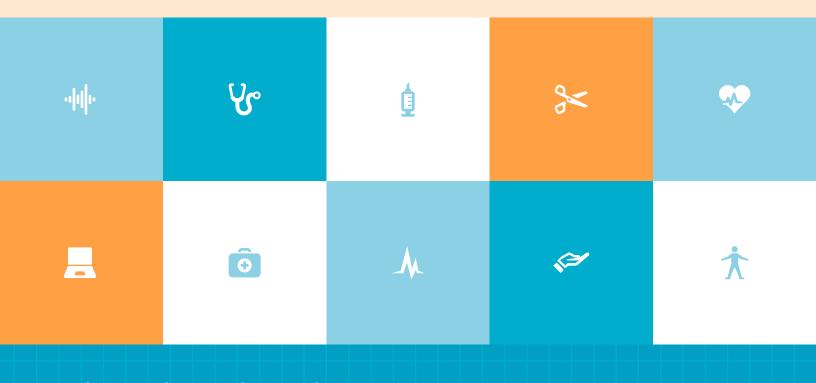
# Diccionario

de Simulación en Salud



traducción al español (Spanish version)



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# Preface

In January 2013, an international group of simulation experts gathered in Orlando, Florida, U.S.A. to form a working team whose mission was to create a dictionary of terms used in health care simulation. This group recognized a need to compile terms that had been completed by other groups in health care simulation and to add more terms. The document you see represents the work of many individuals and their societies to compile and refine the dictionary. The goal of this project is to enhance communication and clarity for health care simulationists in teaching, education, assessment, research, and systems integration activities. The Agency for Healthcare Research and Quality (AHRQ) has partnered with the Society for Simulation in Healthcare and its many affiliates to produce the first comprehensive Healthcare Simulation Dictionary and disseminate it widely as part of AHRQ's mission to improve patient safety, which includes simulation research.

# There are some key points to keep in mind when looking at this document, because it is not perfect, nor complete.

- This is a living document and represents the sum of the work at this moment. Terms and definitions will change and be edited, added, or deleted over time.
- The intent was to be inclusive of the various definitions in use, not to exclude any definitions or areas of health care simulation.
- This collection of definitions shows how the terms are being used in health care simulation. It is not intended to dictate one particular definition over another.
- This dictionary focuses on health-care-simulation-specific terms and meanings. Many terms that are generally used in education (e.g., educational design) and health care (e.g., ventricular fibrillation or anxiety) are not defined. The reader is referred to standard dictionaries and resources for these definitions.

- This list of terms is not a taxonomy, nor should it be used as such. It may inform taxonomical work.
- Terms that have been identified as potentially controversial have been noted with a \* prior to the word.
- The terms and spellings are written in standard American English. This was at the recommendation of our consultant lexicographer to aid in reducing clutter and support translation to other languages.
- As a living document, all are encouraged to submit feedback using the form located at <u>www.ssih.org/dictionary</u>. We realize there may be better insights into other terms or definitions, additional references, etc.
- Citations have been included wherever possible. Should you know of additional and/or missing citations, please submit those as above. Original citations are preferred.

The Society for Simulation in Healthcare (SSH) acknowledges the participation and input of many individuals and also the Societies they represent. Without you, this would not have been possible! Thank you for your time and efforts in the creation of this dictionary over the last 3 years.

**Joseph O. Lopreiato M.D., M.P.H.** October 2016





#### \*Actor \ 'ak-tər \ noun

**Etym.** late 14c., "an overseer, guardian, steward," from Latin actor "an agent or doer," also "theatrical player," from past participle stem of agere. Sense of "one who performs in plays" is 1580s, originally applied to both men and women.

#### **Definition**

• In healthcare simulation, professional and/or amateur people trained to reproduce the components of real clinical experience, especially involving communication between health professionals and patients or colleagues (ASSH).

**See also:** CONFEDERATE, EMBEDDED PARTICIPANT, ROLE PLAYER, SIMULATED PATIENT, SIMULATED PERSON, STANDARDIZED PATIENT

\*Term that has been identified as potentially controversial.

**Advocacy and Inquiry** \ad-və-kə-sē \ in-'kwī(-ə)r-e\ noun

Etym. advocate (n.) mid-14c., "one whose profession is to plead cases in a court of justice," a technical term from Roman law. Also in Middle English as "one who intercedes for another," and "protector, champion, patron."

Etym. inquest (n.) mid-15c., enquery, from enquere (see 'inquire'). From Latin methodus "way of teaching or going," from Greek methodos "scientific inquiry," method of inquiry, investigation.

#### **Definition**

• A method of debriefing in which an observer states what was observed or performed in a simulation activity (advocacy) or shares critical or appreciative insights about it explicitly (advocacy) and then asks

# \*Actor \ sustantivo

#### Definición

• En simulación en salud, profesional y /o persona amateur que está entrenada para representar parte de experiencias clínicas reales, especialmente cuando se involucra la comunicación entre los profesionales de la salud y los pacientes o entre colegas.

*Ver También:* CONFEDERADO, PARTICIPANTE INTEGRADO, *ROLE PLAYER*, PACIENTE SIMULADO, PERSONA SIMULADA, PACIENTE ESTANDARIZADO.

\*Término que ha sido identificado como potencialmente controversial

Advocacy / Inquiry – Observación e Indagación \ sustantivo

- Método de debriefing en donde el observador declara lo que observa en la ejecución de la simulación (advocacy observación) o comparte ideas críticas o apreciaciones de la misma (advocacy observación) y posteriormente le solcita a los participantes una explicación sobre sus pensamientos o acciones (Inquiry indagación) (Rudolph et al, 2007).
- Inquiry /indagación busca entender lo que otros piensan, saben, quieren o sienten, mientras que advocacy observación incluye declaraciones que comunican lo que una persona piensa, sabe, quiere o siente. (Bolman and Deal).

the learners for an explanation of their thoughts or actions (inquiry)(Rudolph et al, 2007).

• Inquiry seeks to learn what others think, know, want, or feel; whereas advocacy includes statements that communicate what an individual think, knows, wants or feels (Bolman and Deal).

#### **Assessor** \ \ \text{\ti}\text{\texi}\titt{\text{\text{\text{\text{\texi{\text{\texi}\tint{\text{\texi}\tint{\text{\text{\text{\text{\texi}\text{\text{\texi}\tint{\tex{

**Etym.** late 14c., from Old French assessor "assistant judge, assessor (in court)" (12c., Modern French assesseur) and directly from Latin assessor "an assistant, aid; an assistant judge."

#### **Definition**

- A person who performs assessment of individuals according to pre-established criteria.
- Assessors must have specific and substantial training, expertise, and competency in assessment (Dictionary.com).

Augmented Reality \og-'men-təd \ rē-'a-lə-tē \ noun Etym. augment (v.) c. 1400, from Old French augmenter "increase, enhance" (14c.), from Late Latin augmentare "to increase," from Latin augmentum "an increase," from augere "to increase, make big, enlarge, enrich." Related: Augmented; augmenting.

**Etym. reality** (n.) 1540s, "quality of being real," from French réalité and directly Medieval Latin realitatem (nominative realitas); Meaning "real existence, all that is real."

#### **Definition**

- A type of virtual reality in which synthetic stimuli are superimposed on real world objects usually to make information that is otherwise imperceptible to human senses perceptible (M&S Glossary).
- A technology that overlays digital computergenerated information on objects or places in the real world for the purpose of enhancing the user experience.
- The combination of reality and overlay of digital information designed to enhance the learning process.
- A spectrum of mixed reality simulation that is part way between the real world and the virtual world.
- A form of virtual reality that includes head mounted displays, overlaysof computer screens, wearable computers or displays projected onto

#### **Evaluador** \ sustantivo

#### Definición

- Persona que realiza una evaluación de individuos según criterios preestablecidos.
- Los evaluadores deben tener capacitación específica y considerable, experiencia y competencia en evaluación (Dictionary.com).

#### Realidad aumentada \ sustantivo

- Un tipo de realidad virtual en la que los estímulos sintéticos son superpuestos a los objetos del mundo real, generalmente para hacer que la información que de otra manera es imperceptible para los sentidos humanos sea perceptible (M&S Glossary).
- Una tecnología que superpone información digital generada por computador sobre objetos o lugares en el mundo real con el propósito de mejorar la experiencia del usuario.
- La combinación de realidad y superposición de información digital diseñada para mejorar el proceso de aprendizaje.
- Un espectro de la simulación de realidad mixta que se encuentra entre el mundo real y el mundo virtual.
- Una forma de realidad virtual que incluye dispositivos montados en la cabeza, superposiciones de pantallas de computadoras, computadoras portátiles o proyecciones en humanos y maniquíes (D.R. Berryman y otros; M. Bajura y otros; H. Fuchs y otros).

humans and manikins (D.R. Berryman et al; M. Bajura et al; H. Fuchs et al).

**Avatar** \'a-və- tär\ noun

*Etym.* 1784, "descent of a Hindu deity," from Sanskrit. In computer use, it seems to trace to the novel "Snowcrash" (1992) by Neal Stephenson.

#### **Definition**

- A computer generated graphic representation of a participant in a virtual reality simulation or game (ASSH).
- A virtual object used to represent a physical object (e.g. a human) in a virtual world.

### **Avatar** \ sustantivo

- Representación gráfica generada por un computador de un participante en una simulación de realidad virtual o juego.
- Un objeto virtual utilizado para representar a un objeto físico (por ejemplo, un humano) en un mundo virtual.



**Brief (Briefing)** \ brēf\ noun (\'brē-fiŋ\ verb )

Note: this term is often not clearly distinguished from Orientation or Prebriefing

**Etym.** "fact or situation of giving preliminary instructions." 1910

#### **Definition**

- An activity immediately preceding the start of a simulation activity where the participants receive essential information about the simulation scenario such as background information, vital signs, instructions, or guidelines. For example: before beginning a session, faculty conduct a briefing about the scenario to review the information being provided to the participants.
- The information and guidelines given to faculty or simulated patients participating in a scenario to allow them to fully prepare for interactions with the participants. Briefing materials could include a handover, physician referral letter, or an ambulance call transcript. For example, at the start of the simulation scenario, participants receive a notification from ambulance personnel regarding a patient being transported to their facility with a gunshot wound. (Alinier, 2011; Husebø et al, 2012). See also: ORIENTATION, PREBRIEFING

#### **Brief (Briefing)\** verbo

Nota: este término a menudo no se distingue claramente de los términos Orientación o Prebrieifina.

#### Definición:

- Una actividad que es inmediatamente anterior al inicio de una simulación en la que los participantes reciben información esencial sobre el escenario de simulación, tal como antecedentes, signos vitales, instrucciones o indicaciones. Por ejemplo, antes de comenzar una sesión los instructores llevan a cabo un brefieng del escenario para revisar las informaciones que se les proveerá a los participantes.
- La información y las indicaciones dadas a los profesores o pacientes simulados que participan en un escenario que les permite prepararse completamente para las interacciones con los participantes. Los materiales del brief pueden ser el pase médico, una carta de referencia o la transcripción de una llamada a la ambulancia. Por ejemplo, al inicio del escenario de simulación, los participantes reciben una notificación del personal de la ambulancia sobre un paciente que está siendo trasladado a sus instalaciones con una herida de bala (Alinier, 2011; Husebø et al, 2012).

Ver también: ORIENTACIÓN, PREBRIEFING.



Clinical Scenario \ kli-ni-kəl \ sə-'ner-ē-,ō \ noun Etym. scenario (n.) 1868, "sketch of the plot of a play," from Italian scenario, from Late Latin scenarius "of stage scenes," from Latin scena "scene."

**Etym. clinical** (adj.) 1780, "pertaining to hospital patients or hospital care," from clinic + -al.

#### Definition

- The plan of an expected and potential course of events for a simulated clinical experience. A scenario usually includes the context for the simulation (hospital ward, emergency room, operating room, clinic, out of hospital, etc.). Scenarios can vary in length and complexity depending on the learning objectives.
- A detailed outline of a clinical encounter that includes: the participants in the event, briefing notes, goals and learning objectives, participant instructions, patient information, environmental conditions, manikin, or standardized patient preparation, related equipment, props, and tools or resources for assessing and managing the simulated experience.
- A progressive outline of a clinical encounter including a

beginning, an ending, a debriefing, and evaluation criteria (INACSL, 2013).

**See also:** SCENARIO, SCRIPT, SIMULATED-BASED LEARNING

#### **EXPERIENCE, SIMULATION ACTIVITY**

**Coaching** \ kōch-iŋ \ *verb* 

**Etym.** Meaning "to prepare (someone) for an exam."

Related: Coached; coaching.

Definition

#### Escenario Clínico \ sustantivo

#### Definición

- El plan esperado del potencial desarrollo de eventos en una experiencia clínica simulada. Un escenario generalmente incluye el contexto para la simulación (sala de internación, sala de emergencias, quirófano o sala de operaciones, consultorio, consultorio ambulatorio, etc). Los escenarios pueden variar en duración y complejidad dependiendo de los objetivos educativos.
- Un resumen detallado de un encuentro clínico que incluye: los participantes en el evento, notas del briefing, metas y objetivoseducativos, instrucciones para los participantes, información del paciente, condiciones ambientales o del contexto, preparación del maniquí o del paciente estandarizado, equipamiento relacionado, accesorios y herramientas o recursos para evaluar y gestionar la experiencia simulada.
- Un resumen progresivo de un encuentro clínico que incluye un inicio, un final, un debriefing y criterios de evaluación (INACSL, 2013).

**Ver también:** ESCENARIO, *SCRIPT*/GUIÓN, EXPERIENCIA DE APRENDIZAJE BASADA EN SIMULACIÓN, ACTIVIDAD DE SIMULACIÓN.

# Coaching \ verbo Definición

• Dirigir o instruir a una persona o grupo de personas para alcanzar metas, desarrollar habilidades específicas o desarrollar competencias. • To direct or instruct a person or group of people in order to achieve goals, develop specific skills, or develop competencies.

**Computer-Based Simulation** \ kəm-'pyü-tər \ bāst \ sim-yuh-ley-shuh n \ *noun* 

Etym. computer (n.) 1640s, "one who calculates," agent noun from compute (v.). Meaning "calculating machine" (of any type) is from 1897; in modern use, "programmable digital electronic computer" (1945 under this name; theoretical from 1937, as Turing machine). ENIAC (1946) usually is considered the first.

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

• The modeling of real-life processes with inputs and outputs exclusively confined to a computer, usually associated with a monitor and a keyboard or other simple assistive device (Textbook of Simulation). Subsets of computer-based simulation include virtual patients, virtual reality task trainers, and immersive virtual reality simulation (ibid). See also: SCREEN-BASED SIMULATION, SIMULATOR

**Conceptual Fidelity** \ kən-'sep-chə-wəl \ fə-'de-lətē, fī- \ *noun* 

Etym. conceptual (adj.) 1820, "pertaining to mental conception" (there is an isolated use from 1662), from Medieval Latin conceptualis, from Latin conceptus" a collecting, gathering, conceiving," past participle of concipere. Related: Conceptualism; conceptualist.

Etym. fidelity (n.) early 15c., "faithfulness, devotion," from Middle French fidélité (15c.), from Latin fidelitatem (nominative fidelitas) "faithfulness, adherence." Definition

• In healthcare simulation, ensures that all elements of the scenario relate to each other in a realistic way so that the case makes sense as a whole to the learner(s) (For example: Vital signs are consistent with the diagnosis). To maximize conceptual fidelity, cases or scenarios should be reviewed by subject matter expert(s) and pilottested prior to use with learners (Rudolph et al. (2007) and Dieckmann et al. 2007).

\*Confederate \ kən-'fe-d(ə-)rət \ noun

Simulación Basada en Computador \ sustantivo Definición

• Modelado de procesos de la vida real con *inputs* y *outputs* que se relacionan exclusivamente a un computador, generalmente asociadas a un monitor y a un teclado u otro dispositivo simple de asistencia (*Textbook of Simulation*). Los subgrupos de simulación por computador incluyen pacientes virtuales, entrenadores de habilidades de realidad virtual y simulación de realidad virtual inmersiva (ibid).

VerTambién:SIMULACIÓNBASADAENPANTALLA/SIMULADOR(SCREEN-BASEDSIMULATION /SIMULATOR).

# Fidelidad Conceptual \ sustantivo Definición

• En simulación en salud, asegura que todos los elementos del escenario se relacionan entre sí de una manera realista para que el caso tenga sentido de manera integral para el/los estudiante/s (Por ejemplo, los signos vitales son coherentes con el diagnóstico). Para maximizar la fidelidad conceptual, los casos o escenarios deben ser revisados por el/los experto/s en la materia y probados antes de su uso con los estudiantes (Rudolph et al. -2007- y Dieckmann et al. -2007-).

\*Confederado\ sustantivo

**Etym.** late 14c., from Late Latin confoederatus "leagued together," past participle of confoederare "to unite by a league," from com- "with, together." **Definition** 

- An individual(s) who, during the course of the clinical scenario, provides assistance locating and/or troubleshooting equipment. This individual(s) may provide support for participants in the form of 'help available', e.g. 'nurse in charge', and/or to provide information about the manikin that is not available in other ways, e.g., temperature, color change, and/or to provide additional realism by playing the role of a relative or a staff member (ASSH).
- An individual other than the patient who is scripted in a simulation to provide realism, additional challenges or additional information for the learner e.g., paramedic, receptionist, family member, laboratory technician (Victorian Simulated Patient Network).

**See also:** ACTOR, EMBEDDED PARTICIPANT, SIMULATED PATIENT, SIMULATED PERSON, STANDARDIZED PATIENT

\*Term that has been identified as potentially controversial.

# Definición

- Persona/s que, durante el escenario clínico, proporciona asistencia para localizar y/o solucionar problemas de equipamiento. Esta/s persona/s puede brindar apoyo a los participantes en la forma de "ayuda disponible", por ejemplo, 'enfermera a cargo' y/o proporcionar información acerca del simulador que no está disponible de otra manera, por ejemplo, temperatura, cambio de color y/o dar realismo adicional o para proporcionar realismo adicional al desempeñar el rol de un familiar o un miembro del staff (ASSH).
- Una persona asignada a una simulación, que no es el paciente, para proporcionar realismo, añadir desafíos o información adicional para el estudiante. Por ejemplo, paramédico, recepcionista, miembro de la familia, técnico de laboratorio (*Victorian Simulated Patient Network*).

**Ver También:** ACTOR, PARTICIPANTE INTEGRADO, PACIENTE SIMULADO, PERSONA SIMULADA, PACIENTE ESTANDARDIZADO.

\*Término que ha sido identificado como potencialmente controversial.

### Cueing \'kyü − iŋ \ *verb*

**Etym. cue** (n.) "stage direction," 1550s, from Q, which was used 16c., 17c. in stage plays to indicate actors' entrances, probably as an abbreviation of Latin quando "when" or a similar Latin adverb.

#### **Definition**

- To provide information during the simulation that helps the participant progress through the activity to achieve stated objectives (modified from NLN-SIRC, 2013).
- noun Information provided to help the learner reach the learning objectives (conceptual cues), or to help the learner interpret or clarify the simulated reality (reality cues); Conceptual cues help the learner reach instructional objectives through programmable equipment, the environment, or through responses from the simulated patient or role player; Reality cues to help the learner interpret or clarify simulated reality through information

# Clave/pista/señal \ sustantivo \* Definición

- Proveer información durante la simulación que ayude al progreso del participante a través de la actividad para alcanzar los objetivos declarados (modificado de NLN-SIRC, 2013).
- Información provista para ayudar al estudiante a alcanzar los objetivos educativos (claves conceptuales) o para ayudar al estudiante a interpretar o esclarecer la realidad de la simulación (claves de realidad). Las claves conceptuales ayudan al estudiante a alcanzar los objetivos educativos a través del equipamiento programable, el ambiente o de respuestas del Paciente Simulado o el *Rol Player*. Las claves de realidad ayudan al estudiante a interpretar o esclarecer la realidad simulada a través de la información provista.

delivered during the simulation (modified from Paige	
& Morin, 2013).	*NdT: en inglés se presenta como la acción/ verbo
	de dar una clave/ nista/ señal.



**Debrief (Debriefing)** \ de 'bref \ noun (\ de 'bre-fin\ verb) **Etym. debrief** "obtain information (from someone) at the end of a mission," 1945, from de+brief (v.). **Related:** Debriefed; debriefing.

#### **Definition**

- (Noun) A formal, collaborative, reflective process within the simulation learning activity.
- An activity that follows a simulation experience and led by a facilitator.
- (Verb) To conduct a session after a simulation event where educators/instructors/facilitators and learners re-examine

the simulation experience for the purpose of moving toward assimilation and accommodation of learning to future situations (Johnson-Russell & Bailey, 2010; NLN-SIRC, 2013); debriefing should foster the development of clinical judgment and critical thinking skills (Johnson-Russell & Bailey, 2010).

- To encourage participants' reflective thinking and provide feedback about their performance while various aspects of the completed simulation are discussed.
- To explore with participants their emotions and to question, reflect, and provide feedback to one another (i.e., *quided reflection*).

**Compare:** ADVOCACY AND INQUIRY, FEEDBACK, GUIDED REFLECTION

# **Debrief (Debriefing)**\ sustantivo **Definición:**

- (Sustantivo) Un proceso formal, colaborativo, reflexivo dentro de la actividad de aprendizaje con simulación.
- Una actividad que sigue a una experiencia de simulación y es conducida por un facilitador.
- (Verbo) Conducir una sesión luego de un Evento de simulación donde los educadores/instructores/facilitadores y los estudiantes reexaminan la experiencia de simulación con el propósito de avanzar hacia la asimilación y adaptación del aprendizaje para futuras situaciones (Johnson-Russel & Bailey, 2010; NLN SIRC, 2013); el debriefing debería fomentar el desarrollo del juicio clínico y las habilidades de razonamiento crítico (Johnson-Russel & Bailey, 2010).
- Alentarel pensamiento reflexivo entre los participantes y proveer feedback acerca de su desempeño mientras se discuten varios aspectos de la simulación realizada.
- Explorar con los participantes sus emociones y cuestionar, reflexionar y proveer feedback entre ellos (por ejemplo, reflexión guiada).

**Comparar:** ADVOCACY/ INQUIRY (OBSERVACIÓN E INDAGACIÓN), FEEDBACK, REFLEXIÓN GUIADA.

**Debriefer** \ sustantivo

#### **Debriefer** \ de-'bref - ur\ noun

**Etym. debrief** "obtain information (from someone) at the end of a mission," 1945, from de- + brief (v.). **Related:** Debriefed; debriefing.

### Definition

• The individual who facilitates a debriefing session and is knowledgeable and skilled in performing

#### Definición

• La persona que facilita una sesión de debriefing y es conocedor y hábil en la ejecución de una sesión de debriefing apropiada, estructurada y psicológicamente segura (*Fanning & Gaba, 2007*).

appropriate, structured, and psychologically safe debriefing sessions (Fanning & Gaba, 2007).

• The person who leads participants through the debriefing; Debriefing by competent instructors and subject matter experts is considered important to maximize the opportunities arising from simulation (Raemer et al, 2011).

**Compare:** FACILITATOR, SIMULATIONIST

• La persona que guía a los participantes a través del debriefing; Se considera importante que el debriefing esté a cargo de instructores competentes y expertos en la materia, para maximizar las oportunidades que surjan de la simulación (Raemer et al, 2011).

Comparar: FACILITADOR, SIMULACIONISTA.

Deliberate Practice \di-'li-bə-rāt\'prak-təs\ noun Etym. deliberate (adj.) 15th century Middle English, from Latin deliberatus, past participle of deliberare to consider carefully, perhaps alteration of \*delibrare, from de- + libra scale, pound.

Etym. practice (n.) 14th century Middle English practisen, from Middle French practiser, from Medieval Latin practizare, alteration of practicare, from practica practice, noun, from Late Latin practice, from Greek praktikē, from feminine of praktikos.

#### **Definition**

- A theory of general psychology that states the differences between expert performers and normal adults reflect a life-long period of deliberate effort to improve performance in a specific domain. (Ericsson, K. A).
- A systematically designed activity that has been created specifically to improve an individual's performance in a given domain (Ericsson, K. A., R. Th. Krampe, R.Th. and Tesch-Römer, C, 1993). *Compare:* MASTERY LEARNING

**Práctica Deliberada**\ sustantivo **Definición** 

- Una teoría de la psicología general que establece las diferencias entre el desempeño de los expertos y adultos normales reflejados en un largo período de vida de esfuerzo deliberado para mejorar el desempeño en un dominio específico (Ericsson, K.A).
- Una actividad diseñada sistemáticamente que ha sido creada específicamente para mejorar la performance(desempeño) de un individuo en un dominio dado (Ericsson, K. A., R. Th. Krampe, R.Th.and Tesch-Römer, C, 1993).

**Comparar:** DOMINIO DEL APRENDIZAJE.

**Deterministic** \ di-'tər-mə-,ni- stik \ adj **Etym. determinism** (n.) 1876 in general sense of "doctrine that everything happens by a necessary causation," from French déterminisme; deterministic (adj.) 1874, from determinist (see determinism) + -ic.

#### **Definition**

• Pertaining to a process, model, or variable whose outcome, result, or value does not depend on chance (M&S Glossary).

**Contrast with: STOCHASTIC** 

# **Determinista\** adjetivo

#### Definición

• Perteneciente a un proceso, modelo o variable cuyo resultado o valor no depende de la casualidad (M&S Glossary).

Contrastar con: ESTOCÁSTICO.

# Discrete Simulation (Discrete-Event Simulation)

\ dis-'krēt \ sim-yuh-ley-shuh n \ noun

Etym. discrete (adj.) mid-14c., "morally discerning, prudent, circumspect," from Old French discret

Simulación Discreta (Simulación de Eventos Discretos)\ sustantivo Definición

"discreet, sensible, intelligent, wise," from Latin discretus "separated, distinct;" in Medieval Latin, "discerning, careful;" past participle of discernere "distinguish." Meaning "separate, distinct" in English is late 14c.

