Plan for debriefing workshop

- Intro & objectives
  - Faire l’expérience du débr
  - Comprendre l’esprit & qqs méthodes
- G 1 + débrief + discussion
  - G1= short, fun, social, external target, cognitive
- G 2 + débrief + discussion
  - G2= longer, frustrating, interaction, intercultural, self-target (remise en cause), affective, behavioural
- Présentation
- FAQ (genre/style débriefing)

Understandings

- No one is forced to participate
  - OK not to participate
    - But non-participants must keep well clear of the activity (game or débr)
    - Only join the activity at the discretion of the facilitator (no one can enter the activity without explicit permission from the facilitator)
    - Can ask Qs before participation, to help decide, but facilitator may not be able to answer all Qs
  - Corollary: If you participate, you must continue till the end, incl the debriefing
    - You cannot play the game and leave without doing the debriefing

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Contact: David Crookall
+33 (0)6.74.53.72.89 (mob) & +33 (0)4.93.20.94.11;
crookall.simulation AT gmail STOP com
Grumble, gripe, (Grogner, raler)

- **Myths**: Unfounded & dangerous assumptions
  - People learn from games
  - Having fun in a game produces learning
  - Video games (automatically) result in learning
    - Some serious games people

- **Alternative assumption**:
  - People learn from processing
    (thinking about, sharing, structuring, conceptualizing, …)
  - their experience
  - ie, from debriefing

**Consequences of wrong assumptions?**

1. Even though we have a good idea of how to build simulation/games and serious games, we still seem, as yet, to have only hazy ideas of **how people learn** from them;
2. Significant **learning** from a simulation/game happens in the **processing** of the game **experience**, not in the game itself;
3. All our efforts to produce snazzy games will **succeed** (in helping people learn) only if we incorporate **appropriate debriefing**.
4. Serious games with no or inappropriate debriefing could be harmful to learners;
5. The serious-games **industry** is likely to make serious **progress** only if it does some serious debriefing.

**Evidence**

*Kriz (2017)*

- As yet, thin evidence showing that debriefing results in learning
  - So far, mostly based on conviction, insight, intuition, reasoning, observation and experience
  - However, some empirical work is under way to provide evidence
    - See Kikawa et al (Fri)

**Experience**

*Edgar Dale’s Cone of Experience*

- Many forms of experience
  - Internships
  - Travel
- Simulation/game = experience
  - “the game experience”

**Key ideas**

- “**Learning** is the process whereby knowledge is created by the **transformation of experience**.” *(Kolb, 1984)*
  - **Learning** is the process whereby learning is achieved (knowledge is created) by the **debriefing** of the simulation/game
  - Game experience is transformed into learning through debriefing
- “Debriefing is … the **most important** part of simulation and yet it tends to be the most neglected, …” *(Crookall, 1992)*

**Terminology**

1. Debriefing
2. After-action review
3. Critical appraisal
4. Critical reflection
5. Assessment
6. Critical analysis
7. Game critique
8. Reflection
9. Processing experience
10. Feedback
11. After-game discussion
12. Pause & learn
13. Post-experience analysis
14. Processing game experience
15. “Post-experience analytic discussion process” ➔ cognitive assimilation of experience” *(Lederman, 1984, p. 415)*
Debriefing: (Re)source (pour) de l'apprentissage, David Crookall

Debriefing principles

Importance of debriefing

Definition or fuzz?

Performance gap; frame

From a slide by J P Fournier

Experiential learning cycle - Kolb

Debriefing: (Re)source (for) of learning.

Marseille, May 2019.

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Debriefing principles p. 13

Importance of debriefing

“A recent Aσlipsis review* Aσlipsis identified feedback (including debriefing) as the most important feature of simulation-based medical education.”


Issenberg et al. 2005. Features and uses of high-fidelity medical simulations that lead to effective learning: a BEME systematic review. Med Teach.

“Reflecting on one’s own Aσlipsis practice is a crucial step in the experiential learning process.”


Debriefing Assessment for Simulation in Healthcare© – DAS H©

Thanks to Alain Percivalle

Mais comment faire le saut, le transfer?? From sim to reality?

Useful for trainer … but = trainer-centred view

‘True debriefing’ = learner-centred

From a slide by J P Fournier

Experiential learning cycle H Kolb

Debriefing

Concrete Experience (doing /having an experience)

Active Experimentation (planning /trying out what you have learned)

Reflective Observation (reviewing /reflecting on the experience)

Abstract Conceptualisation (conceptualizing /learning from the experience)
Debriefing: (Re)source (for) of learning.

