World Possible - RACHEL Survey

Q1 What type of RACHEL installations have you used?
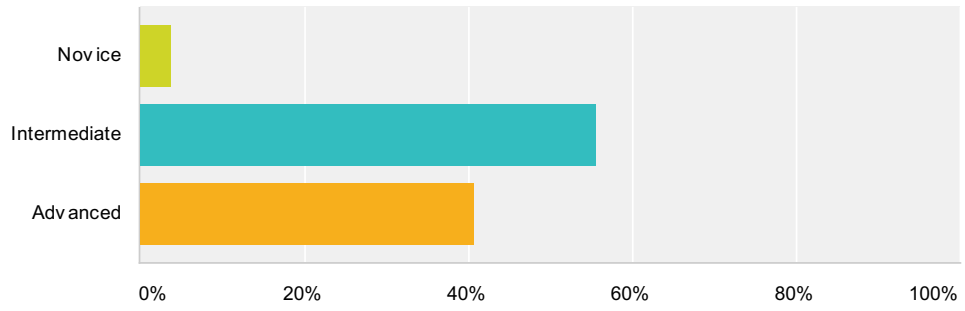
Answered: 24   Skipped: 3
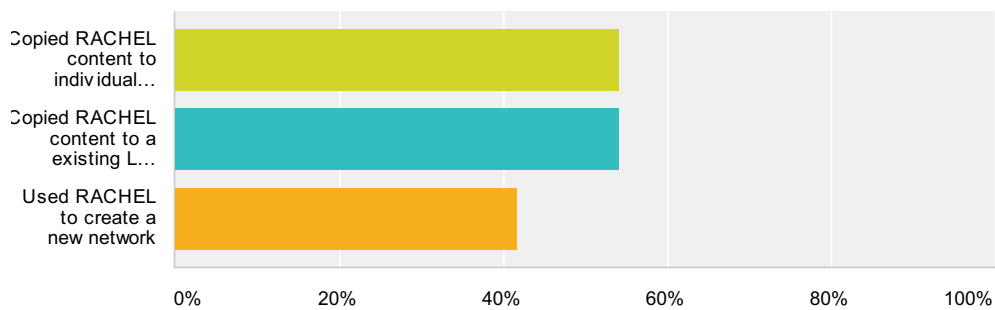
Answer Choices	Responses	
Copied RACHEL content to individual computers or tablets	**54.17%**	13
Copied RACHEL content to a existing LAN network or server	**54.17%**	13
Used RACHEL to create a new network	**41.67%**	10
Total Respondents: 24		

| #	Other (please specify)	Date
1	Used the RACHEL installation for the Raspberry Pi	6/24/2013 5:13 AM
2	intend to offer RACHEL to Looma users	6/20/2013 3:57 PM
3	one test on a standalone raspberry pi	6/20/2013 3:00 PM
4	I have only just started to investigate RACHEL for use in a children's home. I will probably copy RACHEL to an existing server.	6/18/2013 2:41 AM

Q2 What is your technical background?

Answered: 27   Skipped: 0

Answer Choices	Responses	
Novice	**3.70%**	1
Intermediate	**55.56%**	15
Advanced	**40.74%**	11
Total		27

Q3 How many RACHEL installations have you performed?

Answered: 27   Skipped: 0
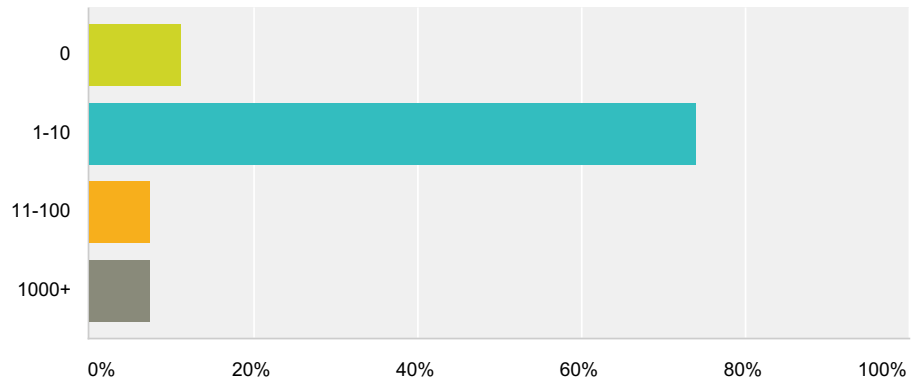
Answer Choices	Responses	
0	**11.11%**	3
1-10	**74.07%**	20
11-100	**7.41%**	2
1000+	**7.41%**	2
Total		27

Q4 Where have you installed RACHEL servers?