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

- A simulation that relies on variables changed only at a countable number of points in time; discrete event simulation (DES) is the process of codifying the behavior of a complex system as an ordered sequence of well-defined events.
- The operation of a system as a discrete sequence of events in time. Each event occurs at a particular instant in time and marks a change of state in the system. Between consecutive events, no change in the system is assumed to occur; thus the simulation can directly jump in time from one event to the next (Robinson, 2004).
- One or more variables that completely describe a system at any given moment in time (Sokolowski and Banks).

- Una simulación basada en variables que cambia solo en una cantidad específica de puntos en el tiempo; la simulación de eventos discretos (*DES por sus siglas en inglés*) es el proceso de codificación del comportamiento de un sistema complejo como una secuencia ordenada de eventos bien definidos.
- La operación de un sistema como una secuencia discreta de eventos en el tiempo. Cada evento ocurre en un instante particular en el tiempo y marca un cambio de estado en el sistema. Entre eventos consecutivos, no se asume que ocurran cambios en el sistema, por lo tanto, la simulación puede saltar directamente en el tiempo de un evento al siguiente (Robinson, 2004).
- Una o más variables que describen completamente a un sistema en cualquier momento dado en el tiempo (Sokolowski y Banks).

# **Distributed Simulation** \ di-'stri-byüt \ sim-yuh-ley-shuh n \ *noun*

**Etym. distribute**(v.) early 15c., "to deal out or apportion," from Latin distributus, past participle of distribuere "to divide, distribute." *Related:* Distributable; distributed; distributing.

**Etym. simulation**(n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

- The concept of simulation on-demand, made widely available wherever and whenever it is required; DS provides an easily transportable, self-contained 'set' for creating simulated environments, at a fraction of the cost of dedicated, static simulation facilities (Kneebone et al, 2010).
- A set of simulations operating in a common environment and distributed to learners; a distributed simulation may be composed of any of the three

# Simulación Distribuida\ sustantivo Definición:

- El concepto de simulación "a demanda", que se pone a disposición donde y cuando sea requerida. Simulación distribuida (DS por sus siglas en inglés) provee un 'set' autónomo y fácilmente transportable para crear ambientes simulados, a una fracción del costo de instalaciones o centros de simulación dedicados o fijos (Kneebone et al, 2010).
- Un 'set' de simulaciones que operan en un ambiente común y distribuido para los estudiantes; una simulación distribuida puede estar compuesta por cualquiera de los tres modos de simulación: vivo, virtual y constructivo, y se integran sin problemas dentro de un solo ejercicio (M&S Glossary).

modes of simulation: live, virtual, and constructive,
and are seamlessly integrated within a single
exercise (M&S Glossary).



**Embedded Participant** \ im-'bed \ id \ pär-'ti-səpant \ noun

Etym. embed (v.) 1778, "to lay in a bed (of surrounding matter)," from em- (1) + bed (n.). Originally a geological term, in reference to fossils in rock; figurative sense is by 1835; meaning "place (a journalist) within a military unit at war" is from 2003 and the Iraq war. Related: Embedded; embedding.

**Etym. participant** (n.) 1560s, from Middle French participant, from Latin participantem, present participle of participare "to share in, partake of" from particeps "sharing, partaking."

#### **Definition**

- An individual who is trained or scripted to play a role in a simulation encounter in order to guide the scenario, and may be known or unknown to the participants; guidance may be positive or negative, or a distractor based on the objectives, level of the participants, and the needs of the scenario.
- A role assigned in a simulation encounter to help guide the scenario; the embedded participant's role is part of the situation, however the underlying purpose of the role may not be revealed to the participants in the scenario or simulation (INACSL, 2013).

**See also:** ACTOR, CONFEDERATE, ROLE PLAYER, SIMULATED PATIENT, SIMULATED PERSON, STANDARDIZED PATIENT

**Environmental Fidelity** \ en - vī-rə(n)- men-tə- l \ fə- de-lə-tē \ noun

Etym. environmental (adj.) 1887, "environing, surrounding," from environment + -al (1). Ecological sense by 1967. Related: Environmentally. Etym. fidelity (n.) early 15c., "faithfulness, devotion," from Middle French fidélité (15c.), from Latin fidelitatem (nominative fidelitas)

## Participante Integrado \ sustantivo Definición

- Una persona entrenada o guionada para desempeñar un rol en un encuentro de simulación con el fin de orientar el escenario, pudiendo ser conocida o desconocida para los participantes. La orientación puede ser positiva o negativa, o un distractor basado en los objetivos, el nivel de los participantes y las necesidades del escenario.
- Un rol asignado en un encuentro de simulación para ayudar a guiar el escenario. El rol del participante integrado es parte de la situación, sin embargo, el propósito subyacente del rol puede no ser revelado a los participantes en el escenario o simulación (INACSL, 2013).

*Ver también:* ACTOR, CONFEDERADO, ROLE PLAYER, PACIENTE SIMULADO, PERSONA SIMULADA, PACIENTE ESTANDARIZADO.

# Fidelidad del Ambiente \ sustantivo Definición

• El grado en el que el entorno simulado (maniquí/simulador, sala, herramientas, equipamiento, moulage y accesorios sensoriales) reproduce la realidad y la apariencia del entorno real.

"faithfulness, adherence, trustiness," from fidelis "faithful, true, trusty, sincere," from fides "faith." From 1530s as "faithful adherence to truth or reality;" specifically of sound reproduction from 1878.

*Ver también:* FIDELIDAD, SIMULACIÓN DE ALTA FIDELIDAD, FIDELIDAD FÍSICA, REALISMO.

#### **Definition**

• The degree to which the simulated environment (manikin, room, tools, equipment, moulage, and sensory props) replicates reality and appearance of the real environment.

**See also:** FIDELITY, HIGH FIDELITY SIMULATION, PHYSICAL FIDELITY, REALISM

**Event** \ i-'vent \ noun

Etym. 1570s, "the consequence of anything" (as in in the event that); 1580s, "that which happens;" from Middle French event, from Latin eventus "occurrence, accident, event, fortune, fate, lot, issue," from past participle stem of evenire "to come out, happen, result," from assimilated form of ex- "out" + venire "to come." Meaning "a contest or single proceeding in a public sport" is from 1865. Events as "the course of events" is attested from 1842.

#### **Definition**

- The occurrences that cause variation or changes in the state of a system (Sokolowski and Banks, 2009); in healthcare simulation, this term is common when programming manikins and often refers to learner actions.
- An event is described by the time it occurs and event lists can be created to drive changes in a simulation.

**See also:** STATE/STATES

# **Evento** \ sustantivo **Definición**

- Las ocurrencias que causan variaciones o cambios en el estado de un sistema (Sokolowski y Banks, 2009). En simulación en salud, este término es común cuando se programan maniquíes/simuladores y a menudo se refiere a las acciones de los estudiantes.
- Un evento se describe en el momento en que ocurre y se pueden crear listas de eventos para impulsar cambios en una simulación.

Ver también: ESTADO/ESTADOS.



# Facilitator (Simulation Facilitator) \fə-'si-lə-,tā-tər\

**Etym.** 1806, agent noun in Latin form from facilitate. **Definition** 

- An individual who is involved in the implementation and/or delivery of simulation activities. For example, faculty, educators, etc.
- An individual that helps to bring about an outcome (such as learning, productivity, or communication) by providing indirect or unobtrusive assistance, guidance, or supervision; for example: *The debriefing facilitator kept the discussion flowing smoothly.*

#### **Compare:** DEBRIEFER, SIMULATIONIST

Feedback \ fēd- bak \ noun

**Etym.** 1920, in the electronics sense, "the return of a fraction of an output signal to the input of an earlier stage," from verbal phrase, from feed (v.) + back (adv.). Transferred use, "information about the results of a process" is attested by 1955.

#### **Definition**

- An activity where information is relayed back to a learner; feedback should be constructive, address specific aspects of the learner's performance, and be focused on the learning objectives (SSH).
- Information transferred between participants, facilitator, simulator, or peer with the intention of improving the understanding of concepts or aspects of performance (INACSL, 2013); feedback can be delivered by an instructor, a machine, a computer, a patient (or a simulated person), or by other learners as long as it is part of the learning process.

**Compare:** ADVOCACY AND INQUIRY, DEBRIEF/DEBRIEFING, GUIDED REFLECTION

**Fiction Contract** \'fik-shən\ 'kän-,trakt\ *noun* **Etym. fiction** (n.) something that is not true; something invented by the imagination or feigned; an assumption of a possibility as a fact irrespective of the question of its truth; a useful illusion or

# Facilitador (Facilitador de Simulación) \ sustantivo

#### Definición

- Una persona que está involucrada en la implementación y/o ejecución de actividades de simulación. Por ejemplo, profesores, educadores, etc.
- Una persona que ayuda a lograr un resultado (como el aprendizaje, la productividad o la comunicación) al proporcionar asistencia, guía o supervisión indirecta o discreta; por ejemplo: el facilitador del debriefing mantuvo la discusión fluyendo sin problemas.

Comparar: DEBRIEFER, SIMULATIONISTA.

**Feedback** (también: retroalimentación) \ sustantivo

# Definición

- Una actividad en la que la información se retransmite a un estudiante. El feedback debe ser constructivo, abordar aspectos específicos del rendimiento del estudiante y centrarse en los objetivos educativos (SSH).
- Información transferida entre los participantes, el facilitador, el simulador o un compañero con la intención de mejorar la comprensión de los conceptos o aspectos del desempeño (INACSL, 2013). El feedback puede ser dado por un instructor, una máquina, una computadora, un paciente (o una persona simulada), o por otros estudiantes, siempre que sea parte del proceso de aprendizaje.

**Comparar:** ADVOCACY/INQUIRY – OBSERVACIÓN E INDAGACIÓN, DEBRIEF/DEBRIEFING, REFLEXIÓN GUIADA.

# Contrato de ficción \ sustantivo Definición

• Un concepto que implica que un compromiso en la simulación es un contrato entre el instructor y el estudiante: cada uno tiene que hacer su parte pretense; the action of feigning or of creating with the imagination.

**Etym. contract** (n.) a binding agreement between two or more persons or parties.

#### Definition

- A concept which implies that an engagement in simulation is a contract between the instructor and the learner: each has to do his or her part to make the simulation worthwhile (Rudolph, Dieckmann, et al.).
- The degree of engagement that healthcare trainees are willing to give the simulated event; also known as the "suspension of disbelief," it is a literary and theatrical concept that encourages participants to put aside their disbelief and accept the simulated exercise as being real for the duration of the scenario.

para que la simulación valga la pena (Rudolph, Dieckmann, et al.).

• El grado de compromiso que los aprendices de la atención en salud están dispuestos a ofrecer en el evento simulado; también conocida como la "suspensión de la incredulidad", es un concepto literario y teatral que alienta a los participantes a dejar de lado su incredulidad y aceptar que el ejercicio simulado es real durante la duración del escenario.

#### \*Fidelity \ fə-'de-lə-tē \ adj

Etym. fidelity (n.) early 15c., "faithfulness, devotion," from Middle French fidélité (15c.), from Latin fidelitatem (nominative fidelitas) "faithfulness, adherence, trustiness," from fidelis "faithful, true, trusty, sincere," from fides "faith." From 1530s as "faithful adherence to truth or reality;" specifically of sound reproduction from 1878.

#### Definition

- The degree to which the simulation replicates the real event and/or workplace; this includes physical, psychological, and environmental elements.
- The ability of the simulation to reproduce the reactions, interactions, and responses of the real world counterpart. It is not constrained to a certain type of simulation modality, and higher levels of fidelity are not required for a simulation to be successful.
- The level of realism associated with a particular simulation activity; fidelity can involve a variety of dimensions, including (a) physical factors such as environment, equipment, and related tools; (b) psychological factors such as emotions, beliefs, and self-awareness of participants; (c) social factors such as participant and instructor motivation and goals; (d) culture of the group; and (e) degree of openness and trust, as well as participants' modes of thinking (INACSL, 2013).

# \* Fidelidad \ adjetivo

### Definición

- El grado en que la simulación replica el evento real y/o el lugar de trabajo. Esto incluye elementos físicos, psicológicos y ambientales.
- La capacidad de la simulación para reproducir las reacciones, interacciones y respuestas de la contraparte del mundo real. No se restringe a una cierta modalidad de simulación y no se requieren niveles más altos de fidelidad para que una simulación tenga éxito.
- El nivel de realismo asociado con una actividad de simulación particular; la fidelidad puede involucrar una variedad de dimensiones, incluyendo: (a) factores físicos, como el entorno, el equipo y las herramientas relacionadas; (b) factores psicológicos, como las emociones, las creencias y la autoconciencia de los participantes; (c) factores sociales, como la motivación y los objetivos del participante y del instructor; (d) cultura del grupo; y (e) el grado de apertura y confianza, así como los modos de pensamiento de los participantes (INACSL, 2013).

Ver también: FIDELIDAD DEL AMBIENTE, FIDELIDAD FUNCIONAL, ALTA FIDELIDAD, SIMULACIÓN DE ALTA FIDELIDAD, SIMULACIÓN INMERSIVA, BAJA FIDELIDAD, FIDELIDAD FÍSICA, FIDELIDAD PSICOLÓGICA, REALISMO, FIDELIDAD DE LA SIMULACIÓN. See also: ENVIRONMENTAL FIDELITY, FUNCTIONAL FIDELITY, HIGH FIDELITY SIMULATION, IMMERSIVE SIMULATION, LOW FIDELITY, PHYSICAL FIDELITY, PSYCHOLOGICAL FIDELITY, REALISM, SIMULATION FIDELITY

\*Término que ha sido identificado como potencialmente controversial.

\*Term that has been identified as potentially controversial.

Fixation Error \ fik-'sā-shən \ er-ər \ noun

Etym. fixation (n.) late 14c., fixacion, an alchemical word, "action of reducing a volatile substance to a permanent bodily form," from Medieval Latin fixationem (nominative fixatio), noun of action from past participle stem of Latin fixare, frequentative of figere "to fix." Meaning "condition of being fixed" is from 1630s. Used in the Freudian sense since 1910.

Etym. error (n.) also, through 18c., errour; c. 1300, "a deviation from truth made through ignorance or inadvertence, a mistake." From late 14c. as "deviation from what is normal; abnormality, aberration." From 1726 as "difference between observed value and true value."

#### **Definition**

- A principle of crisis resource management wherein humans fail to revise a situation assessment in risky and dynamic systems or events (Decker 2011).
- The persistent failure to revise a diagnosis or plan in the face of readily available evidence suggesting that a revision is necessary.

# Error de Fijación \ sustantivo Definición

- Un principio de manejo de recursos en crisis en el que los seres humanos no realizan una evaluación de la situación en sistemas o eventos riesgosos y dinámicos (Decker 2011).
- La falta persistente de revisar un diagnóstico o plan frente a la evidencia fácilmente disponible que sugiere que una revisión es necesaria.

Comparar: CONCIENCIA SITUACIONAL.

### **Compare: SITUATIONAL AWARENESS**

#### Frame(s) \ frāmz \ noun

**Etym.** From 1660s in the meaning "particular state" (as in Frame of mind, 1711). Frame of reference is 1897.

#### **Definition**

- The perspectives through which individuals interpret new information and experiences for the purpose of decision-making; frames are formed through previous experiences and can be based on knowledge, attitudes, feelings, goals, rules, and/or perceptions.
- The mindset of the internal participant or facilitator; their knowledge, thoughts, feelings, actions (speech/body language), attitudes (verbal/non-verbal), and perceptions (adapted from Rudolph, J.W. et al.).

# Marco (s) / Encuadre (s) \ sustantivo Definición

- Las perspectivas a través de las cuales las personas interpretan nueva información y experiencias con el propósito de tomar decisiones; los marcos se forman a través de experiencias previas y pueden basarse en el conocimiento, las actitudes, los sentimientos, los objetivos, las reglas y/o las percepciones.
- La mentalidad del participante interno o facilitador; sus conocimientos, pensamientos, sentimientos, acciones (habla/lenguaje corporal), actitudes (verbales/no verbales) y percepciones (adaptadas de Rudolph, J.W. et al.).

**Functional Fidelity** \'fəŋ(k)-shnəl, -shə-nəl \fə-'de-lətē \ noun

Etym. functional (adj.) 1630s, "pertaining to function or office," from function (n.) + -al (1), or from Medieval Latin functionalis. Meaning "utilitarian" is by 1864. Related: Functionally; functionality. Etym. fidelity (n) early 15c., "faithfulness, devotion," from Middle French fidélité (15c.), from Latin fidelitatem (nominative fidelitas) "faithfulness, adherence, trustiness," from fidelis "faithful, true, trusty, sincere," from fides "faith" (see faith). From 1530s as "faithful adherence to truth or reality."

• The degree in which the equipment used in the simulation responds to the participant's actions; e.g. a static ventilator would offer low functional fidelity compared to a working ventilator in a simulation requiring a ventilator alarm.

**Definition** 

**See also:** FIDELITY, HIGHT FIDELITY SIMULATOR, REALISM

# Fidelidad Funcional \ sustantivo Definición

• El grado en que el equipo utilizado en la simulación responde a las acciones del participante. Por ejemplo, un ventilador estático ofrecería una baja fidelidad funcional en comparación con un ventilador en funcionamiento en una simulación que requiera de una alarma de ventilador.

*Ver también:* FIDELIDAD, SIMULADOR DE ALTA FIDELIDAD, REALISMO.

Guided Reflection \ gīd - id \ ri-'flek-shən\ noun Etym. guide (v.) late 14c., "to lead, direct, conduct," from Old French guider "to guide, lead, conduct" (14c.), earlier guier, from Frankish \*witan "show the way" or a similar Germanic source.

Etym. reflection (n.) Of the mind, from 1670s. Meaning "remark made after turning back one's thought on some subject" is from 1640s.

#### Definition

- The process encouraged by the instructor during debriefing that reinforces the critical aspects of the experience and encourages insightful learning allowing the participant to link theory with practice and research (INACSL, 2013).
- The facilitated intellectual and affective activities that allow individuals to explore their experience in order to lead to new understanding and appreciations (adapted from Boud et al, 1985).
- A mentor facilitated process that allows the learner to "integrate the understanding gained into one's experience in order to enable better choices or actions in the future, as well as enhance one's overall effectiveness" (Rogers, 2001).

Compare: ADVOCACY AND INQUIRY, DEBRIEF/DEBRIEFING, FEEDBACK **See also:** REFLECTIVE THINKING

**Gynecological / Genitourinary Teaching Associate** (GTA, GUTA, MUTA) \ je-nə-tō-'yur-ə- ner-ē \ 'tēch ng \ə-'sō-shē- āt, -sē-\ noun

Etym. genitourinary (adj.) of or relating to the genital and urinary organs or functions. genitals (n.) "reproductive organs," especially the external sexual organs, late 14c. Compare Genitalia.

#### **Definition**

• A Genitourinary Teaching Associate (GUTA) is an individual trained to teach the techniques and protocol for performing the gender-specific physical examination to learners, using himself or herself as a demonstration and practice model.

## Reflexión Guiada \ sustantivo Definición

- El proceso alentado por el instructor durante el debriefing que refuerza los aspectos críticos de la experiencia y alienta el aprendizaje intuitivo que permite al participante vincular la teoría con la práctica y la investigación (INACSL, 2013).
- Las actividades intelectuales y afectivas facilitadas que permiten a las personas explorar su experiencia para conducir a una nueva comprensión y apreciación (adaptado de Boud et al, 1985).
- Un proceso facilitado por un mentor que permite al estudiante "integrar la comprensión adquirida en la experiencia de uno para permitir mejores elecciones o acciones en el futuro, así como mejorar la efectividad general" (Rogers, 2001).

Comparar: ADVOCACY/INQUIRY – OBSERVACIÓN E INDAGACIÓN, DEBRIEF/DEBRIEFING, FEEDBACK. Ver también: PENSAMIENTO REFLECTIVO.

# Educador Asociado de Enseñanza Ginecológica / **Genitourinaria** \ sustantivo

- Un Educador Asociado de Enseñanza Genitourinaria (GUTA, por sus siglas en inglés) es un individuo capacitado para enseñar las técnicas y el protocolo para realizar el examen físico específico de género a los estudiantes, usándose a sí mismo como modelo de demostración y práctica.
- Un Educador Asociado de Enseñanza Ginecológica (GTA, por sus siglas en inglés) es una mujer específicamente capacitada para enseñar, evaluar y dar feedback a los estudiantes sobre técnicas

- A Gynecological Teaching Associate (GTA) is a female specifically trained to teach, assess, and provide feedback to learners about accurate pelvic, rectal and/or breast examination techniques. They also address the communication skills needed to provide a comfortable exam in a standardized manner, while using their bodies as teaching tools in a supportive, non-threatening environment (ASPE).
- A Male Urogenital Teaching Associates (MUTA) is a male specifically trained to teach, assess, and provide feedback to learners about accurate urogenital and rectal examination techniques. They also address the communication skills needed to provide a comfortable exam in a standardized manner, while using their bodies as teaching tools in a supportive, non-threatening environment (ASPE).
- precisas de examen pélvico, rectal y/o mamario. También abordan las habilidades de comunicación necesarias para proporcionar un examen cómodo de una manera estandarizada, mientras utilizan sus cuerpos como herramientas de enseñanza en un entorno de apoyo, sin amenazas (ASPE).
- Un Educador Asociado de Enseñanza Urogenital Masculino (MUTA, por sus siglas en inglés) es un hombre entrenado específicamente para enseñar, evaluar y dar feedback a los estudiantes sobre las técnicas precisas de examen urogenital y rectal. También abordan las habilidades de comunicación necesarias para proporcionar un examen cómodo de una manera estandarizada, mientras utilizan sus cuerpos como herramientas de enseñanza en un entorno de apoyo, sin amenazas (ASPE).



### Haptic (Haptics) \'hap-tik \ adj

**Etym.** (adj.) "pertaining to the sense of touch," 1890, from Greek haptikos "able to come into contact with," from haptein "to fasten."

### Definition

- In healthcare simulation, refers to devices that providing tactile feedback to the user. Haptics can be used to simulate touching, palpating an organ, or body part, and the cutting, tearing or traction on a tissue.
- Devices that capture and record a trainee's 'touch' in terms of location and depth of pressure at specific anatomical sites (McGaghie et al, 2010; Jackson et al).

# **Healthcare Simulation** $\$ helth $\$ ker $\$ sim-yuh-leyshuh n $\$ *noun*

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

# DefinitionA technic

- A technique that creates a situation or environment to allow persons to experience a representation of a real healthcare event for the purpose of practice, learning, evaluation, testing, or to gain understanding of systems or human actions (SSH).
- The application of a simulation activity to training, assessment, research, or systems integration toward patient safety (SSH).

#### See also: SIMULATION

Etym. fidelity (n.) early 15c., "faithfulness, devotion," from Middle French fidélité (15c.), from Latin fidelitatem (nominative fidelitas) "faithfulness, adherence, trustiness," from fidelis "faithful, true, trusty, sincere," from fides "faith." From 1530s as

# **Háptica/o** \ adjetivo

# Definición

- En simulación en salud, se refiere a dispositivos que brindan feedback táctil al usuario. Los hápticos se pueden usar para simular el tacto, el palpar un órgano o parte del cuerpo, y el corte, desgarro o tracción en un tejido.
- Dispositivos que capturan y registran el "toque" de un estudiante en términos de ubicación y profundidad de presión en sitios anatómicos específicos (McGaghie et al, 2010; Jackson et al).

# Simulación en Salud \ sustantivo Definición

- Una técnica que crea una situación o ambiente para permitir que las personas experimenten una representación de un evento de atención en salud real con el propósito de practicar, aprender, evaluar, realizar pruebas u obtener una comprensión de los sistemas o acciones humanas (SSH).
- La aplicación de una actividad de simulación para entrenamiento, evaluación, investigación o integración de sistemas hacia la seguridad del paciente (SSH).

Ver también: SIMULACIÓN.

# Simulador de Alta Fidelidad \ sustantivo Definición

- Término que se usa a menudo para referirse a la amplia gama de maniquíes de cuerpo completo que tienen la capacidad de imitar, en un nivel muy alto, las funciones del cuerpo humano.
- También conocido como un simulador de alta complejidad. Otros tipos de simuladores también

"faithful adherence to truth or reality;" specifically of sound reproduction from 1878.

Etym. simulator (n.) 1835, of persons, from Latin simulator "a copier, feigner," agent noun from simulare "imitate," from stem of similis "like." In reference to training devices for complex systems, from 1947 (flight simulator). simulated (adj.) 1620s, "feigned," past participle adjective from simulate (v.). Meaning "imitative for purposes of experiment or training" is from 1966 (agent noun simulator in the related sense dates from 1947. In commercial jargon, "artificial, imitation" by 1942.

Definition

- A term often used to refer to the broad range of full-body manikins that have the ability to mimic, at a very high level, human body functions.
- Also known as a high complexity simulator. Other types of simulators can also be considered high-fidelity, and that fidelity (realism) has other characteristics beyond a particular type of simulator. **See also:** FIDELITY, FUNCTIONAL FIDELITY, REALISM

**High-Fidelity Simulation**  $\$  hī  $\$  fə-'de-lə-tē  $\$  sim-yuh-ley-shuh n  $\$  *noun* 

Etym. fidelity (n.) early 15c., "faithfulness, devotion," from Middle French fidélité (15c.), from Latin fidelitatem (nominative fidelitas) "faithfulness, adherence, trustiness," from fidelis "faithful, true, trusty, sincere," from fides "faith." From 1530s as "faithful adherence to truth or reality;" specifically of sound reproduction from 1878.

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

• In healthcare simulation, high-fidelity refers to simulation experiences that are extremely realistic and provide a high level of interactivity and realism for the learner (INACSL, 2013); Can apply to any mode or method of simulation; for example: human, manikin, task trainer, or virtual reality.

**See also:** ENVIRONMENTAL FIDELITY, FIDELITY, REALISM

**Human Factors** \ hyü-mən \ fak-tərz \ *noun* **Etym. factor** (n.) Sense of "circumstance producing a result" is attested by 1816, from the mathematical sense.

pueden considerarse de alta fidelidad, y esa fidelidad (realismo) tiene otras características más allá de un tipo particular de simulador.

