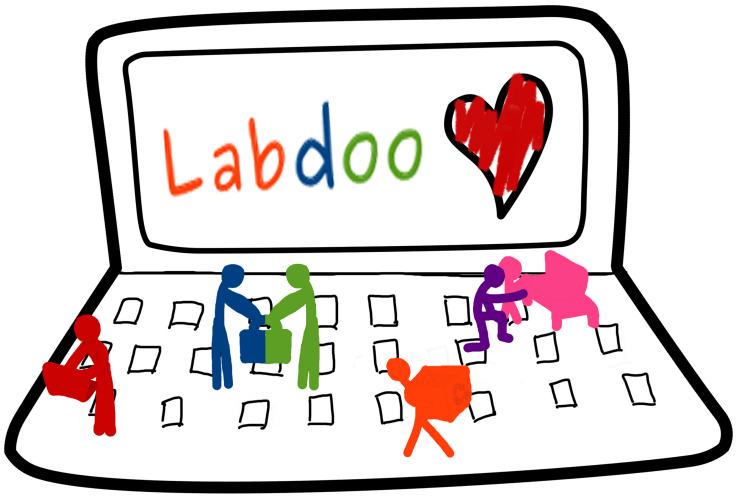
Labdoo.org

the Hub School Project

booklet



Building laboratories for edoocation one at a time

www.labdoo.org

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Glossary of Terms

Digital Divide: A global problem arising from the fact that those that do not have access to the Internet, cannot have free access to sources of education, which leads to lesser opportunities with respect to those that do have access to the Internet. Since those that have access to the Internet learn education at a much faster pace than those that do not, the digital divide leads to an ever increasing socio-economic gap between these two groups.

Dootrip: The action of transporting a laptop from one location to another in the luggage of volunteering travelers who had to undertake that trip regardless of the laptops. Dootrips effectively provide a transportation system with no economic or environmental cost.

Edoovillage: A location where the Labdoo network has a school project where laptops are sent.

Electronic Waste (eWaste): A global problem arising from the ever increasing consumption of electronic goods that at the end of their life time do not get properly recycled back to planet earth.

Labdoo: It stands for Laboratories for Edoocation—the mission of the Labdoo project is to use social network tools to bring laptops to children without incurring additional costs to Planet Earth.

Mini-mission: The mission of bringing a single unused laptop to a school so that children in that school can gain free access to sources of education.

The Circle of Life: It is the life-path that every laptop should undertake to ensure sustainability, including the extraction of its components from Planet Earth, their assembly into the actual laptop embodiment, its usage, its delivery to a child for education purposes using dootrips, and its final recycling back to Planet Earth. (See Appendix B.)

Ubuntu and Edubuntu: Open source and free software which comes with lots of education programs for children of all ages and for all languages. Labdoo laptops are always loaded with Ubuntu/Edubuntu before they are dootripped to a school in need.

What is Labdoo

Labdoo is a non-profit project that aims at providing laptops to schools in those parts of the world that are most in need, allowing these schools to gain free access to sources of education thanks to the laptops. What differentiates Labdoo from other non-profit projects that have the same objective is the approach. Labdoo does not have a centralized structure or ownership, on the contrary, it is a distributed project which allows anyone to participate, from any location and at any time. Labdoo provides the tools so that any participant can take on his or her own mini-mission to bring a laptop to a school. Such tools are found in the social network www.labdoo.org, in the form of a dashboard that allows participants to sanitize their laptops, manage their mini-missions, track the laptops as they make progress to a child, and eventually see pictures of the laptop as it reaches a child in a school.

Labdoo, therefore, efficiently connects participants with schools around the globe that need laptops, providing the tools to sanitize and bring the laptops to such schools. While typically Labdoo projects are located in disadvantages regions of the world (such as Africa, South East Asia, South America, Eastern Europe, etc.), projects can be located anywhere where there is a need.

