give free rein to your creativity and your enthusiasm for trying out new things – but take seriously the users' perspectives, research results, experiences of others etc.

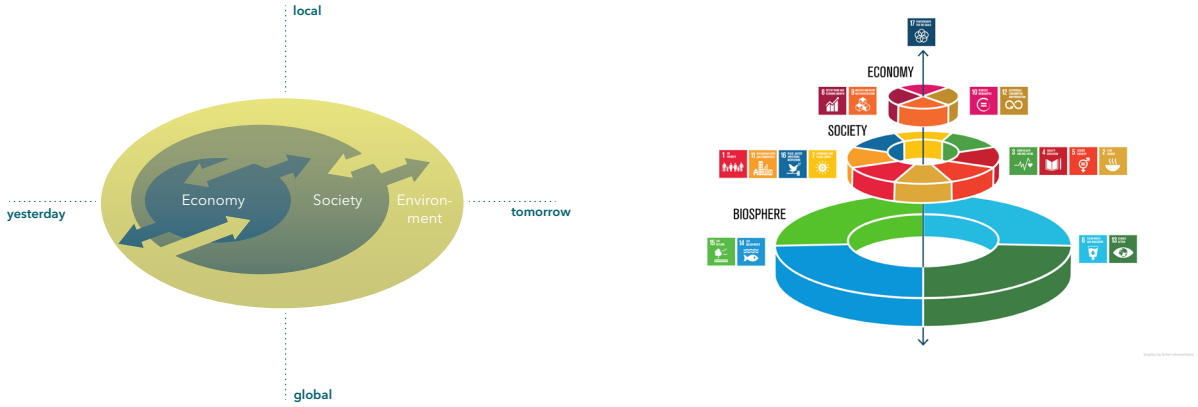
– The diversity of your concerns, intentions, organizational forms, educational approaches call for individual, diverse approaches. With this in mind, we have not limited our questions nor our instruments to a specific number. The question that appears self-explanatory and banal to you might very well be the trigger, for your partner organization, to initiate an innovation process, which results in a considerably better end product.

– We have not added examples to the guide. On the one hand, there are not many examples in environmental education and education for sustainability as Design Thinking is relatively new in our field. On the other hand, references are made at various points in the guide to collections of examples, which can be easily adapted. And you are the innovators here: you will produce the cool new examples for EE & EfS!

1. What can you expect from this guide?

Many environmental education and education for sustainability providers produce learning materials in a wide variety of forms: worksheets, folders with learning and teaching materials, manuals for teaching staff, handouts, films, software, mobile applications, case studies and much more.

The objective of SEEC (Swiss Environmental Education Commission) is to ensure that these learning materials are developed in a way that optimally increases the impact and quality of environmental education and education for sustainability. The overriding objective should be a “win-win-win” for educators, learners, and society and the biosphere as a whole. Our guiding principle is the concept of strong sustainability, as explained in the SEEC “Position paper on Environmental Education” or elaborated in the “Stockholm Wedding Cake model” for the UN’s Sustainable Development Goals (SDG):



Sources: *Position paper of the SEEC (Swiss Environmental Education Commission) 2014, p. 7*; *Stockholm Resilience Centre, Stockholm University: Stockholm Wedding Cake model*.

As EE & EfS providers vary, for example, in terms of size, orientation and didactic approaches and, as mentioned, there is also a wide variety of different teaching and learning materials, the aim is not to provide a detailed checklist for the perfect learning resource. This is not even possible as the quality ultimately depends on your experiences, skills and objectives: these are factors which are determined by you and which we therefore cannot appropriately take into account here.

However, we are convinced that the quality and impact of learning materials depend on a holistic view of your topic, of your impact vision, of sustainability and the SDGs. This includes in particular a high capacity for self-reflection and a judicious knowledge of what else is available. It must also be possible after careful consideration to come to the following conclusion: the fantastic things we initially wanted to achieve are not actually needed at all or in any case not from us. The importance of the idea of cooperation with other organizations, especially teacher training colleges and schools, also needs to be emphasized.

The *Design Thinking* method promotes such a holistic perspective with regard to impact. We invite you to work using this method. It enables a very open way of working that can be easily adapted to a wide variety of starting points and needs. Above all it is intended as a heuristic approach.