*Ver también:* FIDELIDAD, FIDELIDAD FUNCIONAL, REALISMO.

# Simulación de alta fidelidad \ sustantivo Definición

• En simulación en salud, la alta fidelidad se refiere a experiencias de simulación que son extremadamente realistas y proporcionan un alto nivel de interactividad y realismo para el estudiante (INACSL, 2013). Puede aplicarse a cualquier modo o método de simulación, por ejemplo: humano, maniquí, entrenador de habilidades o realidad virtual.

**Ver también:** FIDELIDAD DEL AMBIENTE, FIDELIDAD, REALISMO.

# Factores Humanos \ sustantivo Definición

• La disciplina o ciencia del estudio de la interacción entre humanos y sistemas y

#### **Definition**

- The discipline or science of studying the interaction between humans and systems and technology; it includes, but is not limited to, principles and applications in the areas of human engineering, personnel selection, training, life support, job performance aids, and human performance evaluation (M&S Glossary).
- The psychological, cultural, behavioral, and other human attributes that influence decision-making, the flow of information, and the interpretation of information by individuals or groups (M&S Glossary).

tecnología; incluye, pero no se limita a principios y aplicaciones en las áreas de ingeniería humana, selección de personal, capacitación, soporte vital, ayuda para el desempeño laboral y evaluación del desempeño humano (M&S Glossary).

• Los atributos psicológicos, culturales, de comportamiento y otros atributos humanos que influyen en la toma de decisiones, el flujo de información y la interpretación de información por parte de individuos o grupos (M&S Glossary).

# **Hybrid Simulation** \ hī-brəd \ sim-yuh-ley-shuh n \ noun

**Etym. hybrid** (n.) "a product of two heterogeneous things" emerged c. 1850.

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

- The union of two or more modalities of simulation with the aim of providing a more realistic experience.
- In healthcare simulation, hybrid simulation is most commonly applied to the situation where a part task trainer (e.g., a urinary catheter model) is realistically affixed to a standardized/simulated patient, allowing for the teaching and assessment of technical and communication skills in an integrated fashion (Kneebone, Kidd et al, 2002).
- The use of two or more simulation modalities in the same simulation activity (Zulkepli et al).

**Compare:** MIXED SIMULATION/MIXED METHODS SIMULATION, MULTIPLE MODALITY SIMULATON

# Simulación Híbrida \ sustantivo Definición

- La unión de dos o más modalidades de simulación con el objetivo de proporcionar una experiencia más realista.
- En simulación en salud, la simulación híbrida se aplica más comúnmente a la situación en la que un entrenador de habilidades (por ejemplo, un modelo de catéter urinario) se coloca de manera realista en un paciente estandarizado/simulado, lo que permite la enseñanza y evaluación de habilidades técnicas y de comunicación de manera integrada (Kneebone, Kidd et al, 2002).
- El uso de dos o más modalidades de simulación en la misma actividad de simulación (Zulkepli et al).

**Comparar:** SIMULACIÓN MIXTA /MÉTODOS DE SIMULACIÓN MIXTOS, SIMULACIÓN DE MÚLTIPLES MODALIDADES.

# Immersion \i-'mər-zhən \ noun

**Etym.** (n.) c. 1500, from Late Latin immersionem (nominative immersio), noun of action from past participle stem of immergere "to plunge in, dip into, sink, submerge," from assimilated form of in"into, in, on, upon" (see in- (2)) + Latin mergere
"plunge, dip" (see merge). Meaning "absorption in some interest or situation" is from 1640s.

#### Definition

- Describes the level to which the learner becomes involved in the simulation; a high degree of immersion indicates that the learner is treating the simulation as if it was a real-life (or very close to real-life) event (SSH).
- A state (or situation) in which trainees dedicate most of their time doing something related to or thinking about a simulation, and becomes involved in it; the level of immersion might vary, where a high degree indicates that the trainee is fully involved; for example: realistic *environments* facilitate a participant's full immersion in the simulation.

### Inmersión \ sustantivo Definición

- Describe el nivel en el que el estudiante se involucra en la simulación. Un alto grado de inmersión indica que el estudiante está tratando la simulación como si fuera un evento de la vida real (o muy cercano a la vida real) (SSH).
- Un estado (o situación) en el que los estudiantes dedican la mayor parte de su tiempo a hacer algo relacionado con una simulación o pensar en ella, y se involucran en ella. El nivel de inmersión puede variar, cuando un alto grado indica que el estudiante está totalmente involucrado; por ejemplo: ambientes realistas facilitan la inmersión total de un participante en la simulación.

Ver también: SIMULACIÓN IMMERSIVA.

#### **See also: IMMERSIVE SIMULATION**

**Immersive Simulation** \ I'm3:SIV\ sim-yuh-ley-shuh n \ adj (immersive); n (simulation)

Etym. immersion. (n.) c. 1500, from Late Latin immersionem, noun of action from past participle stem of immergere "to plunge in, dip into, sink, submerge," from assimilated form of in- "into, in, on, upon" (see in- (2)) + Latin mergere "plunge, dip" (see merge). Meaning "absorption in some interest or situation" is from 1640s.

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### Definition

• adj: A real-life situation that deeply involves the participants' senses, emotions, thinking, and

**Simulación Inmersiva** \ adj (immersivo); s. (simulación)

- (Adjetivo) Una situación de la vida real que involucra profundamente los sentidos, las emociones, el pensamiento y el comportamiento de los participantes. La creación de una simulación inmersiva depende de la alineación con los objetivos educativos, la fidelidad de la simulación (física, conceptual y emocional) y la percepción del realismo de los participantes.
- (Sustantivo) una sesión de simulación influenciada por las características de los participantes, las experiencias, el nivel de entrenamiento y la preparación para el caso o tarea. La fidelidad física, conceptual y emocional percibida, el nivel

behavior; creating an immersive simulation depends on the alignment with learning objectives, the fidelity of the simulation (physical, conceptual and emotional), and participant's perception of realism.

• noun: A simulation session influenced by participants' characteristics, experiences, level of training, and preparation for the case or task,. The perceived physical, conceptual and emotional fidelity, the appropriate level of challenge, and the simulators and actors can all effect the simulation experience (Hamstra et al, 2014; Rudolph et al, 2007).

apropiado de desafío, los simuladores y actores pueden afectar la experiencia de simulación (Hamstra et al, 2014; Rudolph et al, 2007). **Ver también:** FIDELIDAD, INMERSIÓN, REALISMO.

See also: FIDELITY, IMMERSION, REALISM

**Incognito Standardized Patient** \ in-,käg-'nē- \ stan-dər-,dīzd \ pā-shənt \ *noun* 

Etym. incognito (adj./adv.) 1640s as both adjective ("disguised under an assumed name and character") and adverb ("unknown, with concealed identity"), from Italian incognito "unknown," especially in connection with traveling, from Latin incognitus "unknown, not investigated."

Etym. standard "authoritative or recognized exemplar of quality or correctness" (late 15c.). Meaning "rule, principal or means of judgment" is from 1560s. That of "definite level of attainment" is attested from 1711 (as in standard of living, 1903).

**Etym. patient** (n.) "suffering or sick person under medical treatment," late 14c.

#### Definition

• A person who plays a role as a patient in real healthcare situations, while the healthcare workers in those situations are unaware of the fact that the person is not a real patient (Rethans et al. review Med Educ 2007).

**See also:** UNANNOUNCED STANDARDIZED PATIENTS, STEALTH PATIENTS, SECRET SHOPPER

In Silico \ in- 'si-li- kō \ adj or adv.

**Etym.** 1980s: Latin, literally 'in silicon' (with reference to the use of silicon chips in computer systems); on the pattern of in vitro and in vivo.

#### Definition

• Performed on computer or via computer simulation; the phrase was coined in 1989 as an

# Paciente Estandarizado de Incógnito \ sustantivo Definición

• Una persona que desempeña un papel como paciente en situaciones de atención en salud reales, mientras que los trabajadores del equipo de salud en esas situaciones no son conscientes del hecho de que la persona no es un paciente real (Rethans et al. Revisa Med Educ 2007).

**Ver también:** PACIENTES ESTANDARIZADOS NO ANUNCIADOS, PACIENTES SECRETOS, COMPRADOR SECRETO.

# In Silico / En Silicio \ adj o adv. Definición

• Realizado en computadora o mediante simulación por computadora; la frase fue acuñada en 1989 como una analogía de las frases latinas in vivo, in vitro e in situ (Sieburg, 1990).

Comparar: IN SITU.

analogy to the Latin phrases in vivo, in vitro, and in situ (Sieburg, 1990).

### Compare: IN SITU

In Situ/In Situ Simulation \ in 'srtju \ sim-yuh-ley-shuh n \  $a_d_j$ 

Etym. in situ 1740, Latin, literally "in its (original) place or position," from ablative of situs "site." Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. Definition

• Taking place in the actual patient care setting/environment in an effort to achieve a high level of fidelity and realism; this training is particularly suitable for difficult work environments, due to space constraints or noise. For example, an ambulance, a small aircraft, a dentist's chair, a catheterization lab (Kyle & Murray, 2008). This training is valuable to assess, troubleshoot, or develop new system processes. Compare: IN SILICO

Interactive Model or Simulation \ in-ter-'ak-tiv \ mä-dəl \ or \ sim-yuh-ley-shuh n \ adj

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

Definition

- Simulating a situation in which the outcome varies depending on human participation (Thomas). This allows humans to practice different sets of actions in order to learn the correct response to an event.
- Modeling which requires human participation (Australian Dept. of Defense 2011).

Interdisciplinary \ in-ter-dis-uh-pluh-ner-ee \ adj Etym. discipline (n.) directly from Latin disciplina "instruction given, teaching, learning, knowledge," also "object of instruction, knowledge, science, military discipline," from discipulus. Meaning "branch of instruction or education" is first recorded late 14c. Meaning "military training" is from late 15c.; that of "orderly conduct as a result of training" is from c. 1500. Definition

# In Situ / Simulación In Situ \ adjetivo Definición

• Tomar lugar en el ambiente/entorno de atención del paciente real en un esfuerzo por lograr un alto nivel de fidelidad y realismo. Esta capacitación es particularmente adecuada para entornos de trabajo difíciles, debido a limitaciones de espacio o ruido. Por ejemplo, una ambulancia, un pequeño avión, un sillón de dentista, un laboratorio de cateterización (Kyle y Murray, 2008). Esta capacitación es valiosa para evaluar, solucionar problemas o desarrollar nuevos procesos del sistema.

Comparar: IN SILICO.

# Modelo Interactivo o Simulación \ adjetivo Definición

- Simulando una situación en la que el resultado varía según la participación humana (Thomas). Esto permite a los humanos practicar diferentes conjuntos de acciones para aprender la respuesta correcta a un evento.
- Modelado que requiere de la participación humana (Departamento de Defensa de Australia 2011).

# Interdisciplinario \ adjetivo Definición

- Implica dos o más disciplinas académicas, científicas o artísticas (Merriam-Webster.com).
- La combinación de dos o más disciplinas académicas, campos de estudio, profesiones, tecnologías o departamentos (dictionary.reference.com).
- Perteneciente o relativo a más de una rama del conocimiento (oxforddictionaries.com).

- Involving two or more academic, scientific, or artistic disciplines (Merriam-Webster.com).
- The combining of two or more academic disciplines, fields of study, professions, technologies or departments (dictionary.reference.com).
- (• Of or relating to more than one branch of knowledge (oxforddictionaries.com).

Ver también: MULTIDISCIPLINARIO.

#### See also: MULTIDISCIPLINARY

Interdisciplinary / Interdisciplinary Learning \ inter - 'di-sə-plə-, ner-ē \ lərn-ing \ noun / adj

Etym. discipline (n.) directly from Latin disciplina "instruction given, teaching, learning, knowledge," also "object of instruction, knowledge, science, military discipline," from discipulus. Meaning "branch of instruction or education" is first recorded late 14c. Meaning "military training" is from late 15c.; that of "orderly conduct as a result of training" is from c. 1500.

**Etym. learning** (n.) Old English leornung "learning, study," from leornian.

#### Definition

- noun: The academic disciplines, such as psychology, or to subspecialties within professions. For example, within the profession of medicine, anesthesia or cardiology (Barr, Koppel, Reeves, Hammick and Freeth, 2005).
- adj: Working jointly, but address issues from their individual discipline's perspective (Gray and Connolly, 2008).
- Integrating the perspective of professionals from two or more professions by organizing the education around a specific discipline, where each discipline examines the basis of their knowledge" (Bray & Howkins, 2008).

**See also:** INTERPROFESSIONAL EDUCATION/TRAINING/LEARNING

Interprofessional \ in-ter - \ prə-'fesh-nəl \ adj Etym. professional (n.) "one who does it for a living," 1798, from professional (adj.).professional (adj.) 1747 of careers (especially of the skilled or learned trades from c. 1793). Related: profession. Definition

• Collaborating as a team with a shared purpose, goal, and mutual respect to deliver safe, quality health care (Freeth, Hammick, Reeves, Koppel, &

Aprendizaje Interdisciplinario / Interdisciplinario \ sustantivo / adj.

# Definición

- (Sustantivo) Las disciplinas académicas, como la psicología, o subespecialidades dentro de las profesiones. Por ejemplo, dentro de la profesión de medicina, anestesia o cardiología (Barr, Koppel, Reeves, Hammick y Freeth, 2005).
- (Adjetivo) Trabajando conjuntamente, pero abordando los problemas desde la perspectiva de su disciplina individual (Gray y Connolly, 2008).
- •Integrando la perspectiva de profesionales de dos o más profesiones organizando la educación en torno a una disciplina específica, donde cada disciplina examina la base de su conocimiento (Bray & Howkins, 2008).

*Ver también:* EDUCACIÓN INTERPROFESIONAL/ENTRENAMIENTO / APRENDIZAJE.

# Interprofesional \ adjetivo Definición

• Colaborar en equipo, con un propósito compartido, objetivo y respeto mutuo, para brindar una atención en salud segura y de calidad (Freeth, Hammick, Reeves, Koppel y Barr, 2005; Organización Mundial de la Salud (OMS), 2010).

Barr, 2005; World Health Organization (WHO), 2010).

# Interprofessional Education /Training/Learning \ in-ter - prə-'fesh-nəl \ e-jə-'kā-shən\ trā-niŋ \ lərning\ noun

Etym. professional (n.) "one who does it for a living," 1798, from professional (adj.).professional (adj.) 1747 of careers (especially of the skilled or learned trades from c. 1793). Related: profession. Etym. education (n.) 1530s, "childrearing," also "the training of animals," from Middle French education (14c.) and directly from Latin educationem (nominative educatio) "a rearing, training," noun of action from past participle stem of educare. Originally of instruction in social codes and manners; meaning "systematic schooling and training for work" is from 1610s.

**Etym. training** (n.) From 1540s as "discipline and instruction to develop powers or skills;" 1786 as "exercise to improve bodily vigor."

#### **Definition**

- An educational environment where students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes (Interprofessional Education and Collaborative Expert Panel, WHO 2011).
- An initiative to secure learning, and promote gains through interprofessional collaboration in professional practice (Freeth et al.).

## See also: INTERDISCPLINARY LEARNING

# $\label{limits} $$ \operatorname{Interprofessionalism} \ \ in-ter - \ \ 'i-zəm\ \ \ noun $$$

Etym. professional (n.) "one who does it for a living," 1798, from professional (adj.).professional (adj.) 1747 of careers (especially of the skilled or learned trades from c. 1793). Related: profession.

## Definition

• The effective integration of professionals through mutual respect, trust, and support, from various professions who share a common purpose to mold their separate skills and knowledge into collective responsibility and awareness that can be achieved through learned processes for communication, problem solving, conflict resolution, and conduct.

# Educación Interprofesional / Formación / Aprendizaje \ sustantivo Definición

- Un entorno educativo en el que los estudiantes de dos o más profesiones aprenden acerca de, desde y entre sí para permitir una colaboración efectiva y mejorar los resultados en salud (Educación Interprofesional y Panel Colaborativo de Expertos, OMS 2011).
- Una iniciativa para asegurar el aprendizaje y promover los beneficios a través de la colaboración interprofesional en la práctica profesional (Freeth et al.).

Ver también: APRENDIZAJE INTERDISCPLINARIO.

# **Interprofesionalismo** \ sustantivo **Definición**

• La integración efectiva de los profesionales a través del respeto mutuo, la confianza y el apoyo de diversas profesiones que comparten un propósito en común para moldear sus habilidades y conocimientos, separados en responsabilidad y conciencia colectiva, que se pueden lograr a través de procesos aprendidos para la comunicación, conducta, resolución de problemas y conflictos.

# J

**Just in Time Simulation \** jəst \ 'in \  $t\bar{t}m$  \ sim-yuhley-shuh n \  $n \circ u n$ 

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

- A method of training that is conducted directly prior to a potential intervention (Palaganas, Maxworthy, Epps, & Mancini, 2015). The training that is utilized is "just in time" at the "place near the site of the potential intervention" (Palaganas, Maxworthy, Epps, and Mancini, 2015).
- A learning approach that meets the learner's needs during or just before it is needed to maximize an educational outcome (Barnes, 1998).
- A cost reduction method that is derived originally from the Japanese car manufacturing industry where it was a strategy that was utilized to reduce flow times in both production and response time costs (Ohno, 1978).

# Simulación Justo a Tiempo \ sustantivo Definición

- Un método de entrenamiento que se lleva a cabo directamente antes de una intervención potencial (Palaganas, Maxworthy, Epps y Mancini, 2015). La capacitación que se utiliza es "justo a tiempo" en el "lugar cercano al sitio de la posible intervención" (Palaganas, Maxworthy, Epps y Mancini, 2015).
- Un enfoque de aprendizaje que satisfaga las necesidades del estudiante durante o justo antes de que sea necesario para maximizar un resultado educativo (Barnes, 1998).
- Un método de reducción de costos que se deriva originalmente de la industria japonesa de fabricación de automóviles, donde fue una estrategia que se utilizó para reducir los tiempos de flujo tanto en los costos de producción como en los de tiempo de respuesta (Ohno, 1978).

# L

## **Live, virtual, and constructed (LVC) simulation** \'liv\'vər-chə-wəl, -chəl; 'vərch-wəl\kən-'strək-tiv\

Etym. live 1540s, "having life," later (1610s) "burning, glowing," a shortening of alive. Meaning "in-person" (of performance) is first attested 1934. Etym. virtual The meaning "being something in essence or effect, though not actually or in fact" is from mid-15c., probably via sense of "capable of producing a certain effect" (early 15c.). Computer sense of "not physically existing but made to appear by software" is attested from 1959.

**Etym. constructed** early 15c., "derived by interpretation," from Middle French constructif or from Medieval Latin *constructivus*, from Latin construct-, past participle stem of *construere* "to heap up."

#### Definition

• A broadly used taxonomy describing a mixture of simulation modalities; a live simulation involves real people operating real systems; a virtual simulation is where a real person operates simulated systems; and a constructed simulation does not involve real people or real systems, but instead are computer programs that create an environment. (Sokolowski).

## Simulación en vivo, virtual y construida (Simulación LVC por sus siglas en inglés)\ sustantivo

#### Definición

• Una taxonomía ampliamente utilizada que describe una mezcla de modalidades de simulación; una simulación en vivo involucra a personas reales que operan sistemas reales; una simulación virtual es donde una persona real opera sistemas simulados; y una simulación construida no involucra personas reales o sistemas reales, sino que son programas de computadora que crean un entorno (Sokolowski).

#### **Low-Fidelity** \ 'lo \ fə-'de-lə-tē \ adj

Etym. fidelity (n.) early 15c., "faithfulness, devotion," from Middle French fidélité (15c.), from Latin fidelitatem (nominative fidelitas) "faithfulness, adherence, trustiness," from fidelis "faithful, true, trusty, sincere," from fides "faith." From 1530s as "faithful adherence to truth or reality;" specifically of sound reproduction from 1878.

#### Definition

• Not needing to be controlled or programmed externally for the learner to participate (Palaganas, Maxworthy, Epps, & Mancini, 2015); examples include case studies, role playing, or task trainers used to support students or professionals in learning

#### Baja Fidelidad \ adjetivo

#### Definición

• No precisa ser controlado o programado externamente para que el estudiante participe (Palaganas, Maxworthy, Epps y Mancini, 2015). Los ejemplos incluyen estudios de casos, *role playing* o entrenadores de habilidades utilizados para ayudar a los estudiantes o profesionales a aprender una situación o práctica clínica (Adaptado de NLN-SIRC, 2013).

Ver también: FIDELIDAD.

a clinical situation or practice (Adapted from NLN-SIRC, 2013).	
See also: FIDELITY	



\*Manikin \ ma-ni-kən\ (also Manneguin) noun Etym. 1560s, "jointed figure used by artists," from Dutch manneken, literally "little man," diminutive of Middle Dutch man.

#### **Definition**

- A life-sized human like simulator representing a patient for healthcare simulation and education (Palaganas, Maxworthy, Epps, & Mancini, 2015).
- Full or partial body representation of a patient for practice.
- Full or partial body simulators that can have varying levels of physiologic function and fidelity.

See also: SIMULATOR.

\*Term that has been identified as potentially controversial.

Manikin-based Simulation \ ma-ni-kən \ bāst \ simyuh-ley-shuh n \ *noun* 

Etym. manikin. 1560s, "jointed figure used by artists," from Dutch manneken, literally "little man," diminutive of Middle Dutch man.

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

- The use of manikins to represent a patient using heart and lung sounds, palpable pulses, voice interaction, movement (e.g., seizures, eye blinking), bleeding, and other human capabilities that may be controlled by a simulationist using computers and software.
- The life-like aspects of people and situations generated by a manikin.

\*Mannequin \ ma-ni-kən \ (also Manikin) noun

\* Maniquí \ sustantivo

#### Definición

- Un simulador a tamaño real similar a un humano que representa a un paciente para la educación y simulación en salud (Palaganas, Maxworthy, Epps y Mancini, 2015).
- Representación corporal total o parcial de un paciente para la práctica.
- Simuladores de cuerpo entero o parcial que pueden tener diferentes niveles de función fisiológica y fidelidad.

Ver también: SIMULADOR.

\*Término que ha sido identificado como potencialmente controversial.

#### Simulación Basada en el Maniquí \ sustantivo Definición

- El uso de maniquíes para representar a un paciente con sonidos cardíacos y pulmonares, pulsos palpables, interacción de voz, movimiento (por ejemplo, convulsiones, parpadeo del ojo), sangrado y otras capacidades humanas que pueden ser controladas por un simulacionista usando computadoras y software.
- Los aspectos realistas de personas y situaciones generados por un maniquí.

\* Maniquí \ sustantivo Ver: MANIQUÍ.

Ver también: SIMULADOR.

Etym. 1902, "model to display clothes," from French mannequin. A French form of the same word that yielded manikin, and sometimes mannequin was used in English in a sense "artificial man" (especially in translations of Hugo). Originally of persons, in a sense where we might use "model."

See: MANIKIN
See also: SIMULATOR

\*Término que ha sido identificado como potencialmente controversial.

\*Term that has been identified as potentially controversial.

Manual Input \'man-yə-wəl \ 'in-,pùt\ noun Etym. manual (adj.) c. 1400, from Latin manualis "of or belonging to the hand; that can be thrown by hand," from manus "hand, strength, power over; armed force; handwriting."

**Etym. input** Middle English verb (late 14c.) meaning "to put in, place, set."

#### **Definition**

• The method of operation in which an operator inputs a value to a given parameter regardless of how it would affect any other parameter. The input of the parameter does not adjust the variables in any physiological manner (Palaganas, Maxworthy, Epps, & Mancini, 2015).

**Compare:** PHYSIOLOGIC MODELING, PREPACKAGE SCENARIO, "RUNNING ON THE FLY"

Mastery Learning \'mas-t(ə-)rē\ \'lərn- iŋ\ noun Etym. mastery (adj.) early 13c., mesterie, "condition of being a master," also "superiority, victory;" from Old French maistrie, from maistre "master" (n.). Meaning "intellectual command" (of a topic, etc.) is from 1660s.

**Etym. learning** (n.) Old English leornung "learning, study," from leornian.

#### **Definition**

• An instructional philosophy originally proposed by Benjamin Bloom that stated a student must first practice and study to meet the predetermined level criteria (>90%) through the formative assessment of a prerequisite domain prior to advancing in subject matter. If the learner does not achieve the level of mastery, information from the test is used to diagnose areas of deficiency necessary for additional prescriptive support. The student is later tested again. This cycle of feedback and corrective procedures is repeated until mastery is achieved, at

## **Entrada Manual/ Input Manual \** sustantivo **Definición**

• El método de operación en el que un operador ingresa un valor a un parámetro dado sin importar cómo afectaría a cualquier otro parámetro. La entrada del parámetro no ajusta las variables de ninguna manera fisiológica (Palaganas, Maxworthy, Epps y Mancini, 2015).

**Comparar:** MODELADO FISIOLÓGICO, ESCENARIO ENLATADO, "CORRER ON THE FLY".

## **Aprendizaje para el Dominio \** sustantivo **Definición**

- Una filosofía de instrucción originalmente propuesta por Benjamin Bloom que establecía que un estudiante debe primero practicar y estudiar para cumplir con los criterios de nivel predeterminados (> 90%) a través de la evaluación formativa de un dominio como requisito previo antes de avanzar en la materia. Si el estudiante no alcanza el nivel de dominio, la información de la evaluación se utiliza para diagnosticar las áreas de deficiencia necesarias para un apoyo prescriptivo adicional. El estudiante es evaluado más tarde de nuevo. Este ciclo de feedback(retroalimentación) y procedimientos correctivos se repite hasta que se alcanza el dominio, momento en el cual el estudiante pasará al siguiente nivel (Guskey, 2010).
- Una filosofía de instrucción que resalta el feedback individualizado y el tiempo adecuado, lo que permite al estudiante progresar en la materia de una manera personalizada, generalmente en

which point the student will move on to the next level (Guskey, 2010).