A key objective of the Labdoo project is the “how”. The “how” defines how we deliver our mini-missions and, in that aspect, Labdoo centers around the idea of delivering each mini-mission without incurring any additional cost to Planet Earth. To that end, the Labdoo project has come up with a set of CO2-neutral ideas. For instance, (1) only unused laptops are utilized, (2) tasks are always divided into mini-tasks so small that don't cost anything to the environment, and (3) laptops are carried from one location to another using dootrips, that is, inside travelers' luggage and coordinated through the social network. Every concept behind the project is carefully designed for sustainability and is explained in more detail at www.labdoo.org.

What is the Hub School Project?

The main objective of this booklet is to provide a description to teachers of what the Hub School Project is. So what is it?

Since one of Labdoo's main lemmas is that “when it comes to making Planet Earth a more sustainable place, every one can participate”, the Hub School Project is a call inviting schools to join Labdoo in its effort to eliminate the digital divide and eWaste problems by creating their own mini Labdoo hub. In its most essential form, a Labdoo hub is in fact a very simple concept: it simply means a group of people that get together to collect and sanitize laptops, and use the social network tools provided by Labdoo to organize dootrips to bring those laptops to a child. (Appendix D describes some of the activities that can optionally take place in a hub.)

The Hub School Project is a humanitarian project that allows students to create their own mini-hub and make their contribution to help solve the digital divide, by helping other students in other schools of the world to gain free access to education. Notice that the project does not require any traveling, since all the tasks can be carried out in the school and its neighborhood. Hence, while the project makes a global contribution, tasks are always carried out locally. This is all possible thanks to the Labdoo tools which can connect resources to enable global mini-missions using local means.

Objectives

The objective of the Hub School Project is to have students engage in small humanitarian mini-missions which will allow them to explore the following set of global values:

- *Solidarity.* Understanding of the challenges that communities in the developing world face, valuing the resources that students have, and cultivating solidarity and empathy through the process of cooperative aid.
- *Planet earth sustainability.* Understanding the intrinsic cost of every action to planet earth, the need to come up with new ideas for a new sustainable world, and the putting into practice of such ideas. Understanding global challenges such as the digital divide

and electronic waste.

- *Global citizenship.* Growing up creating friendship bonds between both their local friends and classmates as well as their remote student friends in the developing world; understanding that in today's global context, we all have a “global citizenship passport”.

The specific act that will allow students to explore and get exposed to this set of values is the following: each student or group of students will take on the mini-mission of delivering a laptop loaded with educational software to another student in a school in the developing world. To carry out such mission, students will rely on two mechanisms:

- Mechanism 1: Students will be able to use the tools provided by the Labdoo social network, which provides a guided step by step process on how a laptop can be delivered to a child at a remote school in a sustainable manner.
- Mechanism 2: While the Labdoo tools provide step by step instructions to help deliver each mini-mission, students will be allowed to also rely on their own creativity and will gain credit for identifying new innovative approaches that they use to accomplish their objective.

Courses in Which The Hub School Project Can Be Imparted

The Hub School Project could be imparted as a module within any of the following courses or as an interdisciplinary project part of more than one of the following courses.

- Environmental course. Labdoo is all about delivering each mini-mission without incurring additional costs to Planet Earth. Through the project, students get to learn the meaning of eWaste, and how to design strategies to deliver each mission without a cost, for instance by way of concepts such as dootrips and technology recycling. Students are also encouraged to come up with their own environmental strategies to deliver their mini-missions.
- Critical thinking course. It is all about thinking new ideas to deliver our mission, that requires a lot of “thinking outside the box”, a lot of “reinventing yourself”. Who knows what the next big green idea will be!