> Heuristic (ancient Greek εὑρίσκω *heurísko* “I find”; from εὑρίσκειν heurískein “locate”, “discover”) is the art of making probable statements or coming up with practical solutions with limited knowledge (incomplete information) and little time

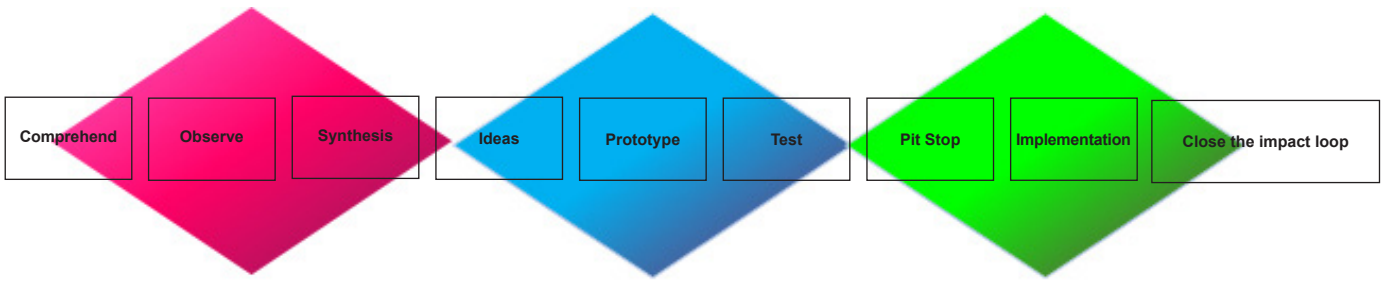
For you as users, this means: the guide is an aid that can be used in accordance with one's own needs, level of knowledge and (time and financial) resources. This is not an industrial manufacturing process where each individual step has to be slavishly performed in a particular way without deviation. You decide which questions are useful and beneficial for you, which instruments and aids you want to use and the best way to proceed in relation to your situation. There is no need in any phase to be the world-leading expert a specific issue. Just do it!

In the meantime, a host of experiences from a variety of different organizations shows that Design Thinking enables you to emerge quickly and full of joy from the daily work routine and come up with good solutions. A really inspiring example is from Bangladesh. Here, the mortality rate of premature or low-birth-weight babies is very high. The medical specialists thought of the usual solution: incubators. The cost is $ 25,000 each. Using a Design Thinking process, a large number of people were questioned, perspectives changed and the actual problem was recognized: hypothermia on the way to the hospital. The result was thermal blankets at a cost of $25 each, which has already saved the lives of 200,000 babies (see *https://extreme.stanford.edu/projects/embrace*).

Get inspiration from other examples, which you can find here: *www.designkit.org/case-studies, https://extreme.stanford.edu/projects* | *https://dschool.stanford.edu/field-notes*.

Design Thinking

*Design Thinking i*s a widely proven concept for developing new ideas and products. At the outset, attention is given to ensure that not only all stakeholders are integrated into the process, but also that real prototypes of the product are created as quickly as possible in order to test them in real-life contexts. From this, you generate insights and experiences for the best possible end product. It is also important to first get involved in a very open ideation (idea generation) process: you assume that you know (almost) nothing (or that your perspective is limited) and where a broad range of ideas is developed, using research, questioning of end users and stakeholders, and unlimited brainstorming. A selection of these ideas is then turned into prototypes, tested and evaluated. Based on this evaluation, a decision is made as to which ideas are actually remodeled into real products or solutions. This double-loop process is referred to as "double diamond" (see section 4, p. 7).