Answered: 22   Skipped: 5
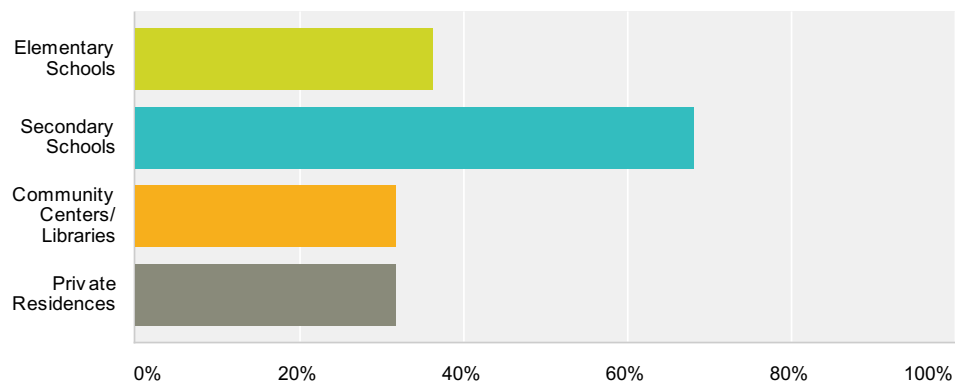
Answer Choices	Responses	
Elementary Schools	**36.36%**	8
Secondary Schools	**68.18%**	15
Community Centers/ Libraries	**31.82%**	7
Private Residences	**31.82%**	7
Total Respondents: 22		

#	Other (please specify)	Date
1	government ministers and directors of NGOs	7/11/2013 3:27 AM
2	home	6/22/2013 8:39 AM
3	have yet to. The first will be on our six prototypes. Looma V1 next year will have RACHEL	6/20/2013 3:57 PM
4	Adult Correctional Education (K-12)	6/18/2013 9:58 AM

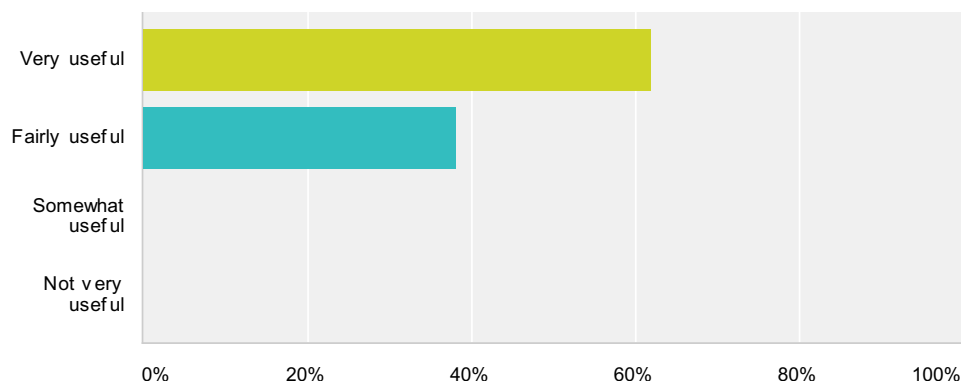## Q5 How many users access your typical RACHEL installation?

