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Learning in emergency operations

A case study of an open, massive distance learning course organized by the International Federation of Red Cross and Red Crescent societies

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Raniel, p. 12

"I learned about coordination, reporting and information screening very rapidly. I also had to learn all about the IFRC systems. One thing to know is that IFRC is bureaucracy heavy."

Briana, p.14

"…it is important to seek the knowledge about the local settings, to find where the biggest needs are, and to be very clear about the choices made, at the same time be very polite…"

Breno, p. 17

"… there is no real substitute for learning 'on the job' and having life experiences on which to draw resilience and resourcefulness"

Joanne, p. 19

Emmanuel, Lukas, Raniel, Briana, Breno, and Joanne:
Some of the ERU voices we "listened to" in order to write this paper.

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1. Executive summary

"Doing more, doing better and reaching further" is the aim of the International Federation of Red Cross and Red Crescent Societies' (IFRC) road map for this decade called *Strategy 2020*. Since 2009, IFRC has delivered self-guided online learning through its Learning platform, a learning management system (LMS), to a massive and rapidly-growing audience (*IFRC Annual Report 2012*). One key challenge faced by IFRC is how to improve training and preparedness, especially for groups like Field Assessment Coordination Teams (FACT) and Emergency Response Units (ERU), which are specialized teams of trained technical specialists ready to be deployed at short notice in emergency operations. The World Disasters Report 2013, which focused on technology and the future of humanitarian action, states that "the responsible use of technology in humanitarian action offers concrete ways to make assistance more effective and accountable, and to reduce vulnerability and strengthen resilience. Distance learning and online education are good examples of technology supporting these goals" (*World Disasters Report 2013*, p. 10-11). Due to both the specificity of the work of emergency operations teams and their diversity of contexts, educational technology that supports the exchange of experiences among team members could increase effectiveness before, during and after such operations, to enhance the organization's capacity for making use of both lessons learned and the mechanisms for their learning. Following this reasoning and considering that IFRC actions have increased in numbers (done more) and have connected members from all over the world (reached further), the objective now is to do it better.

1.1 Pilot Course on Online FACT/ERU Learning

In a an effort to demonstrate one approach to improve continuous learning as a form of professional development for emergency teams, this White Paper reports the findings of an investigation conducted during a pilot online course titled "Learning from shared experience in humanitarian assistance" (called FACT/ERU Learning community in Scholar). The course was developed with asynchronous and synchronous activities employing, respectively, Scholar as LMS for the former and WebEx for the latter. In addition, a variety of common tools in use by humanitarian actors (e-mail, Skype, etc.) were included in the learning design. Scholar, which is the focus of this report, supported the four-week course activities with 285 participants (from the 591 enrolled) from inside and outside the Red Cross Red Crescent Movement. Online conferencing was used to host the weekly live moments where some participants presented their case studies, discussed the course work and the use of Scholar, and engaged in conversations with other learners.

1.2 What is the importance of this course for continuing professional development of humanitarian workers such as FACT and ERU team members (and those from other organizations they are likely to collaborate with in the field)?

The main activity developed during the course was the production of a case study where participants had to reflect on their own learning before, during, and after an emergency operation. Moreover, participants provided anonymous feedback to three peers writing on the same topic (and against the same rubric) and, consequently, received feedback from three peers for their own case study.

1.3 Why employ Scholar as LMS?

Scholar was developed to position users as knowledge producers. It offers two distinctive features, one public and one private, that allow the production, consumption and distribution of knowledge: the Community and the Creator spaces. Community is a shared (public) activity stream that distributes information in a way that is already familiar to participants that use social media interfaces. The user can filter information that s/he wants to consume and contribute to its discussion. Creator is the individual (private) space where the user produces knowledge and collaborates with peers, providing feedback in an organized system structured by rubrics and some synchronicity (requiring learners to complete specific steps by a deadline). The user can review feedback received side-by-side with the case study. Additionally, Creator allows the elaboration of a multimodal text where the user can insert multimedia information such as videos and pictures.

1.4 Summary of findings from this research

IFRC delivers self-guided e-learning modules intended for volunteers and staff working in its membership through Cornerstone On Demand, a LMS developed for corporate workplace environments. The catalog of courses that IFRC delivers includes the following categories of courses: The Essentials, Volunteering, Disaster Management, Heath, Humanitarian Diplomacy, Management/Leadership, and Personal Development. These online courses, though they do not necessarily constitute a comprehensive or coherent curriculum, are intended to contribute to the basic competencies of everyone involved in humanitarian and other areas of work of the Red Cross and Red Crescent Movement. Learners (whether or not from the Movement) can take the courses at any time and at their own pace.

To demonstrate the predominant design of the existing online courses, let us take the "World of Red Cross Red Crescent" course as an example. It is organized in 14 modules plus a final test (summative assessment). Each module is comprised of a set of slides, which are unilateral providers of information, i.e., information goes in one direction only, from the slides to the person who is watching/reading them. Except for the "Welcome" and the "Introduction"

modules, all the others modules end with a quiz in which the learner has to reach the passing score of 70%. The attendee completes each module once s/he has clicked through all slides and reaches the passing score in the quiz. If they fail, they can try it again. After completing all modules s/he is allowed to take the final test.

Summarizing, such courses deliver information that may be both important and useful. However, they provide no access to the experiences that Red Cross Red Crescent volunteers and staff (and others doing similar work) may undergo or how they (re)act in response to new events they may have to face. That is the rationale for why the delivery of information is necessary but not sufficient, and hence why it is important to move toward a learning experience in which people can share how they are developing and deploying the knowledge they acquire, both in formal courses or training and through experience (informal learning).

Why is this next step so important? There is both a general answer and a specific one relevant to the context of humanitarian work. First, learning does not occur in a vacuum. It occurs in a specific socio-cultural context and it is also shaped by the background that every learner brings to the learning experience. Therefore, every learner absorbs and applies the content of these courses in a different way based on his/her former experiences in life. S/he builds his/her new knowledge upon previous knowledge. Learning, according to Vygotsky (1978), occurs when we go from one level to the next level and this happens with and through social interaction. Second, humanitarian workers in the Twenty-First Century face increasingly volatile, uncertain, complex and ambiguous (VUCA) contexts. The competencies sought increasingly require them to continually learn and adapt to new situations. Formal, transmissive learning approaches contribute to preparedness but are not sufficient. Humanitarian workers themselves increasingly recognize the value of experience, of collaboration and other forms of informal or incidental learning, but seldom have the opportunity to reflect on how they learn through such experiences.

The course "Learning from shared experience in humanitarian assistance" described here aimed to provide its participants with an opportunity to socially engage with their peers in collaborative, reflective knowledge construction.

Post-course survey findings, LMS data, and course dialogue in the Community space show that the participants of the "Learning from shared experience in humanitarian assistance" e-course were highly engaged in the proposed activities. The majority reported positive reactive feedback to the process of case study development: writing the case study, peer review, and revision their own case study based on their interpretation of feedback received and new insights gained through the learning process. Indeed, many learners emphasized the usefulness of feedback from their peers, and reported that peer reviewing the work of others informed the revision of their own case study.

Qualitative analysis revealed that most respondents of the post-course survey described their experience in writing the case study as an opportunity for reflection. Additionally, they recognized the importance of the rubric to structure the review process, the uniqueness of this case study development

process (writing/peer reviewing/self revising), and the relevance of the peer review process to 'draw out' informal learning processes that are otherwise difficult to document.

Finally, the quantitative and qualitative analyses of the case studies of the ERU participants who answered the post-course survey provide access to their learning process before, during and after emergency operations. They confirmed that feedback had a central role to improve their reflective thinking, and it demonstrated that peer reviewers learn from reading their peers' case study.

1.5 New Paths for FACT/ERU Continuing Professional Development

How are people most effectively trained to operate in emergency situations? There is no way to foresee what type of catastrophe is going to occur, its location, its proportions, or its complexity. Therefore, the ability to infer from outcomes to improve future practice, to develop new strategies to (re)act to situations, and to adapt and apply knowledge to new situations are essential competencies in emergency operations. The process of writing, review, and revision of the case study triggered in the participants a reflection on a specific emergency operation. During this process, they had the opportunity to think about how they learned, adapted, and grew – and further examine their initial thinking and writing through the eyes of their peers. This process of metacognition (thinking about thinking) was the key Scholar feature identified by participants of this investigation that differentiated it from online courses in other LMS. Interestingly, such an affordance to foster and support reflection is one often considered unattainable through purely transmissive e-learning, and therefore to require face-to-face interaction. This may indeed be true when the learning environment is designed to primarily transmit information, but it would be a mistake to presume that such learning is unattainable due to distance or mediation by technology. The "Learning from shared experience in humanitarian assistance" course represents a significant shift on the role of the learner in the learning process. Instead of employing the usual "banking education" (Freire, 1981) system, where knowledge is deposited into passive learners, this course considers learners as active holders and producers of knowledge.

The results show that all participants enjoyed writing the case study (49% of them "strongly enjoyed" the process). "I have been writing reports and case studies", explains Sue, a learner in this course, "but this was one of its kind, as I had to assess myself and my work, my mistakes and my learning. In general […] we just pick a subject and start writing about that, but in this case study I was a subject […]. I discovered a lot of things which [I had not considered] before". From this point of view, it may be argued rhetorically that participants have done more, done better and reached further (than transmissive e-learning), as they have not only acquired knowledge but have also become producers of knowledge that describe outcomes (lessons learned) and examine their contexts and mechanisms in emergency operations.

The following section will show how this process of writing/reviewing/revising impacted the ERU members Emmanuel, Lukas, Raniel, Briana, Breno, and Joanne. They were ERU members that answered the pre and post-course surveys. In order to maintain their anonymity, the names are fictitious. Here are their stories…

Emmanuel

"I thought that life was ending"

Emmanuel is a Haitian FACT roster member who did two weeks of volunteer work in Haiti after the 2010 earthquake. The company he worked for closed after the earthquake and he lost his job. His family's food store collapsed. "I thought that life was ending", he said, after seeing so many dead bodies on the sidewalks. Emmanuel wanted to help his country in some way. He found a leader from the US Army Haiti Relief who was impressed with Emmanuel's command of English. He then became the English/Creole translator for the group to help the soldiers, with the mission of looking for leaders, finding out people's needs, and following up. He felt confident in doing such work for two reasons. First, he was living in affected zones for five years for his studies on agriculture. He, along with other agronomists, used to take agricultural diagnostic training courses each year, talking to farmers, investigating their needs and trying to find solutions for their problems despite the limited resources that were available. This experience, together with knowledge about the culture of that specific zone, gave him the skills to do a needs assessment. Second, he had developed translation skills by doing medical clinic translation for Christian missionaries in his church. He learned the importance of accurate translation. "As I knew well the Haitian culture, I knew how to translate, what word I can or cannot use when talking to avoid embarrassing people", he wrote. Emmanuel and the group of soldiers walked though the zone asking people about their needs and distributing food and water to those who had lost everything. He said that he "learned that in that kind of situation, we have fake people that are not really in need and want to take advantage of everything", referring to people who came from non-affected zones to receive free food in order to sell it. The biggest problem was that crowds of people were fighting for food and the distribution had to be interrupted to first establish order. "If you are not in the field you won't be able to think of tactics to face situations like that next time when you have limited donations. The way to talk to them was very important, psychologically, to show them that we want to help everyone". He solved this situation by communicating with people: "Communication was one of the best weapons to solve unexpected problems".

"As I knew well the Haitian culture, I knew how to translate, what word I can or cannot use when talking to avoid embarrassing people… communication was one of the best weapons to solve unexpected problems"

Emmanuel's learning

How Emmanuel learned before going to the field:
By formal training on needs analysis and development of translation awareness and skills.

How he learned during the operation:
By communicating with the people in need. He said that his best advantage was being a Haitian; everybody recognized that. His "weapon" (or tool) was communication.

What he learned from the reviews he received from his peers in the project:
Emmanuel took the suggestions of the reviewers by moving some information from one section to the other and adding more information to his writing in order to "make it more 'visual' to the reader, hoping readers would better understand the background of the operation". As suggested by one reviewer, Emmanuel included examples on how he helped people in need and of how people took advantage of the situation. When answering the post-course survey, Emmanuel wrote that now he "would have added more about how to improve the learning", which, actually, was a suggestion from two reviewers. One reviewer recognized that by reading Emmanuel's work he learned "how we so easily underestimate the skills and experience of local people".

Lukas

Lukas is a water and sanitation engineer who has been on the ERU roster since 2010. In 2012, he was deployed to the south of Austria for almost four weeks to supply purified water to the hospital in the city. The heavy rain that fell for days caused mudslides, blocked roads, damaged houses, and contaminated water reservoirs, affecting approximately 16,000 people. The government's actions were quick and efficient but the hospital did not have enough purified water. Also, it was not simply a matter of providing purified water. The hospital also required low conductivity water for special equipment such as the dialysis machines. "That gave us a huge challenge", said Lukas, "especially since we had another problem arise along side this one. The chemicals that we used in the beginning were old. The reaction of these chemicals and the outcome of the tests were not predictable and the water that was stored overnight changed a lot". Lukas and four other members of the organization worked as a team to face every new challenge: "We met together with our team leader and talked over the solutions". They ordered new chemicals and new measurement equipment. Then, by trial and error and learning on the go, they managed to produce the necessary stabilization for water. It was Lukas' first deployment and there was no time for specific formal training. Even so, he felt confident in this mission because he had formal training on water and sanitation and on teamwork from workshops completed before the operation. Also, he had taken part in field exercises that taught him about flexibility, problem solving and adapting to changing situations. For this mission, Lukas also highlights the importance of the informal knowledge he built from sharing experiences with more senior colleagues and peers from other countries. He concludes: "I feel that I had achieved a high level of training, both formal and informal which meant I was prepared and ready for this mission. However, I was constantly learning and my problem solving and communication skills improved dramatically over the four weeks". Lack of communication was the main reason for "every problem" and, in fact, in his words, "almost every problem could be solved through open communication and a good relationship between every member of the team".

"That gave us a huge challenge […] We met together with our team leader and talked over the solutions"

"…almost every problem could be solved through open communication and a good relationship between every member of the team"

Lukas' learning

How Lukas learned before going to the field:

By formal training on WatSan and teamwork through the following workshops: Water & Sanitation (WatSan) International Workshop Modules M15 & M40; WatSan Pool-Filter Basic Course; Training of Trainers Workshop; and Mass Sanitation (MSM20) International Workshop.

By formal field exercises on how best solve problems, develop flexibility and spontaneous reaction to unexpected problems: Tempest 09-Federal Exercise; xH2O Exercise (Wave 2011).

By informal knowledge sharing with more experienced colleagues or colleagues from different countries.

How he learned during the operation:

By trial and error and learning on the go, and by communicating with his team.

What he learned from the reviews he received from his peers in the project:

In the post-course survey, Lukas said that he enjoyed writing the case study, but it was hard because of the English language requirement. The three reviewers gave high scores for his case study draft, and provided positive and praising comments both for his experience and for the way he built the case study. So he did not revise his case study. In the same survey, he said that the activity "was well-explained so it was not a challenge".

Raniel

Raniel is a fire fighter, an emergency medical technician, a registered nurse, and an advanced paramedic specialized in out of hospital critical care. He was deployed for the 2010 Haiti earthquake. This was his ninth mission on disaster/conflict areas, his fourth with the IFRC. He didn't have much time to prepare himself for this mission, but explains that his "bag is always packed with basic equipment". And he always follows UN and Red Cross websites to keep himself updated. He also gets info from the CIA fact book. This kind of information gives him a general idea about events, security and climate. He believes in planning for a mission on the most basic levels, even though "a plan will not survive the initial stage of a mission. When you get off the plane, everything changes. I try to relax and wait for all the things that will happen. No use worrying about it in advance. The mission will come to you, not the other way around". Arriving there, his first assignment was to lead the healthcare team (a total of 37 people) to another compound and make sure that everyone would have a place to sleep, food, and "a hole in the ground to be used when nature calls". The problem was that many had not packed the right equipment to be in a field mission. Many arrived with large suitcases. Raniel received a big metal

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Raniel's learning

How Raniel learned before going to the field:

By completing ERU training.

By going on mission with the EU, Finnish Armed Forces, Finnish USAR, Finnish Police /Disaster Victim Identification Unit, and IFRC. The Red Cross Red Crescent experience was: in Sri Lanka (2005), being a tech and security in a basic healthcare clinic; in Pakistan (2005), being a tech, helping in a clinic, and medical evacuations with helicopter; and Peshawar (2009), building a field hospital.

By informal learning from his hobby, being a wilderness guide.

How he learned during the operation:

By avoiding elaborated plans. Dealing with the problems when they appear. And, specially, being open-minded. He said: "Everything changes, the unexpected happens all the time, people die even if you do your best. It affects you, let it affect you, but it´s nothing personal. This mindset is essential to stay functional in my line of work back home and in disasters abroad. This mindset is also controversial. It generates a lot of mixed feelings in your fellow delegates, depending on their personalities. Some delegates cannot stand the insecurity and unawareness, some are quite happy about it. It is a little hard to explain. The mindset is also very dependent on where the delegates come from. An example (not the best): In some countries my fellow fire fighters/paramedics run to an accident scene and start working. In my culture running is something you never, ever do. You walk. Running is a sign of weakness and lack of professionalism. In the Red Cross Red Crescent world there are similar cultural differences, but it doesn´t matter, as long as everybody understands their existence. We are who we are. The goal is a functional unit, helping others in a professional way."

What he learned from the reviews he received from his peers in the project:

Raniel received two reviews for his case study. One of the reviewers, Anastasia, made several suggestions such as the importance of including more information about his role and experience in previous operations and about his previous experience as a team leader. He took these pieces of advice and edited about 22% of his case study. The other reviewer, Matheus, praised Raniel for the form and content of his case study. Matheus said that he learned from the mistakes that Raniel and his team made. And he concluded: "Your case study was the best I have read. I have learned from the beginning until the end. I like your sense of humor in showing all kind of difficulties and unexpected problems on the field. – I will save a copy of your case study so I can read [it] before any humanitarian job I would be deployed in."

box filled with ready-to-eat meals for his group. He still had to look for mosquito tents and blankets and managed to find some. All the bags and equipment were placed into a truck and the people in a bus. Before arriving, the bus broke down and they had to walk to the destination. There, Raniel had to teach them how to use the equipment and even how to use a pit latrine. Moreover, one of them had a hypoglycemic crisis that Raniel found out only afterward. Communication was an issue: "It's difficult to lead a group [in which people don't] know each other. Many are on their first mission. Everybody wants to start working. A few want to be the coordinator but do not want to be coordinated. There is always the lack of information", he said. After that, Raniel was transferred to another place with other technicians. He finds that the experiences from emergency operations are as important as the ones he gets from being a wilderness guide, which is his hobby. According to him, emergency operations have much in common with the wilderness. "There is a common structure on how to behave, [a requirement to be physically] fit, to have the right equipment, to understand and respect the nature/surroundings, how to keep your health, how to find your way in unfamiliar terrain and how to make yourself as comfortable as possible". From this mission he learned how important it is to have the right equipment, to be proactive and act quickly, to communicate more and better (in a gentle manner), and to listen to people. He intends to improve these interpersonal skills for his next mission. After all, "What is an order without the soldier? ... only a thought, a play of intellect, a dream", he concludes, quoting General Panfilov (a Russian World War II General).