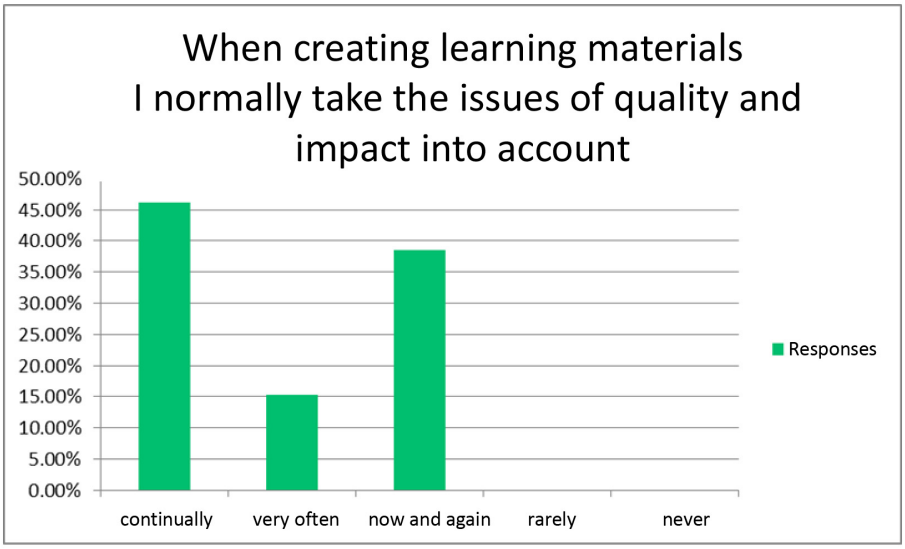


Design Thinking process with *Triple Diamond*: To the original double diamond, we have added a third diamond (green steps 7-9) since we are convinced that the actual production of the solution warrants intense consideration)[1].

1 See, in a similar vein: www.interaction-design.org/literature/article/design-thinking-a-quick-overview

2. Results of the SEEC survey

Mainly large environmental education providers answered the survey of SEEC (Swiss Environmental Education Commission) members carried out for this tool. In summary, it shows the following:



– Quality and impact are issues for you. Why? Because funding bodies demand action, because it promotes reflection, because quality and impact are currently a key topic in education, because you want to increase benefits for your environmental and sustainability objectives and because “also EE & EfS offers must pursue this goal”.
– When developing learning materials, EE & EfS providers consider the age of the learners, factual correctness, relevance to official curricula (i.e. national curriculum), impact on the target group (i.e. often students). They research the content and whether other materials are available. They often collect feedback from teaching staff and students or specifically from experts. Some create learning materials only if teaching staff express a demand. Some, however, do not often create learning materials, which means that there is no proven procedure.
– Evaluation of real results at the outcome and impact level is considered a challenge.
– Quality and impact are reviewed by questioning teaching staff, professional colleagues and sometimes experts in the field. Some have the materials tested by teaching staff and students. In one case, a project was accompanied by educational research.
– In the vast majority of cases, the perspective from within is predominant: work is carried out based on the experiences made by the organization itself, its own assessment of what is needed and its own existing EE & EfS offers.
– Many organizations do not know whether their learning materials are actually used, and if so, by how many users.
– 57% of the organizations who responded have an educational concept, which in principle guides the design and production of learning materials.

3. Quality and Impact

We do not want to provide you with a definition of quality: quality is not something that is defined from the outside or by an independent body. Rather, it is something that all the stakeholders involved have to redefine continually. It is exactly such a process that is enabled and provided by the *Design Thinking* tool in section 4.

With regard to impact, it is worth considering Konstantin Kehl's statement at the 1st SEEC-Collab on 15 January 2019 in Solothurn, Switzerland: "There is no patent/copyright for the term impact: Feel free to define what impact means in your area of activity, for your organization and for your clients – **otherwise someone else will do it for you!**"

It is important for SEEC to emphasize our focus on systemic impact. It is not just about reaching our target groups so that they can go home with a smile on their face. If we want to achieve our overriding objectives, i.e. a win-win-win, it is a question of transformative change, of outcome and impact. The important thing about this approach is that you do not think forward starting with your own ideas, but that you think backward from the intended impact, i.e. from the social, environmental and education-related change you seek to accomplish in the real world

Source: *Phineo: Social Impact Navigator,* p. 5

For a long time, environmental education and education for sustainability only focused on input and the output stages 1-3 of the graphic above. This is actually the inner view, which is happy when the media sell well. Impact is only produced when noticeable changes happen to the target groups. We cannot talk of impact, for example, if during visits to schools, young people are enthusiastically engaged on the topic of consumption and find the learning materials cool, but subsequently there is no evidence of change in their behavior as consumers in real life.
We are very aware that the measurement and assessment of impact is difficult and challenging. Our learning materials and educational offers are not the only influencing factors on actions. But just because something is difficult we should not give up this task. This just calls on our capacity for innovation and creativity.