Answered: 25   Skipped: 2
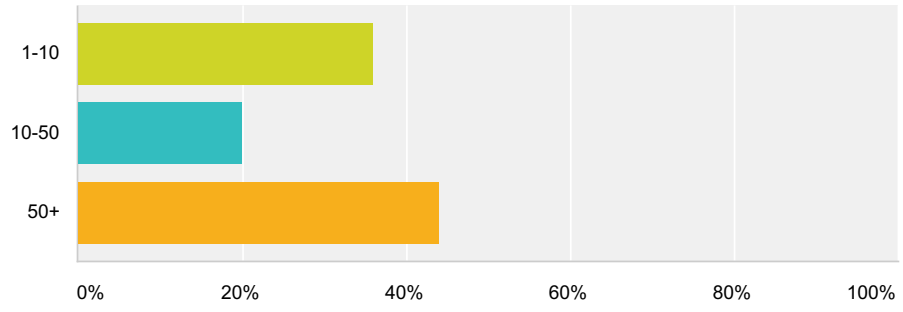
Answer Choices	Responses	
1-10	**36%**	9
10-50	**20%**	5
50+	**44%**	11
Total		25

Q6 How useful has your RACHEL server been? Please explain why in the comment field below.

Answered: 21   Skipped: 6

Answer Choices	Responses	
Very useful	**61.90%**	13
Fairly useful	**38.10%**	8
Somewhat useful	**0%**	0
Not very useful	**0%**	0
Total		21

| #	Comments/ Suggestions	Date
1	Biggest challenge is capacitating teachers to use the content within their classes, to support the curriculum. If teachers aren't aware of how the content supports their lessons (in a way that is immediately clear, i.e. 'this video is linked to this section of the maths curriculum…etc') then there is a severe underutilisation of the materials. Secondly, if there was a print out detailing the content contained within Rachel that could be provided to head teachers, heads of department and subject teachers (etc), then this will proactively encourage usually non-ICT conversant individuals to explore further, rather than hoping that they will stumble across the content themselves.	7/14/2013 7:15 AM
2	Rachel provides off line content in AFrica . This is essential in that the Internet use is still far too costly for learning in Africa.	7/11/2013 3:27 AM
3	We just did the install a few weeks ago as part of a humanitarian/mission effort. The initial interest in RACHEL by the students and a few teachers was very high. I will not be there to see how useful it remains or how often they students have access to the computers, but will get a report next June when the group returns (our group has been working with this school for ~9 years and plans to continue).	6/24/2013 5:13 AM
4	One of the main things that Rachel enables is serving content like khan academy from a basic windows box (as opposed to a windows server or Linux box, which would add maintenance complexity). Also, the searchable Wikipedia setup speeds installation enormously over direct installation per machine.	6/23/2013 8:08 AM
5	RACHEL content has been very usefull to supliments learning materials as well as fantastic math and science viedeos to students in remote area where internet connection is unreliable	6/22/2013 1:03 PM
6	I am experimenting with it.	6/22/2013 8:39 AM
7	Installed RACHEL in a secondary school in Tanzania. They are just now learning to use it, but expect it to be a big success. Lots of material available without need to access internet. Challenge is to get teachers to endorse RACHEL and learn t use it.	6/21/2013 9:53 AM
8	Too soon to really assess this. What Rachel does provide is a volume of immediate content that teachers and pupils can access so they gain an appreciation that computers can be more than just using Microsoft Office type applications	6/21/2013 12:50 AM
9	Students and teachers are using the KA and CK-12 texts, wiki content, and the school nurse has downloaded the Hesperian health information.	6/21/2013 12:04 AM
10	RACHEL sever made it possible to bring Khan Academy videos to a school.	6/20/2013 6:09 PM

11	Data is expensive	6/20/2013 5:30 PM
12	This is yet to be determined. We need to get our systems up and compatible with RACHEL. Then the usefulness will depend on searching ease, how to tie content to lessons, etc.	6/20/2013 3:57 PM
13	Purely for testing to see what's there. Not yet deployed anywhere "real"	6/20/2013 3:00 PM
14	Thousands of children in villages in Ghana and Liberia are able to access vast contents of information without Internet connectivity. It helps teachers with great materials. In community settings, children and adults are able to research information without paying money at internet cafe with slow internet.	6/18/2013 1:40 PM
15	Not fully deployed yet, so I can not answer this question yet.	6/18/2013 7:02 AM
16	We are in Central America so have limited use for Rachel in English. Certainly more content in Spanish would be very helpful. Also experiencing SD card failures at a pretty good rate which is making us look beyond the Raspberry Pi which would otherwise be an obvious vehicle.	6/18/2013 5:09 AM