• An instructional philosophy that highlights individualized feedback and adequate time, allowing the learner to progress through the subject in a customized manner, generally in smaller units to master the subject matter. This concept states that nearly all learners can achieve subject or skill mastery utilizing this method (Palaganas, Maxworthy, Epps, & Mancini, 2015).

unidades más pequeñas para dominar la materia. Este concepto establece que casi todos los estudiantes pueden lograr el dominio de la materia o la habilidad utilizando este método (Palaganas, Maxworthy, Epps y Mancini, 2015).

Comparar: PRÁCTICA DELIBERADA.

#### **Compare:** DELIBERATE PRACTICE

**Mixed Reality Human** \ mikst \ rē-'a-lə-tē \ hyü-mən \ *noun* 

Etym. reality (n.) 1540s, "quality of being real," from French réalité and directly Medieval Latin realitatem (nominative realitas), from Late Latin realis. Meaning "real existence, all that is real" is from 1640s; that of "the real state (of something)" is from 1680s.

#### Definition

• The use of a technology such as video, augmented reality, or virtual reality in conjunction with a physical manikin to simulate a human. (Costanza, E., Kunz, A., and Fjeld, M. 2009); for example, in team-based training, using TV monitors in portrait mode with interactive videos as a standin for a real team member (Palaganas, Maxworthy, Epps, & Mancini, 2015).

#### **Humano de Realidad Mixta** \ sustantivo **Definición**

• El uso de una tecnología como video, realidad aumentada o realidad virtual en conjunción con un maniquí físico para simular a un humano (Costanza, E., Kunz, A., y Fjeld, M. 2009). Por ejemplo, en la capacitación en equipo, utilizando monitores de televisión en forma vertical con videos interactivos como representación de un miembro real del equipo (Palaganas, Maxworthy, Epps y Mancini, 2015).

## Mixed Simulation (Mixed Methods Simulation) \ mikst \ sim-yuh-ley-shuh n \ noun

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. Etym. method (n.) early 15c., "regular, systematic treatment of disease," from Latin methodus "way of teaching or going," from Greek methodos "scientific inquiry, method of inquiry, investigation," originally "pursuit, a following after." Meaning "way of doing anything" is from 1580s; that of "orderliness, regularity" is from 1610s.

#### Definition

• The use of a variety of different simulation modalities; this is differentiated from hybrid simulation in that it is not characterized by the

## Simulación Mixta (Simulación de Métodos Mixtos) \ sustantivo

#### Definición

• El uso de una variedad de diferentes modalidades de simulación. Esto se diferencia de la simulación híbrida en que no se caracteriza por la combinación de un tipo de simulación para mejorar otro, sino por el uso de múltiples tipos de simulación en el mismo escenario o lugar. Por ejemplo, se utilizan en un mismo escenario un SP y un maniquí o un SP con un entrenador de habilidades para la punción venosa, etc. (SSH).

*Ver también:* SIMULACIÓN DE MÚLTIPLES MODALIDADES.

Comparar: SIMULACIÓN HÍBRIDA.

combining of one type of simulation to enhance another, but rather the use of multiple types of simulation in the same scenario or place. For example, a SP and a mannequin are used in a scenario or a task trainer paired with an SP for venipuncture, etc. (SSH).

See also: MULTIPLE MODALITY

SIMULATION *Compare:* HYBRID SIMULATION

### **Mobile Simulation** \'mō-bəl \ sim-yuh-ley-shuh n \ noun

Etym. mobile (adj.) late 15c., from Middle French mobile (14c.), from Latin mobilis "movable, easy to move; loose, not firm," "pliable, flexible. contraction of \*movibilis, from movere "to move." Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

• The ability to move a simulator from one teaching location to another or to teach a scenario on the move (F.C. Forrest, Bristol Med Sim Center).

#### Simulación Móvil \ sustantivo Definición

• La capacidad de mover un simulador de un lugar de enseñanza a otro o de enseñar un escenario en movimiento (F.C. Forrest, Bristol Med Sim Center).

#### \*Modality \ mō- 'da-lə-tē\ noun

**Etym.** 1610s, from Old French modalité or directly from Medieval Latin modalitatem (nominative modalitas) "a being modal," from modalis. 1560s, term in logic, from Middle French modal and directly from Medieval Latin modalis "of or pertaining to a mode," from Latin modus "measure, manner, mode."

#### Definition

• A term used to refer to the type(s) of simulation being used as part of the simulation activity, for example, task trainers, manikin-based, standardized/simulated patients, computer-based, virtual reality, and hybrid (SSH).

**See also:** SIMULATED/SYNTHETIC LEARNING METHODS, TYPOLOGY

\*Term that has been identified as potentially controversial.

**Model (as in Modeling and Simulation\** mä-dəl \ noun

#### \* Modalidad \ sustantivo Definición

• Término utilizado para referirse al o los tipos de simulación que se usan como parte de la actividad de simulación, por ejemplo, entrenadores de habilidades, simulación basada en el maniquí, pacientes estandarizados (SP), basada en computadora, realidad virtual e híbridos (SSH). *Ver también:* MÉTODOS DE APRENDIZAJE SIMULADOS /SINTÉTICOS, TIPOLOGÍA.

\*Término que ha sido identificado como potencialmente controversial.

Modelo (como en Modelado y Simulación) \
sustantivo
Definición

**Etym.** Sense of "thing or person to be imitated" is 1630s.

#### Definition

•A representation of an object, concept, event, or system; models can be physical models, computational models or theories of function (Sokolowski).

Una representación de un objeto, concepto, evento o sistema. Los modelos pueden ser modelos físicos, modelos computacionales o teorías de la función (Sokolowski).

**Etym model** sense of "thing or person to be imitated" is 1630s.

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

- The terms modeling and simulation are often used interchangeably.
- An academic discipline focused on the study, development and use of live, virtual, and constructive models, including simulators, emulators, and prototypes to investigate, understand, or provide data.
- The use of models, including emulators, prototypes, simulators, and stimulators, to develop data as a basis for making managerial or technical decisions.

#### Modelado y Simulación (M&S) \ sustantivo Definición

- Los términos modelado y simulación a menudo se usan indistintamente.
- Una disciplina académica centrada en el estudio, desarrollo y uso de modelos en vivo, virtuales y constructivos, incluidos simuladores, emuladores y prototipos para investigar, comprender o proporcionar datos.
- El uso de modelos, incluidos emuladores, prototipos, simuladores y estimuladores, para desarrollar *data* como base para tomar decisiones administrativas o técnicas.

Monte Carlo Simulation \ m\u00e4n-t\u00e4-'k\u00e4r-(\,)\u00e4\u00f6 \ sim-yuh-ley-shuh n \ noun

**Etym. Monte Carlo fallacy** 1957, named for resort in Monaco famous for its gambling casinos. The fallacy of thinking that the probability of a particular outcome rises with the successive number of opposite outcomes.

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### Definition

- A simulation in which random statistical sampling techniques are employed such that the result determines estimates for unknown values (M&S Glossary).
- A mathematical model using probability distributions to calculate the possible outcomes for a given choice of action. Such a simulation involves

Simulación de Monte Carlo \ sustantivo

Etim. La falacia de Monte Carlo de 1957, llamada así por ser un resort en Mónaco famoso por sus casinos. La falacia de pensar que la probabilidad de un resultado particular aumenta con el número sucesivo de resultados opuestos.

#### Definición

- •Una simulación en la que se emplean técnicas de muestreo estadístico aleatorio de manera que el resultado determina estimaciones para valores desconocidos (M&S Glossary).
- •Un modelo matemático que utiliza distribuciones de probabilidad para calcular los posibles resultados para una elección de acción determinada. Tal simulación involucra muchos cálculos y recálculos para producir un rango de resultados posibles.

many calculations and re-calculations to yield a range of possible outcomes.

#### Moulage \mü-'läzh\ noun

## **Etym.** (n.) From the French: casting/moulding. **Definition**

- The makeup and molds applied to humans or manikins used to portray lesions, skin findings, bleeding, and traumatized areas (Levine et al).
- The application of makeup and molds to a human or simulator's limbs, chest, head, etc. to provide elements of realism (such as blood, vomitus, open fractures, etc.) to the training simulation.
- Techniques used to simulate injury, disease, aging, and other physical characteristics specific to a scenario; moulage supports the sensory perceptions of participants and supports the fidelity of the simulation scenario through the use of makeup, attachable artifacts (e.g. penetrating objects), and smells (INACSL, 2013).

Multidisciplinary \ mxltr \ di-sə-plə-,ner-ē \ noun Etym. discipline (n.) directly from Latin disciplina "instruction given, teaching, learning, knowledge," also "object of instruction, knowledge, science, military discipline," from discipulus. The Latin word is glossed in Old English by beodscipe. Meaning "branch of instruction or education" is first recorded late 14c. Meaning "military training" is from late 15c.; that of "orderly conduct as a result of training" is from c. 1500.

#### Definition

• The combining of professionals with different perspectives to provide a wider understanding of a particular problem (Bray & Hawkins, 2008).

#### See also: INTERDISCIPLINARY

\*Multiple modality (Multi-modal) simulation \'mʌltɪpl \ moʊˈdæləti \ sim-yuh-ley-shuh n \ noun Etym. modality. 1610s, from Old French modalité or directly from Medieval Latin modalitatem (nominative modalitas) "a being modal," from modalis. 1560s, term in logic, from Middle French modal and directly from Medieval Latin modalis "of or pertaining to a mode," from Latin modus "measure, manner, mode."

#### Moulage \ sustantivo Definición

- •El maquillaje y los moldes aplicados a humanos o maniquíes utilizados para representar lesiones, afecciones en la piel, sangrado y áreas traumatizadas (Levine et al).
- •La aplicación de maquillaje y moldes a las extremidades, el pecho, la cabeza, etc. de un humano o simulador para proporcionar elementos de realismo (como sangre, vómito, fracturas expuestas, etc.) a la simulación de entrenamiento.
- •Técnicas utilizadas para simular lesiones, enfermedades, envejecimiento y otras características físicas específicas de un escenario. El moulage da soporte a las percepciones sensoriales de los participantes y ayuda a alcanzar la fidelidad del escenario de simulación mediante el uso de maquillaje, utilería anexa (por ejemplo, objetos penetrantes) y olores (INACSL, 2013).

#### Multidisciplinario \ sustantivo Definición

• La combinación de profesionales con diferentes perspectivas para proporcionar una comprensión más amplia de un problema particular (Bray & Hawkins, 2008).

Ver también: INTERDISCIPLINARIO.

\* Simulación de Modalidad Múltiple (multimodal) \ sustantivo

#### Definición

• El uso de múltiples modalidades de simulación en la misma actividad de simulación; diferenciado de la simulación híbrida en que no se caracteriza por la combinación de un tipo de simulación para mejorar otro, sino por el uso de múltiples tipos de simulación en el mismo escenario o lugar, por ejemplo, se utilizan en un mismo escenario un SP y

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

- The use of multiple modalities of simulation in the same simulation activity; differentiated from hybrid simulation in that it is not characterized by the combining of one type of simulation to enhance another, but rather the use of multiple types of simulation in the same scenario or place, e.g., SP and manikin used in a scenario or a task trainer paired with an SP for venipunture, etc. (SSH).
- A mixture of textual, audio, and visual modes in combination with media and materiality with the aim of enhancing the realism of the simulation encounter (Lutkewitte).

**See also:** MIXED SIMULATION/MIXED METHODS SIMULATION**Compare:** HYBRID SIMULATION

\*Term that has been identified as potentially controversial.

un maniquí o un SP con un entrenador de habilidades para la punción venosa, etc. (SSH).

• Una mezcla de modos textuales, auditivos y visuales en combinación con medios digitales y materialidad con el objetivo de mejorar el realismo del encuentro de simulación (Lutkewitte).

*Ver también:* SIMULACIÓN MIXTA /SIMULACIÓN DE MÉTODOS MIXTOS.

Comparar: SIMULACIÓN HÍBRIDA.

\*Término que ha sido identificado como potencialmente controversial.

# N

Non-technical Skills \ non \ 'tek-ni-kəl \ skilz \ noun Etym. techno word-forming element meaning "art, craft, skill," later "technical, technology," from Latinized form of Greek tekhno-, combining form of tekhne "art, skill, craft in work; method, system, an art, a system or method of making or doing." Etym. skill (n.) late 12c., "power of discernment," from Old Norse skil "distinction, ability to make out, discernment, adjustment," related to skilja (v.) "to separate; discern, understand," from Proto-Germanic \*skaljo. Sense of "ability, cleverness" first recorded early 13c.

#### **Definition**

• In the healthcare field, the skills of communication, (patient-provider, team) leadership, teamwork, situational awareness, decision-making, resource management, safe practice, adverse event minimization/mitigation, and professionalism; also known as behavioral skills or teamwork skills (ASSH).

#### Habilidades No Técnicas \ sustantivo Definición

• En el campo de la atención en salud, las habilidades de comunicación (paciente-proveedor, equipo), liderazgo, trabajo en equipo, conciencia de la situación, toma de decisiones, gestión de recursos, práctica segura, minimización/mitigación de eventos adversos y profesionalismo; también conocido como habilidades de comportamiento o habilidades de trabajo en equipo (ASSH). NdT: también conocido como habilidades blandas.



## Objective Structured Clinical Examination (OSCE) \ ab-'jek-tiv \ strak-chard \ kli-ni-kal \ ig-,za-ma-'nā-shan \ noun

#### Definition

- An approach to the assessment of clinical or professional competence in which the components of competence are assessed in a planned or structured way with attention being paid to the objectivity of the examination (Harden 1988).
- A station or series of stations designed to assess performance competency in individual clinical or other professional skills. Learners are evaluated via direct observation, checklists, learner presentation, or written follow-up exercises. The examinations may be formative and offer feedback or summative and be used for making high stakes educational decisions (ASPE).
- A method of assessment where learners perform specific skills and behaviors in a simulated work environment.

## **Operations Specialist** \ op-uh-rey-shuh nz \ spesh-uh-list \ *noun*

Etym. operation (n.) late 14c., "action, performance, work," also "the performance of some science or art," from Old French operacion "operation, working, proceedings," from Latin operationem (nominative operatio) "a working, operation," from past participle stem of operari "to work, labor." Military sense of "series of movements and acts" is from 1749.

**Etym. specialty** (n.) From early 15c. as unusual, or extraordinary thing; specialized branch of learning; peculiar quality, distinctive characteristic.

#### Definition

• An individual whose primary role is the implementation and delivery of a simulation activity through the application of simulation technologies

## Examen Clínico Objetivo Estructurado (OSCE, por sus siglas en inglés) \ sustantivo \* Definición

- Un acerca a la evaluación de competencias clínicas o profesionales en el que los componentes de las competencias se evalúan de manera planificada o estructurada, prestando atención a la objetividad del examen (Harden 1988).
- Una estación o serie de estaciones diseñadas para evaluar la competencia en la performancede habilidades clínicas individuales u otras habilidades profesionales. Los estudiantes son evaluados a través de la observación directa, checklists, presentación del estudiante o ejercicios de seguimiento escritos. Los exámenes pueden ser formativos y ofrecer feedback o sumativos y ser utilizados para tomar decisiones educativas de alto nivel (ASPE).
- Un método de evaluación donde los estudiantes realizan habilidades y comportamientos específicos en un ambiente de trabajo simulado.

#### NdT: también conocido como ECEO, ECOE.

#### Especialista en Operaciones \ sustantivo Definición

- Una persona cuyo rol principal es la implementación y ejecución de una actividad de simulación a través de la aplicación de tecnologías de simulación, tales como, computadoras, audiovisuales o tecnologías de red.
- Un término "paraguas" inclusivo que incorpora muchos roles diferentes dentro de las operaciones en simulación en salud, incluyendo técnico en simulación, especialista en tecnología de simulación, especialista en simulación, coordinador de simulación y especialista en AV de simulación. Si bien muchos de estos individuos también diseñan actividades de simulación, este término se refiere al rol funcional relacionado a la

such as, computers, audio-visual, or networking technologies.

• An inclusive "umbrella" term that embodies many different roles within healthcare simulation operations, including simulation technician, simulation technology specialist, simulation specialist, simulation coordinator, and simulation AV specialist. While many of these individuals also design simulation activities, this term refers to the functional role related to the implementation of the simulation activities (SSH).

imprementación de actividades de simulación (SSH).

Orientation \oʻr-ē-ən-'tā-shən,-ˌen-\noun Etym. (n.) 1839, originally "arrangement of a building, etc., to face east or any other specified direction," noun of action from orient (v.). Sense of "action of determining one's bearings" is from 1868. Meaning "introduction to a situation" is from 1942. Definition

- The process of giving participants information prior to a simulation event to familiarize them to a simulation activity or environment, such as center rules, timing, and how the simulation modalities work, with the intent of preparing the participants.
- An activity that occurs prior to a simulation activity in order to prepare the faculty/instructors or learners; for example, a *PowerPoint presentation* that all participants must review to understand how the center operates, or how the activity is being conducted.

See also: BRIEF/BRIEFING, PREBRIEF/PREBRIEFING

### **Orientación** \ sustantivo **Definición**

- El proceso de proporcionar información a los participantes antes de un evento de simulación para familiarizarlos con una actividad o entorno de simulación, como las reglas del centro, el tiempo y cómo funcionan las modalidades de simulación, con la intención de preparar a los participantes.
- Una actividad que se realiza antes de una actividad de simulación para preparar a los profesores/instructores o estudiantes; por ejemplo, una presentación de PowerPoint que todos los participantes deben revisar para comprender cómo funciona el centro o cómo se lleva a cabo la actividad.

**Ver también:** BRIEF/BRIEFING, PREBRIEF/PREBRIEFING.

# P

Participant \ pahr-tis-uh-puh nt \ noun

Etym. 1560s, from Middle French participant, from
Latin participantem (nominative participans),
present participle of participare "to share in,
partake of" from particeps "sharing, partaking."

Definition

- In healthcare simulation, a person who engages in a simulation activity for the purpose of gaining or demonstrating mastery of knowledge, skills, and/or attitudes of professional practice (INACSL, 2013).
- A person engaged in a simulation activity or event and for those involved in simulation research.

#### Participante \ sustantivo Definición

- En simulación en salud, una persona que participa en una actividad de simulación con el fin de obtener o demostrar el dominio de los conocimientos, habilidades y/o actitudes de la práctica profesional (INACSL, 2013).
- Una persona involucrada en una actividad o evento de simulación y para aquellos involucrados en la investigación con simulación.

Physical Fidelity \'fi-zi-kəl\ fə-'de-lə-tē, fī-\ noun Etym. physical early 15c., "of or pertaining to material nature" (in medicine, opposed to surgical), from Medieval Latin physicalis "of nature, natural," from Latin physica "study of nature" (see physic). Meaning "pertaining to matter" is from 1590s; meaning "having to do with the body, corporeal" is attested from 1780. Meaning "characterized by bodily attributes or activities" is attested from 1970. Physical education first recorded 1838; abbreviated form phys ed is from 1955. Physical therapy is from 1922. Related: Physically.

**Etym.** fidelity early 15c., "faithfulness, devotion," from Middle French fidélité (15c.), from Latin fidelitatem (nominative fidelitas) "faithfulness, adherence, trustiness," from fidelis "faithful, true, trusty, sincere," from fides "faith" (see faith). From 1530s as "faithful adherence to truth or reality;" specifically of sound reproduction from 1878.

#### Definition

- A level of realism associated with a particular simulation activity.
- The degree to which the simulation looks, sounds, and feels like the actual task (Alexander, Brunyé, Sidman, & Weil, 2005).

#### Fidelidad Física \ sustantivo Definición

- Un nivel de realismo asociado a una actividad de simulación en particular.
- El grado en que la simulación se ve, suena y se siente como la tarea real (Alexander, Brunyé, Sidman y Weil, 2005).

**Ver también:** FIDELIDAD DEL AMBIENTE, FIDELIDAD, REALISMO.

**See also:** ENVIRONMENTAL FIDELITY, FIDELITY, REALISM

**Physiologic Modeling** \ fiz-ee-uh-loj-i-k \ mod-l-ing \ noun

Etym. physiology (n.) 1560s, "study and description of natural objects," from Middle French physiologie or directly from Latin physiologia "natural science, study of nature," from Greek physiologia "natural science, inquiry into nature," from physio- "nature" + logia "study." Meaning "science of the normal function of living things" is attested from 1610s. Related: Physiologic; physiologist.

**Etym model.** Sense of "thing or person to be imitated" is 1630s.

#### **Definition**

- The mathematical computer models governing complex human physiology in a simulated patient case so that reasonable responses occur automatically to events inputted into the program; for example, a pharmacodynamic model could predict effects of drugs on heart rate, cardiac output, or blood pressure and display them on a simulated clinical monitor. (Howard Schwid, Rosen, K. (2013); in Levine et al. Chapter 2 and 14).
- A computer model that allows for a method of operation in which an operator inputs a value to a given parameter, and it automatically adjusts the other variables in a physiologically realistic manner (Palaganas, Maxworthy, Epps, and Mancini, 2015).

**Compare:** MANUAL INPUT, PREPACKAGED SCENARIO, "RUNNING ON THE FLY"

**Portable Simulator** \pawr-tuh-buh I \ sim-yuh-leyter \ noun

**Etym. portable** (adj.) Early 15c., from French portable "that can be carried," from Late Latin portabilis "that can be carried," from Latin portare "to carry." **Related:** Portability.

Etym. simulator (n.) 1835, of persons, from Latin simulator "a copier, feigner," agent noun from simulare "imitate," from stem of similis "like." In reference to training devices for complex systems, from 1947 (flight simulator); simulated (adj.) 1620s, "feigned," past participle adjective from simulate (v.). Meaning "imitative for purposes of experiment or training" is from 1966 (agent noun simulator in the related sense dates from 1947). In commercial jargon, "artificial, imitation" by 1942.

#### **Modelado Fisiológico \** sustantivo **Definición**

- Los modelos matemáticos computarizados que rigen en la fisiología humana compleja en un caso de paciente simulado para que se produzcan respuestas automáticas razonables con los eventos ingresados en el programa. Por ejemplo, un modelo farmacodinámico podría predecir los efectos de los fármacos en la frecuencia cardíaca, el gasto cardíaco o la presión arterial y mostrarlos en un monitor de paciente simulado (Howard Schwid, Rosen, K. (2013); en Levine et al. Capítulo 2 y 14).
- •Un modelo de computadora que permite un método de operación en el que un operador ingresa un valor a un parámetro dado y ajusta automáticamente las otras variables de una manera fisiológicamente realista (Palaganas, Maxworthy, Epps y Mancini, 2015).

**Comparar:** ENTRADA MANUAL, ESCENARIO ENLATADO, "CORRER ON THE FLY".

#### Simulador Portátil \ sustantivo Definición

• Un simulador que tiene la capacidad de ser trasladado y que también puede funcionar independientemente de cables, tanto de alimentación o de comunicación.

#### **Definition**

• A simulator that has the capabilities of being moved, and may also be able to operate independently of tethers such as power cords or communication cables.

## \*Prebrief (Prebriefing) \ pri'brēf \ noun (\pri'brēfin\ verb)

**Etym. brief** "fact or situation of giving preliminary instructions," 1910 (but popularized by World War II pre-flight conferences).

#### **Definition**

- An information or orientation session held prior to the start of a simulation activity in which instructions or preparatory information is given to the participants. The purpose of the prebriefing is to set the stage for a scenario, and assist participants in achieving scenario objectives.
- The time used by educators, researchers, facilitators, or staff to plan their roles prior to the simulation; suggested activities in a prebriefing include an orientation to the equipment, environment, manikin, roles, time allotment, objectives, and patient situation. For example: Before starting the simulation session, there is a prebriefing where the equipment and its capabilities are reviewed and they are reminded of the equipment available to them in the room (INACSL, 2013).

The collaboration and planning of co-facilitators/co-debriefers prior to the simulation activity.

See also: BRIEF/BRIEFING, ORIENTATION

\*Term that has been identified as potentially controversial.

**Prepackaged / Preprogrammed Scenario** \ pree - pak-ijd \ si-nair-ee-oh \ *noun* 

Etym. scenario (n.) 1868, "sketch of the plot of a play," from Italian scenario, from Late Latin scenarius "of stage scenes," from Latin scena "scene." Meaning "imagined situation" is first recorded 1960, in reference to hypothetical nuclear wars.

#### Definition

• A method of operation in which the simulator is programmed to be in one state and to respond to

#### \* Prebrief (Prebriefing) \ sustantivo \ verbo Definición

- Una sesión de información u orientación realizada antes del inicio de una actividad de simulación en la que se dan instrucciones o información preparatoria a los participantes. El propósito de la reunión previa es establecer las bases para un escenario y ayudar a los participantes a lograr los objetivos del mismo.
- •El tiempo utilizado por los educadores, investigadores, facilitadores o personal para planificar sus funciones antes de la simulación; Las actividades sugeridas en una reunión informativa incluyen la orientación al equipo, el entorno, el maniquí, los roles, la asignación del tiempo, los objetivos y la situación del paciente. Por ejemplo: antes de comenzar la sesión de simulación, hay un informe previo en el que se revisan el equipo y sus capacidades y se les recuerda el equipamiento disponible en la sala (INACSL, 2013).
- •La colaboración y planificación de cofacilitadores/co-debriefers antes de la actividad de simulación.

**Ver también:** BRIEF/BRIEFING, ORIENTACIÓN. \*Término que ha sido identificado como potencialmente controversial.

#### Enlatado / Escenario Preprogramado \ sustantivo Definición

- Un método de operación en el que el simulador está programado para estar en un estado y responder a una entrada (*input*) y hacer la transición a otro estado basado en un script o algoritmo.
- Un escenario en el que un guión asignará valores iniciales (como ritmo cardíaco, presión arterial, estado emocional o preocupación) al inicio del mismo, que requerirán acciones específicas del

an input and transition to another state based on a script or algorithm.

• A scenario where a script will assign initial values (such as heart rate, blood pressure, emotional state or concern) at the start of the scenario that will require specific actions by the participant or certain time frames, for the scenario to transition to the next state (Palaganas, Maxworthy, Epps, and Mancini, 2015).

participante o ciertos tiempos específicos para que el escenario pase al siguiente estado (Palaganas, Maxworthy, Epps y Mancini, 2015).

