READY TO ROLE?
Accessing the benefits of simulations in humanitarian capacity building

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INTRODUCTION

RedR UK's recent work using simulation methodologies with humanitarian actors has demonstrated that there are a broad range of reasons to use this methodology, a number of key considerations when designing a simulation-based intervention, and a strong argument for the value of this methodology to effectively build capacity at a range of levels.

This paper aims to contribute to thinking on the breadth of benefits brought by simulation methodology by drawing on RedR's experience to consider the range of types of simulation, key considerations in simulation design, and evaluation of simulation effectiveness.

PART 1: Why simulations?

RedR UK has long been using simulations within our learning programmes, and have seen a notable increase in requests through our Tailor-made Training and Consultancy Service for simulation methodology-based capacity building. The majority of RedR's face-to-face trainings include a simulation component, to enable participants to immediately put newly-acquired knowledge and skills to the test in a practical exercise. Standalone simulations are becoming increasingly popular in the sector, and online simulation has become a viable learning option through the development and use of gaming technology, such as the Mission Ready platform created by RedR UK and DTS.

Our own experience corroborates the statement in the ECB Project Case Study, published in 2013, that "simulations are being used widely across the humanitarian sector" and furthermore that "the industry is placing increasing value on simulations as valuable staff capacity, preparedness and relationship building exercises"[1].

This appetite for simulations is based on a desire for change; simulations ultimately aim to move participants from an initial state, to an improved end state, at an individual or an organisational level. Evidence from our work strongly suggests that, as a methodology, simulation is popular among participants, with this regularly cited as the most useful part of a training event on end of event evaluations.

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[1] Hockaday et al, 2013. *ECB Project Case Study: Simulating the worst to prepare the best: a study of humanitarian simulations and their benefits.* Pg. 3

For example, a participant on our Ebola Response Pre-Departure training in 2015 stated that the use of daily simulation exercises meant they left the course with a "Genuine skill base that will be applied throughout deployment". A participant on our Essentials of Humanitarian Practice course, noted the impact on their own learning: "The operational planning exercise [simulation] was excellent, it helped put everything learnt in the first two days into practice and the role play exercise was incredibly useful and allowed me to realise the importance of a professional and personal approach to humanitarian response." Another, on a Tailor-made simulation designed and run for UNICEF staff noted the relevance to cross-organisational learning: "Simulation exercise was intense and a great learning tool to understand what our field staff have to deal with".

An internal review[2] of RedR's work between 2012 and 2015 identified success in facilitating individual and organisational improvements in a number of thematic areas including security management, staff welfare and emergency preparedness, and noted the importance of simulation methodologies in this.

In addition, there is a wide range of potential uses for simulations, as will be discussed in the next section.

PART 2: Simulation dimensions

In this section, we will explore the three key dimensions in simulation design: purpose, environment and role. Each of these needs to be considered, along with the level of complexity, in order to understand the broad range of simulation types and their uses. Examples from RedR's work will be provided to illustrate the points made.

Dimension 1: PURPOSE
The first dimension in design relates to the purpose of the simulation.

Simulation methodology can be used for a broad range of purposes along a spectrum with identifying and adapting individual or team behaviour at one end, to testing systems and processes by putting them into practice in a controlled environment at the other end. At either individual level or systems level, a simulation can be for learning or for assessment, or for a combination of both.

These options are not mutually exclusive so it is possible to have a simulation that seeks to improve individual behaviours as well as systems and processes.

For example, a simulation exercise during a personal security training is designed to provide an individual with the opportunity to experience their own behaviour in a high stress, insecure or volatile situation. Alternatively, an organisation may use a simulation exercise to test their systems and processes in the event of a security incident, through a crisis management exercise for example.

[2] RedR UK, 2016. *Impact Assessment – internal review.* Pg. 18

Dimension 2: ENVIRONMENT

The second element of design relates to the environment in which the simulation takes place. Simulations can take place in two different types of environments: a real environment or a created environment.

A real environment is the location in which the participants actually work or the events would actually take place: this could be an office, warehouse or field site.

A created environment is a location that replicates the place the event would take place but which has been created, often for the simulation: this could be a classroom, meeting room, or virtual (online) set-up but it could also be a site such as a farm on which a personal security/HEAT course takes place or a mock set-up of an Ebola treatment centre.