Q7 How helpful would the following improvements to RACHEL be? (1 being least, 5 being critical)

Answered: 24   Skipped: 3
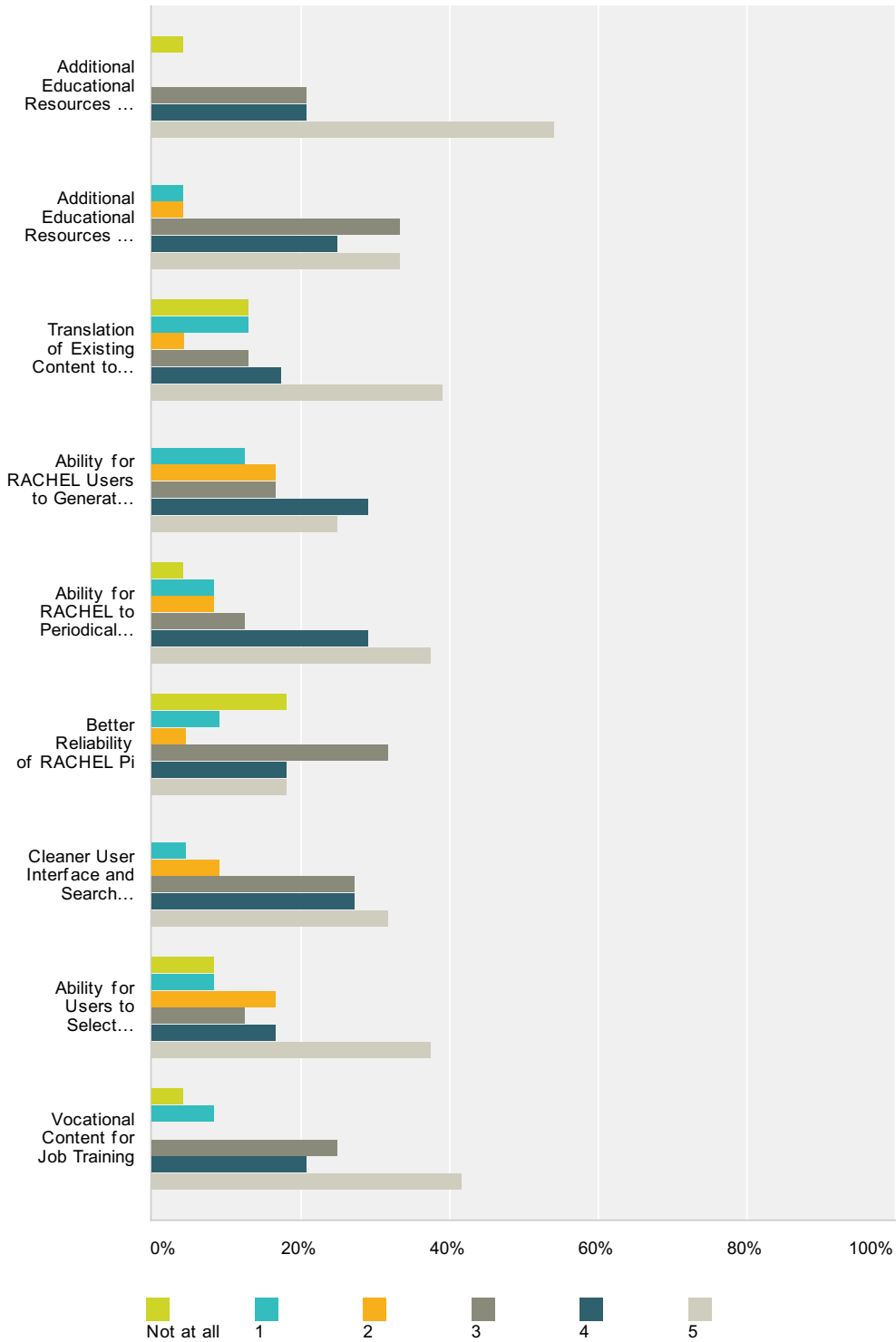
	Not at all	1	2	3	4	5	Total
Additional Educational Resources for Children	4.17% 1	0% 0	0% 0	20.83% 5	20.83% 5	54.17% 13	24