What is an order without the soldier? ... only a thought, a play of intellect, a dream.
(General Panfilov)

Briana

Briana went to the 2004 Gonaives Flood with the FACT/ERU team as the Operations Coordinator. Her mission was to support the FACT team as an administration delegate. Some of her tasks were to support delegates, ensure their well-being, follow-up their movements, and coordinate work with the IFRC secretariat offices in Geneva and Panama. She was a first-timer in an international emergency operation. She had not yet completed FACT training at that time. Nevertheless, Briana feels she was well-prepared to be deployed. In her words, "I had never deployed for the IFRC but was familiar with the domestic American Red Cross field deployments and operations. I used this expertise to ensure that my home front was cleared of all personal issues: family was OK and taken care of, bills were paid. [...] I packed a suitcase with personal items including medications, fieldwork clothes and business attire. During trainings for international delegates, we had been advised to always carry business attire. This would bring a professional look in meetings with local NS counterparts, the local authorities and any other officials. I was ready to deploy medically since my vaccinations were all OK. I left with a clear mind ready to tackle this new situation". She stated that didn't have much time to prepare herself before the mission. Even so, she read about the political situation in Haiti, UN documents, and field notes from the IFRC and from the American Red Cross head-

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quarters. In addition to the food problem the political situation there was tense with heavy arms and drugs trafficking. The field office operations had to be transferred to another place. Also, the FACT team leader had to be evacuated for medical reasons, and she took over the recovery operation for the next months. She "learned about coordination, reporting and information screening very rapidly", she said. Besides, since she was new in the position she "also had to learn all about the IFRC systems. One thing to know is that IFRC is bureaucracy heavy." She ended up spending eight months in the field.

Briana built a list with 50 lessons she learned in the Emergency Operation and the Recovery/Development phase of this mission. Here it is:

1. Flexibility to work with more experienced delegates.
2. Accept that you do not know everything.
3. Do not pretend you do know. This is dangerous.
4. Know and acknowledge your limitations.
5. Ask questions to the TL but chose the timing of your questions so as to not overwhelm.
6. Use the more experienced delegates to help you and be happy they are willing to help.
7. Work closely with local staff; listen to what they say especially in a volatile situation.
8. Treat local staff with respect, understand where they come from, issues they have.
9. Use common sense.

Briana's learning

How Briana learned before going to the field:

By reading UN documents, field notes from the IFRC and from the American RC headquarters, and news related to the political situation in Haiti.

How she learned during the operation:

Briana distinguishes the formal aspect of her learning from the informal aspect. For the formal aspect she said the following: "I participated in all the operational team meetings we had from the morning sectorial briefings to evening general debriefs to understand the scope of the operation – even though at the beginning I did not hold an operational function. The mere fact of sitting in the meetings to take notes enabled me to manage my timeline of activities for the day to come, understand the constraints and challenges of the operational teams. I learned about the working environment: who was who, who was doing what, where, how I was to deal with the external partners. I ensured I had sufficient knowledge not to mess up and be confident when I represented Red Cross in meetings with the partners ranging from local authorities, local and international NGOs, UN sectors to Military. I [was especially] careful [with respect] to the interests of the Haitian Red Cross in regards to the beneficiaries and the civil society in general including the religious partners."

Her learning happened through observation, collaboration, and mentoring: "I paid attention to my colleagues from the local team so we had a comfortable working relationship. I tried to understand how everyone operated and what they expected of me as an administrative, logistics, and HR delegate. The delegates were more experienced then me. I listened to what they said and how they introduced their requests, how they dealt with the back offices of IFRC and their own PNS. They shared their knowledge of the IFRC/FACT/ERU environment with no restraints. But mostly I had a great experienced and patient Team Leader who clearly communicated with all of us in terms of expectations and program management. He really supported me and showed me the ropes. I became his deputy and chief of staff. He trusted me in my decision-making and accepted our exchanges of opinions. I listened to his comments and suggestions."

What she learned from the reviews he received from his peers in the project:

From the three reviews that Briana received for her case study, two praised her work. One of them, Mary, referring to Briana's list of lessons learned, said the following: "I would mark [your] 'lessons learnt' as 'golden rules' or an addition to the Code of Conduct. This is a real practical set of rules that will make your life easier during the mission, work, wherever you are". The third reviewer, asked for more details. Briana took the revision process seriously; she wrote 19 versions for her case study (edited it 19 times). She added much more detail to her case study and included an entire section explaining how she learned.

10. Cross check information/ triangulate with responsible party.
11. Communicate clearly with everyone.
12. Screen the information you need to pass with your TL
13. Liaise internally and externally.
14. Be clear in your requests.
15. Be humble when asked about your background.
16. Learn to prioritize activities/events since in an emergency you are multitasking at all times and everything is «urgent».
17. Manage the unexpected.
18. Don't drop the ball on an activity assuming "someone" is doing the job, check at all time.
19. Respect deadline and advise if you can't make it.
20. If you can't make the deadline define «the road block», offer alternate solutions.
21. Minimize work surprises. Often considered as « bad surprise».
22. Obey security rules. Do all the ckeck-ins.
23. Ensure you make yourself known to IFRC HQ or Zone Office.
24. Introduce yourself to the expatriate community.
25. Introduce yourself to your partners and local authorities (civil society members).
26. Make sure delegates and local staff know who is « boss».
27. Learn to use VHF radios and the codes.
28. Have all your technical gears charged: phones, radios.
29. Stay in contact and reachable at all times.
30. Do not use floppy discs in a dusty environment!
31. Be ready to leave/evacuate at any minute.
32. Be nice to all and curb your bad mood.
33. Sleep and eat well - time permitting.
34. Be aware of the underlying political issues within your organization (here the HRC internal conflict).
35. If you work in the field listen to the beneficiaries.
36. When you do VCA (Vulnerability Capacity Assessment) listen to the communities and be careful whom you refer to in terms of social local hierarchy.
37. Respect religions. In Gonaives Voodoo was very present.
38. Remember the Code of Conduct you have signed.
39. As a Red Cross delegate know your 7 principles and be ready to apply them.
40. You are Red Cross 24/7.
41. Other organizations often look up to the Red Cross. Show your best behavior and know your limitations.
42. Recognize and advise when you are tired and overwhelmed.
43. Be careful when approached by medias for interviews. Prepare yourself and know what you can or cannot say.
44. IFRC is bureaucracy heavy.
45. IFRC HQ or Zone offices are information hungry.
46. Send all the field reports on time.
47. Deal with time constraints and time zones.
48. Help and listen to your fellow delegates.
49. Be a good mentor to the local staff.
50. Don't forget capacity building.

Breno

Breno is a trained nurse who was sent to central Ethiopia by a Danish NGO to work for six months in a health care center in a camp, helping with its administration. It was in 1985 and Ethiopia was going through a drought different from other droughts people were used to. This time it had reached a scale that affected vast areas. The areas were divided between the NGOs that were working there, so that more people could receive assistance. The camp where Breno was sent to was administered by Danish nurses. Among other activities, they had food distribution and healthcare services in a small in- and out-patient clinic center. They did not have doctors or administrators there. But when they had doubts about treatment, they would consult doctors from other NGOs that were in other camps.

"…it is important to seek the knowledge about the local settings, to find where the biggest needs are, and to be very clear about the choices made, at the same time be very polite…"

Regarding preparation before going to field, Breno had 3-4 years of experience as a nurse from medical and pediatric wards, but non as an administrator. He had one day of training before deployment. He also read books about managing malnourishment and typical diseases and looked for information about the area. For the first time, Breno was part of the process of building a camp. In the field, he learned about the structure and function of a camp and realized that there are "so many factors playing together to make an operation like that work and run smoothly". When analyzing how he learned, he said that he learned from his colleagues, who explained to him "the reasons various solutions had been chosen at the time". As it is a place where several languages are spoken, he also learned from the translator. "Especially one young man was special", he said, "because he had a very clear eye for the cultural differences, and so he was able to make us aware of customs that could influence the work in the camp, the relations between employees from various tribes, and the way people from the local villages might react on changes, i.e., in the distribution of food, or which health care services we were able to render in the camp. The knowledge that he shared with us was invaluable". He said that he learned that "it is important to seek the knowledge about the local settings, to find where the biggest needs are, and to be very clear about

Breno's learning

How Breno learned before going to the field:
By reading books about managing malnourishment and typical diseases, about the situation in Ethiopia, and with a one-day training before deployment.

How he learned during the operation:
Breno learned from his colleagues, with their explanations about running a camp. He also learned with the translator about cultural differences among various tribes.

What he learned from the reviews he received from his peers in the project:
Breno received three reviews from his peers. Two of them suggested that Breno should include more information, for example, about his previous experience as a nurse and as administrator. And the other reviewer provided suggestions regarding the organization of Breno's writing. Breno accepted most of the suggestions and edited more than a third of his case study. In the post-course survey, Breno said that he would like to repeat the experience of writing a case study. "It gives good learning, because you're forced to reflect on [it]", he said. One of the reviewers, Jenifer, provided the following feedback to Breno: "WOW!! What an experience. And really significant key issues you had to work through. I learned from your descriptions. Thank you." In the post-course survey, Jenifer said that writing a case study was not a challenge because she had done it before. However, she said that the feedback system "was the highlight for me. Reading and learning from others experiences, and being given the opportunity to feedback. Humbling experience to see the fantastic people out there doing fantastic work".

the choices made, at the same time be very polite to the groups/people who are given less of what they may consider a 'free hand-out', because it may also be a reason for jealousy among local groups/tribes." "In my opinion", he continues, " it is crucial to obtain an understanding of the local traditions, beliefs, including superstition, which may hinder mutual understanding, and may hinder some necessary things being done."

Joanne

Joanne was deployed for one month to Pakistan in 2010 to support people affected by the worst monsoon flooding Pakistan had seen in 80 years. It caused the death of approximately 1,780 people and the destruction of 1,900,000 houses affecting 20 million people. Joanne's role was to establish and operate "procedures to ensure full commodity tracking and monitoring and reporting of financial, administrative and stock records". This was her first experience overseas with an ERU. However, she had previously worked for two years in Nigeria. This experience taught her how to respect and adapt to cultural norms and expectations. Her technical skills include project management, logistics, accounting, and monitoring, ,among others. She also had formal general ERU training and mission-specific preparation. Her informal learning comes from sharing experiences with other delegates and readings blogs and other stories about deployments. In the field, she "learned that things do not always go to plan on a mission. The theoretical training and learning [she] had already done was fantastic grounding to refer to when in the field, yet there is not a comprehensive guidebook for each specific [situation]. Eventually, you come across [an unexpected situation], so you need to be resourceful and find ways to deal with things."

"I learned that things do not always go to plan on a mission"

Joanne had learned that usually they are deployed in groups of 4 people. However, to this mission, she was deployed alone, with her colleagues being in another base, 200 kilometers away. "I was very acutely aware I would need to be making decisions without perhaps having full working knowledge and experience to draw upon", she said. "At times, I felt it hard to maintain a confident and/or authoritative stance to others without having to constantly refer to others to help me (I do not know if that came across to others). I made sure I carried a list of contacts and tried to quickly identify people who might be able to assist, deferring answers if possible and if it was something that I felt was out of my depth or authorization level." And "sometimes I learned through actually making mistakes (…) This mistake was rectified but having now experienced that situation I will (hopefully!) not make that particular mistake again." Moreover, she "learned that I don't need to know or remember everything but that knowing there are people to call upon for support and advice (and who they are, how to reach them) is valuable."

"… there is no real substitute for learning 'on the job' and having life experiences on which to draw resilience and resourcefulness"

And she concludes saying that "there is no real substitute for learning 'on the job' and having life experiences on which to draw resilience and resourcefulness".

Joanne's learning

How Joanne learned before going to the field:

She described her learning experience in detail, as shown below:

"General (formal) soft skills training and experience not directly linked to ERU includes: negotiation, persuading & influencing, facilitation, capacity building, training plus developing teams/individuals and, essentials of humanitarian practice (RedR).

Training for my two-year posting in Nigeria included elements on cross-cultural working, finance & accounting skills, training and stress management.

Formal courses relevant to UK emergencies include; emergency control centre operations, writing and validating emergency plans, introduction to civil protection.

Formal Red Cross volunteer courses include: providing psychosocial support, introduction to major incidents, safeguarding (adults and children), health & Safety, first aid. This training has been supported through experience of deploying to domestic emergency situations.

Formal ERU training (2007) consisted of approx. 18 days worth of preparatory courses

1. Foundation course * (8 days),
2. security training (on-line + 3 days),
3. technical course * (5 days),
4. driver training (2 days)

Topics covered on courses* include: Media & communications, Red Cross Movement (national societies, Federation, ICRC), fundamental principles & values, financial systems, IFRC disaster response & management, relief & recovery programmes, cross cultural working, health & wellbeing, case studies from returned delegates, code of conduct, IHL (International Humanitarian Law), kit familiarisation, first aid & manual handling, procurement, transport, documentation, teamwork, LogIC (stock system). Includes formal classroom sessions and hands-on setting up of camp equipment

Additional mandatory annual refresher training (approx 5 days) includes two days of 'deployment exercise' (field scenario) based upon institutional learning developed from previous delegate experiences and deployments. Also expanded on informal discussions and sharing of delegate case studies & experiences.

Informal learning: discussions with other delegates & sharing of their experiences, reading BRC blogs and internal news stories about deployments and attending fundraising presentations at which returned delegates were speaking about their experiences in the field."

"Formal pre-departure briefings at Red Cross HQ (day before departure) including overview of current context, media/ communications, finance, logistics specific elements (e.g. current LogIC issues). Verbal briefings with relevant hard copy briefing papers provided.

Red Cross country/mission specific security briefing

Health briefing / checks (external health provider)

External travel & health advice overview provided by email/on-line (institutional providers)

On arrival in Pakistan, hard copy of current country overview was provided plus further verbal briefings by Federation HQ team (logistics, procurement and security) in Islamabad before departing to base location (Multan) where I received briefings from team colleagues and ERU team leader. Some of the briefings duplicated previous information - others provided more updated or localised context."

How she learned during the operation:

Joanne learned from her "mistakes" (through reflection on how to avoid repeating them) and by establishing a network of expertise to provide support for problems beyond the scope of her own knowledge or capabilities.

What she learned from the reviews he received from his peers in the project:

Joanne received two reviews for her work. Both praised the quality of her case study. They suggested that she include additional details about her training and skills. And she provided a detailed explanation in the revised version of her case study. Moreover, one suggested that she could expand on the gap between trainings and field learning. She accepted the suggestion and provided additional details.

2. Research Approach

This is an ethnographic case study that employs quantitative indicators from surveys and data from the participants' writing artifacts. It adopts a qualitative approach to investigate the production, distribution and consumption of knowledge. The researchers performed different roles during the data collection: one of us was an observer of the process, while the other was a participant observer acting as facilitator in the course.

This research was approved by the Institutional Review Board (IRB) of the University of Illinois at Urbana-Champaign and by the International Federation of Red Cross and Red Crescent Societies (IFRC). All excerpts in this White Paper that come from the course and from the surveys are used with the consent of their authors. Names and photos have been redacted to preserve confidentiality.

This section starts with an overview of the course, the participants, and the amount and quality of knowledge produced. Subsequently, it presents the participants that answered the surveys.

2.1 The course

The call for enrollment was first posted on the Red Cross Red Crescent Learning network's blog. The primary audience of ERU and FACT roster members were targeted through IFRC's ERU coordinator, who provided invaluable assistance in contacting ERU managers in National Societies and supporting the dissemination of the call. In addition, the call was also shared with other organizations with an explicit request for support in dissemination and posted on a number of web sites known to be trusted information sources for humanitarian workers. These organizations and sites included: ALNAP, Global Disaster Preparedness Center (GDPC), Bioforce, disasterready.org (Cornerstone Foundation), Humanitarian Academy, Red Cross Red Crescent Psychosocial Support Center, Reliefweb, and Save The Children UK. A knowledge community was established for the course inside Scholar, and participants were invited to join the community by registering in Scholar. During the enrollment period (1–18 November 2013), the course information page was viewed 2,953 times, with 671 applications received. Of those, 591 (88%) met the course requirements (experience in emergency operations and commitment to at least 3-4 hours per week dedicated to the course work) and 285 (48% of those who met the requirements) successfully registered in Scholar.

The course was a pilot initiative delivered entirely online during four weeks, employing Scholar as learning environment for knowledge community and development, WebEx for the weekly synchronous sessions (referred to as "Live Learning Moments" in the course syllabus), and e-mail, Skype and other

common online tools for communication. In the first week of the course, participants received orientation (both Webex sessions and recorded screencasts) regarding the schedule, the process of case study development, and the use of the learning environment. In the second week, they had to draft their case study, a brief paper sharing their experiences, lessons learned, and insights into how they learned before, during, and after an emergency operation. Learners were given the rubric for the case study, developed in collaboration with IFRC staff and ERU managers in National Societies. In the third week, participants had to review the case studies of three of their peers by providing feedback using the rubric. In the last week, they had to revise their own case study taking into consideration peer feedback.

2.2 The participants who joined the course

Of the 285 people who joined the learning in emergency operations course, 18 did not provide their personal information. The demographics presented in this subsection are based on the information that 267 participants provided to the IFRC on their application form. They comprise a very diverse group in terms of gender, age, experience, and nationality, as represented in the Tables that follow. The gender distribution of the participants is represented in Table 1, being 36.7% female and 63.3% male.

Table 1. Gender distribution

		Frequency	Percent
Valid	Female	98	36.7
	Male	169	63.3
	Total	267	100.0

Source: Data from IFRC application form and table generated with SPSS 21.

The requirement for being accepted in the course was that they had to dedicate at least 3-4 hours of work time per week for the course. In this regard 56.6% of the participants reported that they expected to dedicate this amount of time while 43.4% informed that they expected to dedicate more than 4 hours per week on the course as presented in Table 2.

Table 2. Weekly time expectation

		Frequency	Percent
Valid	3-4 hours per week	151	56.6
	More than 4 hours per week	116	43.4
	Total	267	100.0

Source: Data from IFRC application form and table generated with SPSS 21.

Besides emphasizing again gender distribution (red arrows), Table 3 offers a deeper analysis providing a cross tabulation between this weekly time expectation and gender. The light orange color shows the distribution of the weekly number of hours within each gender. In other words, 52.7% and 47.3% of the men declared that they expected to spend, respectively, 3-4 hours per week in the course and more than 4 hours per week. For the women, 63.3% of them expected to spend 3-4 hours per week while 36.7% estimated to spend more than that. The light blue color shows the distribution of the weekly number of hours considering all participants. 56.6% of them expected to spend 3-4 hours per week and 43.4% expected to spend more than 4 hours per week. 58.9% of the participants that expected to spend 3-4 hours per week are male and 41.1% are female. Moreover, 69% of the participants that expected to spend more than 4 hours per week are male and 31% are female. This means that besides having more men attending the course they are the participants that intended to dedicate more time to course work each week.