- Ethics course. Why do we spend time thinking ideas to build things that are sustainable and make Planet Earth a healthier place to live? Simply because it is morally right. So teachers of ethics may also use the Hub School Project as a vehicle to teach their students theoretical concepts through actual practice.
- Technology course. Each mini-mission teaches students how to sanitize a laptop, take care of the technology, and install Ubuntu and Edubuntu (Ubuntu is based on the operating system Linux, a very powerful open source software technology). So students end-up using and learning themselves cutting-edge software technology.
- Entrepreneurship course. The Labdoo tools and the teacher(s) can help guide the students in accomplishing their mini-missions, but ultimately students are the ones that will need to come up with their own plan. That will require innovation and entrepreneurship.
- Economics course. Beneath Labdoo, there is a set of socio-economic ideas that explain why the project is economically sustainable. Labdoo in fact belongs to a set of projects that economist classify as new “wikinomics”. Concepts such as the opportunity cost of a dootrip, or the economic meaning of the “wealth of networks” (originally coined by Harvard economist Yochai Benkler), can be introduced to students as part of a course in economics, allowing them to put these concepts into practice through an actual project.

Project Structure

A typical Hub School Project will have the following stages:

- *Bootstrapping stage.* The students will be introduced to the project, its description and the definition of the objectives and the means to carry them out. A volunteer from the Labdoo team will help the teachers by making a presentation of the Labdoo project to the students, explaining the socio-economic concepts behind the circle of life story (Appendix B) and overall directions of the project.
- *Organization of tasks and assignment of mini-missions to students.* Teachers and students will define mini-missions (number of laptops to be collected and destination

schools of such laptops). Teachers will have the choice to allow students to work individually or by groups.

- *Execution of mini-missions.* Once the objectives and tasks are assigned, students will begin their work. The duration of the project can also be adjusted depending on the necessities of each classroom. Recommended durations of each round of mini-missions can be 4 months (quarter-based) or 6 months (semester-based).

- *Final essay write-ups.* Once the project is completed, students will be required to write an essay describing the steps they took in carrying out their mini-mission. The essay will also include the description of any innovation produced by the student and geo-tagged pictures of the work done (including a picture of the children that received the laptop which will be provided by the Labdoo social network). While teachers can define their own, Appendix C provides a sample template of the final essay that can optionally be used.

Evaluation Criteria

1) Is the knowledge/experience from the Hub School Project applicable for further use in the future (e.g. practical as an everyday skill or in future career?

Not applicable/practical									Very Applicable/ practical
1	2	3	4	5	6	7	8	9	10

2) Has this course taught students' new information not already introduced in class/ through the curriculum? If yes, please specify what new information they have learned.

No new information									All new information
1	2	3	4	5	6	7	8	9	10

3) Is this Hub School Project a novel opportunity for your school students to be part of an…
   a) e-waste reduction program?
   b) technology-education program?
   c) hands-on/ skills-based program?
   d) entrepreneurship program,?
   e) ethics/ community-service program?

4) Is there interest to continue the program and/or deepen their understanding (in technology/ e-waste/ entrepreneurship) ?

Not much interest at all — Much interest to continue and learn more

1 2 3 4 5 6 7 8 9 10

5) Did this project provide the students with opportunities to practice leadership?

Not at all — There were many opportunities

1 2 3 4 5 6 7 8 9 10

6) Did this project provide the students with opportunities to practice teamwork?

Not at all — There were many opportunities

1 2 3 4 5 6 7 8 9 10

7) Did this project provide the students with opportunities to practice creativity/ new ideas?

Not at all — There were many opportunities

1 2 3 4 5 6 7 8 9 10

8) Did this Project support school values or school goals or personal values and goals for the students?

Not at all — It exceeded goals & expectations

1 2 3 4 5 6 7 8 9 10 11

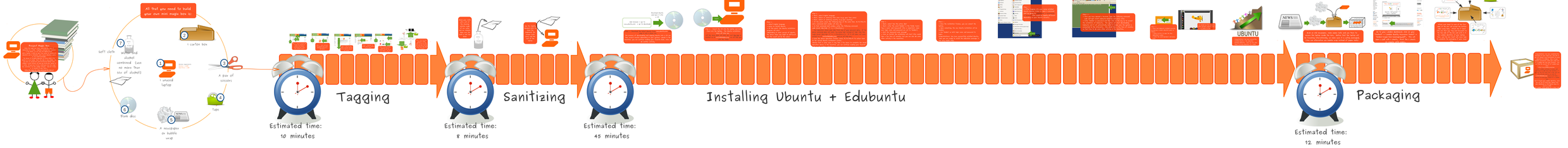
9) How would you rank this Project overall?