Additional Educational Resources for Adults	0% 0	4.17% 1	4.17% 1	33.33% 8	25% 6	33.33% 8	24
Translation of Existing Content to a Local Language	13.04% 3	13.04% 3	4.35% 1	13.04% 3	17.39% 4	39.13% 9	23
Ability for RACHEL Users to Generate Content	0% 0	12.50% 3	16.67% 4	16.67% 4	29.17% 7	25% 6	24
Ability for RACHEL to Periodically Connect to Internet to Update Content	4.17% 1	8.33% 2	8.33% 2	12.50% 3	29.17% 7	37.50% 9	24
Better Reliability of RACHEL Pi	18.18% 4	9.09% 2	4.55% 1	31.82% 7	18.18% 4	18.18% 4	22
Cleaner User Interface and Search Function	0% 0	4.55% 1	9.09% 2	27.27% 6	27.27% 6	31.82% 7	22
Ability for Users to Select Content for Download onto Tablets or Smartphones for Home Use	8.33% 2	8.33% 2	16.67% 4	12.50% 3	16.67% 4	37.50% 9	24
Vocational Content for Job Training	4.17% 1	8.33% 2	0% 0	25% 6	20.83% 5	41.67% 10	24

#	Other (please specify)	Date
1	1. Related to the ability for users to generate content, it would be useful to allow others to add content to RACHEL (I don't see the users I worked with as being capable of adding content yet, but it will happen!). Perhaps some sort of ability to "plug in" additional WP or user sponsored modules, and/or wiki capability. Plug-ins may be a way to manage the size of the install as you gather more content (e.g., some modules may be optional) 2. Consider a portal type of UI. I don't know how much this would add to the complexity of the install though (simple is best!). I looked at Metadot but the install still seemed a bit complex as we have to remember that someone else needs to maintain this when we are not present 3. Read-along books (i.e., see the text and hear the words)	6/24/2013 5:13 AM
2	It would be useful to have some more simplified content - both for children and adults. e.g. Wikipedia for Kids almost needs to have a summary text/image section that then cross-references/links to a more complete article.	6/21/2013 12:50 AM
3	Many students are learning in English which is not their first or even second language. More content such as vocabulary help, grammar help, and fiction at the elementary level would be helpful. I don't know if it is possible or whether it takes up too much memory, but an offline dictionary/thesaurus would also help. I am having some problems with the Merriam-Webster Offline dictionary at present. Finally, interactivity for problem sets in math, for example, like KA-lite has done would be fantastic. With flashdrives and SD cards capacity increasing, perhaps this might be possible.	6/21/2013 12:04 AM
4	The ability for a RACHEL server to create a local mini cloud. This would allow simpler computers to be used as clients, because the server could provide storage and basic software like word prepossessing. This would really helpful in school because students could have there own cloud account to manage there work and documents.	6/20/2013 4:07 PM
5	We want to make sure that content in RACHEL which is a good supplement to a specific lesson in the government texts is easy to identify. This could be a really really tedious exercise, and never finished if the search and match is done one by one by people. Having an easy way to select words in a textbook, and then have a 'suggested' assortment of RACHEL links could be really helpful.	6/20/2013 3:57 PM
6	Vocational contents such as farming would be a superb help. Activities such as fish farming, raising of goats, poultry and pigs will do a great deal to help the poor young farmer who is trying to pull themselves out of poverty.	6/18/2013 1:40 PM
7	In my case, It would be great if I could install RACHEL on an existing Linux computer/server. Now I have to choose between Windows and RPi platform. I prefer to avoid Windows in my case because of license stuff and hardware requirements, and there is no money for an RPi platform. There is old hardware available, so it would be great if we could use that hardware for a RACHEL server and general purpose clients.	6/18/2013 7:02 AM

Q8 What country are you operating in?