Unlike the dimension on purpose, this dimension is not a continuum so simulations would take place in either a real or a created environment.
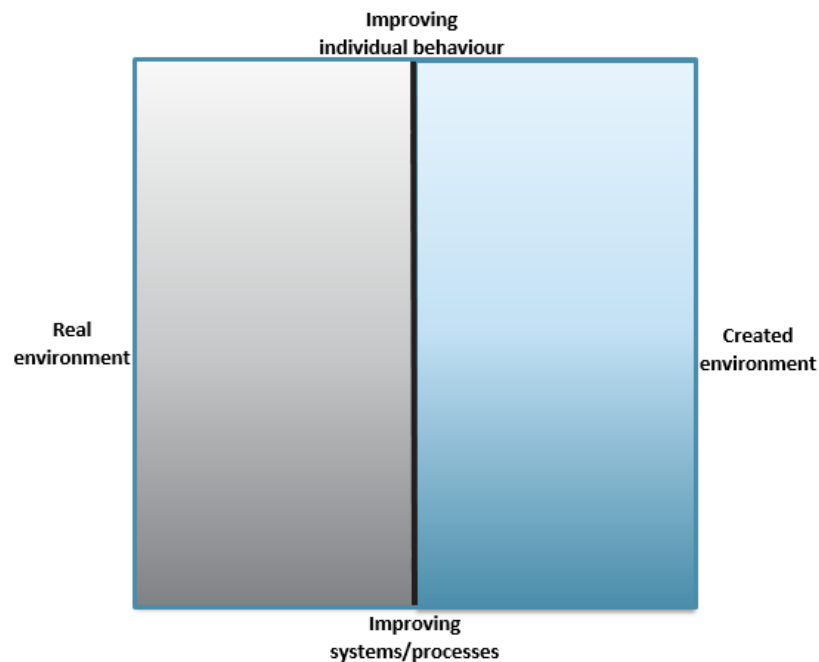

It is possible to have examples of simulations which sit in each of the four corners of the diagram. However, it is more common for a simulation with a purpose of system/process learning to be set in a real environment, and for a simulation with the purpose of individual learning to be set in a created environment.

Dimension 3: ROLE

The final dimension relates to the role that a participant takes. In order to meet the simulation purpose, and any more specific objectives identified based on learning needs, simulation participants can engage in the exercise by acting either in their own role, or in an assumed role (for example, operating in the simulation as an INGO Project Manager when this is not their role in real life).

Again, while neither is impossible in any simulation purpose, it is more likely that simulations with a purpose in systems and processes will use participants' own roles, as this enables the systems, processes, team and organisational structures to be used and tested in a realistic fashion. Exercises focused on individual behaviour can more easily work with participants taking on assumed roles, as these exercises are more interested in the application of learning which may not be directly linked to one organisation or role profile.
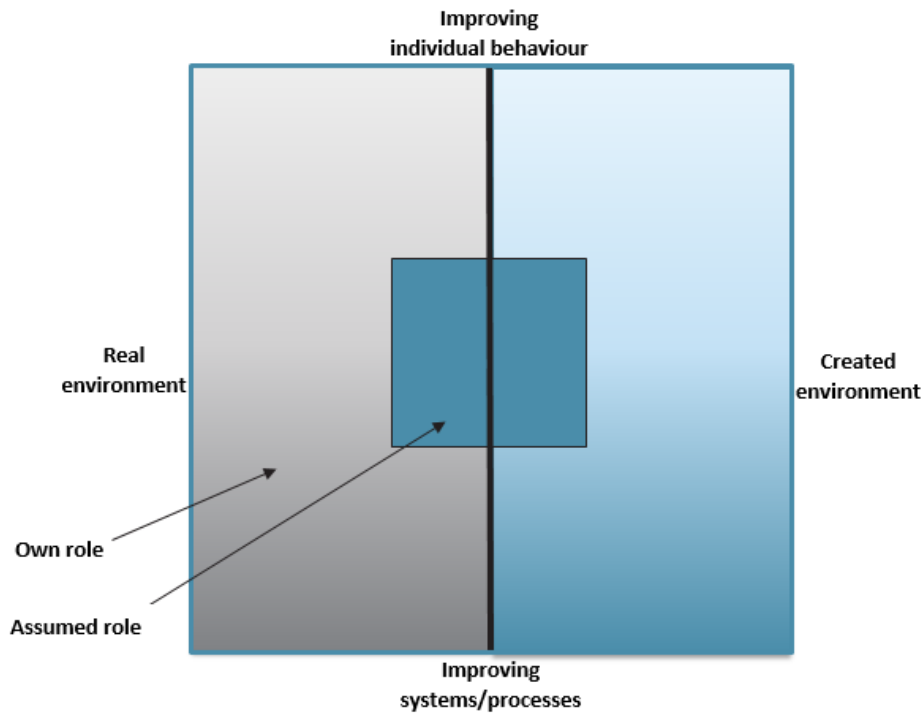

COMPLEXITY

At any point on the diagram, a simulation can take place at various levels of complexity. Key considerations in defining the complexity of a simulation include the number and type of participants, the type and level of resourcing and how reactive the exercise is. This could be visualised by imagining the diagram in 3D.