4. Tool for developing learning materials in environmental education and education for sustainability[21]

1 COMPREHEND

Keywords: desirable / appropriate / useful / effective

Description of the phase

Here, the aim is to clarify as objectively and (self-) critically as possible what is truly needed, without thinking about one's own organization. How do others see the situation and what is needed?

It is not yet about the wishes and perceived needs of teaching staff or target groups. Rather, the question is whether there are compelling reasons for new learning materials from a professional, learning-theory-based or sustainability perspective. It may well be that these reasons are not even on the radar screens of teaching staff or students. In this case, even communicating the need for new materials might constitute an educational task, which has to be taken into consideration during the project.

It is also not yet about financial or personnel resources and how this all connects to your current work. This would be a much too restrictive perspective. You don't need to concern yourself with these questions until phases 7 and 8.

Questions

– Who really needs this learning material? Is there really a gap in provision or are we reinventing the wheel?
– Have we researched whether comparable materials are already available in our country or abroad? Would we (in consultation) adopt or adapt those, if necessary?
– Are there well-proven, evidence-based professional reasons why this kind of learning material is needed?
– Are there well-proven, evidence-based reasons from teaching and learning research why this kind of learning material with this didactic and methodological approach is needed?
– Are there well-proven, evidence-based reasons from sustainability research why this kind of learning material is needed for sustainability?
– Do we have an impact model for what we aim to do? Do we know why and what we are changing, and how and where we want to achieve a *win-win-win*?

Tools

– Analysis of specialist discussions, teaching & learning research, sustainability discussion: you can perform desk & online research for this (libraries, DuckDuckGo) and read relevant specialist articles or metastudies (are there new findings since I looked last time?). You can also easily conduct interviews with stakeholders or focus groups with individual specialists or researchers.
– Richtigkeit & Wichtigkeit (Correctness & Importance) (Hinnen & Hinnen, 16-20)
– *www.designkit.org/methods* -> How do I conduct an interview?
– *The Five Whys*
– *Secondary Research*

2 You can find some useful tools for all phases at: *www.designkit.org/methods*

2 OBSERVE

Keywords: discover / empathize with users / ask and listen / open mindedness / pinpoint possibilities and challenges / 360-degree feedback

Description of the phase

This involves not being led by your own perceptions or prejudices, but rather going out of your way to understand the perspectives, wishes, needs, views of all stakeholders involved as accurately as possible and with as much empathy as possible (putting yourself in their shoes). NOTHING is settled as yet, neither that it will be a learning material of a particular type, nor its form, nor the didactical-methodological approach or anything else.

Ask broad questions that are not already restricted. Maybe it becomes apparent that a course, an app, tandem support or a conference is needed – and not learning materials in a narrow sense.

But don't forget to consider impact: look at inspiring examples (also from other areas) which have shown demonstrable impact (e.g. incubator vs. thermal blankets)!

Questions

– Who are the stakeholders, the people affected, and future users?
– What do the various stakeholder groups need? School management, teaching staff, students, parents, politicians?
– What is the best possible means to address the needs?
– What do you think about the topic? What does and does not interest you about it? (Others often see the same thing very differently: *www.masonsminute.com/wp-content/uploads/2014/04/different-perspectives.jpg*.
– What would these stakeholder groups do if they had to meet their needs themselves?

Tools

– *Think outside the box*: Question people from completely different fields on the topic: they should be "uncomfortably different" from ourselves; the uncomfortable, uneasy feeling in real life when questioning people with totally different perspectives is the best way to come up with viable, long-term solutions. See: *Extremes and Mainstreams*
– Needs assessment and context analysis: *Phineo Social Impact Navigator*, p. 16-24, in particular "problem tree" p. 22.
– *On-the-job* observations, documentation, photos, videos
– *www.designkit.org/methods* -> What tools can I use to understand people?
– *Immersion*
– *Un-learning* / *Getting out of the box*

3 SYNTHESIS

Keywords: collect / bundle / refine / clarify / focus

Description of the phase

This phase completes the first "*diamond*": an attempt is made to isolate 1 to 3 concrete ideas or approaches based on the first two phases.