Debriefing principles

**Experiential learning cycle - Kolb**

- Game
- Concrete Experience
- Active Experimentation
- Reflective Observation
- Abstract Conceptualisation
- Debriefing
- Debriefing + Experiences; Follow-up activities
- Follow-up: "real"-world action; New simulation

**Multiple cycle spiral**

- Kolb, 2008

**Processing / transforming exper**

- Jarvis 1994 (reflecting on Kolb)
- Dave Kolb

**Sim/game Debrief Learn**

**Assumptions (correct)**

- Simulation = experience
- Simulation is its own reality
  - Similar to, but different from, (other, real), ‘reality’
    - Sometimes close resemblance, sometimes hint of similarity
    - But nevertheless not the ‘real reality’
  - Learner needs to arrive at ‘real reality’
    - Acting only in the simulation increases risk
- Debrief moves learner from sim to ‘real reality’
  - debrief = the key to real-world learning
Learning from debriefing

- Some gamers, facilitators & companies ➔ impression (that they believe) that their game does the learning = NO!
- Some debriers = teachers conducting a traditional class
- Learners do the learning, not the game ➔ Learning in (during) a game = impossible
- Learns from debriefing ➔ Facilitators important in debriefing ➔ Facilitators (debriers) need to be trained
- Simulation/game = opportunity to debrief

Objectives

- Objectives & debriefing ➔ Closely related
- Unclear / confused objectives ➔ uncertain learning
- Important to understand objectives in games
- Learning objectives ≠ Game objectives ➔ basic maths
- Games ≠ learning

Game+Debriefing:
Phases, steps, Delipsis

Game+debriefing ➔ learning

You can learn from debriefing only
You cannot learn from a game only

Sequence

- SG1
  - Debriefs during long game
  - Debrief ➔ Individual reflection (forms)
  - Group discussion (form) ➔ without teacher (after learner training)
  - Reading, film, lecture, internet research, etc
  - PPT design + share with presentation + Q&A
  - &/or Share with presentation, poster, design game, ...
- SG2
  - Debrief ➔ Incl compare with SG1

We must be clear

Game objectives ➔ end when game ends
- We do not learn in the game ➔ ≠ ≠ ≠
- Learning objectives ➔ start when game ends
- We learn outside (after, during pauses in) the game ➔ in debriefing

We must be sure

Learning from debriefing:
Impression (that they believe) that their game does the learning = NO!
Learners do the learning, not the game ➔ Learning in (during) a game = impossible
Learns from debriefing ➔ Facilitators important in debriefing ➔ Facilitators (debriers) need to be trained
Simulation/game = opportunity to debrief

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- Learning objectives ≠ Game objectives ➔ basic maths
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Game+Debriefing:
Phases, steps, Delipsis

Game+debriefing ➔ learning

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We must be clear

Game objectives ➔ end when game ends
- We do not learn in the game ➔ ≠ ≠ ≠
- Learning objectives ➔ start when game ends
- We learn outside (after, during pauses in) the game ➔ in debriefing
Debriefing: (Re)source (pour) de l'apprentissage, David Crookall

Objectives
- Simulation/game objective ≠ Learning objectives

Game objective:
- Make best tower

Learning objectives:
- Learn teamwork
- Train teachers in debriefing

Game ≠ learn

Game objectives ≠ learning goals

Game objectives
- Collect people's names on a form
- Guess hidden object
- Make an agreement with another group
- Draw a pic from spoken instructions
- Hand over medication
- Become the richest fishing Co.

Learning objectives
- Go to know other people
- Improve skill in asking questions
- Become a better cross-cultural communicator
- Understand the importance of, increase skills in, listening & giving feedback
- Master pharmacist communication & procedures for medication delivery
- Learn about & understand: tragedy of the commons, limits to growth, sustainability, natural resource renewal

Same G, diff objectives

Workshop on games & debriefing for university teachers in TH
- Objective of s/g
  - Build the best tower
- Objective of workshop (learning)
  - Train teachers to run simulation/games & debriefing

Team building course for masters business students in FR
- Objective of s/g
  - Build the best tower
- Objective of training (learning)
  - Learn teamwork skills and concepts

PROFFItéROLE Project

Pharmacy practice
- Pratiques officinates et jeu de rôle
- Pharmacie, Lille
- Bertrand Décaud, director
- Simulation/gaming for learning in community pharmacy
- 5th and 6th year students
  - 2 ECTS by year
- Blended learning
  - Video Game + E-Caducée
  - Role-play + debriefing

Team building course
- Become the richest another group
- Hand over agreement with
- Master pharmacist communication &
- Become a better cross-cultural communicator
- Understand the importance of, increase skills in, listening & giving feedback
- Master pharmacist communication & procedures for medication delivery
- Learn about & understand: tragedy of the commons, limits to growth, sustainability, natural resource renewal

Debriefing: (Re)source (for) of learning.