Participants

Simulation participation can range from a single individual to multi-organisational.

As shown here, any scale of participation can occur in each of the different potential categories of simulation environment, however the participation of a single

individual is unusual outside of virtual environments as the value of simulations more often comes from the interaction with others than the interaction with the space itself.
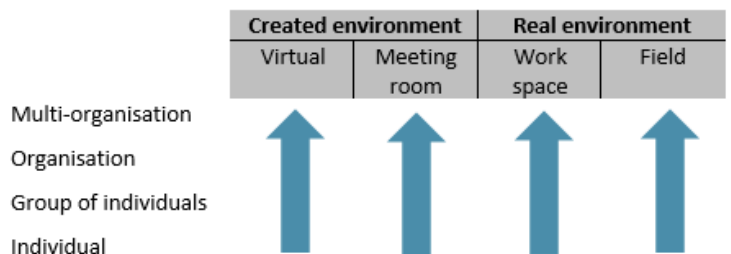
To assess an individual's learning of organisational policies or processes, an online simulation could be used by a single individual. To test a humanitarian response you would more likely have a complex, multi-agency simulation which involved a range of players in a created, field environment.

Resourcing

Considerations for the resourcing of a simulation may include the number of facilitators, the environment, the technology or equipment available, the use of actors and/or props, and where information comes from during the simulation. To a certain degree, the level of resourcing is likely to increase, as the level of participation increases.
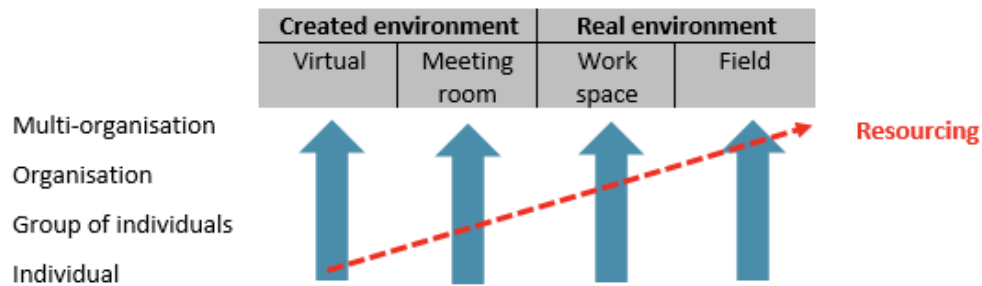
For example, a simulation designed for individual participation will tend to:

- be in a virtual environment
- not require the presence of a facilitator
- contain all of the necessary information within the package.

At the other extreme, a simulation designed for multi-organisational participation will tend to:

- take place in person
- take place in a field environment, or across multiple sites
- involve a team of facilitators
- be supported by actors
- involve multiple sources of information during the exercise.

Reactiveness

How reactive the simulation is relates to the extent to which the scenario can or will change based on the actions taken by the participants. Injects are commonly used in many simulations to speed up or slow down the exercise, to add new information or challenges into the scenario. Some simulations, due to their expected learning outcomes, or perhaps due to their level of complexity, will be relatively inflexible, guiding participants through a set scenario or series of scenarios. Others, will be more reactive, altering the scenario in response to actions and decisions made by participants.

EXAMPLES FROM OUR PRACTICE

Here, we draw on RedR's recent work to share an example of the use of simulation in each category of the dimensions diagram.

Example 1: Norwegian Church Aid, Crisis Management simulation

Purpose: Improving systems, processes and individual behaviour

NCA's Global Security Manager sought RedR's support to design and run a simulation exercise to test and improve the organisation's new crisis management system. A new crisis management plan had recently been developed and introduced, and the simulation provided an opportunity to test the plan and the performance of the crisis management team in a simulated crisis based on NCA operations.