It is important here to give yourself the opportunity to come to a different decision than originally envisaged. If you started with the idea of a manual for teaching staff and now it is evident that a gaming app would be much better, then you should take this result seriously. The same applies if you notice that a different organization could carry out the planned project much better because of their respective expertise.

You should now have a much clearer idea of what is needed to meet the needs clarified in phases 1 and 2.

It is important here to once again bear in mind the ultimate purpose when making a choice.

Questions

– The results of the above-mentioned phases and the professional assessment within one's own organization are collated, interpreted and weighted: What is really needed? The objective is the most precise answer possible to this question.
– Are we the most suitable organization to develop the learning materials? Which partnerships make sense?
– Which one to three products (which may be very different) could best meet the identified needs?

Tools

– *Download your learnings*: Everyone presents their findings in the team; these are noted, bundled and prioritized.
– *Top Five*: Alle im Team wählen ihre fünf besten Produktideen / Ergebnisse. Diese werden zusammengetragen und gebündelt.
– *Share inspiring stories:* Sharing the most impressive experiences and results from phases 1-2.
– *Role play* to visualize the different positions which have emerged.
– Which ideas fill you the most with passion, enthusiasm and energy?
– *Find Themes*
– *Create Frameworks*
– *Bundle ideas*

4 IDEAS

Keywords: generating as many ideas as possible / reopening the frame

Description of the phase

Once you have thoroughly clarified what is really needed, once again in relation to these needs, you should go into a second opening, discovery or brainstorming phase:
Focused on the initial results from phase 3, explore now in depth everything related to these ideas: is there stuff we have neglected, totally different or new approaches, etc.

As a general rule: Don't consolidate your ideas too quickly – *never fall in love with your first innovative approach*.

Questions

– How could the results of focusing (What is needed? Step 3) be implemented as effectively as possible?
– In an ideal world without any financial, staff or organizational limitations, what specific form could 1 to 3 ideas take?
– Which other potential solutions would also exist? Could we learn from other areas to boost these ideas?
– What haven't we thought about yet in the first opening phase? Where were we caught up in our own biases (*http://mentalfloss.com/article/68705/20-cognitive-biases-affect-your-decisions*)?
– Which new stakeholder groups or co-creators can we incorporate on the basis of the results of phases 1-3? Which cooperations would make sense?

Tools

– *Brainstorm Rules*: However, be aware that brainstorming mostly doesn't work, as among other things the participants are mutually obstructive. How to make it more effective: *www.lifehack.org/571425/how-brainstorming-more-effectively*
– *Gut check*
– *Mash-ups*
– *How might we*
– *Co-creation session*
– *6-3-5 brainwriting*
– *Spiral model*
– *Bodystorming*
– *Mind maps*
– *S.C.A.M.P.E.R*
– *Osborn's checklist*
– *The collective notebook*

5 PROTOTYPE

Keywords: creating specific, testable pilot projects/prototypes

Description of the phase

Development of initial prototypes for products that should be open to improvement and change with respect to form and content.

Careful consideration should be given to quality & impact for each prototype. The questions and tools below can be used for this.

You are also strongly recommended to work together with internal and external experts. Together we can do better ☺.

IMPORTANT: The focus is on visualization and materialization, i.e. on making things real and tangible. The aim is to cast and convert ideas into a form that goes beyond a description or a sketch. This allows you to identify the strengths and weaknesses of a project idea as early as possible, because you and users can actually test them. Prototypes do not have to be complex and expensive. They should stimulate the imagination and enable feedback.

Questions

– Based on the ideas created in phase 4: Which are the 1 to 3 best ideas to be tested as prototypes?
– What should these products look like?
– Which (quality) criteria does it have to meet?
– Which general conditions (e.g. national curriculum or similar) does it have to be compatible with?

Tools

– *Create a concept*
– *Determine what to prototype*
– *Rapid Prototyping*
– *Live Prototype*
– *Storyboard*
– LATCH (Hinnen & Hinnen, 184-188)
– SILVIVA: Tool for Quality improvement in environmental education (Part II) | *PDF version* *Excel version* | *Instruction manual*
– Not all ideas and approaches can be reconstructed three dimensionally. In this case, other solutions must be found for visualization: drawings, short video films, role-play with symbolic objects and special artefacts, or photo collage etc.