**Comparar:** MODELADO FISIOLÓGICO, "CORRIENDO ON THE FLY".

**Compare:** PHYSIOLOGIC MODELING, "RUNNING ON THE FLY"

**Procedural Simulation** \ pruh-see-jer-uh  $I \setminus sim$ -yuh-ley-shuh  $n \setminus noun$ 

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

- The use of a simulation modality (for example, task trainer, manikin, computer) to assist in the process of learning to complete a technical skill(s), or a procedure, which is a series of steps taken to accomplish an end (INACSL).
- A simulation that incorporates cognitive knowledge and technical skill into a precise sequence of actions that are safe and efficient, targeting any level of learner (Palaganas, Maxworthy, Epps, & Mancini, 2015).

**Compare: PROCESS-ORIENTED SIMULATION** 

 $\label{lem:process-Oriented Simulation \ pros-es \ awr-ee-uh nt-id \ sim-yuh-ley-shuh n \ noun}$ 

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

- A simulation in which the process is considered more important than the outcome; for example, a model of a radar system in which the objective is to replicate exactly the radar's operation, and duplication of its results is a lesser concern (M&S Glossary).
- In healthcare, the use of simulation to examine the process of care rather than the outcome of care. For example, using simulation to re-create an emergency in a patient area to see what latent safety threats exist, such as poor availability of

## **Simulación de Procedimiento** \ sustantivo **Definición**

- El uso de una modalidad de simulación (por ejemplo, entrenador de habilidades, maniquí, computadora) para asistir en el proceso de aprendizaje para completar una o varias habilidades técnicas o un procedimiento, el cual es una serie de pasos a seguir para lograr un fin (INACSL).
- Una simulación que incorpora el conocimiento cognitivo y la habilidad técnica en una secuencia precisa de acciones que son seguras y eficientes, dirigidas a cualquier nivel de aprendizaje (Palaganas, Maxworthy, Epps y Mancini, 2015). *Comparar:* SIMULACIÓN ORIENTADA AL PROCESO.

#### Simulación Orientada al Proceso\ sustantivo Definición

- Una simulación en la que el proceso se considera más importante que el resultado; por ejemplo, un modelo de un sistema de radar en el que el objetivo es replicar exactamente la operación del radar y replicar sus resultados es una preocupación menor (M&S Glossary).
- En la atención en salud, el uso de la simulación para examinar el proceso de atención en lugar del resultado de la atención. Por ejemplo, usar simulación para recrear una emergencia en el área de pacientes para ver qué amenazas de seguridad latentes existen, como la falta de disponibilidad de equipamiento, botones de llamada de emergencia inadecuados u obstáculos inseguros.

**Comparar:** SIMULACIÓN DE PROCEDIMIENTO.

patient equipment, inadequate emergency call buttons or unsafe obstacles.

#### **Compare: PROCEDURAL SIMULATION**

#### **Prop** \ prop \ *noun*

**Etym. prop** (n.) "object used in a play," 1898, from props (1841), shortened form of properties (which was in theatrical use from early 15c.).

#### **Definition**

- In simulation, an element or accessory used in a given scenario to enhance realism, or to provide a cue to learners.
- A physical object used as an interface to a virtual world; a prop may be embodied by a virtual object and might have physical controllers mounted on it (Australian Dept. of Defense).

**Psychological Fidelity** \ sahy-kuh-loj-i-kuh l \ fə-'de-lə-tē \ *noun* 

Etym. psychology (n.) 1650s, "study of the soul," from Modern Latin psychologia, probably coined mid-16c. in Germany by Melanchthon from Latinized form of Greek psykhe- "breath, spirit, soul" + logia "study of." Meaning "study of the mind" first recorded 1748, from Christian Wolff's "Psychologia empirica" (1732); main modern behavioral sense is from early 1890s.

Etym. fidelity (n.) early 15c., "faithfulness, devotion," from Middle French fidélité (15c.), from Latin fidelitatem (nominative fidelitas) "faithfulness, adherence, trustiness," from fidelis "faithful, true, trusty, sincere," from fides "faith." From 1530s as "faithful adherence to truth or reality;" specifically of sound reproduction from 1878.

#### **Definition**

- A level of realism associated with a particular simulation activity.
- The extent to which the simulated environment evokes the underlying psychological processes necessary in the real-world setting (Dieckmann et al., 2008).
- The degree of perceived realism, including psychological factors such as emotions, beliefs, and self-awareness of participants in simulation scenarios (Dieckmann et al., 2008).

See also: FIDELITY, REALISM

**Psychological Safety** \ sahy-kuh-loj-i-kuh I \ seyf-tee \ noun

#### **Objeto de Utilería/ Prop** \ sustantivo **Definición**

- En simulación, un elemento o accesorio utilizado en un escenario dado para mejorar el realismo o para proporcionar una pista a los estudiantes.
- Un objeto físico utilizado como interfaz para un mundo virtual; un prop u objeto de utilería puede estar incorporado a un objeto virtual y puede tener controladores físicos montados en él (Departamento de Defensa de Australia).

#### Fidelidad Psicológica \ sustantivo Definición

- Un nivel de realismo asociado a una actividad de simulación particular.
- La medida en que el ambiente simulado evoca los procesos psicológicos subyacentes necesarios en el ambiente del mundo real (Dieckmann et al., 2008).
- El grado de realismo percibido, incluidos los factores psicológicos como las emociones, las creencias y la autoconciencia de los participantes en escenarios de simulación (Dieckmann et al., 2008).

Ver también: FIDELIDAD, REALISMO.

**Seguridad Psicológica** \ sustantivo **Definición** 

Etym. psychology (n.) 1650s, "study of the soul," from Modern Latin psychologia, probably coined mid-16c. in Germany by Melanchthon from Latinized form of Greek psykhe- "breath, spirit, soul" + logia "study of." Meaning "study of the mind" first recorded 1748, from Christian Wolff's "Psychologia empirica" (1732); main modern behavioral sense is from early 1890s.

Etym. safety (n.) early 14c., from Old French sauvete "safety, safeguard; salvation; security, surety," earlier salvetet (11c., Modern French sauveté), from Medieval Latin salvitatem (nominative salvitas) "safety," from Latin salvus.

#### **Definition**

- A feeling (explicit or implicit) within a simulationbased activity that participants are comfortable participating, speaking up, sharing thoughts, and asking for help as needed without concern for retribution or embarrassment.
- The perception of members of the team that the team is safe for risk taking, and mistakes will be considered learning opportunities rather than there being embarrassment or punitive consequences (Edmondson, 1999; Higgins et al, 2012).

• Un sentimiento (explícito o implícito) dentro de una actividad basada en simulación en la que los participantes se sienten cómodos participando, expresando su opinión, compartiendo pensamientos y pidiendo ayuda según sea necesario, sin preocuparse por represalias o vergüenza.

• La percepción de los miembros del equipo de que el mismo es seguro para asumir riesgos, donde los errores se considerarán como oportunidades de aprendizaje en lugar de sermotivo de vergüenza o de consecuencias punitivas (Edmondson, 1999; Higgins et al, 2012).

Ver también: APRENDIZAJE SEGURO.

**See also:** SAFE LEARNING



#### Realism \ rea\_lizam \ noun

Note: this term often used synonymously with fidelity but not all agree these are the same **Etym. realism** (n.) 1794, from real (adj.) + -ism; after French réalisme or German Realismus; from Late Latin realis "real." Meaning "close resemblance to the scene" (in art, literature, etc., often with reference to unpleasant details) is attested from 1856.

#### Definition

- The ability to impart the suspension of disbelief to the learner by creating an environment that mimics that of the learner's work environment; realism includes the environment, simulated patient, and activities of the educators, assessors, and/or facilitators (SSH).
- A statement about the similarity of something (a 'copy') to something else (the 'original') (Dieckmann, Gabe, et al, 2007).
- The quality or fact of representing a person, thing, or situation accurately in a way true to life; this enables participants to act "as if" the situation or problem was real.
- Refers to the physical characteristics of the activity, semantical aspects of the activity (theories and conceptual relations if A happens then B occurs), and/or the phenomenal aspects of the activity (emotions, beliefs and thoughts experienced).

See also: FIDELITY, FUNCTIONAL FIDELITY, HIGH FIDELITY SIMULATION, HIGH FIDELITY SIMULATOR, IMMERSIVE SIMULATION, PHYSICAL FIDELITY, PSYCHOLOGICAL FIDELITY, SIMULATION

Reflective Thinking \ ri-flek-tiv \ thing-king \ noun Etym. reflection (n.) Of the mind, from 1670s. Meaning "remark made after turning back one's thought on some subject" is from 1640s. Definition

#### Realismo \ sustantivo

Nota: este término a menudo se usa como sinónimo de fidelidad, pero no todos están de acuerdo en que son lo mismo.

#### Definición

- La capacidad de impartir la suspensión de la incredulidad en el estudiante mediante la creación de un ambiente que imite a su ambiente de trabajo. El realismo incluye el ambiente, el paciente simulado y las actividades de los educadores, asesores y/o facilitadores (SSH).
- Una declaración sobre la similitud de algo (una "copia") a otra cosa (el "original") (Dieckmann, Gabe, et al, 2007).
- La calidad o el hecho de representar a una persona, cosa o situación con precisión de una manera fiel a la vida real; esto permite a los participantes actuar "como si" la situación o el problema fueran reales.
- Se refiere a las características físicas de la actividad, los aspectos semánticos (teorías y relaciones conceptuales; si ocurre A, entonces ocurre B) y/o los aspectos fenomenales (emociones, creencias y pensamientos experimentados).

**Ver también:** FIDELIDAD, FIDELIDAD FUNCIONAL, SIMULACIÓN DE ALTA FIDELIDAD, SIMULADOR DE ALTA FIDELIDAD, SIMULACIÓN INMERSIVA, FIDELIDAD FÍSICA, FIDELIDAD PSICOLÓGICA, SIMULACIÓN.

#### Pensamiento Reflectivo \ sustantivo Definición

• El compromiso de auto-monitoreo que se produce durante o después de una experiencia de simulación; este auto-monitoreo lo realizan los

- The engagement of self-monitoring that occurs during or after a simulation experience; this selfmonitoring is performed by participants during or after a simulation experience.
- A process to assist learners in identifying their knowledge gaps and demonstrating the areas in which they may need further improvement; it requires active involvement in the simulation and facilitator guidance to aid in this process (Rodgers, 2002; Decker et al., 2013 Kuiper and Pesut, 2004).
- The conscious consideration of the meanings and implications of the events of the simulation; this process allows participants to make meaning out of the experience, to identify questions generated by the experience, and ultimately, to assimilate the knowledge, skills, and attitudes uncovered through the experience with pre-existing knowledge.
- A process to assist learners in identifying their knowledge gaps and demonstrating the areas in which they may need further improvement; this reflection requires conscious self-evaluation to deal with unique patient situations (INACSL, 2013).

See also: GUIDED REFLECTION

participantes durante o después de una experiencia de simulación.

- Un proceso para ayudar a los alumnos a identificar sus brechas de conocimiento y demostrar las áreas en las que pueden necesitar mejoras adicionales. Requiere de una participación activa en la simulación y de la orientación del facilitador para ayudar en este proceso (Rodgers, 2002; Decker et al., 2013 Kuiper y Pesut, 2004).
- La consideración consciente de los significados e implicaciones de los eventos de la simulación. Este proceso permite a los participantes dar sentido a la experiencia, identificar las preguntas generadas y, en última instancia, asimilar los conocimientos, habilidades y actitudes descubiertas a través de la experiencia con conocimientos preexistentes.
- Un proceso para ayudar a los alumnos a identificar sus brechas de conocimiento y demostrar las áreas en las que pueden necesitar mejoras adicionales. Esta reflexión requiere una autoevaluación consciente para enfrentar situaciones con pacientes que son únicas (INACSL, 2013).

Ver también: REFLEXIÓN GUIADA.

#### **Role Player** \ rohl-pley- r \ *noun*

**Etym. role** (n.) "part or character one takes," c. 1600, from French rôle "part played by a person in life," literally "roll (of paper) on which an actor's part is written," from Old French rolle.

**Etym. player** (n.) Old English plegere, agent noun from play (v.). Stage sense is from mid-15c.

#### Definition

• One who assumes the attitudes, actions, and discourse of (another), especially in a make-believe situation, in an effort to understand a differing point of view or social interaction. For example: Nursing students were given a chance to role play a patient or a surgeon. This term is sometimes used interchangeably with the terms 'simulated' and 'standardized patient' and may include medical, nursing or other health professionals. (Victorian Simulated Patient Network).

**See also:** ACTOR, CONFEDERATE, EMBEDDED PARTICIPANT, SIMULATED PATIENT, SIMULATED PERSON, STANDARDIZED PATIENT.

#### Role Player \ sustantivo Definición

• Persona que asume las actitudes, las acciones y el discurso de (otro), especialmente en una situación ficticia, en un esfuerzo por comprender un punto de vista diferente o interacción social. Por ejemplo: los estudiantes de enfermería tuvieron la oportunidad de representar a un paciente o un cirujano. Este término a veces se usa de manera intercambiable con los términos "simulado" y "paciente estandarizado" y puede incluir profesionales médicos, de enfermería u otros profesionales de la salud (Victorian Simulated Patient Network).

**Ver también:** ACTOR, CONFEDERADO, PARTICIPANTE INTEGRADO, PACIENTE SIMULADO, PERSONA SIMULADA, PACIENTE ESTANDARIZADO. "Running on the fly" \ ruhn-ing \ on \ th uh \ flahy \ noun

#### Definition

- The method of operation for running a simulation whereby the operator changes the parameters of the scene, the SP, or the simulator as the scenario unfolds; the changes are dependent on the observations and knowledge of the instructor or the operator, which is based on the actions of the participant.
- Running a simulation with minimal planning and preparation; a more impromptu type of simulation experience.

**Compare to:** MANUAL INPUT, PHYSIOLOGIC MODELING, PREPACKAGE SCENARIO

#### "Correr on the fly" \ sustantivo Definición

- El método de operación para ejecutar una simulación mediante la cual el operador cambia los parámetros de la escena, el SP o el simulador a medida que se desarrolla el escenario. Los cambios dependen de las observaciones y del conocimiento del instructor o del operador, que se basa en las acciones del participante.
- Ejecutar una simulación con planificación y preparación mínima. Un tipo de experiencia de simulación más improvisada.

Comparar con: ENTRADA/INPUT MANUAL, MODELADO FISIOLÓGICO, ESCENARIO ENLATADO.

# S

Safe Learning Environment \'sāf\ \'lərn\ng\ en·vi·ron·ment \in-'vī-rə(n)-mənt \ noun Etym. safe (adj.) not able or likely to be hurt or harmed in any way; not in danger.

**Etym. environment** (n.) the conditions that surround someone or something; the conditions and influences that affect the growth, health, progress, etc., of someone or something. **Definition** 

- A learning environment where it is clarified that learners feel physically and psychologically safe to make decisions, take actions and interact in the simulation.
- A learning environment of mutual respect, support, and respectful communication among leaders and learners; open communication and mutual respect for thought and action encouraged and practiced.

#### Ambiente Seguro de Aprendizaje \ sustantivo Definición

- Un ambiente de aprendizaje donde se aclara que los alumnos se sienten física y psicológicamente seguros para tomar decisiones, tomar medidas e interactuar en la simulación.
- Un ambiente de aprendizaje de respeto mutuo, apoyo y comunicación respetuosa entre líderes y alumnos, donde se alienta y practica la comunicación abierta y respeto mutuo por el pensamiento.

Ver también: SEGURIDAD PSICOLÓGICA.

#### See also: PSYCHOLOGICAL SAFETY

**Scenario** \si-nair-ee-oh \ noun

**Etym.** (n.) 1868, "sketch of the plot of a play," from Italian scenario, from Late Latin scenarius "of stage scenes," from Latin scena "scene." Meaning "imagined situation" is first recorded 1960, in reference to hypothetical nuclear wars.

#### Definition

- In healthcare simulation, a description of a simulation that includes the goals, objectives, debriefing points, narrative description of the clinical simulation, staff requirements, simulation room set up, simulators, props, simulator operation, and instructions for SPs (Alinier, 2011).
- The scripts, stories, or algorithms created for instructing the participants, including the simulators (human or robotic), on how to interact with the students.
- The description of an exercise (including initial conditions), of events for a simulation that includes details for everyone taking part.

#### Escenario \ sustantivo Definición

- En simulación en salud, una descripción de una simulación que incluye las metas, objetivos, puntos de debriefing, descripción narrativa de la simulación clínica, requisitos de personal, configuración de la sala de simulación, simuladores, operación del simulador e instrucciones para los SP (Alinier, 2011).
- Los scripts/guiones, historias o algoritmos creados para instruir a los participantes, incluidos los simuladores (humanos o robóticos), sobre cómo interactuar con los estudiantes.
- La descripción de un ejercicio (incluidas las condiciones iniciales) de eventos para una simulación que incluye detalles para todos los participantes.
- Un conjunto inicial de condiciones y la línea de tiempo de los eventos significativos presentados a los estudiantes o sistemas para lograr los objetivos del ejercicio (M&S Glossary).

• An initial set of conditions and timeline of significant events imposed on trainees or systems to achieve exercise objectives (M&S Glossary).

Ver también: ESCENARIO CLÍNICO, SCRIPT/GUIÓN.

#### See also: CLINICAL SCENARIO, SCRIPT

Screen - based Simulation / Screen - based Simulator \ skreen \ bāst \ sim-yuh-ley-shuh n \ noun

**Etym. screen** (n.) Meaning "flat vertical surface for reception of projected images" is from 1810, originally in reference to magic lantern shows; later of movies. Related **screenshot** (n.) by 1991, from (computer) screen (n.) + shot (n.) in the photograph sense.

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. Etym. simulator (n.) 1835, of persons, from Latin simulator "a copier, feigner," agent noun from simulare "imitate," from stem of similis "like." In reference to training devices for complex systems, from 1947 (flight simulator); simulated (adj.) 1620s, "feigned," past participle adjective from simulate (v.). Meaning "imitative for purposes of experiment or training" is from 1966 (agent noun simulator in the related sense dates from 1947). In commercial jargon, "artificial, imitation" by 1942.

#### **Definition**

- A simulation presented on a computer screen using graphical images and text, similar to popular gaming format, where the operator interacts with the interface using keyboard, mouse, joystick or other input device. The programs can provide feedback to, and track actions of learners for assessment, eliminating the need for an instructor (Ventre & Schwid, in Levine Chapter 14).
- A computer generated video-game simulator which can create scenarios that require real-time decision-making (Bonnetain; Biese, et al, 2009).

**See also:** COMPUTER-BASED SIMULATION, SIMULATOR

Scribe / Scribing \'skrīb\ noun / verb \'skribiNG\
Etym. special use of Latin scriba "keeper of accounts, secretary, writer," from past participle stem of scribere "to write." Sense "one who writes, official or public writer" in English is from late 14c.

### Simulación basada en Pantalla / Simulador basado en Pantalla \ sustantivo Definición

- Una simulación presentada en una pantalla de computadora usando imágenes gráficas y texto, similar al formato de un videojuego, donde el operador interactúa con la interfaz mediante el teclado, el mouse, el joystick u otro dispositivo de entrada. Los programas pueden proporcionar comentarios y realizar un seguimiento de las acciones de los alumnos para su evaluación, eliminando la necesidad de un instructor (Ventre & Schwid, en el Capítulo 14 de Levine).
- Un simulador de videojuegos generado por computadora que puede crear escenarios que requieran la toma de decisiones en tiempo real (Bonnetain; Biese, et al, 2009).

*Ver también:* SIMULACIÓN BASADA EN COMPUTADOR, SIMULADOR.

#### **Escriba / Escribiendo**\ sustantivo / verbo **Definición**

• El acto de tomar notas (\*) sobre un escenario y documentar las acciones tomadas o no tomadas. (\*) NdT: o persona encargada de hacerlo.

#### Definition

• The act of making notes about a scenario and documenting the actions taken or not taken.

#### **Script** \ skript \ *noun*

**Etym.** (n.) late 14c., "something written." Meaning "handwriting" is recorded from 1860. Theatrical use, short for manuscript, is attested from 1884.

#### Definition

- The written plan for a simulation event that includes various sets of topics, subtopics, skills, and triggers that will create the situation to induce the desired observable behaviors by the participant(s).
- A preordained series of actions based on the time and sequence of specific events.
- A written set of instructions providing a detailed plan of action for a simulation case; similar to a theatrical play.
- The lines to be spoken by operators, embedded actors or simulated patients during a simulation event.

#### **Script / Guión** \ sustantivo **Definición**

- El plan escrito para un evento de simulación que incluye varios conjuntos de temas, subtemas, habilidades y desencadenantes que crearán la situación para inducir los comportamientos observables deseados de los participantes.
- Una serie de acciones predeterminadas basadas en el tiempo y la secuencia de eventos específicos.
- Un conjunto de instrucciones por escrito que proporciona un plan de acción detallado para un caso de simulación. Similar a una obra teatral.
- Las líneas que deben decir los operadores, actores integrados o pacientes simulados durante un evento de simulación.

Ver también: ESCENARIO CLÍNICO, ESCENARIO.

#### See also: CLINICAL SCENARIO, SCENARIO

Serious Games \ seer-ee-uh s \ geymz \ noun Etym. serious (adj.) mid-15c., "expressing earnest purpose or thought" (of persons), from Middle French sérieux "grave, earnest" (14c.), from Late Latin seriosus, from Latin serius "weighty, important, grave." Gothic....."honored, esteemed," literally "weighty." Meaning "attended with danger" is from 1800.

**Etym. games** (n.) 1200, from Old English gamen "joy, fun; game, amusement," "participation, communion." "contest for success or superiority played according to rules" is first attested c. 1200 (of athletic contests, chess, backgammon).

#### **Definition**

- A mental contest played with a computer in accordance with specific rules, that uses entertainment to further training, education, health, public policy, and strategic communication objectives (Zyda, 2005).
- A game designed for a primary purpose other than pure entertainment. Serious games have an explicit and carefully thought out educational purpose, and are not intended to be played primarily for amusement (Michael and Chen, 2006). Serious games are simulations of real-world events, or

## **Serious Games / Juegos Serios \** sustantivo **Definición**

- Un desafío mental jugado con una computadora de acuerdo con reglas específicas, que utiliza el entretenimiento para mejorar la capacitación, la educación, la salud, las políticas públicas y los objetivos de comunicación estratégica (Zyda, 2005).
- Un juego diseñado para un propósito primario que no sea puro entretenimiento. Los *Serious Games* o Juegos Serios tienen un propósito educativo explícito y cuidadosamente pensado, y no están destinados a ser jugados principalmente por diversión (Michael y Chen, 2006). Los juegos serios son simulaciones de eventos del mundo real o procesos diseñados con el propósito de resolver un problema.
- En el contexto de la defensa, los juegos serios se utilizan para ensayar, entrenar o explorar opciones militares en una simulación de eventos o procesos del mundo real (Departamento de Defensa de Australia). El adjetivo "serio" generalmente se adjunta para referirse a productos utilizados por industrias como defensa, educación, exploración científica, atención en salud, manejo de

processes designed for the purpose of solving a problem.

• In the defense context, serious games are used to rehearse, train, or explore military options in a simulation of real-world events or processes (Australian Dept. of Defense); The "serious" adjective is generally appended to refer to products used by industries like defense, education, scientific exploration, healthcare, emergency management, city planning, engineering, religion, and politics.

emergencias, planificación urbana, ingeniería, religión y política.

Ver también: SIMULADOR.

NdT: También conocidos como Juegos Formativos.

See also: SIMULATOR

**Shared Mental Model** \ shaird \ men-tl] \ mod-l] \ noun

**Etym. share** (n.) (v.) 1580s, "to apportion to someone as his share; to apportion out to others; to enjoy or suffer (something) with others," from share. Meaning "to divide one's own and give part to others" is recorded from 1590s. **Related:** Shared, sharer, sharing

Etym. mental (adj.) early 15c., "pertaining to the mind," from Middle French mental, from Late Latin mentalis "of the mind," from Latin mens (genitive mentis) "mind;" cognates: Sanskrit matih "thought, mind;" Old English gemynd "memory, remembrance."

**Etym. model.** Sense of "thing or person to be imitated" is 1630s.

#### **Definition**

- A means of describing that each participant in a simulation has a shared understanding of the purpose and process of the simulation activity and participant's roles.
- The knowledge framework of the relationships between the task the team is engaged in and how the team members will interact, for example, facilitates team's ability to predict what team members will do when faced with a task, and what they will need to do it.
- A framework whereby an individual team member develops a perception of the situation, it is shared, allowing the team to reflect on the information and revise their situational awareness and their own mental model based on new information; for example, sharing can be done by vocalizing observations, calling out information, using a structured time-out to communicate new information and thinking out loud to allow others to

#### Modelo Mental Compartido \ sustantivo Definición

- Un medio para describir que cada participante en una simulación tiene una comprensión compartida del propósito y el proceso de la actividad de simulación y los roles de los participantes.
- El marco de conocimiento de las relaciones entre la tarea en la que está involucrado el equipo y cómo los miembros del equipo interactuarán. Por ejemplo, facilita la capacidad del equipo para predecir qué harán los miembros del equipo cuando se enfrenten a una tarea y qué necesitarán para hacerlo.
- Un marco de referencia mediante el cual un miembro individual del equipo desarrolla una percepción de la situación, se comparte, lo que permite al equipo reflexionar sobre la información y revisar su conocimiento de la situación y su propio modelo mental basado en información nueva. Por ejemplo, el compartir se puede llevar a cabo verbalizando observaciones, pidiendo información, utilizando pausas estructuradas para comunicar información nueva y pensando en voz alta para permitir que otros se relacionen y aprecien las asociaciones, evaluaciones y planes. Los modelos mentales compartidos facilitan la colaboracióny son crucialespara la comunicación del equipo en situaciones difíciles (debido a la presión del tiempo, etc.).