Table 3. Cross tabulation between gender and weekly time expectation

			Weekly time expectation		
			3–4 hours per weel	More than 4 hours per week	Total
Gender	Male	Count	89	80	169
		% within gender	52.7%	47.3%	100.0%
		% within weekly time expectation	58.9%	69.0%	63.3%
	Female	Count	62	36	98
		% within gender	63.3%	36.7%	100.0%
		% within weekly time expectation	41.1%	31.0%	36.7%
Total		Count	151	116	267
		% within gender	56.6%	43.4%	100.0%
		% within weekly time expectation	100.0%	100.0%	100.0%

Source: Data from IFRC application form and table generated with SPSS 21.

Table 4 demonstrates the distribution of the participants by gender and age. Important to notice that if grouping participants from 25 to 54 years old together, they represent 79.45% of the participants. Participants between 25 and 39 years old represent over half (52.4%) of the participants, as shown below.

Table 4. Age distribution by gender

Age (in years)	Gender		Total
	Female	Male	
19–24	5	10	15
25–29	13	29	42
30–34	16	36	52
35–39	15	31	46
40–44	11	24	35
45–49	6	14	20
50–54	8	9	17
55–59	5	4	9
60–64	9	7	16
65–69	2	0	2
70–72	1	1	2
Missing cases*	7	4	11
	98	169	267

52.4%

79.4%

* Participants that informed an invalid birthday

Source: Data from IFRC application form and table generated with SPSS 21.

Figure 1 illustrates the countries of residence of the 267 participants of the course. There were 83 countries represented in this course, which correspond to 39% of the countries in the world.

Figure 1. Distribution of participants' countries of residence



Source: Data from IFRC and figure generated using http://www.travbuddy.com/maps/6753390 and manipulated with Skitch.

Table 5 summarizes the countries represented in the course, the number of participants from each country, and the percentage they represent. The top five countries with the highest number of participants are Australia (22 participants – 8.2%), United States (17 – 6.4%), Somalia (13 – 4.9%), United Kingdom (11 – 4.1%), and Pakistan (10 – 3.7%). At the other end, 39 countries were represented with one participant each.

Table 5. Participants' country of residence

# Countries	Country	# Participants from each country	Percent
1	Australia	22	8.2
1	United States	17	6.4
1	Somalia	13	4.9
1	United Kingdom	11	4.1
1	Pakistan	10	3.7
2	Denmark, Norway	9	6.8
1	Sri Lanka	8	3.0
4	Canada, Haiti, Kenya, Syrian Arab Republic	7	10.4
2	Côte D'ivoire, India	6	4.4
3	Germany, Tunisia, Turkey	5	5.7
6	Austria, Spain, France, Myanmar, Mexico, Philippines	4	9.0
8	Afghanistan, Bangladesh, Belarus, Switzerland, Cameroon, Italy, Republic Of Korea, Nigeria	3	8.8
13	Belgium, Central African Republic, Colombia, Ethiopia, Hong Kong, Cambodia, Mauritius, Sweden, Senegal, South Sudan, Togo, Uganda, South Africa	2	9.1
39	Argentina, Barbados, Burkina Faso, Benin, Brazil, Botswana, The Democratic Republic Of The Congo, China, Cape Verde, Czech Republic, Algeria, Ecuador, Finland, French Guiana, Greenland, Gambia, Greece, Guyana, Honduras, Indonesia, Ireland, Jordan, Japan, Lebanon, Morocco, Nicaragua, Nepal, New Zealand, State Of Palestine, Qatar, Saudi Arabia, Sudan, Singapore, Thailand, Tonga, Uruguay, Uzbekistan, Samoa, Yemen	1	15.6
83	**Total**	**-**	**100.0**

Source: Data from IFRC application form and table generated with SPSS 21.

Figure 2 provides a word cloud with the types of operations the participants deployed to. The bigger the font of the word the higher the frequency of that type of operation.

Figure 2. Types of operations to which participants were deployed



Source: Data from IFRC and figure generated using http://worditout.com/word-cloud/

2.3 The amount and the quality of knowledge produced

The participants engaged in the written activity (writing a case study) in three stages: First, they had to develop a short case study describing how they prepared for an operation they were in, what the gaps were in their knowledge, skills and competencies, and how they learned during the operation (Stage 1 – Writing). Second, they had to peer review the case studies of three other participants (Stage 2 – Review). Third, they had to revise their case study using the inputs and comments received from their peers (Stage 3 – Revision). Of the 285 people who joined the course, 105 (36.8%) participated in this case study development process. 40 participants participated in peer review (Stage 2) and 65 participants revised their own case study (Stage 3). Therefore, a total of 105 wrote case studies and, at the same time, read and reviewed one or more case studies written by others. A total of 65 case studies were finally published and shared with all members of the knowledge community.

Analyzing these 65 published works, we observed that they cover 13 subjects on emergency operations, itemized in Table 6, below. Also, it shows that the three most described experiences are about earthquake (17), floods (14), and conflicts (11).

Table 6. Central subjects of the published case studies

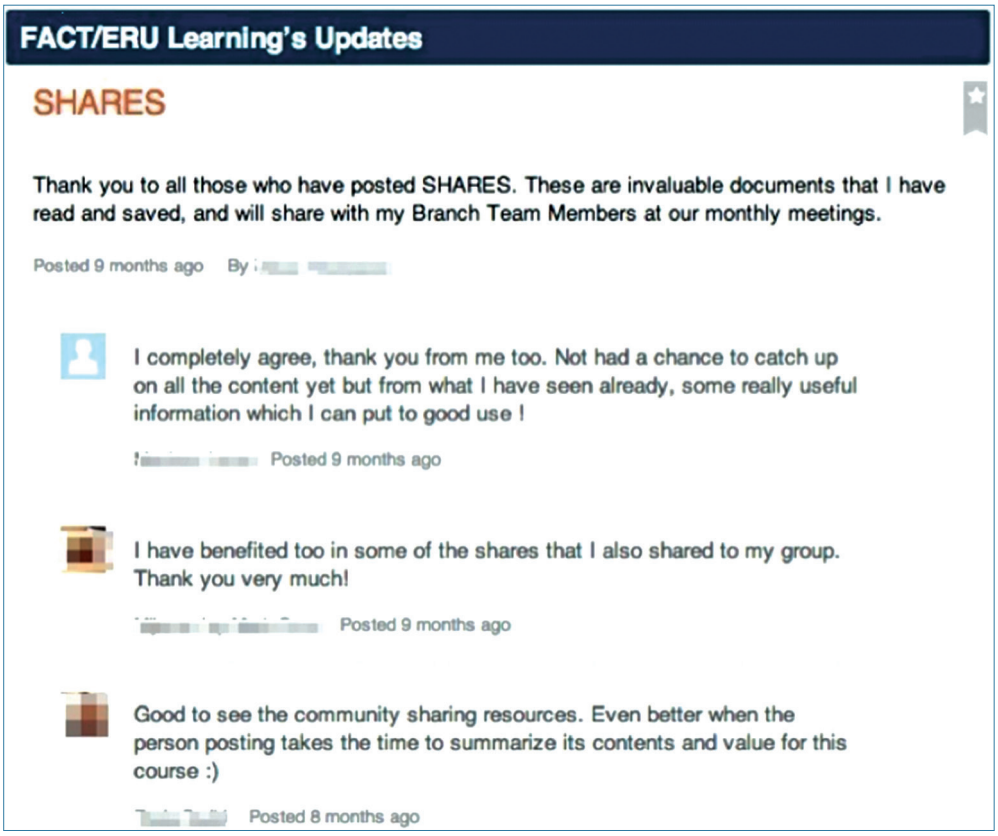
Occurrences	Subject of the Case study
17	Earthquake
14	Floods
11	Conflict
7	Hurricane/Cyclone/Typhoon
5	Refugee assistance
4	Drought
4	Food assistance
3	Tsunami
2	Cholera
2	NFI distribution
1	Bombing
1	Freezing
1	Tornado

Source: Data from qualitative analysis of the published works.

In addition to the case studies, much knowledge was shared informally in the community space. Participants wrote 695 comments (called "updates" in *Scholar*) on a range of subjects related to the course process (ex: discussing the instructions for the Live Learning Moment, for example), exploring experience in emergency operations, or posting information about emergencies ongoing during the course. The update that received the highest number of comments (50) is the one entitled "Typhoon Haiyan deployments and updates". Participants also shared relevant resources, posting 53 documents and links including reports, presentations, web sites, and so on. This sharing of resources emerged once clear instructions were provided to learners on its use, a few resources were posted by the course facilitator and discussed in the community. Learners then began to post their own, including information about the contents and relevance of each resource for the course. This process of interactive resource sharing may be observed in Figure 3, and update created by one participant followed by comments from others.

The spontaneous (although facilitated) emergence of resource sharing is significant given that the course design explicitly did not require or provide reference material for reading or study. Participants were expected to write from experience, using the rubric to guide their exploration and reflection. Knowledge resources thus gained meaning in the process of thinking through questions and problems related to their case study.

Figure 3. Participants' comments about the use of Shares in Scholar to share knowledge sources



Source: Partial screenshot of CGScholar, Activity Stream: FACT/ERU Learning.

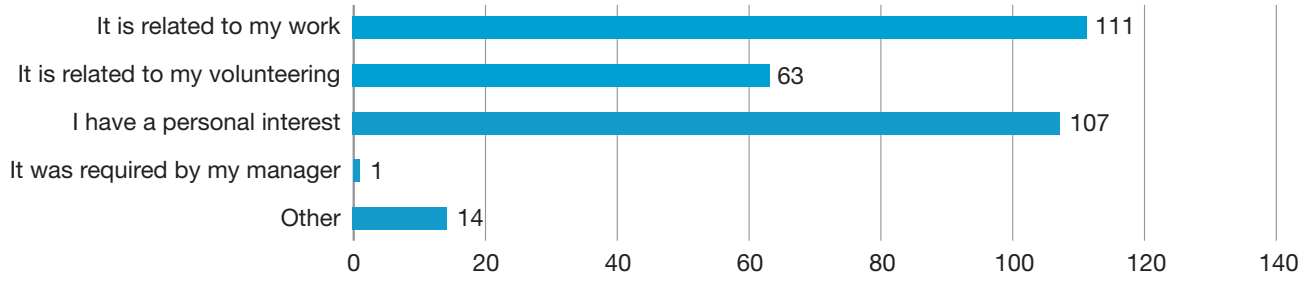
2.4 The Research

Participants who accepted to be part of the investigation completed pre and post course surveys. A total of 285 IFRC affiliates were registered in the FACT/ERU Learning knowledge community. 162 (56.8%) of them completed the pre-course survey and 39 (13.7%) completed the post-course survey. Closed questions offered quantitative data while the open-ended questions provided data for qualitative analysis. Answers to open-ended questions were arranged into categories that emerged from the answers. Moreover, in order to achieve a better understanding of how participants engaged in the process of writing, review and revision, we analyzed the case studies of all ERU roster members who answered the pre and the post-course surveys.

2.4.1 Backgrounds of the Participants in the Research

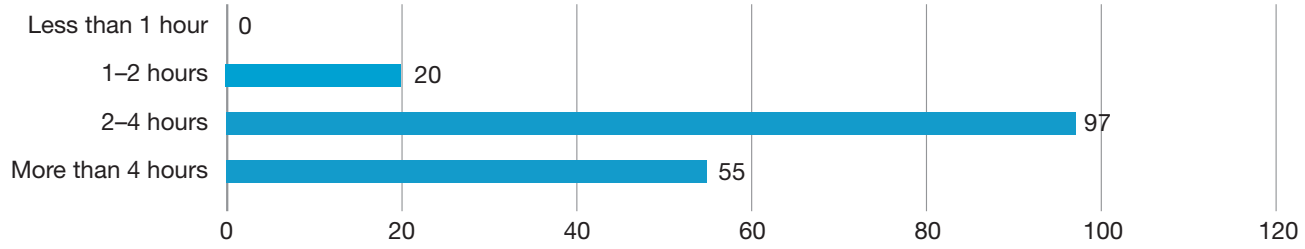
The results presented in this subsection are from the pre-course survey. From the overall participants that answered this survey (162), the majority (57%) is between 30-45 years old. 60% are male and 40% female. They cited personal interest as a key motivation (Figure 4), with most willing to spend 2-4 weekly hours or more with it (Figure 5).

Figure 4. Reason they chose to apply for this course



Source: Survey results generated with CGScholar.

Figure 5. Weekly number of hours they were willing to spend in this course

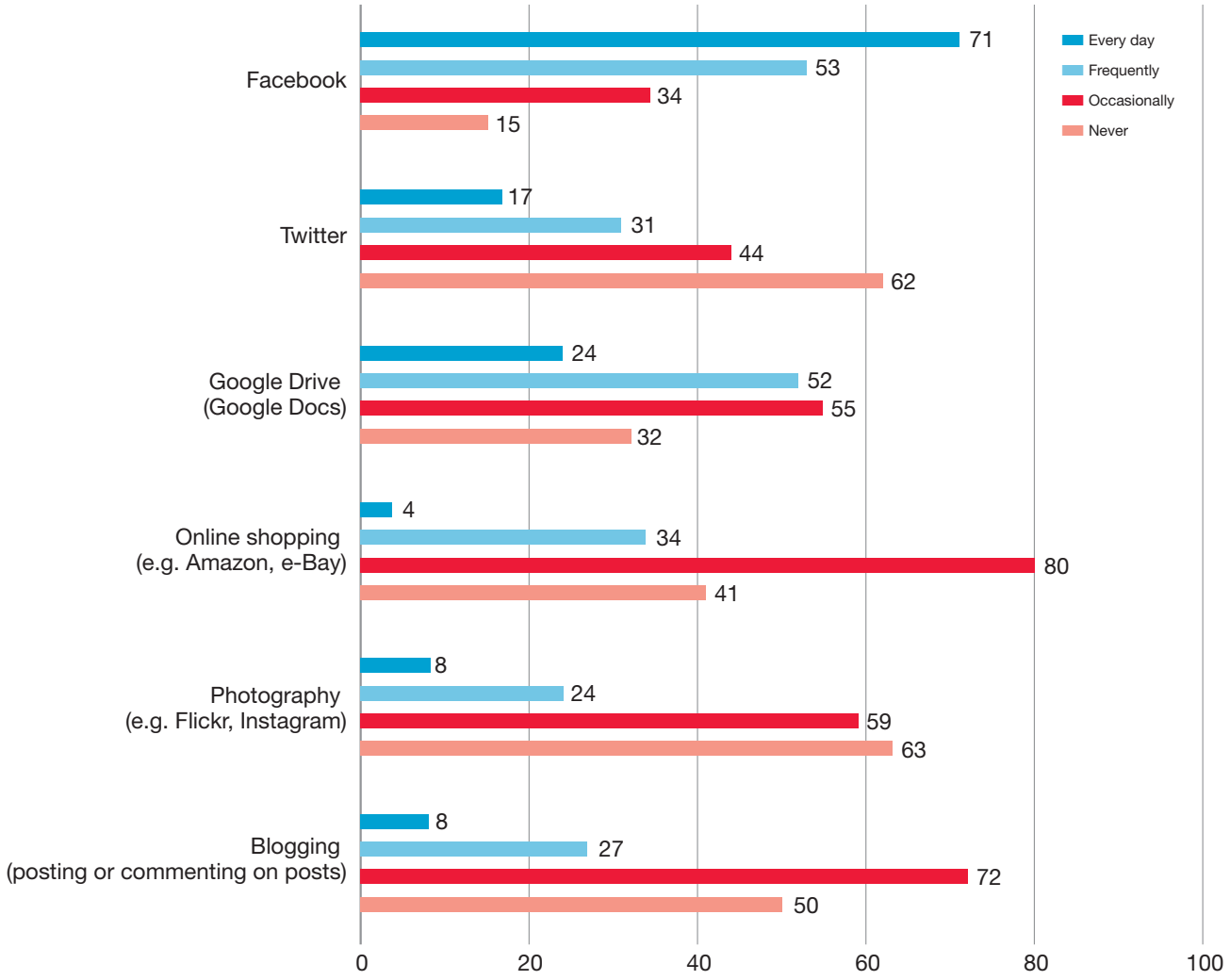


Source: Survey results generated with CGScholar.

Regarding their digital literacy, i.e., their experience with using online resource, Figure 6 shows that most participants interact with technology or on the web "every day", "frequently", and "occasionally". For instance, people tend to socially interact in Facebook daily. An outcome that deserves attention, though, is the relatively high number of people that had never employed social media. 62 people, for example, had never used Twitter. This is especially relevant because the use of online technology is increasingly important for workers in emergency operations. One indirect benefit of online courses may be to improve digital literacy as learners develop or improve their digital competencies in order to complete course work – and may then transfer these competencies to their work.

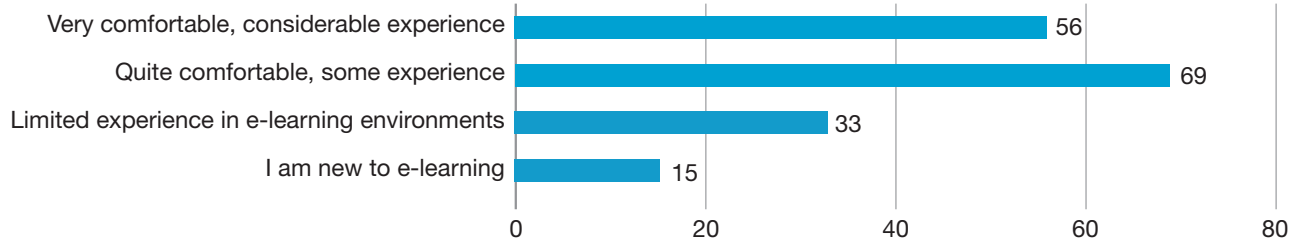
As for the participants' level of experience and comfort with eLearning environments, Figure 7 illustrates that the majority of the participants are comfortable with this type of environment: 56 of them declared to have considerable experience and 69 have some experience. Only 15 participants were new to e-learning environments.

Figure 6. Frequency of use of online media



Source: Survey results generated with CGScholar.

Figure 7. Level of experience and comfort with e-Learning environments



Source: Muck (2015) – Figure 15 – Level of experience and comfort with e-Learning environments (Survey results generated with CGScholar)

3. Conceptual Framework

This study follows the conceptual framework of a New Learning system for preparing humanitarians for the exigencies of 21st Century complex emergencies, as described by IFRC in its 2013 World Disasters Report regarding the use of technology for humanitarian education (World Disaster Report 2013, pp. 26-27). This section outlines the seven practical openings for educational transformation, and briefly relates them to Scholar's underlying pedagogy.