Answered: 26   Skipped: 1

#	Responses	Date
1	Ethiopia, Kenya, Zambia	7/14/2013 7:15 AM
2	Uganda, Tanzania, Other African countries through conferences	7/11/2013 3:27 AM
3	Tanzania	6/24/2013 5:13 AM
4	Laos	6/24/2013 3:49 AM
5	Alaska	6/24/2013 12:53 AM
6	South Africa	6/23/2013 8:08 AM
7	Tanzania	6/22/2013 1:03 PM
8	plan to work in Mali for a start	6/22/2013 8:39 AM
9	Tanzania	6/21/2013 9:53 AM
10	Ghana	6/21/2013 12:50 AM
11	Uganda, Tanzania	6/21/2013 12:04 AM
12	Uganda	6/20/2013 6:09 PM
13	Many	6/20/2013 5:30 PM
14	South Sudan	6/20/2013 4:07 PM
15	1 Nepal, 2 probably Spanish, 3 possibly Swahili	6/20/2013 3:57 PM
16	sri lanka	6/20/2013 3:06 PM
17	Ireland	6/20/2013 3:00 PM
18	Ghana and Liberia	6/18/2013 1:40 PM
19	USA	6/18/2013 9:58 AM
20	Uganda	6/18/2013 7:02 AM
21	FSM	6/18/2013 6:13 AM
22	Guatemala and Honduras	6/18/2013 5:09 AM
23	Ghana	6/18/2013 4:57 AM
24	Tanzania	6/18/2013 4:20 AM
25	Paraguay	6/18/2013 3:32 AM
26	South Africa	6/18/2013 2:41 AM

Q9 Where did you hear about World Possible?

Answered: 25   Skipped: 2

#	Responses	Date
1	Through Daniel Stern	7/14/2013 7:15 AM
2	From Sal Khan	7/11/2013 3:27 AM
3	I don't remember! But I'm telling many others who have any interest in education in developing nations.	6/24/2013 5:13 AM
4	Jeremy	6/24/2013 3:49 AM
5	Net	6/24/2013 12:53 AM
6	Search, khan on a stick	6/23/2013 8:08 AM
7	www.worldposible.org	6/22/2013 1:03 PM
8	internet	6/22/2013 8:39 AM
9	Internet search	6/21/2013 9:53 AM
10	Email on Cameroon project	6/21/2013 12:50 AM
11	Through CK-12's Juli Weiss	6/21/2013 12:04 AM
12	Internet	6/20/2013 6:09 PM
13	at the beginning	6/20/2013 5:30 PM
14	Khan academy	6/20/2013 4:07 PM
15	From Joan Fuetsch of Riecken Libraries	6/20/2013 3:57 PM
16	through a friend	6/20/2013 3:06 PM
17	raspberrypi.org	6/20/2013 3:00 PM
18	And-Albert and EVCO partnership with Norberto	6/18/2013 1:40 PM
19	KA on a Stick	6/18/2013 9:58 AM
20	Google / RPi website	6/18/2013 7:02 AM
21	internet search	6/18/2013 6:13 AM
22	Not sure. Read about it and saved site as a favorite	6/18/2013 5:09 AM
23	Web	6/18/2013 4:20 AM
24	Web	6/18/2013 3:32 AM
25	Through a guest post on raspberrypi.org	6/18/2013 2:41 AM

Q10 Please let us know any other comments that you may have.