Comparar: CONCIENCIA SITUACIONAL.

relate and appreciate the associations, assessments, and plans. Shared mental models facilitates collaboration, and is crucial when team communication in a situation is difficult (due to time pressure, etc.).

#### **Compare:** SITUATIONAL AWARENESS

Simulated-Based Learning Experience \ sim-yuh-leyt -id \ bāst \ lur-ning \ ik-speer-ee-uh ns \ noun Etym. simulated (adj.) 1620s, "feigned," past participle adjective from simulate (v.). Meaning "imitative for purposes of experiment or training" is from 1966; commercial jargon, "artificial, imitation" by 1942.

**Etym. learning** (n.) Old English leornung "learning, study," from leornian. Learning curve attested by 1907.

Etym. experience (v.) 1530s, "to test, try, learn by practical trial or proof;" (n.). Sense of "feel, undergo" first recorded 1580s. Related:
Experienced; experiences; experiencing.
Etym. experience (n.) late 14c., "observation as the source of knowledge; actual observation; an event which has affected one," from Old French esperience "experiment, proof, experience" (13c.), from Latin experientia "a trial, proof, experiment; knowledge gained by repeated trials;" Meaning "state of having done something and gotten handy at it" is from late 15c.

#### **Definition**

• An array of structured activities that represent actual or potential situations in education and practice. These activities allow participants to develop or enhance their knowledge, skills, and attitudes, or to analyze and respond to realistic situations in a simulated environment. (Pilcher, Goodall, Jensen, Huwe, Jewell, Reynolds, and Karlson, 2012).

**See also:** CLINICAL SCENARIO, SIMULATION ACTIVITY

**Simulated Patient (SP)** \ sim-yuh-leyt -id \ pey-shuh nt \ *noun* 

Note: this term is often synonymous with Standardized Patient

**Etym. simulated** (adj.) 1620s, "feigned," past participle adjective from simulate (v.). Meaning "imitative for purposes of experiment or training" is

Experiencia de Aprendizaje Basada en Simulación \ sustantivo

#### Definición

Un conjunto de actividades estructuradas que representan situaciones reales o potenciales en la educación y la práctica. Estas actividades les permiten a los participantes desarrollar o mejorar sus conocimientos, habilidades y actitudes, o analizar y responder a situaciones realistas en un entorno simulado (Pilcher, Goodall, Jensen, Huwe, Jewell, Reynolds y Karlson, 2012).

*Ver también:* ESCENARIO CLÍNICO, ACTIVIDAD DE SIMULACIÓN.

Paciente Simulado (SP) \ sustantivo

Nota: este término es a menudo sinónimo de Paciente Estandarizado.

#### Definición

Una persona que ha sido entrenada cuidadosamente para simular a un paciente real con tanta precisión que la simulación no puede ser

from 1966; commercial jargon, "artificial, imitation" by 1942.

**Etym. patient** (n.) "suffering or sick person under medical treatment," late 14c., from Old French pacient (n.), from the adjective, from Latin patientem.

#### **Definition**

- A person who has been carefully coached to simulate an actual patient so accurately that the simulation cannot be detected by a skilled clinician. In performing the simulation, the SP presents the gestalt of the patient being simulated; not just the history, but the body language, the physical findings, and the emotional and personality characteristics as well (Barrows 1987). Often used interchangeably with standardized patients in the USA and Canada, but in other countries simulated patient is considered a broader term than standardized patient because the simulated patient scenario can be designed to vary the SP role in order to meet the needs of the learner.
- An individual who is trained to portray a real patient in order to simulate a set of symptoms or problems used for healthcare education, evaluation, and research (SSH).
- SPs can be used for teaching and assessment of learners including but not limited to history/consultation, physical examination, and other clinical skills in simulated clinical environments (ASPE). SPs can also be used to give feedback and evaluate learner performance (ASPE). See also: ACTOR, CONFEDERATE, EMBEDDED PARTICIPANT, ROLE PLAYER, SIMULATED PERSON, STANDARDIZED PATIENT.

**Simulated Person** \ sim-yuh-leyt -id \ pur-suh n \ noun

**Etym. simulated** (adj.) 1620s, "feigned," past participle adjective from simulate (v.). Meaning "imitative for purposes of experiment or training" is from 1966; commercial jargon, "artificial, imitation" by 1942.

#### Definition

• A person who portrays a patient (simulated patient), family member, or healthcare provider in order to meet the objectives of the simulation; a simulated person may also be referred to as a standardized patient/family/healthcare provider if they have been formally trained to act as real

detectada por un clínico experto. Al realizar la simulación, el SP presenta la gestalt del paciente que se está simulando; no solo la historia, sino también el lenguaje corporal, las afecciones físicas y las características emocionales y de personalidad (Barrows 1987). A menudo se usa indistintamente con pacientes estandarizados en los EE.UU. y Canadá, pero en otros países, el paciente simulado se considera un término más amplio que el paciente estandarizado porque el escenario del paciente simulado se puede diseñar para variar la función de SP a fin de satisfacer las necesidades del alumno.

- Una persona que está capacitada para representar a un paciente real con el fin de simular un conjunto de síntomas o problemas utilizados para la educación, evaluación e investigación de la atención en salud (SSH).
- Los SP se pueden utilizar para enseñar y evaluar a los alumnos, incluidos, entre otros, la historia clínica/consulta, el examen físico y otras habilidades clínicas en entornos clínicos simulados (ASPE). Los SP también se pueden utilizar para brindarfeedback y evaluar el rendimiento del estudiante (ASPE).

**Ver también:** ACTOR, CONFEDERADO, PARTICIPANTE INTEGRADO, ROL PLAYER, PERSONA SIMULADA, PACIENTE ESTANDARIZADO.

#### Persona Simulada \ sustantivo Definición

Una persona que interpreta a un paciente (paciente simulado), un miembro de la familia o un profesional del equipo de salud para cumplir los objetivos de la simulación. Una persona simulada también puede ser referida como un paciente/familiar/proveedor de atención médica estandarizado, si ha sido formalmente entrenada para actuar como pacientes reales para simular una serie de síntomas o problemas utilizados para la educación, evaluación e investigación de la atención en salud. Las personas simuladas a menudo se involucran en la evaluación al

patients in order to simulate a set of symptoms or problems used for healthcare education, evaluation, and research. Simulated persons often engage in assessment by providing feedback to the learner (Palaganas, J.C. (2012) Annex A).

See also: CONFEDERATE, EMBEDDED PARTICIPANT, ROLE PLAYER, SIMULATED PATIENT, STANDARDIZED PATIENT, STANDARDIZED/SIMULATED PARTICIPANT

Simulated/Synthetic Learning Methods \ sim-yuh-leyt -id \ sin-thet-ik \lur-ning \ meth-uh dz noun Etym. simulated (adj.) 1620s, "feigned," past participle adjective from simulate (v.). Meaning "imitative for purposes of experiment or training" is from 1966; commercial jargon, "artificial, imitation" by 1942.

Etym. synthetic (adj.) 1690s, as a term in logic, "deductive," from French synthétique (17c.) and directly from Modern Latin syntheticus, from Greek synthetikos "skilled in putting together, constructive," from synthetos "put together, constructed, compounded," past participle of syntithenai "to put together" (see synthesis). Related: Synthetical (1620s in logic).

**Etym. learning** (n.) Old English leornung "learning, study," from leornian.

**Etym. method** (n.) from Latin methodus "way of teaching or going," from Greek methodos "scientific inquiry, method of inquiry, investigation," originally "pursuit, a following after," from meta- "after" + hodos "a traveling, way." Meaning "way of doing anything" is from 1580s; that of "orderliness, regularity" is from 1610s.

#### Definition

The principles, pedagogies, and educational strategies used in healthcare simulation. They include:

- Case-based learning written and oral presentations used to present and review clinical scenarios but do not involve hands-on learning. e.g., table-top simulation.
- •Computer simulation see Computer Simulation.
- Procedural or Partial Task Training see Part-task Trainer or Task Trainer.
- Hybrid Simulation- see Hybrid Simulation.
- •Integrated procedural training (psychomotor focus) Combines a series of discrete tasks that are conducted simultaneously or in sequence to form a

proporcionar feedback al estudiante (Palaganas, J.C. -2012- Anexo A).

**Ver también:** CONFEDERADO, PARTICIPANTE INTEGRADO, ROLE PLAYER, PACIENTE SIMULADO, PACIENTE ESTANDARIZADO, PARTICIPANTE ESTANDARIZADO/SIMULADO.

## **Métodos de Aprendizaje Simulados / Sintéticos \** sustantivo

#### Definición

Los principios, pedagogías y estrategias educativas utilizadas en la simulación en salud. Incluyen:

- Aprendizaje basado en casos presentaciones orales y escritas que se utilizan para presentar y revisar escenarios clínicos, pero no incluyen el aprendizaje práctico. Por ejemplo, la simulación de mesa(table-top simulation).
- **Simulación por computador**: ver Simulación Basada en Computador.
- Entrenamiento de procedimientos o habilidad parcial: ver Entrenador de Habilidades por Partes o Entrenador de Habilidades.
- Simulación híbrida: ver Simulación Híbrida.
- Entrenamiento integrado de

procedimientos (enfoque psicomotor): combina una serie de tareas particulares que se realizan simultáneamente o en secuencia para formar una tarea clínica compleja (por ejemplo, intubación endotraqueal e inmovilización de la columna cervical en un paciente con traumatismo).

- Entrenamiento integrado de procedimientos (procedimiento completo): integra la capacitación de habilidades con el role play(actores) para permitir que las habilidades de procedimientos y comunicacionales se practiquen simultáneamente.
- Simulación mixta: ver Simulación Mixta.
- •Simulación/Aprendizaje basado en escenarios: los estudiantes interactúan con personas, simuladores, computadoras o entrenadores de habilidades para lograr los objetivos de aprendizaje que sean representativos de las responsabilidades en el mundo real del estudiante. El entorno puede parecerse al lugar de trabajo. Dependiendo de los objetivos de aprendizaje, el realismo puede integrarse en el equipamiento o en el ambiente.

complex clinical task (e.g. endotracheal intubation and cervical spine immobilization in a trauma patient).

- •Integrated procedural training (whole procedure)
- Integrates task training with role play (actors) to enable procedural and communication tasks to be practiced simultaneously.
- Mixed simulation- see Mixed Simulation.
- •Simulation / Scenario-based learning Learners interact with people, simulators, computers or task trainers to accomplish learning goals that are representative of the learner's real world responsibilities. The environment may resembles the workplace. Depending on the learning objectives, realism can be built into the equipment or the environment.
- •Standardized/Simulated Patient see Standardized/Simulated Patient. Role play - see Role Play.
- **Debriefing** see Debriefing.
- Multimodal formats see Multiple Modality.

See also: MODALITY, TYPOLOGY

• Paciente estandarizado/simulado: ver Paciente estandarizado/simulado. Role Play - ver Role Play.

• **Debriefing**: ver Debriefing.

• Formatos multimodales: ver Modalidad Múltiple. Ver también: MODALIDAD, TIPOLOGÍA.

**Simulation** \ sim-yuh-ley-shuh n \ *noun* **Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

- A technique that creates a situation or environment to allow persons to experience a representation of a real event for the purpose of practice, learning, evaluation, testing, or to gain understanding of systems or human actions.
- An educational technique that replaces or amplifies real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner (Gaba Future Vision Qual Saf Health Care 2004).
- A pedagogy using one or more typologies to promote, improve, or validate a participant's progression from novice to expert (INACSL, 2013).
- The application of a simulator to training and/or assessment (SSH).
- A method for implementing a model over time.

Simulación \ sustantivo

#### Definición

- Una técnica que crea una situación o ambiente para permitir que las personas experimenten una representación de un evento real con el propósito de practicar, aprender, evaluar, probar u obtener comprensión de sistemas o acciones humanas.
- Una técnica educativa que reemplaza o amplía las experiencias reales con experiencias guiadas que evocan o replican aspectos sustanciales del mundo real de una manera totalmente interactiva (Gaba Future Vision Qual Saf Health Care 2004).
- Una pedagogía que utiliza una o más tipologías para promover, mejorar o validar la progresión de un participante de novato a experto (INACSL, 2013).
- La aplicación de un simulador a la formación y/o evaluación (SSH).
- Un método para implementar un modelo a lo largo del tiempo.

**Simulation Activity** \ sim-yuh-ley-shuh n \ ak-tiv-i-tee \ *noun* 

**Actividad de Simulación** \ sustantivo **Definición** 

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

- The entire set of actions and events from initiation to termination of an individual simulation event; in the learning setting, this is often considered to begin with the briefing (prebriefing) and end with the debriefing.
- All the elements in a simulation session including the design and setup required.
- El conjunto completo de acciones y eventos desde la iniciación hasta la terminación de un evento individual de simulación; en el entorno de aprendizaje, a menudo se considera que esto comienza con el briefing (prebriefing) y finaliza con debriefing.
- Todos los elementos en una sesión de simulación, incluidos el diseño y la preparación (set up).

*Ver también:* EXPERIENCIA DE APRENDIZAJE BASADA EN SIMULACIÓN.

#### See also: SIMULATED-BASED LEARNING EXPERIENCE

## Simulation-Enhanced Interprofessional Education / (Sim-IPE)

\sim-yuh-ley-shuh n \ in-'han(t)st \ in-'tər\ prə-'fesh-nəl \ e-jə-'kā-shən\ *noun* 

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. Etym. education (n.) the action or process of teaching someone especially in a school, college, or university; the knowledge, skill, and understanding that you get from attending a school, college, or university; a field of study that deals with the methods and problems of teaching.

#### Definition

- The education of health care professionals with different but complementary knowledge and skills in a simulation environment that promotes a collaborative team approach. Simulation- enhanced interprofessional education (Sim-IPE)occurs when participants and facilitators from two or more professions are engaged in a simulated health care experience to achieve shared or linked objectives and outcomes (Decker, S. et al., 2015); It is designed for the individuals involved to...."learn about, from and with each other to enable effective collaboration and improve health outcomes" (WHO, 2010, p.13).
- A collaborative educational approach that brings together

health care professionals of varying specialties in a simulation environment engaging learners in an interprofessional teamwork model (Decker et. al).

### Educación Interprofesional Mejorada por Simulación / (Sim-IPE) \ sustantivo Definición

- La educación de profesionales de la salud con conocimientos y habilidades diferentes pero complementarios en un entorno de simulación que promueve un enfoque de equipo colaborativo. La educación interprofesional mejorada por simulación (Sim-IPE) ocurre cuando los participantes y facilitadores de dos o más profesiones participan en una experiencia de atención en salud simulada para lograr objetivos y resultados compartidos o vinculados (Decker, S. et al., 2015). Está diseñado para que las personas involucradas
- ... "aprendan sobre, de y entre sí para permitir una colaboración eficaz y mejorar los resultados en salud" (OMS, 2010, p.13).
- Un enfoque educativo colaborativo que reúne profesionales de la salud de diferentes especialidades en un entorno de simulación que involucra a los estudiantes en un modelo de trabajo en equipo interprofesional (Decker et al.).
- Un entorno de simulación de igual y mutuo respeto y reconocimiento de los conocimientos y habilidades de cada miembro del equipo.

• A simulation environment of equal and mutual respect and recognition of each team member's knowledge and skills.

## Simulation Environment / Simulation Learning Environment / Synthetic Learning Environment (SLE)

\sim-yuh-ley-shuh n \ lur-ning \ en-vahy-ruh n-muh nt

\sin-'the-tik\ 'lərn-ing \ in-'vī-rə(n)-mənt \ noun Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. Etym. synthetic (adj.) 1690s, as a term in logic, "deductive," from French synthétique (17c.) and directly from Modern

Latin syntheticus, from Greek synthetikos "skilled in putting together, constructive," from synthetos "put together, constructed, compounded," past participle of syntithenai "to put together" (see synthesis). *Related:* Synthetical (1620s in logic). *Etym. learning* (n.) Old English leornung "learning, study," from leornian.

**Etym. environment** (n.) 1887, "environing, surrounding," Ecological sense by 1967.

#### Definition

- The physical setting where simulation activities may take place, inclusive of the people and equipment that forms part of the simulation experience.
- A location where a simulation-based learning experience takes place, and where a safe atmosphere is created by the facilitator to foster sharing and discussion of participant experiences without negative consequences.
- A context for learning that consists of a controlled and shielded representation of real world situations, and a set of educational methods and procedures in which trainees feel simultaneously challenged and psychologically safe to practice and reflect on their performance (Rudolph et al).
- An atmosphere that is created by the facilitator to allow for sharing and discussion of participant experiences without fear of humiliation or punitive action.
- A setting, surrounding, or conditions that reproduce components or aspects of the real world

# Ambiente de Simulación / Ambiente de Aprendizaje de Simulación / Ambiente de Aprendizaje Sintético (SLE) \ sustantivo Definición

- El entorno físico donde pueden llevarse a cabo actividades de simulación, incluidas las personas y el equipamiento que forma parte de la experiencia de simulación.
- Un lugar donde se lleva a cabo una experiencia de aprendizaje basada en simulación, y donde el facilitador crea una atmósfera segura para fomentar el intercambio y la discusión de las experiencias de los participantes sin consecuencias negativas.
- Un contexto para el aprendizaje que consiste en una representación controlada y protegida de situaciones del mundo real, y un conjunto de métodos y procedimientos educativos en los que los estudiantes se sienten desafiados y psicológicamente seguros para practicar y reflexionar sobre su desempeño (Rudolph y otros).
- Una atmósfera creada por el facilitador para permitir compartir y discutir las experiencias de los participantes sin temor a la humillación o la acción punitiva.
- Un entorno, contexto o condiciones que reproducen componentes o aspectos del ambiente del mundo real, con el propósito de experiencias de aprendizaje y actividades relacionadas, y/o investigación (ASSH).

Ver también: SEGURIDAD PSICOLÓGICA.

environment, for the purpose of learning and related activities, and/or research (ASSH).

See also: PSYCHOLOGICAL SAFETY

**Simulation Fidelity**  $\$  sim-yuh-ley-shuh n  $\$  fə-'de-lə-tē  $\$  *noun* 

Note: the term fidelity is often used synonymously with realism but not all agree these are the same **Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

- The level of realism associated with a particular simulation activity.
- The physical, semantic, emotional and experiential accuracy that allows persons to experience a simulation as if they were operating in an actual activity (SSH).
- The believability, or the degree to which a simulated experience approaches reality. Fidelity can involve a variety of dimensions, including (a) physical factors such as environment, equipment, and related tools; (b) psychological factors such as emotions, beliefs, and self-awareness of participants; (c) social factors such as participant and instructor motivation and goals; (d) culture of the group; and (e) degree of openness and trust, as well as participants' modes of thinking (Rudolph et al. 2007).

See also: FIDELITY

Fidelidad de la Simulación \ sustantivo

Nota: el término fidelidad se usa a menudo como sinónimo de realismo pero no todos acuerdan que son lo mismo.

#### Definición

- El nivel de realismo asociado con una actividad de simulación en particular.
- La precisión física, semántica, emocional y experiencial que permite a las personas experimentar una simulación como si estuvieran operando en una actividad real (SSH).
- La credibilidad o el grado en que una experiencia simulada se acerca a la realidad. La fidelidad puede involucrar una variedad de dimensiones, que incluyen (a) factores físicos como el ambiente, el equipamiento y las herramientas relacionadas; (b) factores psicológicos como las emociones, las creencias y la autoconciencia de los participantes; (c) factores sociales como la motivación y los objetivos del participante y el instructor; (d) cultura del grupo; y (e) el grado de apertura y confianza, así como los modos de pensamiento de los participantes (Rudolph et al, 2007).

Ver también: FIDELIDAD.

**Simulation Guideline** \ sim-yuh-ley-shuh n \ gahydlahyn \ *noun* 

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### Definition

- A recommendation of the qualities for simulation fidelity, simulation validity, simulation program, or for formative or summative evaluation (SSH).
- A set of procedures or principles that are recommended toassist in meeting standards.
   Guidelines are not necessarily comprehensive, they provide a framework for developing policies and procedures based on best practice.

#### Guía en Simulación \ sustantivo Definición

- Una recomendación sobre las cualidades para la fidelidad en simulación, la validez en simulación, el programa de simulación o la evaluación formativa o sumativa (SSH).
- Un conjunto de procedimientos o principios que se recomiendan para asistir en el cumplimiento de las normas. Las directrices no son necesariamente exhaustivas, proporcionan un marco para el desarrollo de políticas y procedimientos basados en las mejores prácticas.
- Un conjunto de recomendaciones que incorporan las mejores prácticas conocidas actualmente basadas en la investigación y/o la opinión de expertos.

**Comparar: ESTÁNDAR EN SIMULACIÓN** 

• A set of recommendations, incorporating currently known best practice, based on research and/or expert opinion.

**Compare: SIMULATION STANDARD** 

**Simulationist** \ sim-yuh-ley-shuh n - ist \ noun **Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

- An individual who is involved in the design, implementation, and/or delivery of simulation activities; for example, educators, technologists, operations specialists, technicians (SSH).
- A modeling and simulation professional (Tucker).
- A person "who is involved, full-time or part-time, in modeling or simulation activities" for example, develops models to be used for simulation purposes; performs simulation studies; develops simulation software; manages simulation projects; advertises and/or markets simulation products and/or services; maintains simulation products and/or services; promotes simulation-based solutions to important problems; advances simulation technology; and advances simulation methodology and/or theory (Ören, 2000).

Compare: DEBRIEFER, FACILITATOR

**Simulation Reliability**\ sim-yuh-ley-shuh n \ ri-lahy-uh-bil-i-tee \ noun

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. Etym. reliable (adj.) 1560s, raliabill, Scottish; see rely + -able.

#### **Definition**

• The consistency of a simulation activity, or the degree to which a simulation activity measures in the same way each time it is used under the same conditions with the same participants.

**Compare: SIMULATION VALIDITY** 

**Simulation Standard** \ sim-yuh-ley-shuh n \ standerd \ noun

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

Simulacionista \ sustantivo Definición

- Una persona que participa en el diseño, implementación y/o ejecución de actividades de simulación. Por ejemplo, educadores, especialistas en tecnología, especialistas en operaciones, técnicos (SSH).
- Un profesional de simulación y modelado (Tucker).
- Una persona "involucrada, a tiempo completo o parcial, en actividades de modelado o simulación". Por ejemplo, desarrolla modelos que se utilizarán con fines de simulación, realiza estudios de simulación, desarrolla software de simulación, gestiona proyectos de simulación, anuncia y/o comercializa productos y/o servicios de simulación, mantiene productos y/o servicios de simulación, promueve soluciones basadas en simulación para problemas importantes, genera avances en la tecnología en simulación y genera avances en la metodología y/o teoríaen simulación.(Ören, 2000).

*Comparar:* DEBRIEFER, FACILITADOR.

#### Fiabilidad de la simulación\ sustantivo Definición

• La consistencia de una actividad de simulación o el grado en que una actividad de simulación se mide de la misma manera cada vez que se usa en las mismas condiciones con los mismos participantes.

Comparar: VALIDEZ DE LA SIMULACIÓN.

**Estándar en Simulación** \ sim-yuh-ley-shuh n \ stan-derd \ noun

#### Definición

• Una declaración de los requisitos mínimos para la fidelidad, validez, evaluación formativa o sumativa de la simulación o cualquier otro

#### **Definition**

• A statement of the minimum requirements for simulation fidelity, validity, formative or summative evaluation, or any other element related to a simulation activity or program (SSH).

elemento relacionado con una actividad o programa de simulación (SSH).

Comparar: GUÍA EN SIMULACIÓN.

**Compare: SIMULATION GUIDELINE** 

**Simulation Testing Environment \ noun** Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

**Definition** 

• A context for formative or summative evaluation of an individual's or team's performance. The goals of the simulation testing environment are to create an equivalent activity for all participants in order to test their knowledge, skills, and abilities in a simulated setting (INACSL, 2013).

**Simulation Time** \ sim-yuh-ley-shuh n \ tahym \ noun

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

- A simulation's internal representation of time; simulation time may accumulate faster, slower, or at the same pace as real-time.
- A time established by the simulation educator before the start of the simulation exercise irrespective of the actual real time (Hancock et al, 2008).

Simulation Validity \sim-yuh-ley-shuh n \ vuh-lid-itee\ noun

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954. **Definition** 

- The degree to which a model or simulation accurately represents or measures what it intends to measure.
- In healthcare simulation, the quality of a simulation or simulation program that demonstrates that the relationship between the process and its intended purpose is specific, sensitive, reliable, and reproducible (Dieckmann, 2009; SSH). **Compare: SIMULATION RELIABILITY**

Ambiente de Simulación para la Evaluación \ sustantivo

#### Definición

• Un contexto para la evaluación formativa o sumativa del desempeño de un individuo o equipo.Los objetivos del ambiente de evaluación en simulación son crear una actividad equivalente para todos los participantes con el fin de evaluar sus conocimientos, habilidades y capacidades en un entorno simulado (INACSL, 2013).

#### **Tiempo de simulación** \ sustantivo Definición

- Una representación interna del tiempo en una simulación; el tiempo de simulación puede acumularse más rápido, más lento o al mismo ritmo que el tiempo real.
- Un tiempo establecido por el educador de simulación antes del inicio del ejercicio de simulación independientemente del tiempo real (Hancock et al, 2008).

#### Validez en Simulación \ sustantivo Definición

- El grado en que un modelo o simulación representa o mide con precisión lo que pretende medir.
- En simulación en salud, la calidad de una simulación o programa de simulación que demuestra que la relación entre el proceso y su propósito es específica, sensible, confiable y reproducible (Dieckmann, 2009; SSH).

Comparar: FIABILIDAD EN SIMULACIÓN.

#### **Simulator \** sim-yuh-ley-ter \ *noun*

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

- A setting, device, computer program or system that performs simulation (Hancock et al, 2008).
- Any object or representation used during training or assessment that behaves or operates like a given system and responds to the user's actions (SSH).
- A device that duplicates the essential features of a task situation. A simulator generally has three elements a modelled process which represents, emulates, or otherwise simulates a real world system, a control system, and a human machine interface which is representative of the inputs found in the real world system (Australian Dept. of Defense); examples include manikins and part-task trainers.