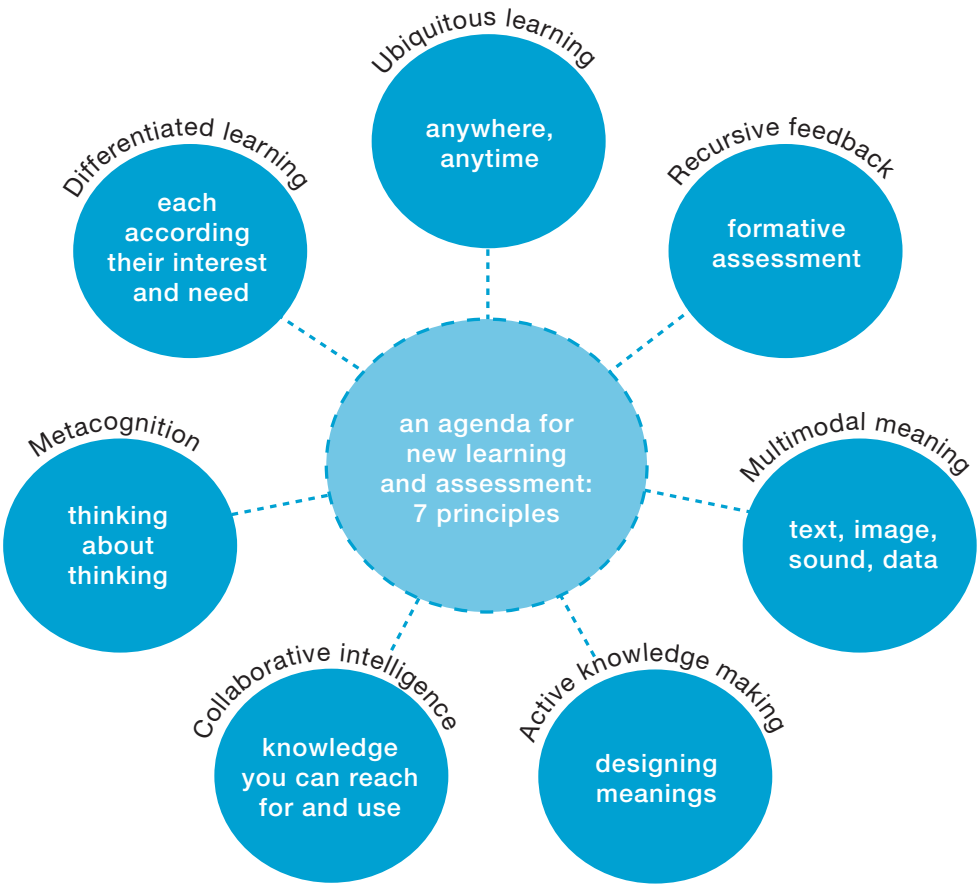
Cope and Kalantzis (2013) developed the basis for both theoretical and practical dimensions of a new learning scenario. From a theoretical perspective, they describe the dimensions of what they term New Learning. In this paradigm, education is seen as a constant co-construction of knowledge that takes place any time, anywhere (ubiquitous). Moreover, it positions the teacher as a facilitator and the students as autonomous agents responsible for their own knowledge construction. This relation with knowledge demands new ways of developing teaching-learning social practice in online and blended learning environments.

Cope and Kalantzis (2013) coordinate a project assembling a multidisciplinary team of professionals (educational researchers, software engineers, computer scientists, computational linguists, and psychometricians) to develop a learning platform named *Scholar*[1]. As stated by the authors (2013, p. 333), "the Scholar intervention is an attempt to reframe the relations of knowledge and learning, recalibrating traditional modes of pedagogy in order to create learning ecologies which are more appropriately attuned to our times".

In this reframing, Cope and Kalantzis (2013) present an agenda for new learning and assessment. As illustrated below, this agenda proposes seven affordances or "openings" for educational transformation: ubiquitous learning, active knowledge production, multimodal knowledge representation, recursive feedback, collaborative intelligence, and differentiated learning. Although these affordances are already known in educational theories or practices, the authors' research on the subject "has attempted to explore ways in which what [they] have termed 'social knowledge' technologies[2] might make each of these ideas easier to realize" (p. 354).

1. Access this link for Dr. Cope's presentation of some of the Scholar's features. As it is a platform that attempts to follow an agenda for new learning, it is in constant improvement and much has been added and/or modified since this presentation. This agenda is going to be described in the sequence.
2. 'social knowledge' technologies: as opposed to "social media, which implies the transmission of information" (p. 335)

Figure 8. Seven practical openings for educational transformation



Source: Retrieved from Cope and Kalantzis (2013, p. 333), Figure 1. Seven openings,seven affordances.

Opening 1 – Ubiquitous learning. This notion captures the opportunity afforded by new media to learn anywhere and anytime. Drawing on Cope and Kalantzis (2008), this paradigm breaks the idea of separation between formal and informal learning: learning is considered to be omnipresent. Thus, according to the authors, it is necessary to investigate other forms of knowledge construction that generate the demand for new technologies as opposed to a teaching-learning process that aims at just adapting to the existing technologies. In other words, technology should not be the agent that sets the limits of the teaching-learning process, but this process is the one that should generate demand for new technologies that envisage a new way of thinking and acting in education.

Opening 2 – Active knowledge production. The authors suggest a change in the knowledge architecture transforming the students into producers of knowledge and not just knowledge consumers. This means that the teacher is not the exclusive holder of knowledge. Students work collaboratively in peers providing feedback to each other. In order to avoid the terminology "teacher" and "student" because of the established social relation, Scholar employs "the terminology of the social relations of knowledge production" (p. 340) having: 'contributors' to review and annotate works; 'publishers' to co-ordinate groups; and 'community' space where works are published and discussed (p. 340).

Arguing about the models of knowledge they present in Scholar, Cope and Kalantzis (2013), state that their focus is in knowledge representation rather than cognition. Moreover, they claim that they are

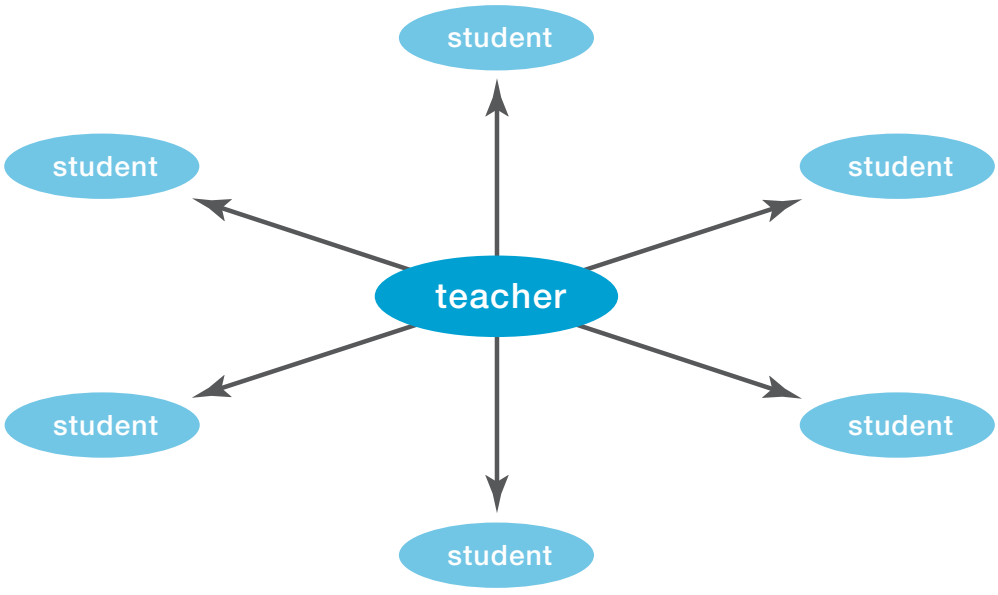
harnessing the varied agencies of students by positioning them as responsible knowledge producers. This makes for engagement. It recruits their identities as every work brings the timbre of each student's voice and the weight of their life experience to their representation of knowledge. It prompts critical thinking and creativity. It positions them as 'makers' (p. 340).

Opening 3 – Multimodal knowledge representation. The third opening offers to the creators the opportunity to make art in writing. They can insert images, videos and sounds in their productions expanding the way they can represent knowledge. In Scholar, the Creator space allows the insertion of all these multimodal aspects.

Opening 4 – Recursive feedback. The fourth opening focuses on the idea of formative assessment as opposed to evaluative assessment. Instead of evaluating the outcome, the goal is to concentrate effort on progress and improvement. Scholar supports recursive feedback to guide students, through the use of rubrics during the writing, review and revision process. Scholar's design also supports these processes by placing side-by-side students' text (case study in this course), the rubric, and the specific inputs from reviewers.

Opening 5 – Collaborative intelligence. This opening focuses on how students and teachers interact which each other in order to build knowledge. In a traditional face-to-face environment the teacher would have to coordinate activities so that students would not talk all at the same time as shown in Figure 9.

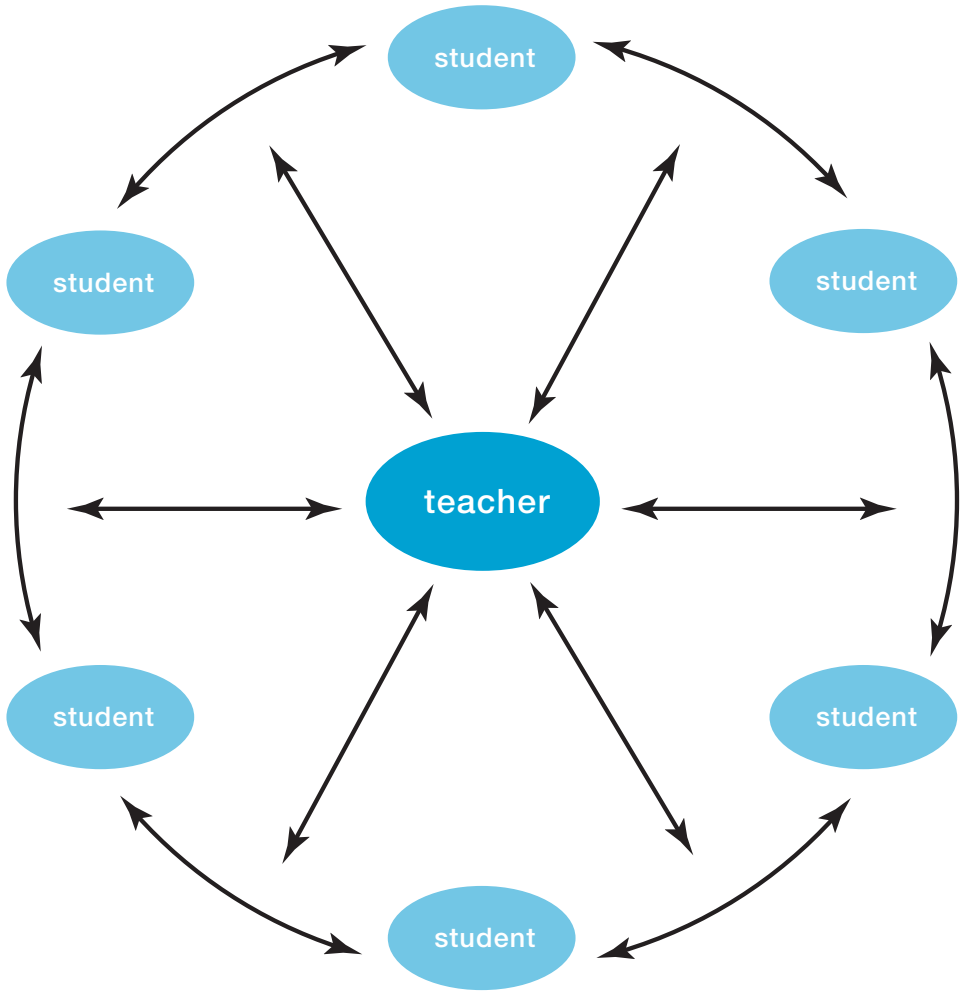
Figure 9. Classroom discourse, didactic pedagogy



Source: Retrieved from Cope and Kalantzis (2013, p. 333), Figure 1. Seven openings,seven affordances.

In *Scholar*, everybody can interact at the same time, maintaining order in discourse through an organization of ideas, as represented in Figure 10.

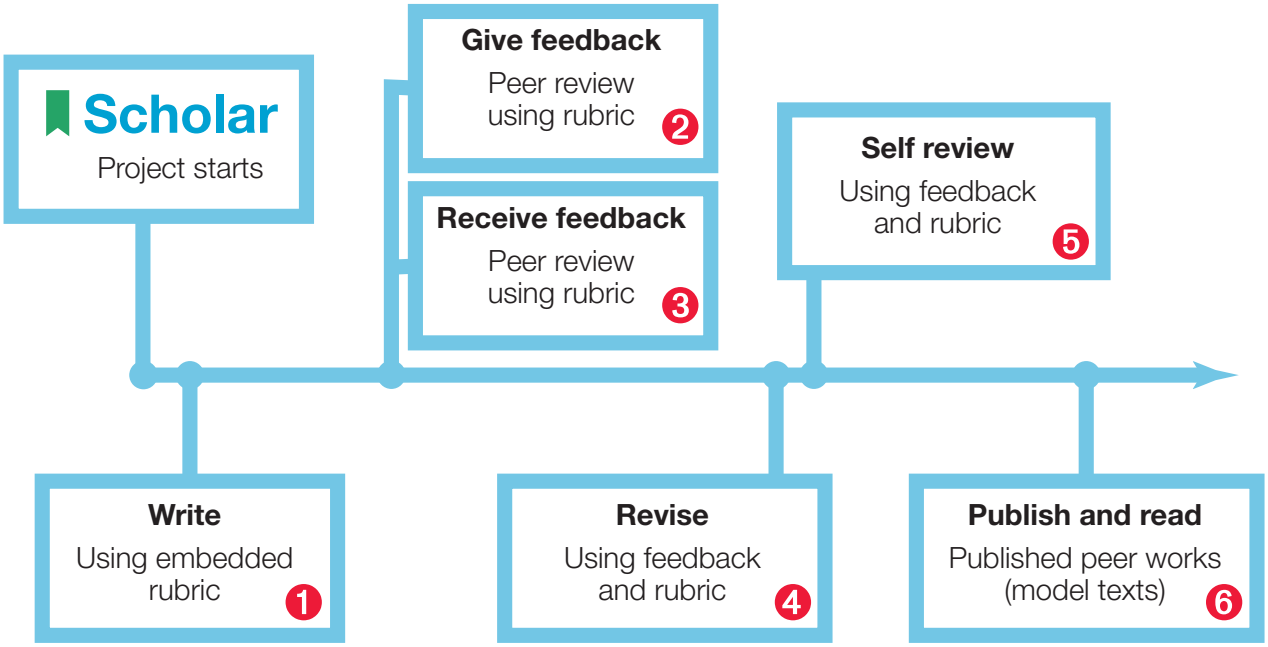
Figure 10. Scaffolding classroom discourse in *Scholar*



Source: Retrieved from Cope and Kalantzis (2013, p. 350)

Opening 6 – Metacognition (reflection). The focus here is in a number of artifacts such as rubrics, and criteria for peer and self review. Participants create knowledge and reflect upon it while providing feedback and reviewing and revising their own case study. Figure 11 displays how this metacognition is developed in Scholar e-learning environment.

Figure 11. Developing metacognition in *Scholar*



Source: Berg & van Haren (2014), PowerPoint presentation

Opening 7 – Differentiated learning. This emphasizes the possibility that each learner has to work on his/her own pace and with his/her own way to explore resources of knowledge. Therefore, in Cope's and Kalantzis' (2013) words, "assessment becomes a somewhat different process than in the past, not measuring capacities to remember identical things or correctly deduce the same answers, but measuring higher order comparabilities and equivalences between knowledge artifacts which may in substance be different. In this assessment regime, you don't have to be the same to be equal. And at this point, managing learner differences may become easier than one-size-fits-all teaching" (p. 354).

4. Opportunities for knowledge production/sharing/ consumption in the *Scholar* learning platform

The "Learning from shared experience in humanitarian assistance" course used the *Scholar* learning platform for asynchronous interaction and knowledge co-construtcion. *Scholar* is the site of this investigation. In *Scholar*, participants and the facilitator employed a range of tools in order to produce, share, and consume knowledge. These tools are organized in spaces named: *Community, Creator, Publisher*, and *Analytics*. The first two were the spaces employed by the participants while the last two were employed by the facilitator. This section concisely describes these spaces, demonstrates how participants and facilitator employed them, and presents the results of the post-course survey, which aimed to document participants' experiences and feelings (reactive evaluation) with the activities and spaces deployed in this course.

4.1 Community space

Community is the public knowledge sharing space (Figure 12). Participants can initiate a new update on the activity stream or comment on other participants' updates. Updates are displayed consecutively in the activity stream, with the newest update being always one the top.

The Community space was used for three purposes: 1) sharing course management information such as course development and technical instructions; 2) establishing a knowledge profile; and 3) sharing knowledge regarding participants' experiences in emergency operations. To illustrate the latter, one of the productive knowledge sharing moments was originated with the update on the Haiyan typhoon. Figure 13 shows a representative sample of four of the 50 comments on this subject.

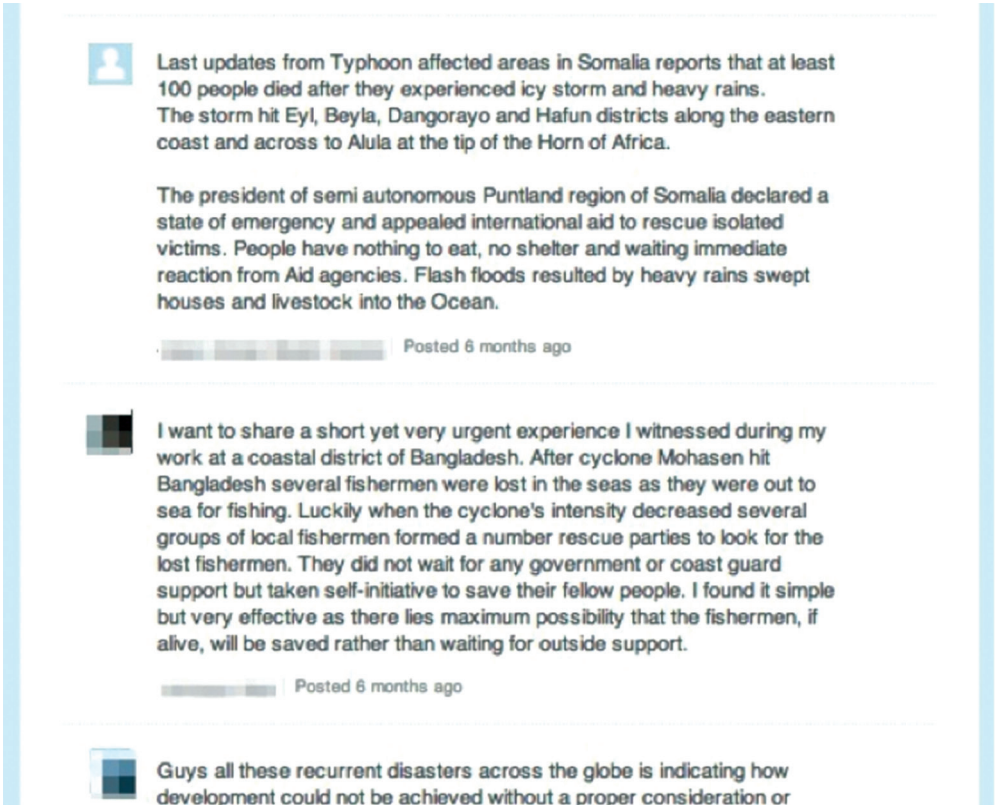
This dialogue provides an example showing how the *Community* space allows participants to interact with each other and, consequently, share and build knowledge as well as reflecting upon the situation and transferring this knowledge to a wider scenario. For example, in the first comment, the participant shares information about the current situation while, in the second, another participant shares knowledge from prior experience. The two subsequent comments anchor previous comments about two local knowledge contexts and shift the perspective to global knowledge.