Low — High

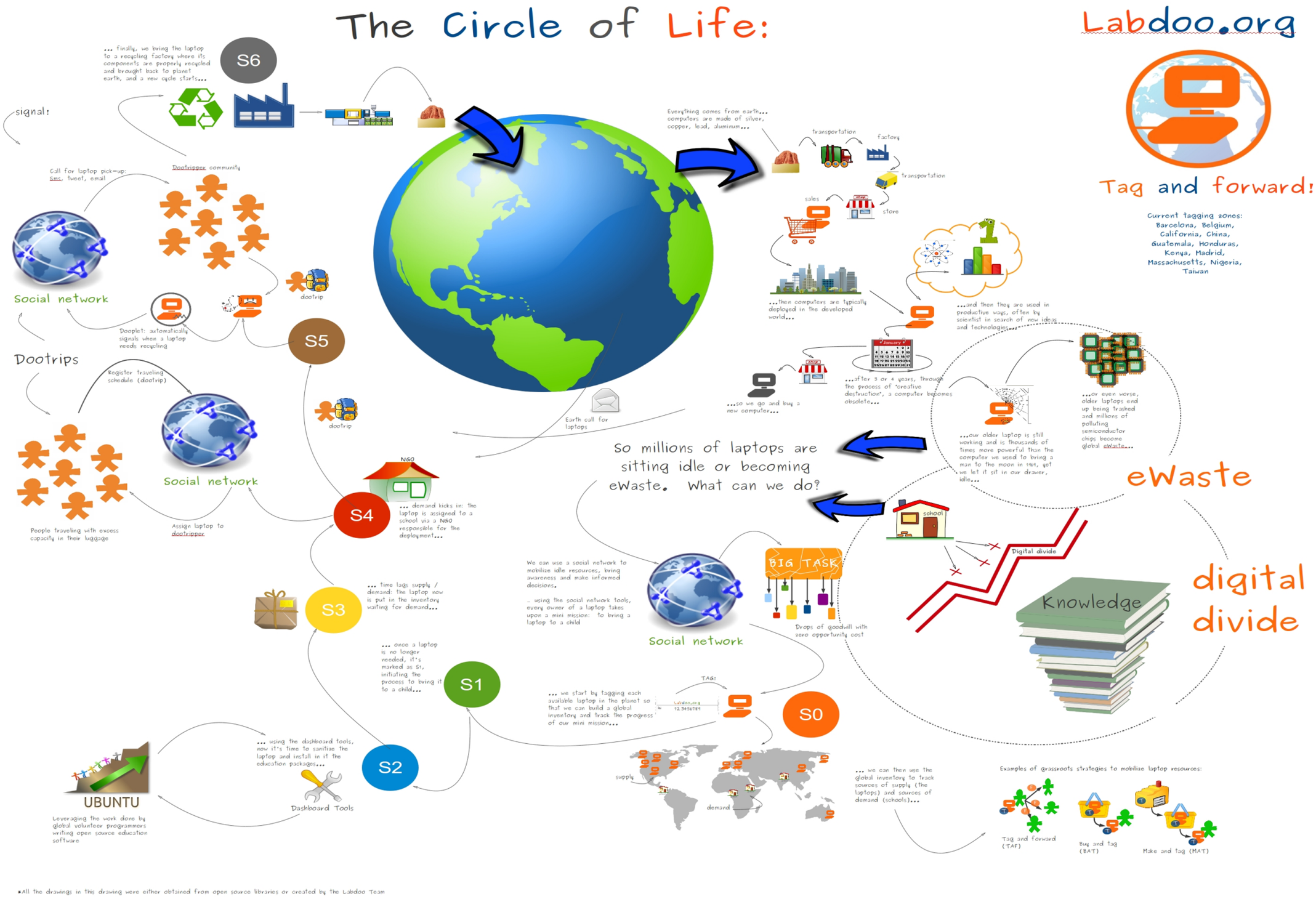
1 2 3 4 5 6 7 8 9 10

Reason(s):