Answered: 17   Skipped: 10

#	Responses	Date
1	Camara is collating data from our M&E exercises. We will be happy to share feedback on educational content uptake in schools.	7/14/2013 7:15 AM
2	I am technical (software applications architect) but do not have a high level of skill in administering servers or in linux. The RPi install and instructions were excellent for anyone with moderate tech understanding. Keeping it straightforward will enable the content to be used more often. I see too often that tech starts as an enabler and then becomes an impediment as more and more is added. It's a tough balance and RACHEL is on the right side! Thank you.	6/24/2013 5:13 AM
3	Translation to local languages is the most critical for us.	6/24/2013 3:49 AM
4	Thanks for your great project, we hope to use it in Alaska to bridge the digital divide.	6/24/2013 12:53 AM
5	Resources for learning English through pictures or some other broadly applicable method would be great. I also find it beneficial to organize content by grade level, as the full content can b overwhelming to a teacher looking for specific lessons. This presents some complexity considering the diversity of curriculums.	6/23/2013 8:08 AM
6	1. Content in French is essential for much of Africa 2. Ease of adding local content would be great.	6/22/2013 8:39 AM
7	Great job! Keep it up. This type of material is invaluable in the developing world.	6/21/2013 9:53 AM
8	Move Khan videos to end of Rachel because only run on HTML5 - most common browser in Ghana is Firefox. Support for Realtek wireless devices as well as Ralink Mobile/smart phone friendly content - snippits of information Android will be the tablet op system that dominates in Africa "Enticement" content e.g. a football section (round ball version!!). Sad in a way, but football is one of the main "global" community topics of conversation for men Women's content - sewing patterns, ideas techniques etc. presentation format content - small rural school-based computer labs used to expose parents to what their children are learning through presentations and demos. Material explaining how best to use Rachel - sort of 'sales' type material to help get across across the benefits of Rachel to for example education management at local, regional and central government level Early days for me and those I am in contact with on Rachel. More feedback and comments later in the year	6/21/2013 12:50 AM
9	Thank you	6/20/2013 5:30 PM
10	I think RACHEL could benefit greatly by adding a local opensource cloud computing. I have been looking at Feng office as an example	6/20/2013 4:07 PM
11	We think you are great.	6/20/2013 3:57 PM
12	It would be a great opportunity if we can combine the 30 computer labs that EVCO has set up and donated in Ghana, Liberia and Nigeria to drum up support for a grant that can help to further the great potential of RACHEL in poor villages in Africa.	6/18/2013 1:40 PM
13	Recently I had contact with you about a Linux version of RACHEL. You told me that the Linux version was in development and hopefully will be ready soon. I will leave my internet connection on July 16th, and you told me that the Linux version would probably be finished before that time. I really hope that I can bring RACHEL for Linux to Uganda on July 16th. Good luck with the development!	6/18/2013 7:02 AM
14	The State of Chuuk, one of the four Federated States of Micronesia, is working to increase the use of Information and Communication Technology (ICT) in their primary and secondary schools. The Illinois Institute of Technology (IIT) SOC 385 "Fieldwork Methods" course was initially connected to this project through their instructor, Dr. Laura Hosman. She has had previous experience working with the Department of Education on other education focused ICT projects in the area. The IIT project team has identified their primary project goal as creating an open source supplemental educational system. This will be accomplished by designing an offline server that contains a database of educational material utilized by students through tablet-based, solar powered computer lab. Overall, the main project goal is to provide basic tools to incorporate into the curriculum at schools in the State of Chuuk of the Federal States of Micronesia. We plan to set up a main server which will hold all the relevant information. We know it cannot be all inclusive due to space issues, but hope to make it as comprehensive as possible for the purposes of education. On the server itself, we will be including content for students from 3rd grade to 8th grade, instructions on how to use the technology in general, and a teacher training plan for how to incorporate the technology into the classroom. We have set up the user interface connected to the server which can be accessed by students and teachers in order to reach the information and coursework they need. To function as an educationally focused server in the developing world, obtaining relevant and useful content is one of the most important design objectives. When doing basic research for the server, our team came across the existing server RACHEL. RACHEL is an initiative whose intentions are similar to our project's: to develop a server for improving the quality of education in the developing world. After analyzing the RACHEL server itself, both at a technical and content level, we found many positive aspects of RACHEL as well as many areas for improvement. By sharing these, we hope to help the RACHEL team, or similar projects in the future, to understand how we expanded upon their model to serve our project's needs as well as how they can improve upon their own system moving forward. In addition, this will be the foundation for	6/18/2013 6:13 AM