Figure 12. The Community space: Activity Stream



Source: Retrieved from Muck (2015) – Figure 1 – A fragment of the Community space (Partial screenshot from CGScholar, Community: FACT/ERU Learning, manipulated with Skitch)

Figure 13. The Community space: comments on an update



Source: Partial screenshot from CGScholar, Activity Stream: FACT/ERU Learning, manipulated with Skitch

The usefulness of the *Community* space for knowledge sharing was highlighted by the participants' answers to the post-course survey. Most of them (19 out of 22) provided positive feedback to the following group of questions: Was the discussion in *Community* useful? Why/why not? If yes, how did it help you?

Sixteen of them stated their satisfaction with *Community* for the sharing of experience. "The discussion forum was the center of gravity of Scholar", said Aly, "It helped to cultivate ideas, experiences and knowledge sharing. It helped me to find resources, generate knowledge and motivated my self-reflection". Sharing allowed participants to "understand a lot about FACT/ERU community" (Alan), to "share resources, [to] discuss on various ongoing disasters" (Noa), and to "gain new insights from the experience of other colleagues in the field" (Joy).

The remaining three participants found the discussions in *Community* useful but reported feeling overwhelmed by the abundance and velocity of the information flow and disappointed by the lack of relevance of some comments. Justin states that the posts in *Community* "were useful, but too much information and documents were posted". Keny found it useful, but "sometime it was hard to catch up because the process was so fast", reporting that she spent 1 to 1,5 hours to review new content, as she did not access Scholar in a daily basis. Similarly, Markus recognized that the discussions helped him to "follow the experiences and thoughts of others, and [he] was happy to contribute where relevant". However, in his words, "a lot of superficial stuff is distracting".

Information (content) used to be selected by the teachers and delivered to the students in a standardized approach and without considering their sociocultural context. Rather than relying on a teacher to select and assign a limited number of readings, in *Scholar* learners are constantly producing, sharing and responding to each other. The ability to select important information is a skill that has to be developed with an educational approach in which knowledge is abundant. In this new scenario, as knowledge producers and consumers, students have to search, navigate and filter content. Like social media, the intense and rapid flow of information in the *Community* space may intimidate people who come from the tradition where everything has to be read. Briana said she did not find *Community* dialogue useful for this reason: "A lot of posts – I did not have time to read most of it. Personally, it did not add to my experience".

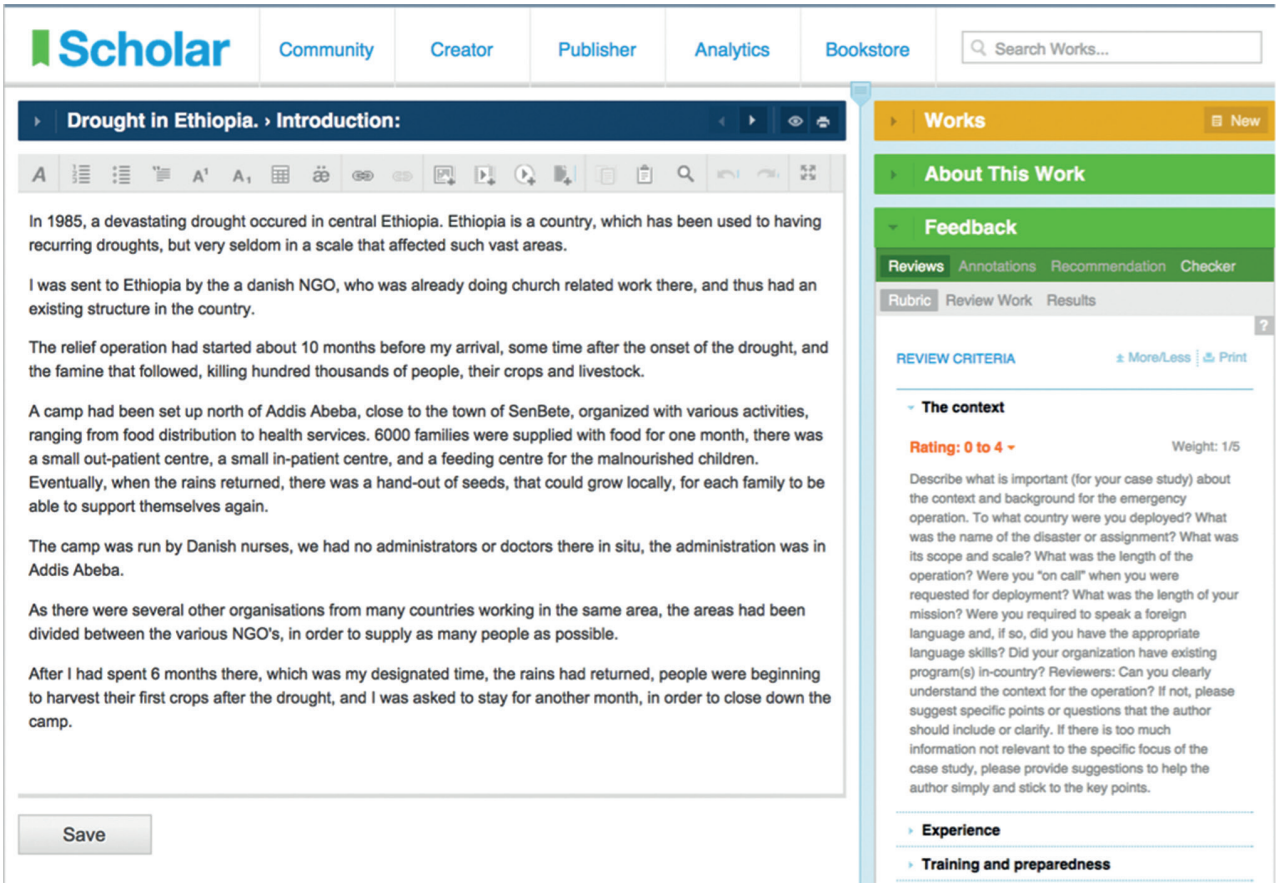
It is important to observe that this ability to filter and extract important information is an increasingly relevant skill for most forms of humanitarian work, where massive amounts of information arrive simultaneously from various sources, demanding rapid assessment and decision-making on what pieces of information actually matter to make sense of a situation and determine what action is needed.

In the course, some participants shared criteria and methods they used to filter information. For example, Marcia relied on her browsing skills to evaluate what conversation to engage. "Some topics are more [interesting] than others, according to who you are, and what you know and need to learn about. Good idea to have the possibility", she said. Laura had the same active attitude: "I would browse the comments and read the attached documents and download them all in a separate file. It was good for me".

Two participants reported in the post-course survey that the *Community* space was only useful to some extent. Their discontent was related to the content of the comments, specifically regarding the sharing of participants' personal feelings and opinions. Ron, for instance, deemed that, "sometimes it was useful and sometimes it was not". He "preferred to check the discussion about real material, not about feelings and opinions". His strategy was to select what was significant to him. As in face-to-face education, in distance education it is also crucial to respect leaners' individual differences by offering a wide spectrum of engagement and learning opportunities. Other participants, for example, may seek to share their feelings and find the ability to do so with others to be a positive aspect of the course. The feeling of isolation is a significant communication challenge in distance education, according to Berge (2013). Sharing feelings may provide a sense of belonging to a community for at least some of the learners. (*Scholar's Community*, of course, does not prescribe the emotional content of updates shared by learners, so this is a matter that can be addressed by the course design and by facilitation.)

4.2 Creator space

Figure 14. The Creator space



Source: Retrieved from Muck (2015) – Figure 2 – General view of the Creator space (Partial screenshot of CGScholar, Community: FACT/ERU Learning, manipulated with Skitch)

The *Creator* space in *Scholar* is where participants wrote their case study, provided and received peer feedback, and revised their own case study based on the feedback received and what they learned by reviewing the work of others. As can observed in Figure 14, participants used *Scholar's Creator* space, which is designed so that learners write their case study in a pane on the left hand side of the screen while the review criteria (and other information needed to make sense of the assignment, such as its metadata) displays in a pane in the right side of the screen.

Participants of the investigation were asked to state their level of agreement with respect to the following descriptors of their experience.

- I enjoyed the experience of writing the case study.
- I enjoyed the experience of providing feedback through peer reviews to my colleagues.
- Providing feedback to my colleagues through peer reviews helped me to think about my own case study.
- The feedback I received from my reviewers were helpful.

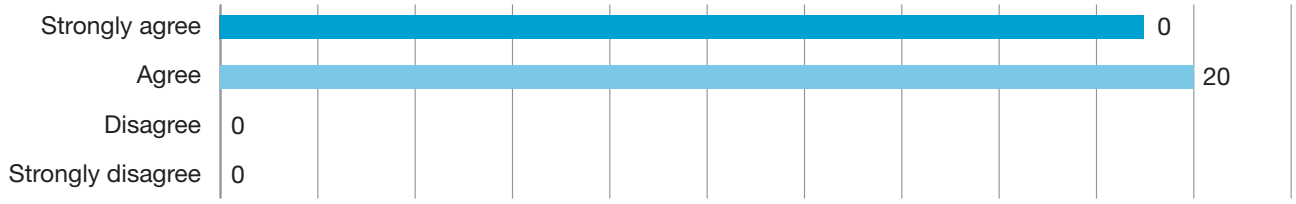
The results are presented in the following subsections: experience of writing the case study, experience of providing feedback through peer reviews, helpfulness of feedback received, and the revision process. Moreover, one example of how the process develops in the Creator space will be provided.

4.2.1 Experience of writing the case study

> *In writing my case study I had to remind myself of things that happened three years ago. It was difficult in the beginning, but as I was writing and reading the different posts in the Scholar Community, information was coming back to me. Reading and writing [is] not what I love the most in my life, but I [discovered that] once you are reading or writing about something, you like, it [becomes] a passion. I am also getting better in ENGLISH [through] writing […] and reviewing others' case study.*
>
> **Matheus**

Participants who answered the post-course survey were invited to react to the following sentence: "I enjoyed the experience of writing the case study." As Figure 15 shows, all participants enjoyed the experience of writing the case study, with 19 who "strongly agree" and 20 who "agree".

Figure 15. Reaction to the sentence: "I enjoyed the experience of writing the case study"



Source: Retrieved from Muck (2015) – Figure 16 – Level of agreement with the sentence: «I enjoyed the experience of writing the case study» (Participants in number) - (Survey results generated with CGScholar)

When asked to describe their experience in writing the case study, participants surfaced five main issues: opportunity for reflection, importance of the rubrics, value of informal knowledge, the uniqueness of the case study development process (writing-review-revision), and the specific relevance of the review step in the process.

To start with, most respondents were satisfied with the opportunity to engage in a reflective exploration of how they learned in a humanitarian operation in which they deployed. Where, typically, it is the lesson learned that is retained, the focus of the assignment on the journey to those lessons was found to be relevant by respondents. Even when reporting that there was no new discovery in writing her draft, Amanda noted the importance of the reflective process: " [I] did not discover anything radically new, rather reflected again on issues that I had thought about even previously, even if maybe from a slightly different angle this time". Participants reported "living" their experience again while writing the case study, but being able to see it from a different perspective. It was "good to use this opportunity to think through where things had been truly learned, " wrote Joanna, "as opposed to things I might have noted or identified but not really 'learned'".

In addition to reliving their experience, writing the case study led participants through a process that made them reflect and (re)think about their performance in the field; a "therapeutic" experience, in Alice's wording, and a "self-reflective exercise" for Aly. For Theofilo, writing the case study forced him to pay attention "to what [he] did during [his] deployment and to reconsider some of the actions [he] conducted before, during and after [it]".

Theofilo's reasoning implies an organization of ideas *while writing*. It exemplifies that this reflective process also (something is missing here! Would "influenced" be the word?) how learners organized their thoughts and, therefore, their writing. Alice said that writing the case study "allowed [her] to examine the events in an orderly manner". The same happened to Noa: he "was happy to be able to recollect [his] thoughts, articulate them in an organized manner, identify issues and challenges, and provide a set of recommendations for future course correction". In this sense, participants went one step further from stating what they learned to describing how they learned. It was, in fact, stimulating for them to reflect upon the how. It was "challenging sometimes to separate the 'what' I learned from the 'how' I learned good to use this opportunity to think through what things had been truly learned, as opposed to things I might have noted or identified but not really 'learned'", explained Joanne. Participants accepted this challenge and saw it as an opportunity to improve their future performance. In Rojim's experience, "when writing the case study I was able to bring back my memories and experiences [...] it helped me to understand my weaknesses to improve in the future".

This structured thinking and recollection of events and experiences were framed by the rubric, which is another aspect emphasized by the respondents. According to Hannah, the rubric "forces you to rethink and structure your knowledge and experience. In my case I suppose I discovered that my entry into disaster work was based on development work and logic thinking and not

a specific 'disaster or humanitarian angle'." Appreciation for the rubric's usefulness in guiding and facilitating reflection was expressed by Katrina: "the breakout of sections and the guiding questions to help in deciding which information to include was incredibly helpful and made it easier than if I were to just outline it on my own". The rubric guided participants' thinking and encouraged them to go beyond factual description, engaging learners in a metacognitive process. And this, in fact, was the focus of the course: how lessons were learned. Nevertheless, one of the biggest challenges for participants was to take that reflective step back to consider the process (how I learned) rather than the outcome (the learned lesson).

A third aspect emphasized by the participants who answered the post-survey was the value of informal knowledge. Amie states that she "discovered that disaster response was not a rocket science. Most participants were not previously trained and yet had informal leanings to share". In sociocultural theory, this informal knowledge, called spontaneous concepts, is built and developed in social activities (Vygotsky, 1986), such as the ones engaged by course participants in emergency operations. The challenge, however, is to establish a dialectic relationship between a *spontaneous concept* and the *scientific concept* - the knowledge that is produced on theoretical grounds (Vygotsky, 1986; Johnson, 2009). Although there were many benefits to opening the course to anyone (whether or not from the Red Cross Red Crescent Movement) with experience in at least one emergency operation, this resulted in a diversity of participants who did not necessarily have the extensive training and preparedness of IFRC's FACT and ERU teams. There may therefore be a case for offering a follow-up course in which FACT and ERU team members could explore the relationship between their formal training (theoretical grounds) and what they learn in the field (informal knowledge). In addition to the benefits to its participants, the outcomes of such a course could also be used to improve the content and process of current FACT and ERU training.

A fourth feature highlighted by respondents was the uniqueness of the case study process. Hanz said that this process was a new approach and led him to explore what learning happened during the operation he chose to write about. This new approach helped him to discover that he learned lessons from field experience although he had never realized that before. Other learners also recognized the unique characteristic of the process and its value, such as Sue: "I have been writing reports and case studies, but this was one of its kind, as I had to assess myself and my work, my mistakes and my learning. In general what we do is, we just pick a subject and start writing about that, but, in this case study, I was a subject, due to which I discovered a lot of things which were not in consideration before". This opportunity to experience a different type of learning was also highlighted by Samaa: "It was a wonderful experience. I never had this type of experience. I have submitted several assignments [...] but only this time I had [the opportunity] to review [the case studies of others]. It is also a great experience of strong learning". Such examples, in addition to illustrating the cognitive process, also reveal respondents' perception of the singularity of a comprehensive, peer-based learning process.

This is especially significant given that most respondents claimed to already be familiar with online learning. And yet, they found this course's process to be unlike any other.

This experienced of writing followed by peer review and revision fully recognizes the learner's individual responsibility for their work (one works alone on one's cases study, and is solely responsible for its content), while also fostering and supporting collaboration. This led to the reinforcement of community, as evidenced in both the Community updates and the post-course survey. It appears that the activity of writing and reviewing fostered mutual support among participants, despite the anonymity of the review process. When reviewing the case studies of others, Alice noticed that her experience was not isolated: "The case study writing experience allowed me to critique the issues encountered and compare to other case studies; thus allowing me to realize [that] my experience was not unique".

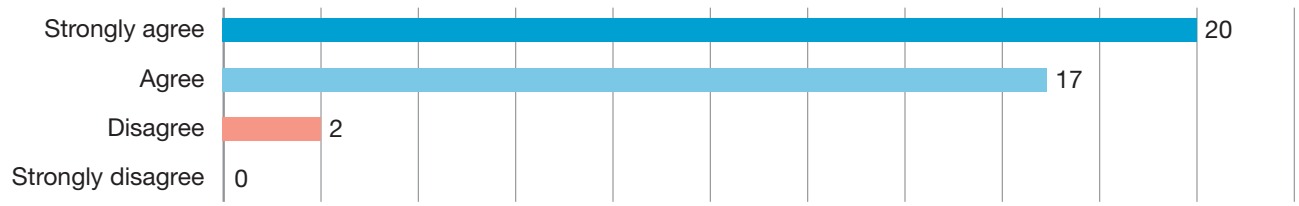
Finally, a fifth topic emphasized by the participants was the relevance of the review process. It helped to expose missing information essential to the reader, "catching the missing points" (Diana). It allowed case study authors to "factor in issues I may have thought were not important. I realized their importance when pointed out by reviewers" (Eduardo). It also facilitated understanding of the activity per se: "I first wrote a draft, reviewed the content and waited for comments. This was when I understood more what had been expected of the case study and how I was to make it clearer" (Briana).

4.2.2 Experience of providing feedback through peer reviews

> *[By giving feedback I learned that] I am not perfect (I have to learn from my mistakes), I have to talk and listen and with good manners. Get to know everybody in my team before a mission.*
>
> **Matheus**

In addition to enjoying writing the case study, nearly all respondents enjoyed the experience of providing feedback to their peers (peer review). Of the 39 respondents, 20 (51%) strongly agreed with the statement "I enjoyed the experience of providing feedback through peer reviews to my colleagues", 17 agreed, and only 2 disagreed, as shown in Figure 16.

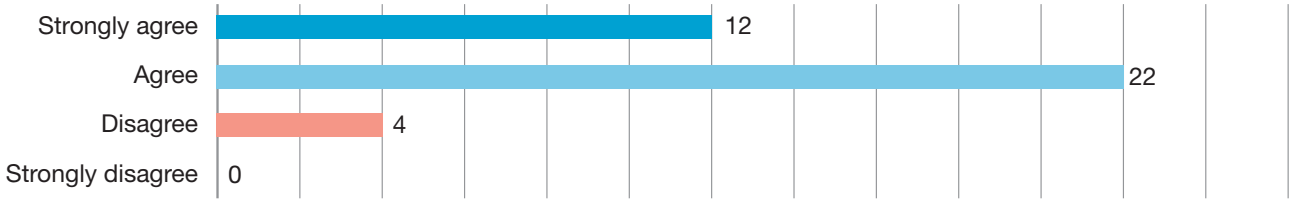
Figure 16. Reaction to the sentence: "I enjoyed the experience of providing feedback through peer reviews to my colleagues"



Source: Retrieved from Muck (2015) – Figure 16 – Level of agreement with the sentence: «I enjoyed the experience of writing the case study» (Participants in number) - (Survey results generated with CGScholar)

Furthermore, the participants acknowledged that the experience of providing feedback to other participants through peer reviews helped them to think about their own case study. Most of the respondents (34, 89.5%) agreed or strongly agreed that the process of providing feedback to the peers helped to think about his/her own case study, as shown in Figure 17.