See also: COMPUTER-BASED SIMULATION, MANIKIN, SERIOUS GAMES, SCREEN-BASED SIMULATION, SIMULATED PATIENT, STANDARDIZED PATIENT, TASK TRAINER, VIRTUAL REALITY

**Situated Learning** \sich-oo-ey-tid \ lur-ning \ noun **Etym. situate** (v.) early 15c., "to place in a particular state or condition," from Medieval Latin situatus, past participle of situare "to place, locate," from Latin situs "a place, position" (see site). **Related:** Situated; situating, situation (n.).

**Etym. learning** (n.) Old English leornung "learning, study," from leornian (see learn). Learning curve attested by 1907.

#### **Definition**

• A theory that posits that learning occurs within authentic activity, context, and culture. Social interaction and collaboration are considered essential components (Lave and Wenger, 2008). This is opposed to a classroom learning activity that is abstract and out of context.

#### $\textbf{Simulador} \setminus \text{sustantivo}$

#### Definición

- Un espacio, dispositivo, programa de computadora o sistema que realiza simulación (Hancock et al, 2008).
- Cualquier objeto o representación utilizada durante el entrenamiento o evaluación que se comporte o funcione como un sistema dado y responda a las acciones del usuario (SSH).
- Un dispositivo que duplica las características esenciales de una tarea. Un simulador generalmente tiene tres elementos: un proceso modelado que representa, emula o simula de otra manera un sistema del mundo real, un sistema de control y una interfaz humano-máquina que es representativa de los *inputs*(entradas) encontrados en el sistema del mundo real (Departamento de Defensa de Australia). Los ejemplos incluyen maniquíes y entrenadores de habilidadespor partes.

Ver también: SIMULACIÓN BASADA EN COMPUTADOR, MANIQUÍ, SEIOUS GAMES (JUEGOS SERIOS), SIMULACIÓN BASADA EN PANTALLA, PACIENTE SIMULADO, PACIENTE ESTANDARIZADO, ENTRENADOR DE HABILIDADES, REALIDAD VIRTUAL.

#### Aprendizaje Situado \ sustantivo Definición

• Una teoría que postula que el aprendizaje ocurre dentro de una actividad, contexto y cultura auténtica. La interacción social y la colaboración se consideran componentes esenciales (Lave y Wenger, 2008). Esto se opone a una actividad de aprendizaje en el aula, que es abstracta y fuera de contexto.

#### **Situational Awareness**

\sich-oo-ey-shuh n-ul \ a- wer-nis\ noun

Etym. situate (v.) early 15c., "to place in a particular state or condition," from Medieval Latin situatus,

## **Conciencia Situacional** \ sustantivo **Definición**

• Conciencia situacional (SA por sus siglas en inglés) es la percepción de los elementos

past participle of situare "to place, locate," from Latin situs "a place, position" (see site). *Related:* Situated; situating, situation (n.).

**Etym. awareness** (n.) 1828, from aware + -ness. Late Old English gewær, "wary, cautious."

#### Definition

- Situation awareness (SA) is the perception of environmental elements within time and space, and a perception of their meaning; it involves being aware of what is happening around you to understand how information, events, and your own actions impact the outcomes and objectives.
- A field of study concerned with understanding of the environment critical to decision-makers in complex, dynamic areas; situational awareness refers to the degree to which one's perception of a situation matches reality.
- The awareness of fatigue and stress among team members (including oneself), environmental threats to safety, immediate goals, information sharing, and the deteriorating status of the crisis or patient. Most commonly used in the context of crisis resource management training (Hancock et al, 2008).

**Compare:** SHARED MENTAL MODEL **Contrast with:** FIXATION ERROR

ambientales en tiempo y espacio, y la percepción de su significado. Implica ser consciente de lo que está sucediendo a su alrededor para comprender cómo la información, los eventos y sus propias acciones afectan los resultados y los objetivos.

- Un campo de estudio relacionado con la comprensión del entorno crítico para los que toman decisiones en áreas complejas y dinámicas; la conciencia situacional se refiere al grado en que la percepción de una situación coincide con la realidad.
- La conciencia de fatiga y estrés entre los miembros del equipo (incluido uno mismo), las amenazas ambientales a la seguridad, los objetivos inmediatos, el intercambio de información y el deterioro de la crisis o el paciente. Se usa más comúnmente en el contexto de la capacitación en el manejo o gestión de recursos en crisis (Hancock et al, 2008).

Comparar: MODELO MENTAL COMPARTIDO.
Contrastar con: ERROR DE FIJACIÓN.

**Standardized Patient (SP)** \ stan-dər-,dīz-d \ pā-shənt \ *noun* [Note: this term is often synonymous with Simulated Patient]

Etym. standard - "authoritative or recognized exemplar of quality or correctness" (late 15c.). Meaning "rule, principal or means of judgment" is from 1560s. That of "definite level of attainment" is attested from 1711 (as in standard of living, 1903). Etym. patient – (n.) "suffering or sick person under medical treatment," late 14c.

#### **Definition**

- A person who has been carefully coached to simulate an actual patient so accurately that the simulation cannot be detected by a skilled clinician. In performing the simulation, the SP presents the gestalt of the patient being simulated; not just the history, but the body language, the physical findings, and the emotional and personality characteristics as well (Barrows 1987).
- An individual trained to portray a patient with a specific condition in a realistic, standardized, and repeatable way and where portrayal/presentation

Paciente estandarizado (SP) \ sustantivo Nota: este término es a menudo sinónimo de Paciente Simulado.

#### Definición

- Una persona que ha sido entrenada cuidadosamente para simular a un paciente real con tanta precisión que la simulación no puede ser detectada por un clínico experto. Al realizar la simulación, el SP presenta la gestalt del paciente que se está simulando; no solo la historia, sino también el lenguaje corporal, las afecciones físicas y las características emocionales y de personalidad (Barrows 1987).
- Una persona capacitada para retratar a un paciente con una afección específica de una manera realista, estandarizada y repetible, y donde la representación/presentación varía según el rendimiento del estudiante. Esta estricta estandarización de la performance en una sesión de simulación es lo que distingue a los pacientes estandarizados de los pacientes simulados.

varies based only on learner performance; this strict standardization of performance in a simulated session is what can distinguish standardized patients from simulated patients.

- SPs can be used for teaching and assessment of learners including but not limited to history/consultation, physical examination, and other clinical skills in simulated clinical environments (ASPE). SPs can also be used to give feedback and evaluate learner performance (ASPE).
- An individual who is trained to portray a real patient in order to simulate a set of symptoms or problems used for healthcare education, evaluation, and research (SSH).

More commonly used in the USA and Canada in large part because SPs participate in high stakes assessments in which SP responses to the learner were standardized; in recent years as SPs have been included in more formative teaching scenarios, its meaning has become interchangeable with the term simulated patient.

**See also:** ACTOR, CONFEDERATE, EMBEDDED PARTICIPANT, ROLE PLAYER, SIMULATED OR STANDARDIZED PATIENT OR PARTICIPANT, SIMULATED PERSON.

- Los SP se pueden utilizar para enseñar y evaluar a los alumnos, incluidos, entre otros, la historia clínica/consulta, el examen físico y otras habilidades clínicas en entornos clínicos simulados (ASPE). Los SP también se pueden utilizar para brindar feedback y evaluar el rendimiento del estudiante (ASPE).
- Una persona que está capacitada para representar a un paciente real con el fin de simular un conjunto de síntomas o problemas utilizados para la educación, evaluación e investigación de atención en salud (SSH).

Se usan más comúnmente en los EE.UU. y Canadá, en gran parte debido a que los SP participan en evaluaciones de alto nivel (high stakes assesments) en las que las respuestas de SP al estudiante fueron estandarizadas. En los últimos años, dado que los SP se han incluido en escenarios de enseñanza más formativos, su significado se ha vuelto intercambiable con el término paciente simulado.

**Ver también:** ACTOR, CONFEDERADO, PARTICIPANTE INTEGRADO, ROL PLAYER, PACIENTE O PARTICIPANTE SIMULADO O ESTANDARIZADO, PERSONA SIMULADA.

**Standardized Patient Simulation** \ stan-dər-ˌdīz-d \ pā- shənt \ sim-yuh-ley-shuh n \ noun

Note: the term Standardized Patient is often synonymous with Simulated Patient

Etym. standard (n.) "authoritative or recognized exemplar of quality or correctness" (late 15c.). Meaning "rule, principal or means of judgment" is from 1560s. That of "definite level of attainment" is attested from 1711 (as in standard of living, 1903). Etym. patient (n.) "suffering or sick person under medical treatment," late 14c.

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

• A simulation using a person or persons trained to portray a patient scenario or actual patient(s) for healthcare education (SSH).

# Simulación de Pacientes Estandarizados \ sustantivo

Nota: el término Paciente Estandarizado a menudo es sinónimo de Paciente Simulado.

#### Definición

- Una simulación que utiliza a una persona o personas capacitadas para representar un escenario de paciente o pacientes reales para la educación en salud (SSH).
- Una modalidad utilizada con el propósito de practicar, aprender, evaluar u obtener una comprensión de los sistemas o acciones humanas en la que los pacientes estandarizados (o simulados) desempeñan un rol central.

A modality used for the purpose of practice, learning, assessment, or to gain an understanding of systems or human actions in which standardized (or simulated) patients play a central role.	
Standardized/Simulated Participant \ stan-dər-ˌdīz-d \ sim-yə-ˌlāt-id \ pär- 'ti-sə-pənt \ noun See Also: SIMULATED PATIENT, STANDARDIZED PATIENT	Participante Estandarizado / Simulado \ sustantivo Ver también: PACIENTE SIMULADO, PACIENTE ESTANDARIZADO.
State/states \ stāt\ noun  Etym. Meaning "physical condition as regards form or structure" is attested from late 13c. Meaning "mental or emotional condition" is attested from 1530s (phrase state of mind first attested 1749).  Definition  • A term used when programming manikins; state variables may include vital signs, monitor readings, body sounds, and verbalizations made by the simulator.  • [pleural] A sequence of events that change over time (Sokolowski and Banks, 2009).  Compare to: EVENT	Estado / estados \ sustantivo  Definición  • Un término usado para programar maniquíes; las variables de estado pueden incluir signos vitales, lecturas del monitor, sonidos corporales y verbalizaciones hechas por el simulador.  • (Plural) Una secuencia de eventos que cambian con el tiempo (Sokolowski y Banks, 2009).  Comparar con: EVENTO.
Stochastic \ stə-'kas-tik \ adj  Etym. (adj.) 1660s, "pertaining to conjecture," from Greek stokhastikos "able to guess, conjecturing," from stokhos "a guess, aim, target, mark," literally "pointed stick set up for archers to shoot at;" the sense of "randomly determined" is from 1934, from German stochastik (1917).  Definition	Estocástico \ adjetivo  Definición  • Perteneciente a un proceso, modelo o variable cuyo resultado, resultado o valor depende de la posibilidad (Glosario de M&S).  Contraste con: DETERMINISTA.

• Pertaining to a process, model, or variable whose outcome, result, or value depends on chance (M&S Glossary).

**Contrast with: DETERMINISTIC** 

**Synthetic Learning Technologies \** sin-'the-tik\ 'lərn-ing \ tek-'nä-lə-jē-z \ *noun* 

**Etym. synthetic** (adj.) 1690s, as a term in logic, "deductive," from French synthétique (17c.) and directly from Modern

Latin syntheticus, from Greek synthetikos "skilled in putting together, constructive," from synthetos "put together, constructed, compounded," past participle of syntithenai "to put together" (see synthesis). *Related:* Synthetical (1620s in logic). *Etym. learning* (n.) Old English leornung "learning, study," from leornian.

Etym. techno - word-forming element meaning "art, craft, skill," later "technical, technology," from Latinized form of Greek tekhno-, combining form of tekhne "art, skill, craft in work; method, system, an art, a system or method of making or doing."

Definition

• The technologies used in synthetic or simulated learning environments including manikin; computer-based virtual reality; haptics; actors; simulated patients; part-task / task trainers; hybrid; video (ASSH).

**Systems Integration** 'sis-təmz \ in-tə-'grā-shən\ noun

Etym. system - (n.) 1610s, "the whole creation, the universe," from Late Latin systema "an arrangement, system," from Greek systema "organized whole, a whole compounded of parts," from stem of synistanai "to place together, organize, form in order," from syn- "together." Meaning "set of correlated principles, facts, ideas, etc." first recorded 1630s.

Etym integration (n.) 1610s, from French intégration and directly from Latin integrationem (nominative integratio) "renewal, restoration." Integrate - Meaning "to put together parts or elements and combine them into a whole" is from 1802. Related: Integrated; integrating.

#### Definition

• An engineering term meaning to bring together the component subsystems into one system that functions together.[In healthcare, the ability to

# **Tecnologías de Aprendizaje Sintético \** sustantivo **Definición**

• Las tecnologías utilizadas en entornos de aprendizaje sintéticos o simulados, incluidos el maniquí, realidad virtual basada en computadora, hápticos, actores, pacientes simulados, entrenadores de habilidades/por partes, híbridos y video (ASSH).

### Integración de Sistemas \ sustantivo Definición

- Un término de ingeniería que significa reunir los subsistemas de componentes en un solo sistema que funcione en conjunto. En la atención en salud, la capacidad de mejorar la calidad de la atención y los resultados del paciente a través de la reingeniería de los procesos de prestación.
- Una categoría de acreditación de programas de simulación que reconoce programas que demuestran una aplicación coherente, planificada, colaborativa, integrada e iterativa de actividades de evaluación, investigación y enseñanza basadas en simulación con ingeniería de sistemas y principios de gestión de riesgos para lograr una excelente atención clínica, mejorar la seguridad del paciente y mejorar los indicadores en los resultados de todos los sistemas de salud (SSH).

improve the quality of care and patient outcomes
through re-engineering of care delivery processes.

• A category of simulation program accreditation
that recognizes programs that demonstrate
consistent, planned, collaborative, integrated, and
iterative application of simulation-based
assessment, research, and teaching activities with
systems engineering, and risk management
principles to achieve excellent bedside clinical care,
enhanced patient safety, and improved outcome
metrics across the healthcare system(s) (SSH).

# T

# Task Trainer / Part-Task Trainer / Partial Task Trainer \ tahsk \ trey-ner \ noun

**Etym. task** (n.) early 14c., "a quantity of labor imposed as a duty," from Old North French tasque (12c., Old French tasche, Modern French tâche). General sense of "any piece of work that has to be done" is first recorded 1590s.

**Etym. trainer** (n.) c. 1600, "one who educates or instructs," agent noun from train (v.). Meaning "one who prepares another for feats requiring physical fitness" is from 1823, originally of horse trainers.

### Definition

- A device designed to train in just the key elements of the procedure or skill being learned, such as lumbar puncture, chest tube insertion, central line insertion or part of a total system, for example, ECG simulator (Center for Immersive and Simulation Based Learning [CISL] & Levine et al).
- A model that represents a part or region of the human body such as an arm, or an abdomen. Such devices may use mechanical or electronic interfaces to teach and give feedback on manual skills such as IV insertion, ultrasound scanning, suturing, etc.... Generally used to support procedural skills training; however they can be used in conjunction with other learning technologies to create integrated clinical situations (ASSH).

See also: PROCEDURAL SIMULATION, SIMULATOR

Team-based Learning \'tēm \ 'bāst \ 'lərn-ing \ noun Etym. team (n.) applied in Old English to groups of persons working together for some purpose, especially "group of people acting together to bring suit;" modern sense of "persons associated in some joint action" is from 1520s. Team spirit is recorded from 1928. Team player attested from 1886, originally in baseball.

**Etym. learning** (n.) Old English leornung "learning, study," from leornian.

# Entrenador de habilidades \* / Entrenador de Habilidares por Partes / Entrenador de HabilidadesParciales \ sustantivo Definición

- Un dispositivo diseñado para entrenar solo los elementos clave del procedimiento o la habilidad que se aprende, como la punción lumbar, la inserción del tubo toráxico, la inserción de un catéter central o parte de un sistema total, por ejemplo, el simulador de ECG (Center for Immersive and Simulation Based Learning [CISL] & Levine et al).
- Un modelo que representa una parte o región del cuerpo humano, como un brazo o un abdomen. Tales dispositivos pueden usar interfaces mecánicas o electrónicas para enseñar y brindar feedback sobre habilidades manuales tales como inserción de IV, ecografía, sutura, etc. Generalmente se usa para dar soporte a la capacitación en habilidades de procedimientos. Sin embargo, se pueden utilizar junto con otras tecnologías de aprendizaje para crear situaciones clínicas integradas (ASSH).

*Ver también:* SIMULACIÓN DE PROCEDIMIENTOS, SIMULADOR.

\*NdT: Por razones de uso, se optó por la traducción "Entrenador de Habilidades" frente a "Entrenador de Tareas", pudiendo ser utilizados ambiguamente.

# **Aprendizaje Basado en Equipo** \ sustantivo **Definición**

• Un método de aprendizaje que utiliza la discusión en grupos pequeños y el estudio colaborativo autodirigido para fomentar el nuevo aprendizaje en lugar de impartir información. Después de un período inicial de responsabilidad individual, los equipos de estudiantes se complementan entre ellos para aprender información y resolver problemas. Esto se

#### **Definition**

- A learning method which makes use of small group discussion and collaborative, self-directed study to foster new learning as opposed to imparting information. After a period of preliminary individual accountability, teams of learners complete with each other to learn information and solve problems, This is in distinction to traditional learning in which information is imparted from teacher to learner.
- A learning method with many similarities to Problem Based Learning (PBL). Unlike PBL, where a complex, open ended, case is given without the information to solve it, team-based learning capitalizes on the use of carefully chosen learning activities based on reading assignments (Michaelson & Parmelee).

distingue del aprendizaje tradicional en el que la información se imparte de un maestro a otro.

• Un método de aprendizaje con muchas similitudes con el aprendizaje basado en problemas (*PBL por sus siglas en inglés*). A diferencia de *PBL*, donde se da un caso complejo, abierto, sin la información para resolverlo, el aprendizaje en equipo aprovecha el uso de actividades de aprendizaje cuidadosamente seleccionadas basadas en tareas de lectura (Michaelson y Parmelee).

Technical skills \'tek-ni-kəl\'skil \ noun Etym. technical (adj.) 1610s, "skilled in a particular art or subject," formed in English from technic + al (1), or in part from Greek tekhnikos "of art; systematic," in reference to persons "skillful, artistic," from tekhne "art, skill, craft." The sense narrowed to "having to do with the mechanical arts" (1727).

Etym. skills (n.) late 12c., "power of discernment," from Old Norse skil "distinction, ability to make out, discernment, adjustment," related to skilja (v.) "to separate; discern, understand," from Proto-Germanic \*skaljo- "divide, separate" (cognates: Swedish skäl "reason," Danish skjel "a separation, boundary, limit," Middle Low German schillen "to differ," Middle Low German, Middle Dutch schele "separation, discrimination;." Sense of "ability, cleverness" first recorded early 13c.

## Definition

- A skill that is required for the accomplishment of a specific task.
- In healthcare, the knowledge, skill and ability to accomplish a specific medical task; for example, inserting a chest tube or performing a physical examination.

### Habilidades Técnicas \ sustantivo Definición

- Una habilidad que se requiere para la realización de una tarea específica.
- En la atención en salud, el conocimiento, la habilidad y la capacidad para realizar una tarea médica específica; por ejemplo, insertando un tubo toráxico o realizando un examen físico.

Technology Enhanced Healthcare Simulation (encompasses high and low technology healthcare simulation) \ tek-'nä-lə-jē\ in-'han(t)s \ 'helth \ 'ker \ sim-yuh-ley- shuh n \ noun

Simulación en Salud Mejorada por Tecnología (abarca simulación en salud de alta y baja tecnología) \ sustantivo Definición

Etym. techno - word-forming element meaning "art, craft, skill," later "technical, technology," from Latinized form of Greek tekhno-, combining form of tekhne "art, skill, craft in work; method, system, an art, a system or method of making or doing."

Etym. simulation (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

- A group of materials and devices created or adapted to train healthcare professionals in a simulated environment. Examples include such diverse products as computer-based virtual reality simulators, high-fidelity and static mannequins, plastic models, live animals, inert animal products, and human cadavers (Cook et al.).
- An educational tool or device with which the learner physically interacts to mimic an aspect of clinical care for the purpose of teaching or assessment.

- Un grupo de materiales y dispositivos creados o adaptados para capacitar a profesionales de la salud en un entorno simulado. Los ejemplos incluyen productos tan diversos como simuladores de realidad virtual basados en computadora, maniquíes estáticos y de alta fidelidad, modelos de plástico, animales vivos, productos de animales inertes y cadáveres humanos (Cook et al.).
- Una herramienta o dispositivo educativo con el cual el estudiante interactúa físicamente para imitar un aspecto de la atención clínica con el propósito de enseñar o evaluar.

### Trigger(s) \ 'tri-gər \ noun

**Etym. trigger** (n.) "device by means of which a catch or spring is released and a mechanism set in action." **Definition** 

• An event or events that move the simulation from one state to another.

## **Disparador (es)** / *Trigger (s)* \ sustantivo *Definición*

• Un evento o eventos que llevan la simulación de un estado a otro.

**Typology** \tī-'pä-lə-jē \ noun

**Etym. typology** (n.) "doctrine of symbols," 1845, from Greek typos.

**Related:** Typological; typologically.

#### **Definition**

• The classification of different educational methods or equipment; for example, 3-dimensional models, computer software, standardized patients, partialtask trainers, or high-fidelity patient simulators (INACSL, 2013).

**See also:** MODALITY, SIMULATED/SYNTHETIC LEARNING METHOD

# **Tipología** \ sustantivo **Definición**

• La clasificación de diferentes métodos o equipamientos educativos; por ejemplo, modelos tridimensionales, software de computadora, pacientes estandarizados, entrenadores de habilidades por partes o simuladores de pacientes de alta fidelidad (INACSL, 2013).

**Ver también:** MODALIDAD, MÉTODO DE APRENDIZAJE SINTÉTICO / SIMULADO.



Virtual Patient \'vər-chə-wəl \ pā-shənt \ noun Etym. virtual (adj.) The meaning "being something in essence or effect, though not actually or in fact" is from mid-15c., probably via sense of "capable of producing a certain effect" (early 15c.). Computer sense of "not physically existing but made to appear by software" is attested from 1959.

**Etym. patient** (n.) "suffering or sick person under medical treatment," late 14c.

### Definition

- A representation of an actual patient. Virtual patients can take many forms such as software-based physiological simulators, simulated patients, physical manikins and simulators, (Ellaway, Terry & Poulton).
- A computer program that simulates real-life clinical scenarios in which the learner acts as a healthcare provider obtaining a history and physical exam, and making diagnostic and therapeutic decisions (ASSH).

## Paciente Virtual \ sustantivo Definición

- Una representación de un paciente real. Los pacientes virtuales pueden adoptar muchas formas, como simuladores fisiológicos basados en software, pacientes simulados, maniquíes físicos y simuladores (Ellaway, Terry y Poulton).
- Un programa de computadora que simula escenarios clínicos de la vida real que el estudiante actúa como proveedor de atención en salud obteniendo una historia clínica y un examen físico y tomando decisiones diagnósticas y terapéuticas (ASSH).

Virtual Reality \ 'vər-chə-wəl \mrē-'a-lə-tē \ noun Etym. virtual (adj.) The meaning "being something in essence or effect, though not actually or in fact" is from mid-15c., probably via sense of "capable of producing a certain effect" (early 15c.). Computer sense of "not physically existing but made to appear by software" is attested from 1959.

**Etym. reality** (n.) 1540s, "quality of being real," from French

réalité and directly Medieval Latin realitatem (nominative realitas), from Late Latin realis. Meaning "real existence, all that is real" is from 1640s; that of "the real state (of something)" is from 1680s. Sometimes 17c.-18c. also meaning "sincerity." Reality-based attested from 1960.

### Definition

• The use of computer technology to create an interactive three- dimensional world in which the objects have a sense of spatial presence; virtual

### Realidad Virtual \ sustantivo Definición

- El uso de la tecnología informática para crear un mundo tridimensional interactivo en el que los objetos tienen una sensación de presencia espacial; ambiente/entorno virtual y mundo virtual son sinónimos de realidad virtual (M&S Glossary).
- Un ambiente tridimensional generado por computadora que proporciona un efecto de inmersión.

Ver también: SIMULADOR.

environment and virtual world are synonyms for virtual reality (M&S Glossary).

• A computer-generated three-dimensional environment that gives an immersion effect.

See also: SIMULATOR

## **Virtual Reality Environment** 'vər-chə-wəl \rē-'a-lətē \ in- 'vī-rə(n)-mənt \ *noun*

Etym. virtual (adj.) The meaning "being something in essence or effect, though not actually or in fact" is from mid-15c., probably via sense of "capable of producing a certain effect" (early 15c.). Computer sense of "not physically existing but made to appear by software" is attested from 1959.

**Etym. reality** (n.) 1540s, "quality of being real," from French

réalité and directly Medieval Latin realitatem (nominative realitas), from Late Latin realis.

Meaning "real existence, all that is real" is from 1640s; that of "the real state (of something)" is from 1680s. Sometimes 17c.-18c. also meaning "sincerity." Reality-based attested from 1960.

### Definition

 A wide variety of computer-based applications commonly associated with immersive, highly visual, 3D characteristics,

that allow the participant to look about and navigate within a seemingly real or physical world. It is generally defined based on the type of technology being used, such as head-mounted displays, stereoscopic capability, input devices, and the number of sensory systems stimulated (ASSH).

### Ambiente de Realidad Virtual \ sustantivo Definición

• Una amplia variedad de aplicaciones basadas en computadora comúnmente asociadas con características 3D inmersivas y altamente visuales que permiten al participante mirar y navegar dentro de un mundo aparentemente real o físico. En general, se define en función del tipo de tecnología que se utiliza, como las pantallas montadas en la cabeza, la capacidad estereoscópica, los dispositivos de entrada (*input*) y la cantidad de sistemas sensoriales estimulados (ASSH).