Objective of workshop & simulation/games &
- Engagement, Looking back, reflecting, sharing, listening, conceptualizing, relating to others, exploring ideas, explaining, project, writing, reading, presenting, etc
- Learning

Objective of training (learning)
- Engagement, Looking back, reflecting, sharing, listening, conceptualizing, relating to others, exploring ideas, explaining, project, writing, reading, presenting, etc
- Learning

Objective of s/g
- Engagement, Looking back, reflecting, sharing, listening, conceptualizing, relating to others, exploring ideas, explaining, project, writing, reading, presenting, etc
- Learning
Debriefing principles

Role-play in simulation centre
- Community pharmacy environment
  - Group of 20 – 30 students
- Overall structure
  - Introduction (5 min)
  - Role-play (environ 40 min)
  - Debriefing (environ 45 min)
- Role-play, checklist, filmed
  - 3 roles: patient, pharmacist & observer
  - 3 scenarios: situations, rotation of roles
- Debriefing
  - Individual and collective
  - Forms
  - Film analysis

Simulation, role-play, gaming
- Example: FISHBANKS (Dennis Meadows)

Variables
- Participant groups = fishing companies
- Computer calculates results
- Decisions each round

Systems dynamic model

Figure 13: STELLA Diagram Depicting Structure of Fish Banks Model

FISHBANKS
Debriefing: (Re)source (pour) de l'apprentissage,
David Crookall

**Debriefing principles**

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Individual form filled out
(start)

Group form (not shown)
PPT (not shown)

Next slides = Portfolio ...

"Companies want to make the most money without considering our environment."

"The world of tomorrow is put in peril because of irresponsible industry."

"We realized that each decision must be thought through carefully and that, to save our planet, the most important thing is to communicate."

Compare

- M2 students
- 2014, France
- No knowledge of sustainability
- No interest in fish or fishing
- Professionals
- 2015, Thailand
- Fishing authorities
- Great interest in sustainable fishing stocks
- Neither know tragedy of the commons

Specialists in fisheries & sustainability

- FISBAN KS, SED I)ISEM, M2, 2014
- 11
- Evolution of catch and regeneration

- New fish, Deep sea
- Tot catch, Deep sea
- 200
- 400
- 600
- 800
- 1000
- 1200
- 1400
- 1600
- 1800
- 2016
- 2018
- 2020
- 2022
- 2024
- 2026
- 2028
- 2030
- 2032
- 2034
- 2036
- 2038
- 2040
Debriefing: (Re)source (pour) de l'apprentissage,
David Crookall

Debriefing: Many forms ...

Diving: Debriefing

“All … classes are videotaped for educational and review purposes only. … it is invaluable for students to visually focus on their individual in-water skills, situational awareness, communication, and team diving.”

Debriefing principles

Debriefing structures

- Within a course (or game series)
- Within a debriefing session
  - Structure
  - Content / topics
- Debriefing = informal chat
- ‘Standard pattern’ = One big game + one short debriefing; no follow up

Internships

Colo de vacances, activity holidays

WAT-A-GAME

A method & toolkit for supporting and simulating water management in any catchment

Debriefing structures

- Within a course (or game series)
- Within a debriefing session
  - Structure
  - Content / topics
- Debriefing = informal chat
- ‘Standard pattern’ = One big game + one short debriefing; no follow up
**Sequence – cycles**

**Single cycle**
- Briefing
  - Experiential learning (learn, training, learning to learn)
  - Specific/s
- Simulation/game per se
  - [In-game feedbacks]
- Debriefing ➔ learning
  - [Learning to deform]
  - Individual work
  - Sharing & discussion
  - Follow-up: Tasks, projects, portfolios, ...

**Multiple cycle**
- Briefing
- s/g 1
  - [Learning to deform]
- Debriefing ➔ learning
  - [Learning]
  - s/g 1 or 2
  - Debriefing ➔ learning

**Generic debriefing steps**
- **Break**
  - Cool off – de-role - 10 mins to 1 week
- **Individual**
  - Silence, forms, open-ended, but specific Qs, ...
- **Discussion** - with observer/debrief
  - Small groups (again remixed; Fish Bowl)
    - Group forms, sharing individual answers, D-game (card game),
    - Listening, thinking, line-up G, ...
  - Plenary - summary feedback.
- **Writing** & (reading, discussing)
  - Memos, letters, reports, ppt, posters, analyze recordings,
    - Reading docs, design new game, conf presentation, ...
  - Group / individual.