6 TEST

Keywords: in-depth testing / testing with future users

Description of the phase

Before a product can be actually implemented, the prototypes from phase 5 should be broadly tested.

The strengths and weaknesses of implementation are only apparent in the actual application. You can never really anticipate this or figure it out in the design studio.

Practical feedback is important. This step also calls for the critical distance of the *Design Thinking* team. This requires a willingness to accept and learn from mistakes, to un-learn and reframe dearly held convictions. The learning aspect must be firmly anchored in the team's minds. Prototypes are not built in the *Design Thinking* process to win first prize or to earn laurels, but for development and learning.

Questions

– What do representatives of the various stakeholders and target groups (such as teaching staff, teaching staff trainers, students) say about the prototypes? In terms of content and form, but also after actual use?
– Do the prototypes meet the (quality) criteria that were clarified in phase 5?
– What is good / in need of improvement / can be discarded? What works, what does not work?
– Key question: Would I use it in my everyday teaching life?
– If so, what additional support would I need?

Tools

– Real-life testing of prototypes with users and questioning them on all aspects
– *Integrate feedback and iterate*
– *Keep iterating*
– *Pilot*

7 PIT STOP & REFLECTION[3]

Keywords: decision for a solution / convincing justification / systemic view of impact / reflection

Description of the phase

Now the decision has to be made on what is effectively produced. The design process makes it a well-founded decision.

The significant factor here is that you do not just focus on the product but also systematically consider how the usage and impact can be ensured.

Please ask yourself the self-critical question: Are we the most suitable organization to implement this solution? Does this make sense for us or would someone else do it better?

Questions

– What is evident from the test phase?
– Can we, with proper justification, decide on a product/solution?
– Can we answer all the questions from phase 1 (Comprehend) in a convincing manner?
– Have we reworked the impact model for the selected solution?
– If we implement this solution: What do we have to do to ensure that the learning materials are not only produced but also used in a way that creates impact (systemic perspective, think impact model through)?
– Is the organization ready for this? Or are other processes needed first within the organization before we can implement the chosen solution?
– Does the project fit into our educational concept and our organizational vision?

Tools

– SEEC (Hinnen & Hinnen, 34-38)
– Modelle (Hinnen & Hinnen, 194-199)
– Der One-Pager (Hinnen & Hinnen, 230-234)
– *Create a concept*
– *SWOT analysis*
– SILVIVA: Tool for Quality improvement in environmental education (Part I) | *PDF version* *Excel version* | *Instruction manual*
– Impact Model: *iooi method (Input – Output – Outcome – Impact)*

3 Yes, for the sake of environmental education and EfS we have attached a third, green diamond…

8 IMPLEMENTATION

Keywords: broad application / production

Description of the phase

The results of prototype testing are incorporated here: the actual product is developed now.

At the same time, the creation of the product does not mean the end of the process. This phase is about lining up all the measures that promote the use and impact of the product.

Questions

– What adjustments and changes do we have to make to the prototype?
– What is needed for production in terms of financial, time and staff/material resources?
– What is needed for broad application and use?
– What is needed for optimum impact? How do we check this impact?
– What do we need in terms of communication and marketing?
– How do we ensure the evaluation and possible adaptation of the product in the long term?
– How do we integrate users into these processes?
– With whom do we have to work together with so that we can implement this at all (graphic designers, copywriters, game developers, internal marketing / communication ...)?

Tools

– Overall vision:
    – *Define success*
    – *Create Frameworks*
    – *Roadmap*
    – *Business Model Canvas*
    – *Ways to grow framework*
– People & Partners
    – *Capabilities Quicksheet* | *Staff your project*
    – *Build Partnerships*
– Testing, evaluating & improving
    – *Pilot*
    – *Keep getting feedback*
    – *Measure and evaluate*
– Earning & selling
    – *Create a Pitch*
    – *Sustainable Revenue* | *Funding Strategy*
– Many useful methods are also available in the *Field Guide*: Integrate Feedback and Iterate, Roadmap, Resource Assessment, Build Partnerships, Ways to Grow Framework, Staff your Project, Funding Strategy, Define Success, Keep Iterating, Create a Pitch, Sustainable Revenue, Monitor and Evaluate, Keep Getting Feedback.