future iterations of the SOC 385 course to understand why certain content was chosen and where there is room for growth in regards to content in the future. Pertaining to the realm of mathematics, Rachel contained a variety of textbooks as well as educational videos from Khan Academy. In terms of academic standards put forth by the Department of Education of the United States of America and the Department of Education of Micronesia, the Rachel server content had no significantly lacking region of mathematical material. However, a reasonable portion of the materials gathered for the Rachel server were discarded for our project. Of the Khan Academy videos, all material that was above a college preparatory level were discarded since the material was beyond the scope of the project. Of the textbooks, all were discarded for one or more of the following three reasons: the text provided an insufficient quantity of examples within particular topics, the text did not provide sufficient visualization of content and examples, or the text required an understanding of the English language that was incongruent with the level of mathematics being learned due to the pace in which students are taught English and the frequency in which classes are taught in Chuukese. In regards to the science content, one of the main tasks was to discriminate between the information that can actually be useful and available for the students of Chuuk and the material that is beyond the scope of our project. Most of the information presented by RACHEL for the science department was in the format of video content with an accompaniment of pdf books. The content of science was categorized into the following fields: Physics, Chemistry, Biology, Organic Chemistry, Cosmology & Astronomy, Earth Science and Life Science. Some of disadvantages encountered when trying to formulate and re-categorize the information for the schools in Chuuk for the science department was to try to obtain the correct level of information that is equal to the level of science that is expected of a regular student in Chuuk. For example some material found in the Biology, Physics and the Organic Chemistry department were a little too advanced for a high school student. Some of the information had to be deleted in order to level the content. Also, another setback with the information on RACHEL was that it was lacking more written examples in pdf format, or booklets, which would benefit the student if this type of examples were to be accompanied with the vast selection of videos from Khan Academy. On the other hand, RACHEL does provide plenty of videos in the science department that will definitely benefit the student. Also it would be beneficial if the videos contained captions for different languages. Similar to an option as provided in youtube videos. Therefore students from different parts of the world would be able to benefit from the information in RACHEL. In regards to the format in which the information in RACHEL was categorize in respects to the order and organization; it was neat and the subjects followed each other. Therefore, there were no problems with having to organize the actual information in RACHEL. Lastly, the final information added to the content was selected for special requests made by a teacher that requested more information on environmental sciences for the middle school students. In regards to environmental science, RACHEL was lacking some content, and therefore supplements had to be found. As a whole, RACHEL is a very useful tool to start from with the material it contains, and also it a great tool for any student to improve or practice their academic skills. The language section of content from the Rachel server included a list of World Literature Ebooks. These books were found to be unsatisfactory for our project due to the tiny font of the letters as well as the lack of any pictures, especially within the section named "Children's Fiction". Grammar necessary for students to learn the English language was found to be missing on the Rachel server. Therefore, additional content from online websites were used. This content comprised of online pdf's documents of English books that are easy for children to read due to the following: large font and colorful pictures that assist in reading comprehension in addition to colorful lessons and pdf grammar worksheets that help children to learn how to better write the English language. Beyond the subjects of Math, Science, and English, there was additional material that the project team felt was important to include. The specific material we included on our server from RACHEL were the Wikipedia articles and several health guides by Hesperian. Our in-country partners expressed that health guides could be of use to educate children beyond the typical classroom topics and expand the health knowledge of both students and the community. Without surprise, culturally relevant material was pertinent to our server but was one area in which RACHEL was lacking. On our server, we included Micronesian videos about cultural figures, local history, and more. We felt that incorporating such material would increase the usability of the server itself because people in the country would feel a strong attraction to material relevant to their culture and nation specifically. We also included some digital graphic organizers to provide a means for teaching more creatively to teachers who lack the same physical amenities that many people are accustomed to. Overall, this section has the most room to grow. We will be continually looking for additional areas to expand into in order to provide the best overall product for the communities we are working with. In the future, expanding our system for schools in other regions of the world to use is a hopeful goal. We had specific content relevant to the site we were working at, but this may not be true for different regions. Understanding the culture and education system of regions is the first step in making this project a global reality as well as something we really focused on when finding content for our project.

15	Would it make sense for you to collaborate with the people developing KA Lite?	6/18/2013 5:09 AM
16	I added PHET science simulations and some audio books from librivox to my installations http://phet.colorado.edu/ http://librivox.org/ I also worked with Books for Africa to install Rachel on computers they ship to Africa. Not sure about local languages but there are a lot of countries that could use French or Spanish.	6/18/2013 4:20 AM
17	Sorry that I'm not much help at the moment, but I hope that the little data that I have provided will help. Hopefully by the time the next survey comes around, I'll have a lot of data to contribute!	6/18/2013 2:41 AM