Figure 17. Reaction to the sentence: "Providing feedback to my colleagues through peer reviews helped me to think about my own case study"



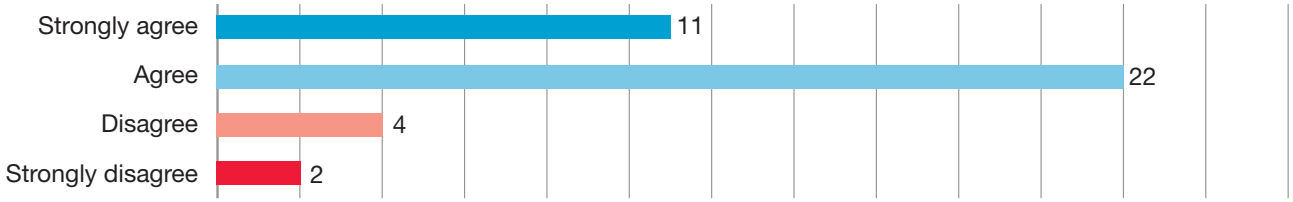
Source: Retrieved from Muck (2015) – Figure 18 - Level of agreement with the sentence: «Providing feedback to my colleagues through peer reviews helped me to think about my own case study» (Participants in number) - (Survey results generated with CGScholar)

4.2.3 The helpfulness of the feedback they received and the revision process.

> *I believe feedback is always a crucial part of self-development.*
>
> **Aly**

The majority of the participants (33 out of 39) also found the feedback they received from their reviewers to be helpful, as expressed in Figure 18.

Figure 18. Reaction to the sentence: "The feedback I received from my reviewers were helpful"



Source: Retrieved from Muck (2015) – Figure 19 - Level of agreement with the sentence: «The feedback I received from my reviewers were helpful» (Participants in number) - (Survey results generated with CGScholar)

In addition, participants were asked to identify aspects of the *Scholar* environment that helped them when revising their own case study after receiving the feedback from their peers. They reported that the space itself was appropriate for revision. It "was very user friendly. While revising the case study I easily got the reviews feedback and managed to revise my case study in light of those com-

ments" (Sue). Briana echoed Sue's comment: "Scholar's set up is very helpful for this type of process. It is a great tool. The writing section is not as flexible as I would have hoped (difficult to copy back to Word, etc.) but the review process is great (with narrative and scores, having an average score, etc.)". Such comments implicitly recognize the value of visually presenting content side-by-side with feedback, an important component in Scholar's design.

One of the principles of progressive education in general (in no way restricted to online education), is to believe that participants will engage learning with intrinsic motivation rather than the expectation of extrinsic reward, i.e., having students commit to a learning process without being graded or penalized for lack of engagement. Each individual was assumed to be responsible for his/her own personal development, and no rewards or penalties were applied by the IFRC or by the facilitator for completing or failing to complete specific tasks assigned in the course. As could be anticipated, not all participants engaged equally in this way in the peer review process. Because peer review connects learners to each other, unequal participation or engagement by some had negative consequences for others. Aly was one participant who suffered the consequences of this lack of engagement, manifested by the lack of feedback from the peers who were assigned (automatically and anonymously) to provide it. "I believe feedback is always a crucial part of self-development. Regrettably, I haven't received any feedback from my three peers", he said.

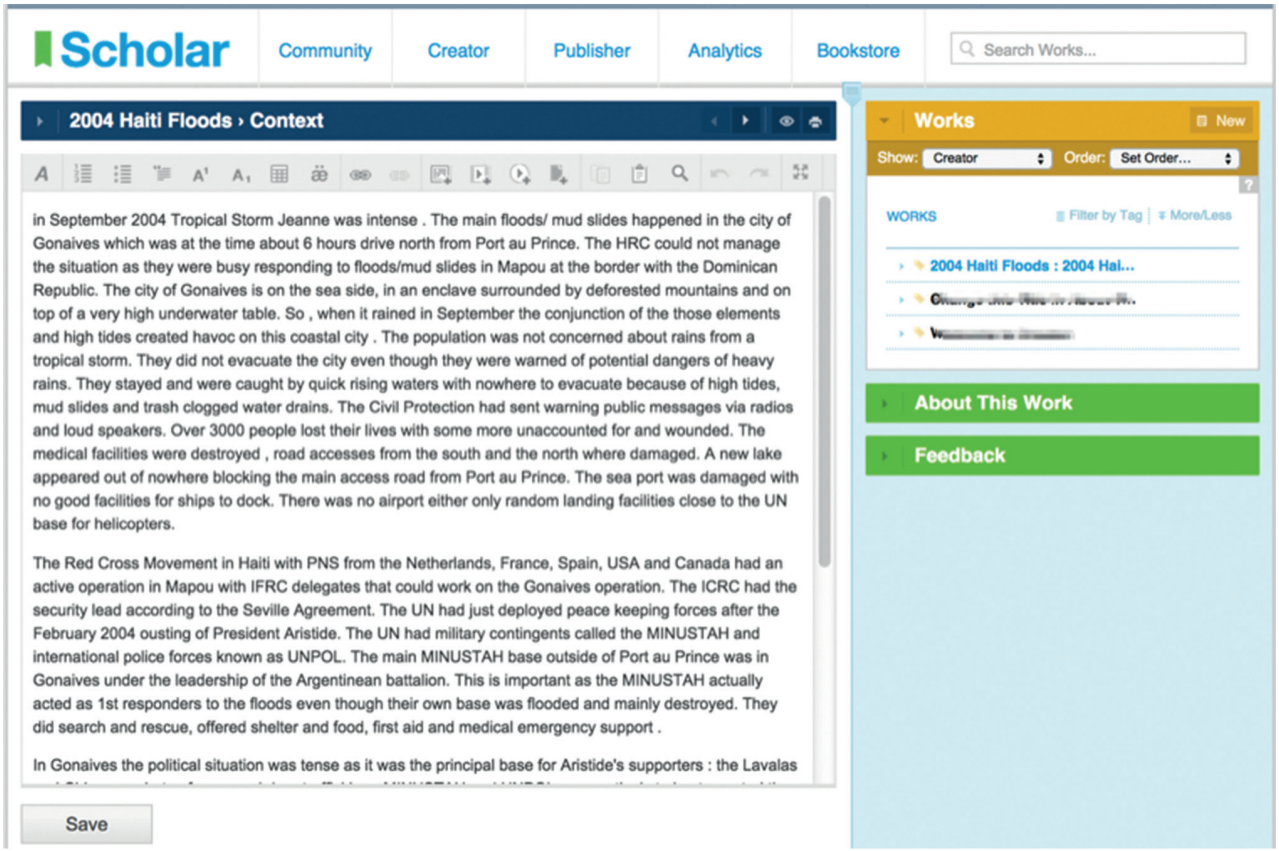
Scholar's features attempt to mitigate this, as did the facilitator by emphasizing this interrelatedness in an appeal to the learners' sense of shared responsibility, keeping in mind that participants enrolled because they were interested in their own development through reflective practice. By default, the system only sends a case study for review to people who have themselves submitted their own case studies. This means that Peter, who wrote a case study and submitted it to be reviewed, will receive case studies from three other peers (for instance, Aly, Samaa, and John) in order to review them. However, if Peter does not review them, there is no penalty to him, but others are penalized by the lack of feedback. To mitigate this, the facilitator had to assign additional reviews to participants who expressed a willingness to complete additional ones. This was possible given the overall dynamic of the course, in which learners that lacked intrinsic motivation opted out of the course either by failing to register in Scholar (which required sufficient motivation to overcome technical barriers and the willingness to learn to use a new software environment) or by failing to submit a case study draft. Aly, for example, adopted a proactive attitude: he searched for help in the *Community* space and revised his own case study. In his words: "the discussions [around the peer review process and the importance of contributing to it] held in the community space of Scholar motivated me to revise my own study and insert a lesson learned section to my study".

4.2.4 One example of how the activity of writing/peer reviewing/self revision develops in the Creator space

This subsection illustrates the development of Briana's case study in Scholar. Figure 19 shows a print screen from Creator space. On the left side of the

figure, "2004 Haiti Floods" is the title of her case study, and the space below it is where she developed the case study. Each one of the tabs in the right side (*Work; About This Work; Feedback*) can be unfolded, revealing more tools relevant to specific contexts for the learner.

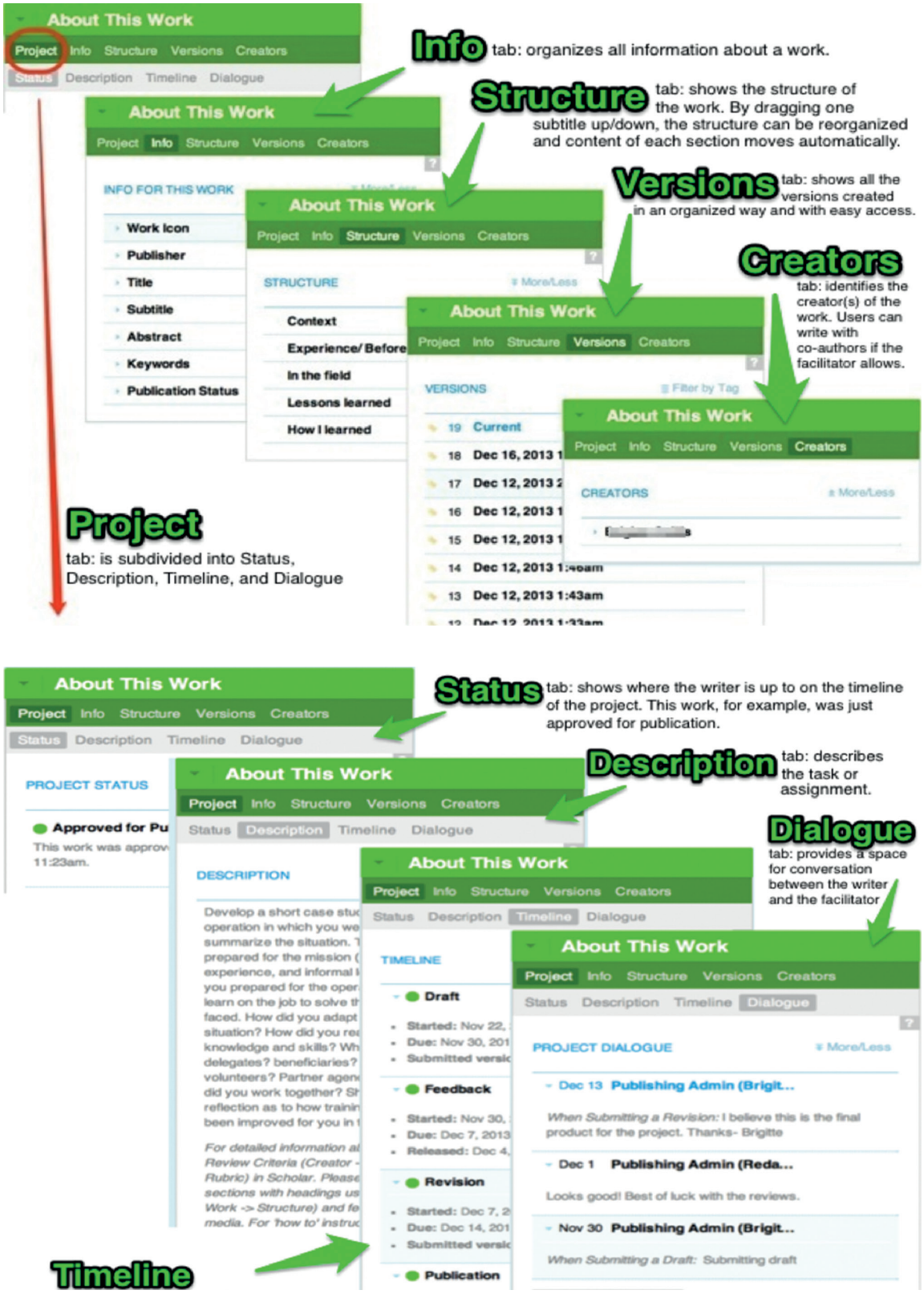
Figure 19. The Creator space with the Works tab extended



Source: Retrieved from Muck (2015) – Figure 4 – The Creator space with the Works tab extended (Partial screenshot of CGScholar, Community: FACT/ERU Learning, manipulated with Skitch)

The *Works* tab, which is extended in Figure 19, provides a list of works (case studies or projects) the user is working on. When the user selects the *About This Work* tab, it expands, revealing a series of features such as: *Project, Info, Structure, Versions*, and *Creator*, as described in Figure 20. In the sequence, Figure 20 also shows that the *Project* tab extends, revealing the following features: *Status, Description, Timeline*, and *Dialogue*, which are also explained in the same Figure.

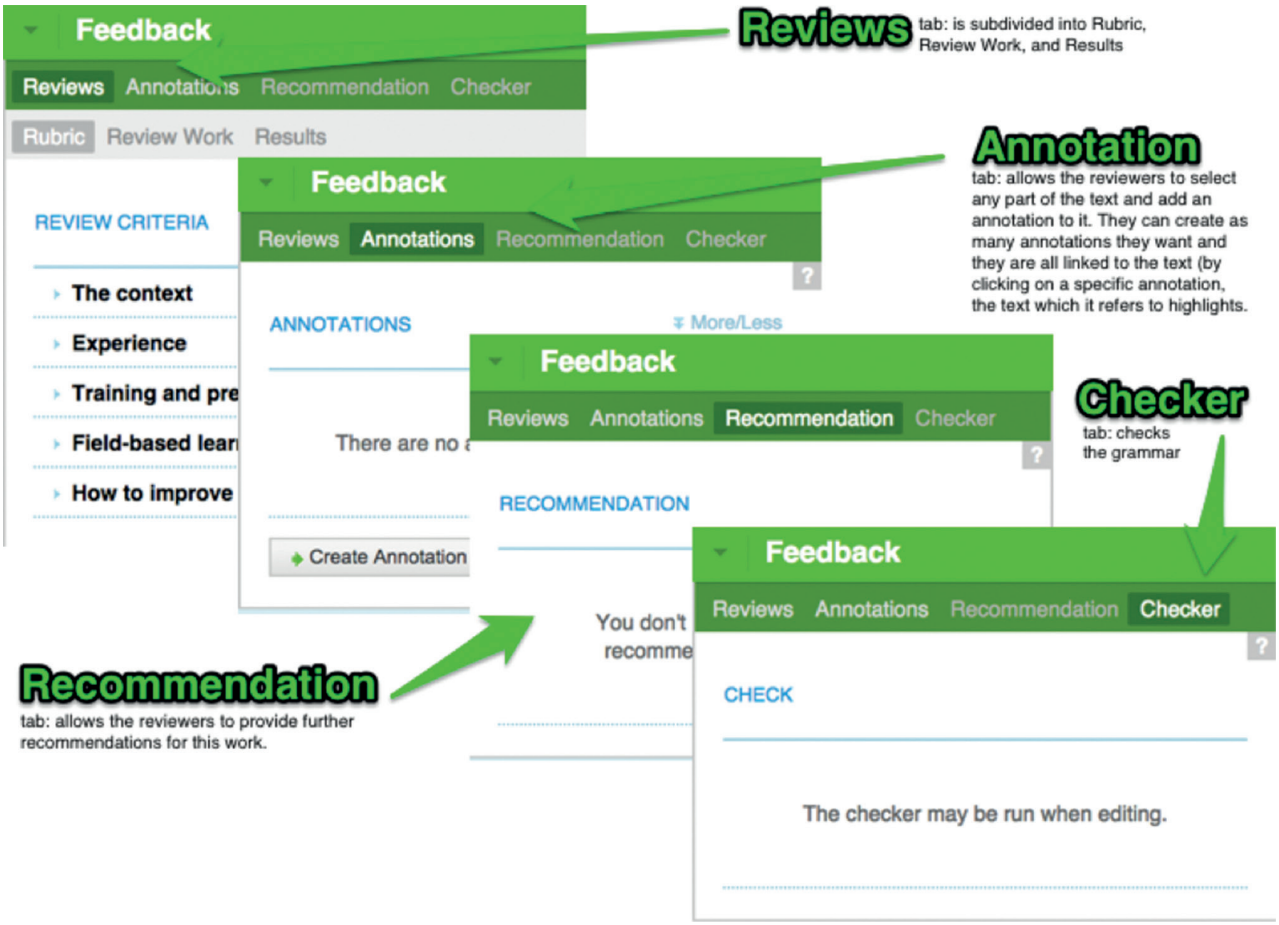
Figure 20. The *Creator* space: *About This Work* tab



Source: Retrieved from Muck (2015) – Figure 5 – The Creator space: About This Work tab (Multiple screenshots of CGScholar, Community: FACT/ERU Learning, manipulated with Skitch)

Under the Feedback tab (Figure 21), the user finds the following features: Reviews, Annotation, Recommendation, and Checker. Moreover, the Reviews tab is subdivided into Rubric, Review Work, and Results, which are further displayed in Figure 22.