Appendix A: How to Create your Own Magic Box to Bring Edoocation to a Child



Appendix B: The Circle of Life



*All the drawings in this drawing were either obtained from open source libraries or created by the Labdoo Team

Appendix C: Final Essay Template

Step 1:

In this reflective essay, please summarize your experience in the Hub School Project by answering the following. In the introduction paragraph explain: In your own words, what is the Hub School Project? What is its mission? How have you been a part of the mission? What has been your role—designated responsibilities—in the project? In the body paragraphs explain: in a summary the activities and events that took place and which you were a part of; what did you do in those events? Did you learn any new information through the Project? What skills did you apply in the Project? What are challenges that you faced, Lastly, in the conclusion include: What are changes you would like to see for the Project? Were there any realizations or new goals that came out of being in the Project?

*Please write this essay in no less than [TEACHERS' CHOICE] pages, double-spaced, in 12 pt font in Times New Roman.

Step 2:

Please provide 2-3 pictures that can represent you and the Project “in action” with a caption (no less than a sentence) explaining the picture.

Step 3:

Please answer these questions:

1) Is the knowledge/ experience from the Hub School Project applicable for further use in the future (e.g. practical as an everyday skill or in future career?

Not applicable/practical — Very Applicable/ practical

1 2 3 4 5 6 7 8 9 10

2) Has this course taught you new information not already introduced in class/ through the curriculum? If yes, please specify what new information they have learned.

No new information — All new information

1 2 3 4 5 6 7 8 9 10

3) Is this Hub School Project a novel opportunity for you to be part of an…

a) e-waste reduction program?
b) technology-education program?
c) hands-on/ skills-based program?
d) entrepreneurship program,?
e) ethics/ community-service program?

4) Is there interest to continue the program and/or deepen their understanding (in technology/ e-waste/ entrepreneurship) ?

Not much interest at all — Much interest to continue and learn more

1 2 3 4 5 6 7 8 9 10

5) Did this project provide you with opportunities to practice leadership?

Not at all — There were many opportunities

1 2 3 4 5 6 7 8 9 10

6) Did this project provide you with opportunities to practice teamwork?

Not at all — There were many opportunities

1 2 3 4 5 6 7 8 9 10

7) Did this project provide you with opportunities to practice creativity/ new ideas?

Not at all — There were many opportunities

1 2 3 4 5 6 7 8 9 10

8) How would you rank this Project overall?

Low — High

1 2 3 4 5 6 7 8 9 10

Reason(s):

That's all! Thank you for your cooperation and good luck in the future ☺

Appendix D: Activities Involved in a Hub

Labdoo.org beta

Setting up your own hub

Hub Activities

As a hub you can choose to do any of the following activities. A best practice is to start with one or two activities, and then progressively increase as you gain experience. In any case, you decide which activities you can carry out depending on your resources.

Deployment –
Identify schools that need laptops and set up new edoovillage projects with them

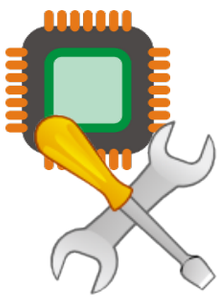
school

Recycle Laptops –
Recycle laptops that no longer work and help reduce eWaste

Labdoo Hub Network

Collect and tag laptops –
Collect unused laptops from your local community and maintain your own laptop inventory

Global Events –
Set up your own global events such as QA Global parties, where volunteers from around the globe meet to fix and sanitize laptops



Quality Assurance –
Sanitize laptops, install Ubuntu + education software, build magic boxes

Dootrips –
Organize your own dootrips by mobilizing travellers in your own area

Outreach your community–
Let people know about the digital divide and eWaste problems, mobilize people to help the Labdoo cause.

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