Environment: Real

The exercise took place in the NCA headquarters office where the Crisis Management Team members are based.

Role: Own

Participants in the exercise were acting in their own roles and performing the duties which would be expected of them in the event of a crisis.

Use of debrief: Debriefing was carried out at individual, task and team levels to ensure that individual and organisational learning was captured to improve the crisis management plan and team preparedness.
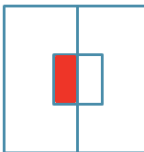
Example 2: RedR UK Trainer Assessment process

Purpose: Assessing individual behaviour

RedR's established process to assess potential new trainers requires applicants to design a short training session based on aim, objectives and target audience details provided by RedR, and then to deliver this session in person. The session is observed by RedR learning and development staff who assess the individual against our training competency framework.

Environment: Real

These assessments take place in a RedR training space, attended by volunteer participants.

Role: Assumed

Participants in the assessments are assuming the role of RedR trainer for the duration of the session.

Use of debrief: Following delivery of their training sessions, applicants are invited to reflect on their performance in conversation with the assessor. Feedback is also gathered from participants and, combined with assessor feedback, is provided to the applicants along with the result of the assessment.
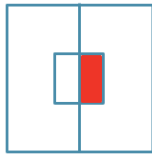
Example 3: Certificate in the Essentials of Humanitarian Practice
Purpose: Improving individual behaviour

RedR's flagship Essentials of Humanitarian Practice course includes a simulation exercise in which participants work in small groups, each representing a Cluster operating in the context of the 2015 Nepal earthquake. Each group is required to engage with other stakeholders including affected populations, coordinate between Clusters, and analysis information received in order to develop an emergency response plan.

Environment: Created

The simulation takes place in training and breakout rooms, with facilitators settings the context and actors providing injects.

Role: Assumed

Participants assume roles as NGO staff and membership of a specific Cluster.

Use of debrief: Participants present the outputs of their group work, and are then guided through individual, task and team debriefs in order to ensure that the experience supports individual learning.

Example 4: DfID Ebola Response Pre-departure training
Purpose: Improving individual behaviour

DfID's response to the West Africa Ebola Outbreak involved the deployment of UK NHS volunteers and Foreign Medical Teams to Sierra Leone. RedR was engaged to provide pre-departure training combining clinical and contextual topics. The 5-day agenda included daily simulation sessions in which participants entered a mock Ebola Treatment Centre and carried out routine tasks that would be required once in-country.

Environment: Created

The simulations took place in a mock Ebola Treatment Centre constructed inside the training venue.

Role: Own

Participants in the exercise were acting in their own roles as medics and performing the duties which would be expected of them upon arrival in Sierra Leone.

Use of debrief: Debrief was built into the design of the simulated scenarios. Following each task, groups were asked to reflect on their own performance and that of their buddy and team, with feedback provided by the facilitator to ensure learning. Individual debriefs between participant and facilitator took place during the doffing process each day, with peer assessment and feedback added during the final practical session.

PART 3: The role of the debrief

Debrief is a vital component of simulation methodology, and is essential to moving beyond the exercise itself, to reach the desired new state.

Initial state → Simulation → Debrief → New State
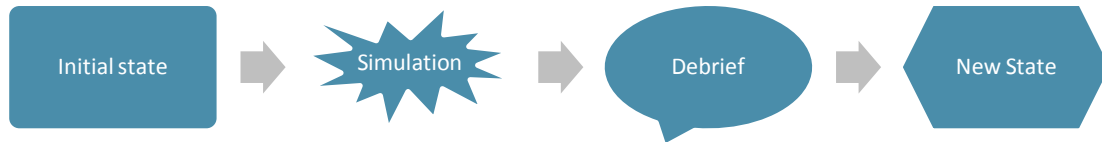
For simulations where the purpose is focused on assessment (of individuals or systems), the debrief should be used to consolidate the facilitator/observer feedback against the pre-identified criteria. In this sense, the debrief may not include the participants themselves, for example when a simulation is used as part of a recruitment process, but it is recommended to provide feedback to participants later if requested.

For simulations where the purpose is focused on learning, the debrief should be used to identify, capture and reflect upon lessons and learning from the exercise to inform changes to behaviours, processes and/or systems. In learning simulations, the debrief should be carried out with the participants, and RedR suggests the following methodology, with a three-step debrief process.