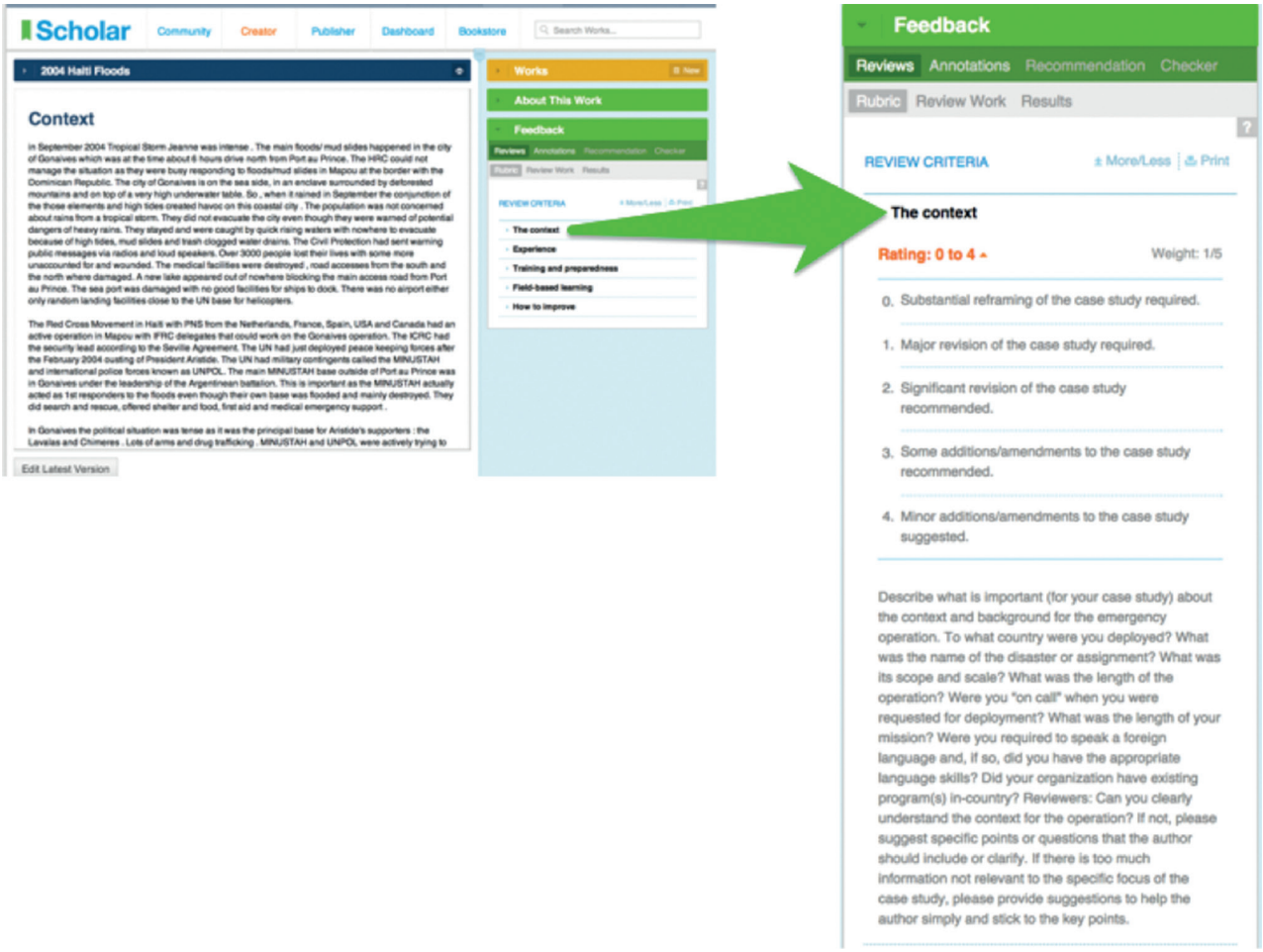
Figure 21. The *Creator* space: *Feedback* tab



Source: Retrieved from Muck (2015) – Figure 6 – The Creator space: Feedback tab (Multiple screenshots of CGScholar, Community: FACT/ERU Learning, manipulated with Skitch)

The *Reviews* tool is employed by the writer (when writing and reviewing his/her own work) and by the reviewer (when reviewing others' work). The advantage is that learners can see the *Rubric* side by side with the writing space, as pictured in Figure 22. All the instructions are on the right side of the screen while the writing/reviewing/revising processes takes place on the left side. The *Rubric* outlines the sections that the case study should include. In this course, the sections for this case study are the following: *The Context, Experience, Training and Preparedness, Field-based learning*, and *How to Improve*. Figure 22 also illustrates that each one of them extends providing detail on what the writer is expected to provide in each section. This detail also includes the criteria the reviewer should employ to conduct the review. To exemplify, Figure 22 shows *The Context* criterion extended.

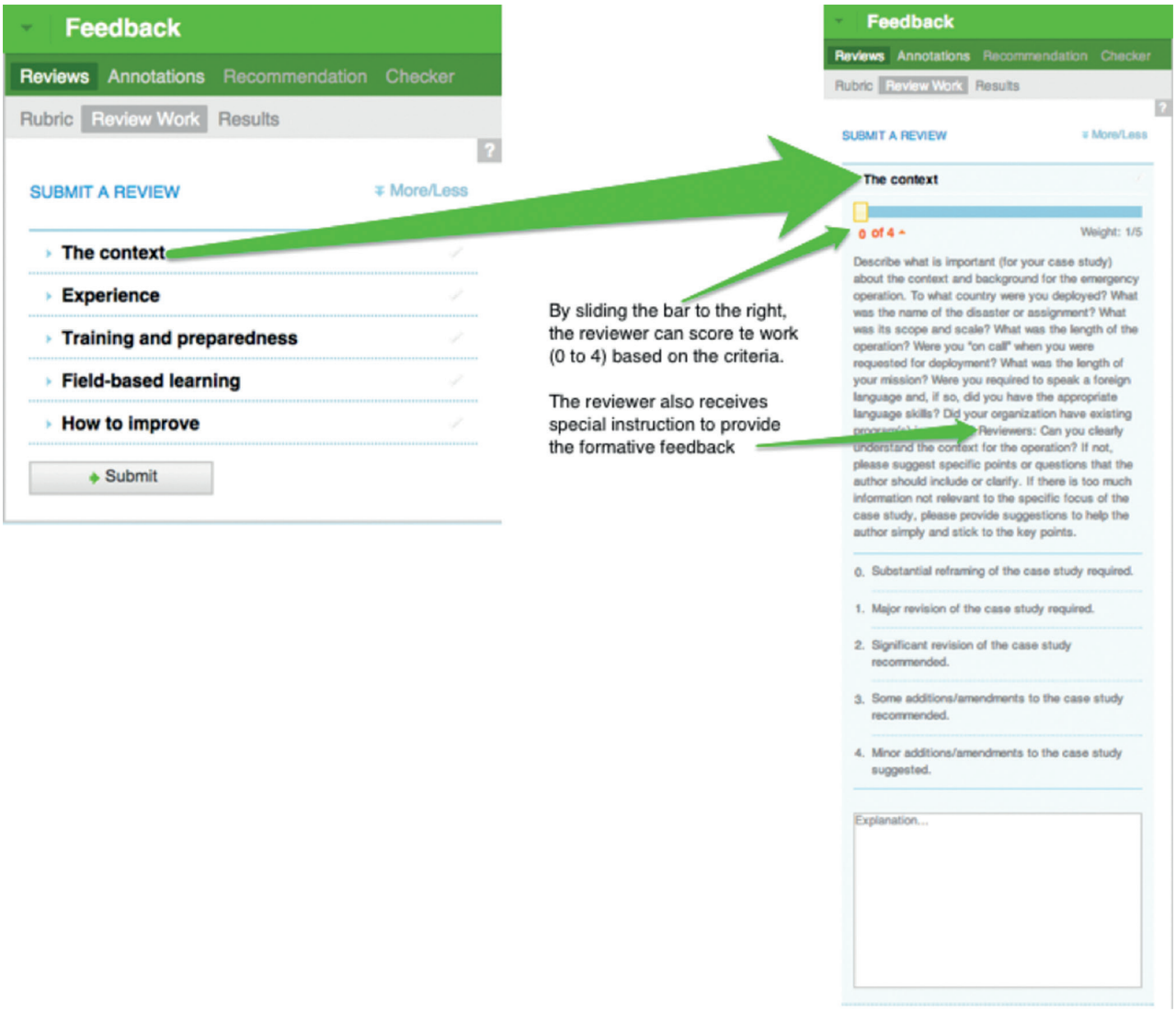
Figure 22. The *Creator* space: *Feedback>Reviews>Rubric* tab with one criterion expanded



Source: Retrieved from Muck (2015) – Figure 7 The Creator space: Feedback>Reviews>Rubric tab with one criterion expanded (Partial screenshots of CGScholar, Community: FACT/ERU Learning, manipulated with Skitch)

Furthermore, under the *Review Work* tab, the reviewer has to rate the writing according to pre-established criteria. Figure 23 shows the space where the reviewer has to slide the bar to the number on a rating scale that best fits the writing under revision and also has to provide a written explanation for the rating. It is important to observe that rubric criteria also include special instructions for the reviewers, as indicated in Figure 23. It is also under this tab that the writer revises his/her own work based on the feedback provided by the reviewers.

Figure 23. The *Creator* space: *Feedback>Reviews>Review Work* tab

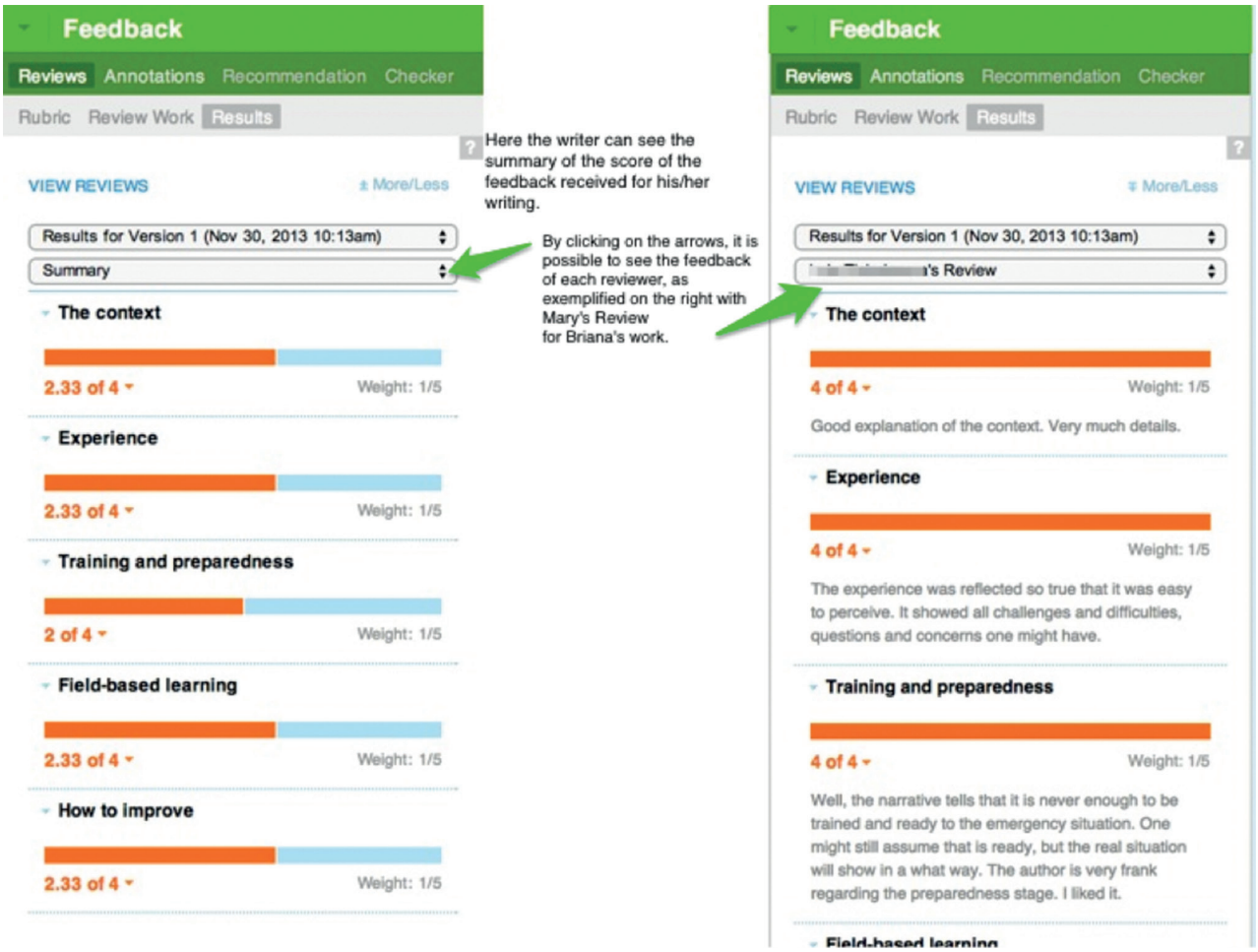


Source: Retrieved from Muck (2015) – Figure 8 – The Creator space: Feedback>Reviews>Review Work tab (Partial screenshots of CGScholar, Community: FACT/ERU Learning; manipulated in Skitch)

Finally, under the Results tab, the writer can access the feedback provided by the reviewers, as shown in Figure 24. It is possible to access a summary of the scores received from the reviewers as well as all the comments and scores that

each reviewer provided. It is important to highlight that the entire process is developed having the case study side by side to the rubrics and feedback.

Figure 24. The *Creator* space: *Feedback>Reviews>Results* tab



Source: Retrieved from Muck (2015) – Figure 9 – The Cretor space: Feedback>Reviews>Results tab (Partial Screenshots of CGScholar, Community: FACT/ERU Learning; manipulated in Skitch)

4.3 *Publisher* space: *Scholar* for facilitators

The remaining two spaces employed in this course, *Publisher* and *Analytics*, are tools for course facilitation. Once participants finished the review process, they submitted their case study to the facilitator for publication. After publication, if the participant allowed it, the case study was made available for all participants of the "Learning from shared experience in humanitarian assistance" course. This provided one form of reward by allowing the learner to share their work with the community and to display it on their profile.

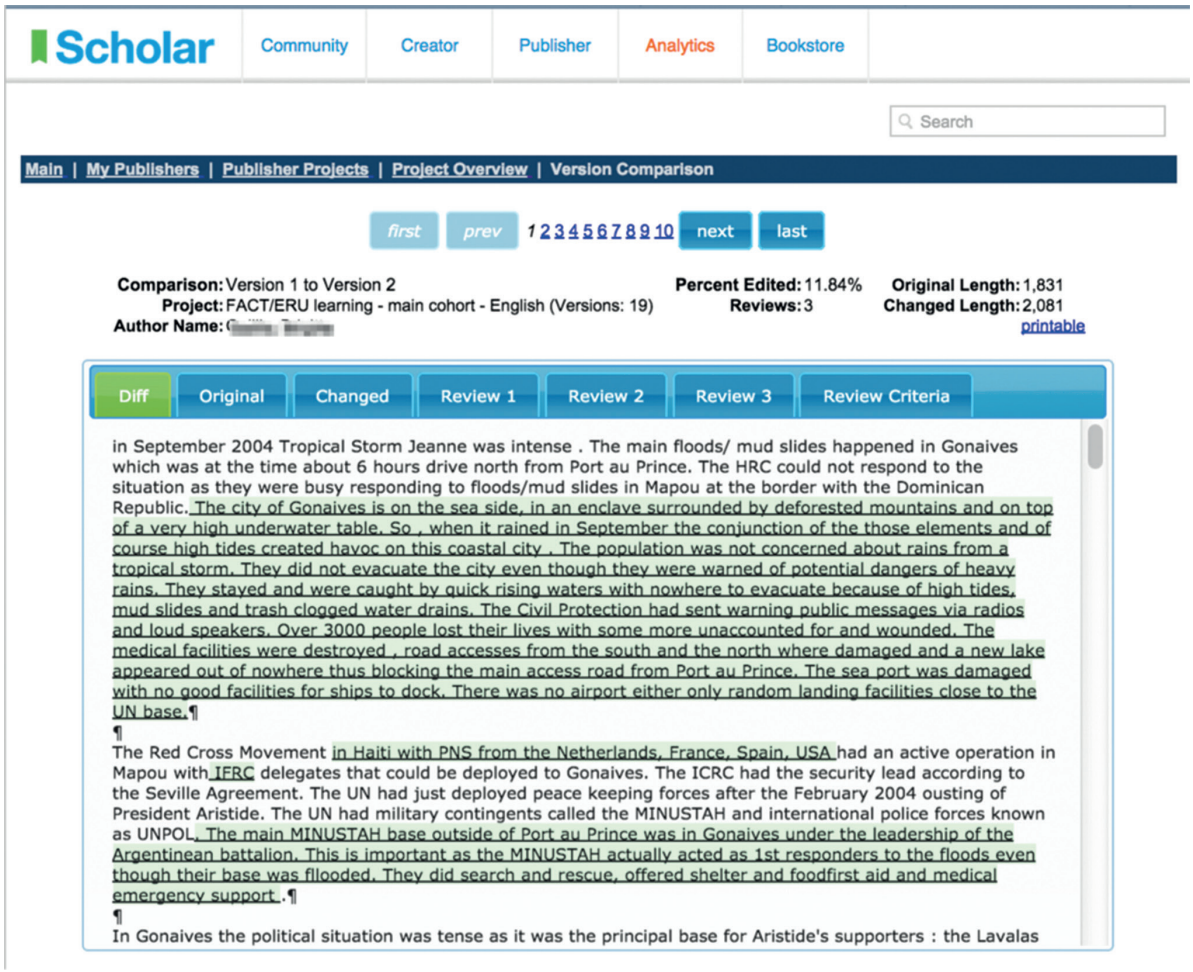
4.4 *Analytics* space: *Scholar* for facilitators

The *Analytics* tool allows the facilitator to access a set of indicators showing progress, performance and results. The facilitator can see: all the different versions that the participant wrote, the version that s/he submitted to the review process, the review criteria, the reviewer's feedback, the final version (after the revision), and the difference between the versions.

Figure 25 shows, in green, an extract of the information that Briana included in her case study. She edited 11.84% of the original text to include information regarding the context. This change was made after receiving suggestions from two of her three the reviewers. The feedback, in this case, had a central role in improving writing, but feedback first had to be processed through reflection before it could be applied to the work, and the author remained solely responsible for the decisions made.

As can also be observed in the same Figure, *Scholar* runs all the analysis of the development of the case study of each participant. The tool provides access to complex, real-time analytics through a relatively simple interface that does not require data processing by the facilitator.

Figure 25. The *Analytics* space

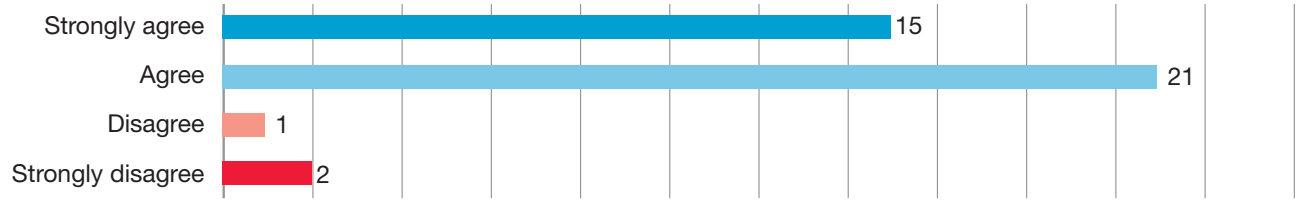


Source: Retrieved from Muck (2015) – Figure 10 – The Analytics space (Partial screenshot of CGScholar, Community: FACT/ERU Learning; manipulated in Skitch)

4.5 The *Scholar* experience from participants' perspectives

Most participants (36) agreed with the sentence "I became comfortable using the Scholar e-learning environment" (Figure 26).

Figure 26. Reaction to the sentence: "I became comfortable using the Scholar e-leaning environment"



Source: Survey results generated with CGScholar.

Additionally, 30 from 37 respondents answered that they would like to take additional courses that use the *Scholar* process of write-review-revise. These results, combined with the results that show participants' satisfaction with the activity developed in the course, indicate that the work load of writing a case study, reviewing three case studies, and revising their own case study was well accepted.

5. Conclusions and implications

The objective of this research was to investigate ways to provide advanced training for people to operate in emergency situations. This positive reactive evaluation, considered together with the qualitative feedback, is remarkable given the striking difference between existing forms of humanitarian training (whether online or face-to-face) and the characteristics of this course. First, the course had no expert faculty, no assigned readings, and took place entirely online. Second, its focus was entirely on reflection about experience. Third, all of the course work was focused on knowledge creation and collaboration, in the *Community*, *Shares*, and *Creator* spaces. By contrast, conventional humanitarian training typically relies on experts as vessels of both experience and expertise, with course work focused on the transmission of their knowledge (and, to a lesser extent, experience) contained in their personal narratives, publications, reports, and other artifacts. Although training often includes activities that call for participants to leverage their experience or to engage in reflection, this is typically only during specific moments and then has to be reconciled with the much larger volume of transmissive knowledge. Most good humanitarian trainers recognize the value of experience but struggle to find methods and tools that can leverage it. The ease with which learners adapted to a course entirely focused on knowledge creation, at the very least, calls for further investigation into the determinants of quality in humanitarian training and preparedness.