**Generic structure - content**
- **Feelings**
- **Analysis & explanation of events**
- **Connections with other experiences**
- **Differences / similarities with other systems**
- **Skills & improvement**
- **Future**
- **Learning**
- **Follow-up**

**Generic structure – ex Qs**
- Feelings / emotions:
  - What is/ was your first reaction to the activity? How did you feel during the activity? How do you feel now?
  - Analysis and explanation of the experience:
    - What happened? Why did it happen?
    - Application to other experiences and systems – diffs & similarities:
    - What is this activity about? What other situations does it remind you of?
    - What differences are there between the simulation and your previous experience or other systems?
  - Learning:
    - What have you learned about yourself? about others? about this kind of situation or system?
  - Future:
    - What would you like to do differently in this kind of situation in the future?
    - Commitment:
      - What do you promise yourself to do in the next few weeks as a result of your participation in this experience (game+debrief)?

**Course structure**
- **Course structure ➔ sim-debr org**
- **One-off sim:**
  - Start: eg, motivate students
  - During: eg, illustrate a point in course
  - End: eg, tie threads together
- **Basis / backbone of course**

**Sim/debr -based course (eg, teamwork, lego)**
- **Class 2 – intro; intro sim & debr** (learner training – lego G1, REPLICA)
  1. Sim1; Ind debr; Grp debr (what to improve)
  2. Homework: Read texts; Make ppt linking sim w/ concepts in readings (debr)
- **Class 3 – lego G2, TOWERS**
  1. Do ppt (debr), discuss (debr)
  2. Sim2 (same theme); Ind debr; Grp debr (what has improved, what to improve further)
  3. Homework: Read texts; Make ppt linking sim w/ concepts in readings, & with previous sim (debr)
- **Class 5 - Do ppt (debr); film, portfolio**
Final thoughts

- Games & learning = 2 separate things
  - Implications for how we help people to learn

- At stake
  - Students’ learning
  - Students’ wellbeing
  - Reputations
  - Gaming profession
  - Future of gaming – especially ‘serious’ gaming

Concluding thoughts

- L’art de débriefer est de se taire. Alain Percivalle

- Learning is experience. Everything else is just information. Albert Einstein

- No debriefing = no learning
- Learning = only with debriefing

Ban term: serious games
Instead:
Debriefing opportunities

Thank you
Merci
crookall.simulation @ gmail.com

Danke – DE
Gracias – ES
Merci – FR
Ευχαριστώ – GR
Sukriya – IN
Grazie – IT
Arigato – JP
Terima kasih – MY
Spasibo – RU
Khop khun – TH
Ta – UK
etc
### Debriefing: (Re)source (for) of learning.

#### Project IDEALS

**Promoting an International Dimension in Education via Active Learning and Simulation**

Fund for the Improvement of Postsecondary Education (FIPSE), Department of Education, US Federal Government

### PI - overview

- Teams = Synthetic countries, based on real:
  - Newspapers, Consultants, Pressure groups
- In 12 countries: US, DE, HK, AU, CA, RU, JP, ...
- 800 participants; 27 teams; 40 facilitators
- Goal: Write treaty on the law of the sea
- 3 weeks + 7 weeks + 4 weeks
- Internet
  - Before web; text only + telecons
  - First time Internet used in France for edu
  - First time interactive Internet connection between USSR and USA

### 1: Participating teams

- 27 teams
- 12 countries
- 800 participants
- 40 facilitators

### 2b: Simulation/game: Objective

- Negotiate the terms of a treaty governing the use and management of the oceans’ resources
- Compose the detailed text of that treaty

**Treaty**

Whereas humanity must live in peace, whereas resources are limited:

Article 1: Sealed

Article 2: Territorial sea

Article 3: Transit passage

Article 4: Fishing

Article 5: Fishing

Article 6: The agency

Article 7: ...
Debriefing: (Re)source (for) of learning.

**Stages - Overview**

1. **Preparation** - 3-5 weeks
2. **Simulation** - 7-8 weeks
3. **Follow-up** - 2-4 weeks

**Stage 3 - Follow-up**
- Debriefing (processing of experience)
- Analysis of messages
- Visits
- Pen pals
- Interviews with press
- Writing (essays, posters, leaflets)
- Evaluation (on-line questionnaire)

**Near me**

**Stage 3 - Follow-up**

**Villeneuve Loubet**

**Eze**

**St Paul**

**Mercantour**
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David Crookall

Debriefing: (Re)source (for) of learning.
Marseille, May 2019.
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Debriefing principles

Artist's model, by Monet