# Virtual Reality Simulation \ 'vər-chə-wəl \mrē-'a-lə-tē \ sim- yuh-ley-shuh n \ noun

**Etym. virtual** (adj.) The meaning "being something in essence or effect, though not actually or in fact" is from mid-15c., probably via sense of "capable of producing a certain effect" (early 15c.). Computer sense of "not physically existing but made to appear by software" is attested from 1959.

**Etym. reality** (n.) 1540s, "quality of being real," from French

réalité and directly Medieval Latin realitatem (nominative realitas), from Late Latin realis. Meaning "real existence, all that is real" is from 1640s; that of "the real state (of something)" is from

# Simulación de Realidad Virtual \ sustantivo Definición

• Simulaciones que utilizan una variedad de características inmersivas, altamente visuales, en 3D para replicar situaciones de la vida real y/o procedimientos de atención en salud. La simulación de realidad virtual se diferencia de la simulación basada en computadora, ya que generalmente incorpora interfaces físicas u otras, como un teclado de computadora, un mouse, reconocimiento de voz y habla, sensores de movimiento o dispositivos hápticos (ASSH).

1680s. Sometimes 17c.-18c. also meaning "sincerity." Reality-based attested from 1960.

### Definition

• Simulations that use a variety of immersive, highly visual, 3D characteristics to replicate real-life situations and/or healthcare procedures; virtual reality simulation is distinguished from computer-based simulation in that it generally incorporates physical or other interfaces such as a computer keyboard, a mouse, speech and voice recognition, motion sensors, or haptic devices (ASSH).

# **Virtual Simulation** \'vər-chə-wəl \ sim-yuh-ley-shuh n \ *noun*

**Etym. virtual** (adj.) The meaning "being something in essence or effect, though not actually or in fact" is from mid-15c., probably via sense of "capable of producing a certain effect" (early 15c.). Computer sense of "not physically existing but made to appear by software" is attested from 1959.

**Etym. simulation** (n.) noun of action from past participle stem of simulare "imitate," from stem of similis "like." Meaning "a model or mock-up for purposes of experiment or training" is from 1954.

#### **Definition**

- The recreation of reality depicted on a computer screen (McGovern, 1994).
- A simulation involving real people operating simulated systems.. Virtual simulations may include surgical simulators that are used for on-screen procedural training and are usually integrated with haptic device(s) (McGovern, 1994; Robles-De La Torre, 2011).
- A type of simulation that injects humans in a central role by exercising motor control skills (for example, flying an airplane), decision skills (committing fire control resources to action), or communication skills (as members of an air traffic control team) (Hancock et al, 2008).

### Simulación Virtual \ sustantivo Definición

- La recreación de la realidad representada en una pantalla de computadora (McGovern, 1994).
- Una simulación que involucra a personas reales que operan sistemas simulados. Las simulaciones virtuales pueden incluir simuladores quirúrgicos que se utilizan para el entrenamiento de procedimientos en pantalla y generalmente se integran con dispositivos hápticos (McGovern, 1994; Robles-De La Torre, 2011).
- Un tipo de simulación que sumerje a los seres humanos en un rol central al ejercer habilidades de control motor (por ejemplo, volar un avión), habilidades de decisión (poner en acción los recursos para el control de incendios) o habilidades de comunicación (como miembros de un equipo de control de tráfico aéreo) (Hancock et al, 2008).

# References

- 1. Alexander AL, Brunye T, Sidman J, and Weil SA. (2005). From gaming to training: A review of studies on fidelity, immersion, presence, and buy-in and their effects on transfer in pc-based simulations and games (DARWARS technical report) Available at: http://www.darwars.com/downloads/DARWARS%2520Paper%252012205.pdf
- 2. Alinier G. Developing high fidelity health care simulation scenarios: A guide for educators and professionals. Simulation Gaming 2011; 42:9-26.
- 3. Alinier G. A typology of educationally focused medical simulation tools Medical Teacher 2007; 29: e243-250. doi:10.1080/01421590701551185
- 4. Anderson LW, Krathwohl DR, eds. A taxonomy of learning, teaching, and assessing: a revision of Bloom's taxonomy of educational objectives. Boston, MA: Allyn & Bacon; 2001.
- 5. Australian Department of Defense: http://www.defence.gov.au
- 6. Australian Society for Simulation in Healthcare: http://www.nhet-sim-edu.au/nhet-sim-program-2/australian-society-for-simulation-in-healthcare
- 7. Bajura M, Fuchs H, Ohbuchi, R. Merging virtual objects with the real world: Seeing ultrasound imagery within the patient. In ACM SIGGRAPH Computer Graphics1992 July; 26(2): 203-210.
- 8. Balci O. Verification validation and accreditation of simulation models. In: Proceedings of the 29th Conference on Winter Simulation. IEEE Computer Society; 1997 December:135-141.
- 9. Barnes, BE. Creating the practice-learning environment using information technology to support a new model of continuing medical education. *Academic Medicine* 1998; 73: 278-281.
- 10. Barr H, Koppel I, Reeves S et al. Effective Interprofessional Education: Argument, Assumption, and Evidence. Oxford, UK: Blackwell Publishing; 2005.
- 11. Barrows HS. An overview of the uses of standardized patients for teaching and evaluating clinical skills. Academic Medicine 1993; 68(6): 443-451.
- 12. Beaubien JM, Baker DP. The use of simulation for training teamwork skills in health care: How low can you go? Quality Safety Health Care 2004;13(Suppl 1): i51-i56. doi:10.1136/qshc.2005.009845
- 13. Berryman DR. Augmented reality: a review. Medical Reference Services Quarterly 2012;31(2): 212-218.
- Bloom BS. Taxonomy of educational objectives: the classification of educational goals. Boston: Adison Wesley Publishing;
   1956.
- 15. Bolman LG, Deal TE. Reframing organizations: artistry, choice, and leadership. San Francisco: Jossey-Bass; 2013.
- 16. Bonnetain E, Boucheix J-M, Hamet M, Freysz M. Benefits of computer screen-based simulation in learning cardiac arrest procedures. Medical Education 2010;44:716–722. doi: 10.1111/j.1365-2923.2010.03708.x
- 17. Boud D, Walker D, Keogh R. Promoting reflection in learning: a model. In Boud D, Walker D, Keogh R, eds. Reflection: turning experience into learning. London, England: Kogan; 1985. p. 3, 18-40.
- 18. Bourke MP, Ihrke BA. Introduction to the evaluation process. In Billings D, Halstead J, eds. Teaching in nursing: a guide for faculty. 5th ed. St Louis: Elsevier;2016. p. 385-397.
- 19. Boyd EM, Fales AW. Reflective learning key to learning from experience. Journal of Humanistic Psychology 1983; 23(2): 99-117.

- 20. Bray J, Howkins E. Facilitating interprofessional learning in the workplace: a research project using the Delphi technique. Work based learning in primary care 2006; 4(3):223-235.
- 21. Center for Immersive and Simulation-based Learning. (2014). Part-task trainers. Retrieved from http://cisl.stanford.edu/what\_is/sim\_modalities/phys\_trainers.html
- 22. Collins English Dictionary. Unabridged 10th ed. United Kingdom: William Collins Sons & Co. Ltd; 2009.
- 23. Cook DA, Brydges R, Hamstra SJ, et al. Comparative effectiveness of technology-enhanced simulation versus other instructional methods: a systematic review and meta-analysis. Simulation in Health Care 2012;7(5):308-320.
- 24. Cook, DA, Hatala R, Brydges R, et al. Technology-enhanced simulation for health professions education: a systematic review and meta-analysis. JAMA 2011; 306(9):978-988.
- 25. Cooper MD. Towards a model of safety culture. Safety Science 2000;36(2):111-136.
- 26. Cowie N, Premkumar K, Bowen A, et al. Teamwork and communication in acute care: a teaching resource for health practitioners. Washington DC: MedEdPORTAL Publications; 2012.
- 27. Cram, RS, Sime JA. Improving safety culture understanding using a computerized learning environment. Achieving sustainable construction health and safety. Professional Safety 2014;52-6.
- 28. Cronenwitt L, Sherwood G, Barnsteiner J, et al. Quality and safety education for nurses. Nursing Outlook 2007;5:122-131.
- 29. D'amour D, Oandasan I. Interprofessionality as the field of interprofessional practice and interprofessional education: an emerging concept. Journal of interprofessional Care 205;19(S1):8-20.
- 30. Decker S, Sportsman S, Puetz L, Billings L. The evolution of simulation and its contribution to competency. Journal of Continuing Education in Nursing 2008;39(2):74-80.
- 31. De Freitas S, Oliver M. How can exploratory learning with games and simulations within the curriculum be most effectively evaluated? Computers & Education 206;46(3):249-264.
- 32. Department of Defense Modeling and Simulation Glossary; 2014: http://msco.mil/MSGlossary.html
- 33. Dictionary. com. Lexico LLC;2002.
- 34. Dieckmann P, Friis SM, Lippert A, Østergaard D. (2012). Goals, success factors, and barriers for simulation-based learning: A qualitative interview study in health care. Simulation & Gaming 2012;43(5):627-647. doi: 10.1177/1046878112439649
- 35. Dieckmann P, Friis S, Lippert A, Østergaard D. The art and science of debriefing in simulation: ideal and practice. Medical Teacher 2009;31(7):e287-e294.
- 36. Dieckmann P, Gaba D, Rall M. Deepening the theoretical foundations of patient simulation as social practice. Simulation in Health Care 2007;2(3):183-193.
- 37. Dieckmann P, Phero JC, Issenberg SB, et al. The first Research Consensus Summit of the Society for Simulation in Health Care: Conduction and a Synthesis of the Results. Simulation in Health Care 2011;6(7):S1-S9.
- 38. Dieckmann P, Rall M. Designing a scenario as a simulated clinical experience: the TuPASS scenario script. Clinical Simulation: Operations, Engineering, and Management 2008;541-550.
- 39. Drews FA, Bakdash JZ. Simulation training in health care. Reviews of Human Factors and Ergonomics 2013;8(1):191-234.
- 40. Durham C, Alden K. Enhancing patient safety in nursing education through patient simulation. In Hughes R, ed. Patient safety and quality: an evidence-based handbook for nurses. Rockville: Agency for Healthcare Research and Quality; 2008 (vol. 3):221-260.
- 41. Edmondson AC. Psychological safety and learning behavior in work teams. Administrative Science Quarterly 1999;44:350-383.
- 42. Ellaway R, Poulton T, Fors U, et al. Building a virtual patient commons. Medical Teacher 2008;30(2):170-4.
- Endsley M. Toward a theory of situation awareness in dynamic systems. Human Factors and Ergonomics Society 1995;37(1):32-64.

- 44. Ericson KA, Krampe RT, Tesch-Romer C. The role of deliberate practice in the acquisition of expert performance. Pyschological Review 1993;100(3):363-406.
- 45. Fanning RM, Gaba DM. The role of debriefing in simulation-based learning. Simulation in Health Care 2007;2(2):115-125.
- 46. Forest FC. Bristol Medical Simulation Center.
- 47. Freeth DS, Hammick M, Reeves S, et al. Effective interprofessional education: development, delivery, and evaluation. Somerset NJ:John Wiley & Sons; 2008.
- 48. Fuchs H, State A, Pisanp E, et al. Towards performing ultrasound guided needle biopsies from within a head-mounted display. Proceedings of the Fourth International Conference on Visualization in Biomedical Computing (VBC). Berlin: Springer Berlin Heidelberg;1996, p. 591-600.
- 49. Gaba DM. The future vision of simulation in health care. Quality and Safety in Health Care 2004;13(suppl 1):i2-i10.
- 50. Hamstra SJ, Brydges R, Hatala R, et al. Reconsidering fidelity in simulation-based training. Academic Medicine 2014;89(3):387-392.
- 51. Hancock PA, Vincenzi DA, Wise, JA, Mouloua M, eds. Human factors in simulation and training. Aldershot: CRC Press; 2008
- 52. Harden RM. What is an OSCE? Medical Teacher 1988;10(1):19-22.
- 53. Harper D. Online etymology dictionary. (2007). Available from: www.etymonline.com/index.php
- 54. Higgins M, Ishimaru A, Holcombe R, Fowler A. Examining organizational learning in schools: the role of psychological safety, experimentation, and leadership that reinforces learning. Journal of Educational Change 2012;13(1):67-94.
- 55. Husebø SE, Friberg F, Søreide E, Rystedt H. Instructional problems in briefings: how to prepare nursing students for simulation-based cardiopulmonary resuscitation training. Clinical Simulation in Nursing 2012;8:307-318.
- 56. International Education Collaborative. Core competencies for interprofessional, collaborative practice: report of an expert panel. Washington DC: Interprofessional Education Collaborative; 2011.
- 57. International Nursing Association for Clinical Simulation and Practice Learning Board of Directors. Standard I: Terminology Clinical Simulation in Nursing 2011; 7(4S). doi:10.1016/j.ecns.2011.05.005
- 58. International Nursing Association for Clinical Simulation and Practice Learning Standards Committeee. Standards of best practice in simulation: simulation glossary. Clinical Simulation in Nursing 2016. doi.org/10.1016/j.ecns
- 59. Interprofessional Education Collaborative. Team-based competencies: building a shared foundation for education and clinical practice. Washington, DC: Interprofessional Education Collaborative; 2011.
- 60. IIssenberg SB, Ringsted C., Østergaard D, & Dieckmann P. Setting a research agenda for simulation-based health care education: a synthesis of the outcome from an Utstein style meeting. Simulation in Health Care 2001; 6(3): 155-167.
- 61. Johnson-Russell J, Bailey C. Facilitated debriefing. In Nehring, WM, Lashley FR, eds. High-fidelity patient simulation in nursing education. Boston, MA: Jones and Bartlett; 2010 p. 369-385
- 62. Jovanovic J, Chiong R. Introduction to the special section on game-based learning: Design and applications. Interdisciplinary Journal of Information, Knowledge and Management 2012 Aug;7:201.
- 63. Jovanović J, Chiong R, eds. Technological and Social Environments for Interactive Learning. Santa Rosa, CA: Informing Science Press; 2014.
- 64. King HB, Battles J, Baker DP. TeamSTEPPS: Team strategies and tools to enhance performance and patient safety. Advances in patient safety: new directions and alternative approaches. 2008:3.
- 65. Kneebone R, Arora S, King D, et al. Distributed simulation–accessible immersive training. Medical Teacher 2010;32(1):65-70.
- 66. Kneebone R, Kidd J, Nestel D, et al. An innovative model for teaching and learning clinical procedures. Medical Education 2002;36(7): 628-634.

- 67. Kozlowski SW, DeShon RP. A psychological fidelity approach to simulation-based training: theory, research and principles. In: Sala E, Elliott LR, Schflett SG, Coovert MD, eds. Scaled worlds: development, validation, and applications. Burlington, VT: Ashgate; 2004. p.75-99.
- 68. Kuiper RA, Pesut DJ. Promoting cognitive and metacognitive reflective reasoning skills in nursing practice: self-regulated learning theory. Journal of Advanced Nursing 2004; 45(4):381-391.
- Kyle R, Murray WB. Clinical simulation. Cambridge, MA: Academic Press; 2010.
- 70. Lave, J. Situating learning in communities of practice. In: Resnick LB, Levine JM, Teasley SD, eds. Perspectives on socially shared cognition. Washington, DC: American Psychological Association; 1991. p. 63-82.
- 71. Lekalakala-Mokgele E, du Randt P. Facilitation as a teaching strategy: The experiences of nursing students. Curationis 2005;28(4):5-11.
- 72. Lekalakala-Mokgele E, du Randt P. A model for facilitation in nursing education. Curationis 2005;28(2):22-29.
- 73. Levine, AI, DeMaria Jr S, Schwartz AD, Sim AJ. The comprehensive textbook of health care simulation. New York, NY: Springer Science & Business Media; 2013.
- 74. Mathieu JE, Heffner TS, Goodwin GF, Salas E, Cannon-Bowers JA. The influence of shared mental models on team process and performance. Journal of Applied Psychology 2000;85(2):273.
- 75. McComb S, Simpson V. The concept of shared mental models in health care collaboration. Journal of Advanced Nursing 2014;70(7):1479-1488.
- 76. McGaghie WC, Issenberg B, Petrusa ER, Scalese RJ. A Critical review of simulation-based medical education research: 2003–2009. Medical Education 2010;44(1), 50-63.
- 77. McGovern KT. Applications of virtual reality to surgery. BMJ: British Medical Journal 1994;308(6936):1054.
- 78. Meads G, Ashcroft J, Barr H, et al. The case for interprofessional collaboration: in health and social care. Malden, MA: Blackwell Publishing, Ltd.; 2008.
- 79. Meakim C, Boese T, Decker S, et al. Standards of best practice: simulation standard I: terminology. Clinical Simulation in Nursing 2013; 9(6S):S3-S11. http://dx.doi.org/10.1016/j.ecns.2013.04.001
- 80. Menix KD. Domains of learning. The interdependent components of achievable learning outcomes. Journal of Continuing Education in Nursing 1996;27:200-208.
- 81. Merriam-Webster Collegiate Dictionary. 10th ed. Springfield, MA: Merriam Co.; 1996.
- 82. Michael DR, Chen SL. Serious games: Games that educate, train, and inform. Thomson Course Technology; 2005. Available at https://openlibrary.org/publishers/Thomson\_Course\_Technology
- 83. Michaelsen LK, Parmelee DX, McMahon KK. Team-based learning for health professions education: a guide to using small groups for improving learning. Sterling, VA: Stylus Publishing, LLC.; 2008.
- 84. Murray J. Composing multimodality. Multimodal composition: a critical sourcebook. Boston: Bedford/St. Martin's; 2013.
- 85. National League for Nursing Simulation Innovation Resource Center, 2013. Retrieved from: http://sirc.nln.org/mod/glossary/view.php?id1/41834
- 86. Nestel D, Watson MO, Bearman ML, et al. Strategic approaches to simulation-based education: a case study from Australia. Journal of Health Specialties 2013;1(1):4.
- 87. Nieva VF, Sorra J. Safety culture assessment: a tool for improving patient safety in health care organizations. Quality and Safety in Health Care 2003;12(suppl 2):ii17-ii23.
- 88. Ören TI. Responsibility, ethics, and simulation. Transactions 2000;17(4).
- 89. Ören TI, Elzas MS, Smit I, Birta LG. Code of professional ethics for simulationists. In: Summer Computer Simulation Conference. Vista, CA: Society for Computer Simulation International; 2002 Jul:434-435.
- 90. Oxford Dictionary. Oxford, UK: Oxford University Press; 2010. Retrieved from http://oxforddictionaries.com/definition/english/VAR

- 91. Paige JB, Morin KH. Simulation fidelity and cueing: a systematic review of the literature. Clinical Simulation in Nursing 2013; 9(11):e481-e489.
- 92. Palaganas JC, Maxworthy JC, Epps CA, Mancini ME, eds. Defining excellence in simulation programs. China: Wolters Kluwer;2014.
- 93. Pazarci H. Online Etymology Dictionary. Review of the Faculty of Divinity University of Süleyman Demirel 2015;100(6 S 21):177.
- 94. Pilcher J, Goodall H, Jensen C, et al. Simulation-based learning: not just for nrp. Neonatal Network 2012;31:281-287.
- 95. Proctor MD, Campbell-Wynn L. Effectiveness, usability, and acceptability of haptic-enabled virtual reality and mannequin modality simulators for surgical cricothyroidotomy. Military Medicine 2014;179(3):260-264.
- 96. Raemer D, Anderson M, Cheng A, et al. Research regarding debriefing as part of the learning process. Simulation in Health Care 2011; 6(7):S52-S57.
- 97. Reeves S, Zwarenstein M, Goldman J, et al. Framework for action on interprofessional education and collaborative practice. Geneva: World Health Organization; 2010.
- 98. Rethans JJ, Gorter S, Bokken L, Morrison L. Unannounced standardized patients in real practice: a systematic literature review. Medical Education 2007;41(6):537-549.
- 99. Richter T, Pawlowski JM. The need for standardization of context metadata for e-learning environments. In: Proceedings of the e-ASEM Conference; 2007 October; Seoul, Korea.
- 100. Riley RH. Manual of simulation in health care. Oxford, UK: Oxford University Press; 2008.
- 101. Robinson S. Simulation: the practice of model development and use. London, UK: Palgrave Macmillan; 2014.
- 102. Robinson-Smith G, Bradley P, Meakim C. Evaluating the use of standardized patients in undergraduate psychiatric nursing experiences. Clinical Simulation in Nursing 2009;5(6):e203-e211. doi: 10.1016/j.ecns.2009.07.001.
- 103. Robles-De-La-Torre G. Principles of haptic perception in virtual environments in human haptic perception: basics and applications. Basel, Switzerland: Birkhäuser Basel; 2008.p. 363-379.
- 104. Robles-De-La-Torre G. The importance of the sense of touch in virtual and real environments. IEEE Multimedia 2006;1(3):24-30.
- 105. Rodgers C. Defining reflection: another look at John Dewey and reflective thinking. Teachers College Record 2002;104(4): 842-866.
- 106. Rogers R. Reflection in higher education: a concept analysis. Innovative Higher Education 2001;26(1):37-57.
- 107. Rudolph JW, Raemer DB, Simon R. Establishing a safe container for learning in simulation: the role of the presimulation briefing. Simulation in Health Care 2014; 9(6):339-349.
- 108. Rudolph JW, Simon R, Dufresne RL, Raemer DB. There's no such thing as "nonjudgmental" debriefing: a theory and method for debriefing with good judgment. Simulation in Health Care 2006;1(1):49-55.
- 109. Rudolph JW, Simon R, Raemer DB. Which reality matters? Questions on the path to high engagement in health care simulation. Simulation in Health Care 2007;2(3):161-163.
- 110. Rudolph JW, Simon R, Raemer DB, Eppich WJ. Debriefing as formative assessment: closing performance gaps in medical education. Academic Emergency Medicine 2008;15(11):1010-1016.
- 111. Rudolph JW, Simon R, Rivard P et al. Debriefing with good judgement: Combining rigorous feedback with genuine inquiry. Anesthesiology Clinics 2007;25(2):361-376.
- 112. Satava RM. Future of modeling and simulation in the medical and health sciences. In: Sokolowski JA, Banks CM, eds. Modeling and simulation in the medical and health sciences. Hoboken, NJ: John Wiley & Sons, Inc.; 2001. p. 175-194.
- 113. Satava RM. Surgical education and surgical simulation. World Journal of Surgery 2001; 25(11):1484-1489.

- 114. Satava RM, Morgan K, Sieburg HB, eds. Interactive technology and the new paradigm for health care. Clifton, VA: IOS Press; 1995. vol. 18.
- 115. Schön DA. The reflective practitioner: how professionals think in action. New York, NY: Basic Books; 1983. Vol. 5126.
- 116. Sieburg HB. Physiological studies in silico. Studies in the sciences of complexity 1990;12(2):321-342.
- 117. Smith-Stoner M. Using moulage to enhance educational instruction. Nurse Educator 2011;36:21-24.
- 118. Sokolowski JA, Banks CM, eds. Principles of modeling and simulation: a multidisciplinary approach. Hoboken, NJ: John Wiley & Sons; 2011.
- 119. Sundar E, Sundar S, Pawlowski J, et al. Crew resource management and team training. Anesthesiology Clinics 2007;25(2):361-376.
- 120. TEL thesaurus and dictionary meta-project. retrieved from: http://www.tel-thesaurus.net
- 121. Textbook of simulation: skills and team training, 1st ed. Woodbury, CT: Cine-Med, Inc.; 2012.
- 122. Thistlethwaite J, Moran M. Learning outcomes for interprofessional education (IPE): Literature review and synthesis. Journal of Interprofessional Care 2010;24(5):503-513.
- 123. Thomas R. The Je LSIM perspective; 203. Retrieved from http://www.simulationfirst.com/s1.html
- 124. Thompson DV, Hamilton RW, Petrova PK. When mental simulation hinders behavior: The effects of process-oriented thinking on decision difficulty and performance. Journal of Consumer Research 2009;36(4):562-574.
- 125. Tolk A, Turnitsa CD, Diallo, SY, Winters LS. Composable M&S web services for net-centric applications. The Journal of Defense Modeling and Simulation: Applications, Methodology, Technology 2006;3(1):27-44.
- 126. Tsuda ST, Scott DJ, Jones DB, eds. Textbook of simulation: skills & team training. Woodburgy, CT: Ciné-Med Pub; 2012.
- 127. Tucker B. The M&S workforce profession; 2010. Retrieved from http://www.scs.org/magazines/2010-04/index\_file/Files/Tucker.pdf.
- 128. Uys LR, Van Rhyn LL, Gwele NS, et al. Problem-solving competency of nursing graduates. Journal of Advanced Nursing 2004;48(5):500-509.
- 129. Van de Ridder JM, Stokking KM, McGaghie WC, Ten Cate OTJ. What is feedback in clinical education? Medical Education 2008;42(2): 189-197.
- 130. Waldner MH, Olson JK. Taking the patient to the classroom: Applying theoretical frameworks to simulation in nursing education. International Journal of Nursing Education Scholarship 2007;4(1).
- 131. Watson K, Wright A, Morris N, et al. Can simulation replace part of clinical time? Two parallel randomized controlled trials. Medical Education 2012;46(7):657-667.
- 132. Westli HK, Johnsen BH, Eid J, et al. Teamwork skills, shared mental models, and performance in simulated trauma teams: an independent group design. Scandinavian Journal of Trauma, Resuscitation, and Emergency Medicine 2010;18(1):47-54.
- 133. WHO Study Group on Interprofessional Education and Collaborative Practice. Geneva, Switzerland: World Health Organization. http://www.who.int/hrh/resources/framework\_action/en/index.html.
- 134. Zulkepli J, Eldabi T, Mustafee N. Hybrid simulation for modelling large systems: An example of integrated care model. In: Proceedings of the 2012 Winter Simulation Conference (pp. 1-12). Piscataway, NJ: IEEE.
- 135. Zyda M. From visual simulation to virtual reality to games. Computer 2005;38(9):25-32.

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