The results show that participants were receptive and engaged the opportunity to reflect on their learning in an emergency operation. Moreover, they felt comfortable framing their reflection with a rubric, as a guided process. Reflection leads to awareness and potentially to that "aha" moment when significant learning happens. For many participants, this was the first time that they had explicitly engaged in such a reflective process about lessons learned from their field experiences. Furthermore, their learning was magnified both by reading the works of others and by 'taking onboard' the inputs and insights of others.

This learning process aligns to the IFRC mantra of doing more, doing better and reaching further. However, in order to reach further, at least three future use cases for Scholar are potentially of high value for improved preparedness and performance of FACT and ERU teams.

First, the massive amount of deep, high-quality experiential knowledge (over 700 pages of case studies) generated by this course should be analyzed through research and its results reviewed by FACT and ERU training managers to (1) analyze patterns of how people learn in emergency operations, especially with respect to informal and incidental learning and sharing of experience; (2)

to determine how such learning can be fostered and supported by the FACT/ERU learning systems; and (3) identify case studies that may be incorporated into trainings and preparedness exercises.

Second, an advanced course solely for FACT and ERU members should be organized to further deepen learning for these Red Cross Red Crescent teams. Specifically, after having completed the initial reflection about how they learn in the field, the next assignment should focus on the relation between their formal education, qualifications, and trainings (scientific concept) and the informal and incidental learning (spontaneous concept) that enables them to solve problems in the field.

Third, given the need for accelerated learning from the field, *Scholar* should be positioned as a field-based tool to capture and process knowledge from returning delegates. Once people are familiar with the *Scholar* process, a three-day (write-review-revise) process could include both outgoing and returning delegates in a practical preparedness exercise that could facilitate and accelerate knowledge sharing between teams.

6. Acknowledgments

We would like to thank the following individuals and organizations that made this endeavor possible:

- The International Federation of Red Cross and Red Cross Crescent for having accepted the challenge of conducting a course in a new LMS following the New Learning design;
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- The *Scholar* team for their technical effort in this pilot enterprise;
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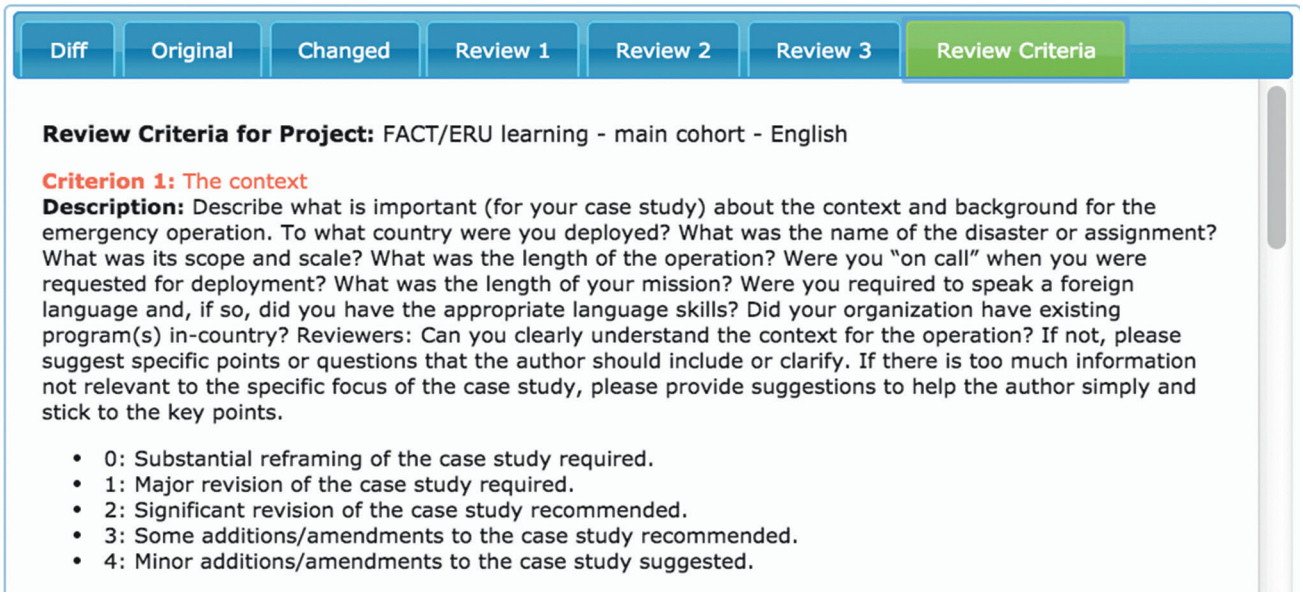
From Didactic Pedagogy to New Learning
https://www.youtube.com/watch?v=YIWM7Ot9yD4&feature=youtu.be

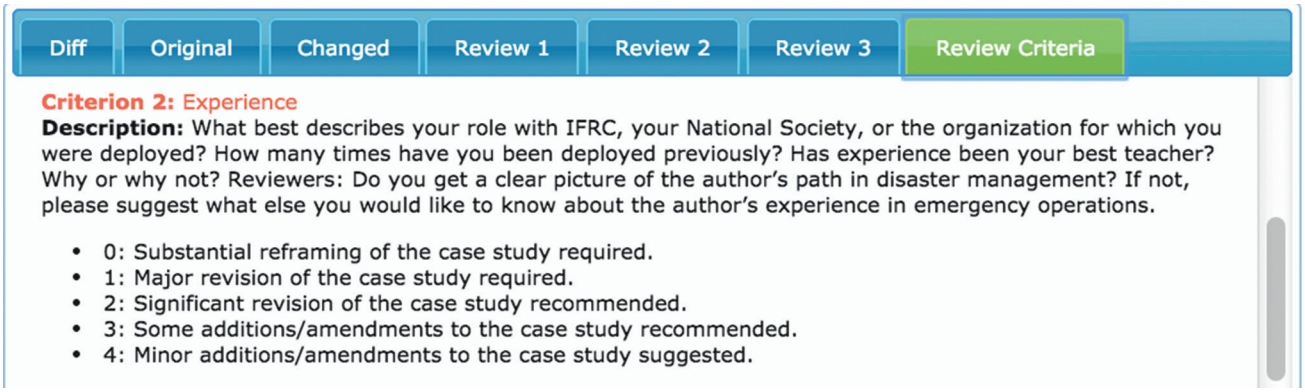
Can Education Lead Technology? The PLATO Story
https://www.youtube.com/watch?v=7BrOQvaInr4

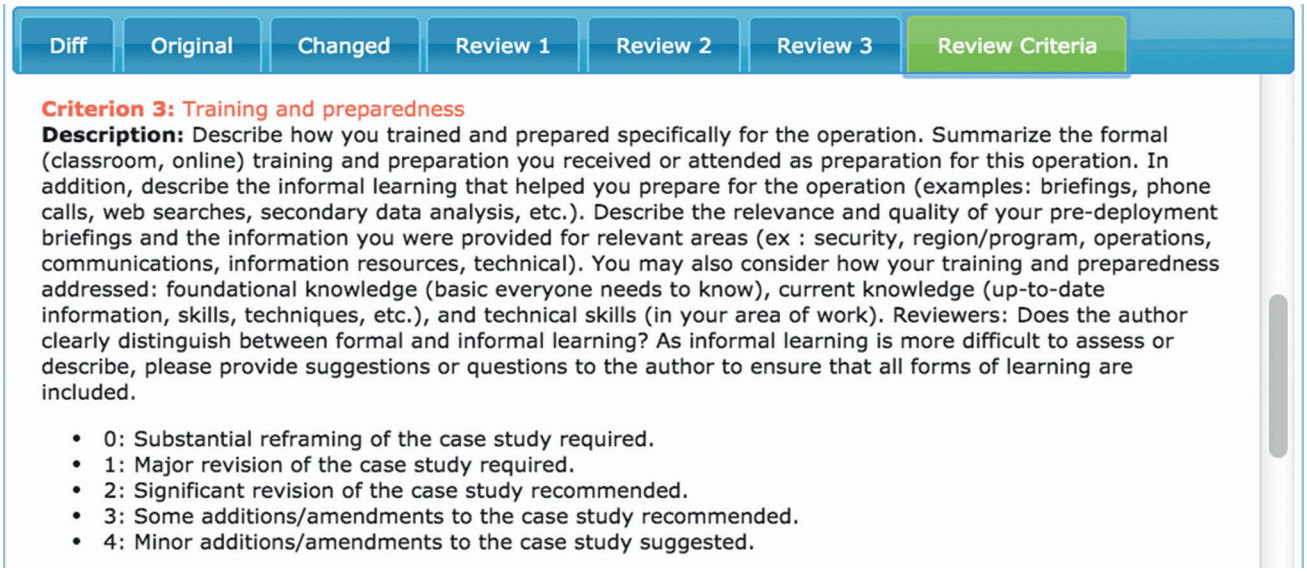
New Technologies, New Social Relationships and Learning
https://www.youtube.com/watch?v=Zq6h5_NUPB0

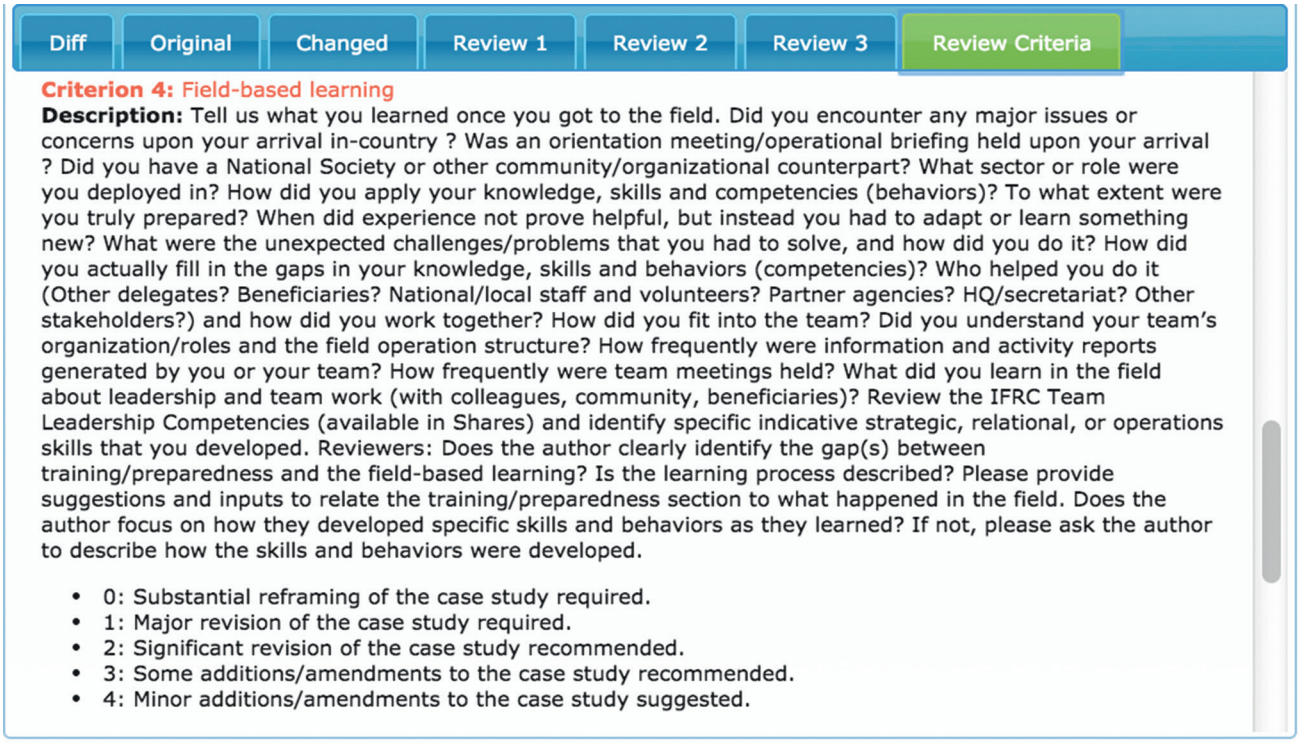
8. Appendix

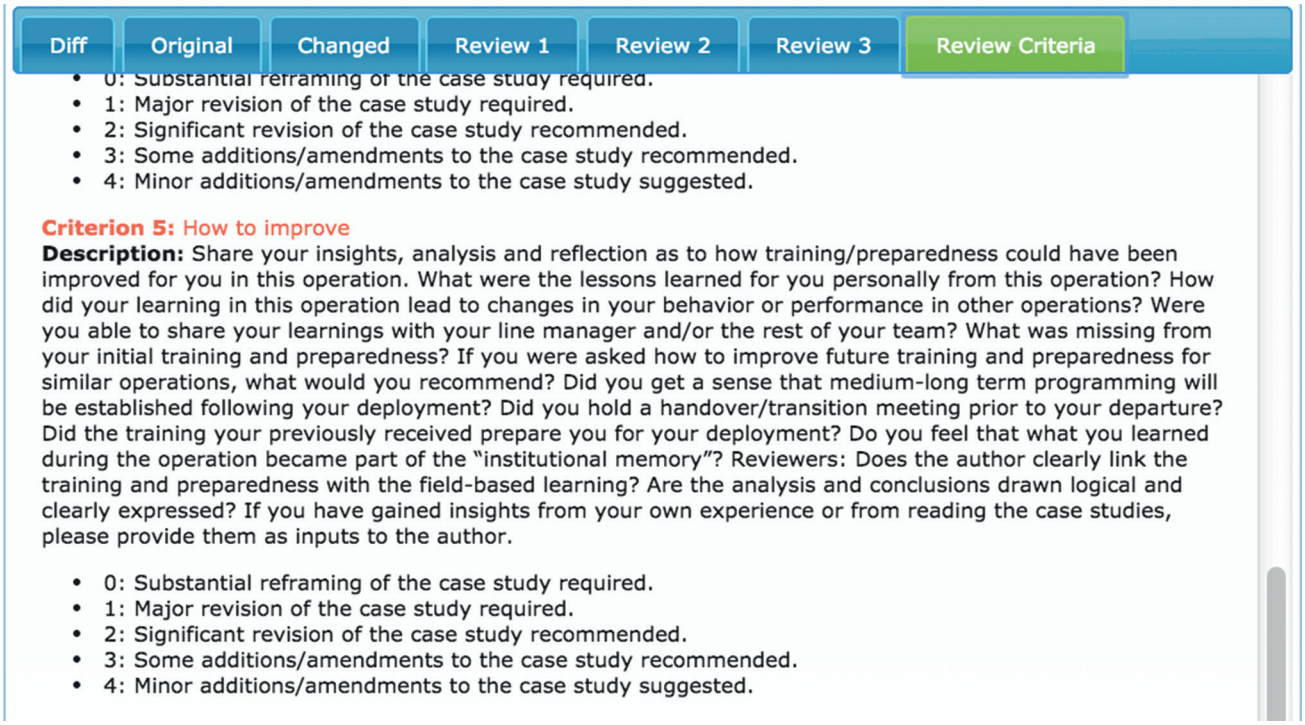
Appendix 1- Review Criteria for the Case Study






Diff
Original
Changed
Review 1
Review 2
Review 3
Review Criteria
Criterion 3: Training and preparedness
Description: Describe how you trained and prepared specifically for the operation. Summarize the formal (classroom, online) training and preparation you received or attended as preparation for this operation. In addition, describe the informal learning that helped you prepare for the operation (examples: briefings, phone calls, web searches, secondary data analysis, etc.). Describe the relevance and quality of your pre-deployment briefings and the information you were provided for relevant areas (ex : security, region/program, operations, communications, information resources, technical). You may also consider how your training and preparedness addressed: foundational knowledge (basic everyone needs to know), current knowledge (up-to-date information, skills, techniques, etc.), and technical skills (in your area of work). Reviewers: Does the author clearly distinguish between formal and informal learning? As informal learning is more difficult to assess or describe, please provide suggestions or questions to the author to ensure that all forms of learning are included.
0: Substantial reframing of the case study required.
1: Major revision of the case study required.
2: Significant revision of the case study recommended.
3: Some additions/amendments to the case study recommended.
4: Minor additions/amendments to the case study suggested.


Diff
Original
Changed
Review 1
Review 2
Review 3
Review Criteria
Criterion 4: Field-based learning
Description: Tell us what you learned once you got to the field. Did you encounter any major issues or concerns upon your arrival in-country ? Was an orientation meeting/operational briefing held upon your arrival ? Did you have a National Society or other community/organizational counterpart? What sector or role were you deployed in? How did you apply your knowledge, skills and competencies (behaviors)? To what extent were you truly prepared? When did experience not prove helpful, but instead you had to adapt or learn something new? What were the unexpected challenges/problems that you had to solve, and how did you do it? How did you actually fill in the gaps in your knowledge, skills and behaviors (competencies)? Who helped you do it (Other delegates? Beneficiaries? National/local staff and volunteers? Partner agencies? HQ/secretariat? Other stakeholders?) and how did you work together? How did you fit into the team? Did you understand your team's organization/roles and the field operation structure? How frequently were information and activity reports generated by you or your team? How frequently were team meetings held? What did you learn in the field about leadership and team work (with colleagues, community, beneficiaries)? Review the IFRC Team Leadership Competencies (available in Shares) and identify specific indicative strategic, relational, or operations skills that you developed. Reviewers: Does the author clearly identify the gap(s) between training/preparedness and the field-based learning? Is the learning process described? Please provide suggestions and inputs to relate the training/preparedness section to what happened in the field. Does the author focus on how they developed specific skills and behaviors as they learned? If not, please ask the author to describe how the skills and behaviors were developed.
0: Substantial reframing of the case study required.
1: Major revision of the case study required.
2: Significant revision of the case study recommended.
3: Some additions/amendments to the case study recommended.
4: Minor additions/amendments to the case study suggested.


Diff
Original
Changed
Review 1
Review 2
Review 3
Review Criteria
0: Substantial reframing of the case study required.
1: Major revision of the case study required.
2: Significant revision of the case study recommended.
3: Some additions/amendments to the case study recommended.
4: Minor additions/amendments to the case study suggested.
Criterion 5: How to improve
Description: Share your insights, analysis and reflection as to how training/preparedness could have been improved for you in this operation. What were the lessons learned for you personally from this operation? How did your learning in this operation lead to changes in your behavior or performance in other operations? Were you able to share your learnings with your line manager and/or the rest of your team? What was missing from your initial training and preparedness? If you were asked how to improve future training and preparedness for similar operations, what would you recommend? Did you get a sense that medium-long term programming will be established following your deployment? Did you hold a handover/transition meeting prior to your departure? Did the training your previously received prepare you for your deployment? Do you feel that what you learned during the operation became part of the "institutional memory"? Reviewers: Does the author clearly link the training and preparedness with the field-based learning? Are the analysis and conclusions drawn logical and clearly expressed? If you have gained insights from your own experience or from reading the case studies, please provide them as inputs to the author.
0: Substantial reframing of the case study required.
1: Major revision of the case study required.
2: Significant revision of the case study recommended.
3: Some additions/amendments to the case study recommended.
4: Minor additions/amendments to the case study suggested.



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