Initial state → Simulation → Reflect → Learn → Apply → New State
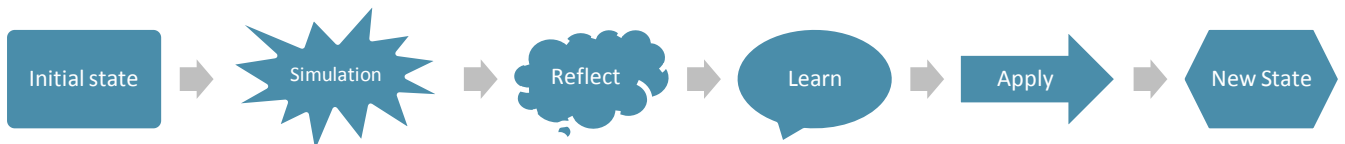
Initial state – the starting point for the participant(s), including any prior knowledge, systems or processes

Simulation – the exercise itself, to test behaviour, systems or processes

Debrief – The debrief comprises three steps, to take participants from the exercise to the new state. A series of questions or actions inform each step, loosely:

- **REFLECT** on and react to the exercise
- Do I/you/he/she/we know it? Does it work?
- How can it (the individual's behaviour, or the system/process) be better?
- **LEARN** from the exercise
- What needs to be different?
- **APPLY** learning through behaviour change
- How does that happen? How can I apply this learning to my working situation? What systems do we need to improve to ensure this set of actions happen more effectively?

New state – the desired or intended outcome of the simulation exercise, where in learning has led to behaviour change, which has been applied to achieve results at an individual or organisational level.

In order to design an effective simulation, it is essential to be clear on the simulation aim and learning objectives, and to ensure that both the exercise design and the debrief design allow for these objectives to be met, and learning to be captured.

PART 4: Measuring the change

RedR's experience and 2016 research with the University of Sussex[3] indicates that simulation methodologies should continue to be promoted in order to provide effective learning opportunities for the humanitarian sector. The emerging recommendations, published in the Identifying Impact paper[4], suggest ways in which to use simulation methodology in the measurement of learning and behaviour change.

If correctly designed, the debriefing process outlined above, can cover all four levels of training evaluation, as identified by Kirkpatrick.

RedR understands these levels as follows:

1. Reaction – how those who participate in the programme react to it
2. Learning – the extent to which participants change attitudes, improve knowledge, and/or increase skill as a result of attending the programme
3. Behaviour – the extent to which change in behaviour has occurred because the participant attended the training programme
4. Results – the final results that occurred because the participants attended the programme

The process thus links to Kirkpatrick's levels as follows:
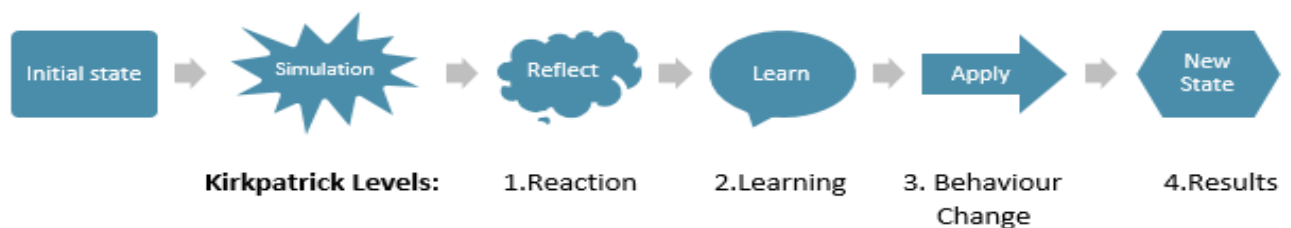
Regardless of the resourcing level, upward sharing of learning should be encouraged to support behaviour change and results at more than one level. For example, individual learning should feed in to organisational learning, and likewise, organisational learning should feed in to support sectoral learning. Learning loops

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[3] Schwittay, A and Phelan, SJ. 2016. *Assessing and Enhancing Our Impact: Training and Capacity-Building in the Humanitarian Sector.* University of Sussex

[4] Robertson, K and Schwittay, A. 2016. *Identifying Impact: Capturing the Outcomes of Humanitarian Capacity-Building.*

should be developed in order to understand how these feedback processes will work, identify potential gaps in the process and find solutions to fill these.

RedR is currently continuing our research in partnership with the University of Sussex to expand upon the recommendations identified and prototype methodologies for the assessment of learning and behaviour change in humanitarian capacity-building. Consultation on the findings from field testing is expected to take place in mid-2018.