9 CLOSE THE (IMPACT) LOOP

Keywords: critical reflection / celebrate

Description of the phase

Take one step back and get an overall view:

In the long run, the quality of teaching materials and of the organizations producing them are developed by a willingness to learn and to apply what was learned the next time round, and to pass it on to others.

The advice from Konstantin Kehl (15.1.2019): “Consider this to be a deliberate **organizational development process** and an opportunity to make your organization agile and fit for the future.”

Fragen

– Did we achieve the desired impact and quality?
– What did we do well, what did we do not so well?*Sometimes you win, sometimes you learn*.
– Was sagt die Zielgruppe?
– What does the target group say?
– Did we document the processes so that we can benefit from the experience next time?
– Did we share our experiences with the EE & EfS scene and make them publicly accessible?

Tools

– *SWOT analysis*
– Impact Model: *iooi method (Input – Output – Outcome – Impact)*
– Feedback
– Write down the processes
– Celebrate and say thank you.

5. Minimum standards for developing learning materials in environmental education and education for sustainability

Overriding stance: "*never fall in love with your first idea*": remain open in the process, reflect again and again with distance, seek advice and cooperation, communicate within the team and with external stakeholders.

Minimum standards
Validated by the vast majority of participants at the 1st Collab of SEEC (Swiss Environmental Education Commission), 15 January 2019, Solothurn, Switzerland)

1. Meticulous clarification of needs, not just from an internal perspective
2. Incorporation of the current state of knowledge on the topic: research, broad brainstorming with users and experts, etc.
3. Incorporation of and communication with the target groups as early as possible
4. Creation of an impact model to determine the overall objectives.
5. Testing with target groups
6. Evaluation and adaptation

6. Literature

One of the best collections of design thinking methods, sorted by various filters (inspiration, ideation, implementation, by question, view all), can be found at: *www.designkit.org/methods* (accessed on 16 April 2019)

The Field Guide to Human-Centered Design. A step-by-step guide that will get you solving problems like a designer. IDEO.org *www.designkit.org/resources/1*. (accessed on 16 April 2019)

Hinnen, Andri & Gieri: *Reframe it! 42 Werkzeuge und ein Modell, mit denen Sie Komplexität meistern* (Reframe it! 42 tools and a model for mastering complexity). Hamburg: Murmann, 2017.

Phineo: Social Impact Navigator. The practical guide for organizations targeting better results. *www.phineo.org/downloads/PHINEO_Social_Impact_Navigator.pdf* (accessed on 31 May 2019)

7. Design Thinking : Further training

Mobiliar Forum Thun: *www.mobiliar.ch/die-mobiliar/engagement/wirtschaft-und-arbeit/mobiliar-forum-thun*

Ina Goller, Geschäftsleiterin, managing director & founder, Skillsgarden AG: *www.skillsgarden.ch*, *i.goller@skillsgarden.ch*

design thinkers academy London: *www.designthinkersacademy.co.uk*
design thinkers academy Amsterdam (global head office): *www.designthinkersacademy.com/about-us*
IDEO org: San Francisco, New York: *www.ideo.org*

Credits

This guide and the 1st Collaboration Lab of SEEC (Swiss Environmental Education Commission) “Qualität und Wirkung von Lernmedien” (Quality and Impact of Learning Materials) (15 January 2019, Altes Spital, Solothurn, Switzerland) were developed, planned and implemented by Nadine Ramer Almer and Erika Bauert from Pusch and Rolf Jucker von SILVIVA, on behalf of SEEC.

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On a final note, we would like to thank the 58 participants from 37 different Swiss EE & EfS organizations who made the above-mentioned conference possible: they have brought this guide to life, reviewed it critically and provided useful feedback and comments in the working groups and the evaluation (response rate: 34 of 58 participants). The guide received very positive and extremely valuable feedback: it was greatly appreciated by the majority and regarded as very helpful.

The program of the 1st Collaboration Lab of SEEC (Swiss Environmental Education Commission) “Quality and Impact” (15 January 2019) and the documents (presentation by Konstantin Kehl, list of participants, summary of the conference observer Ueli Nagel, report on the conference for folio magazine, evaluation of minimum standards) can be found at *www.education21.ch/de/fub-cee*

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