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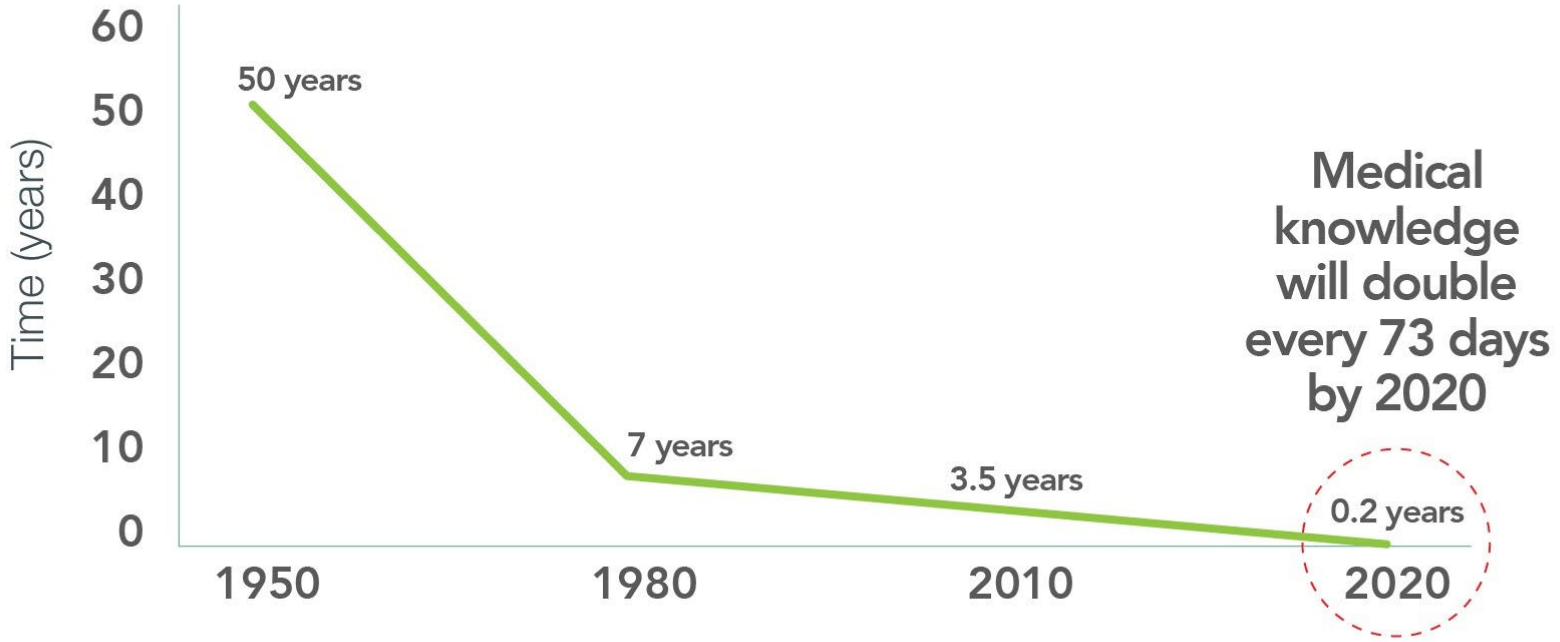
Time To Double Medical Knowledge Is Decreasing



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Peter Densen, MD, 2011

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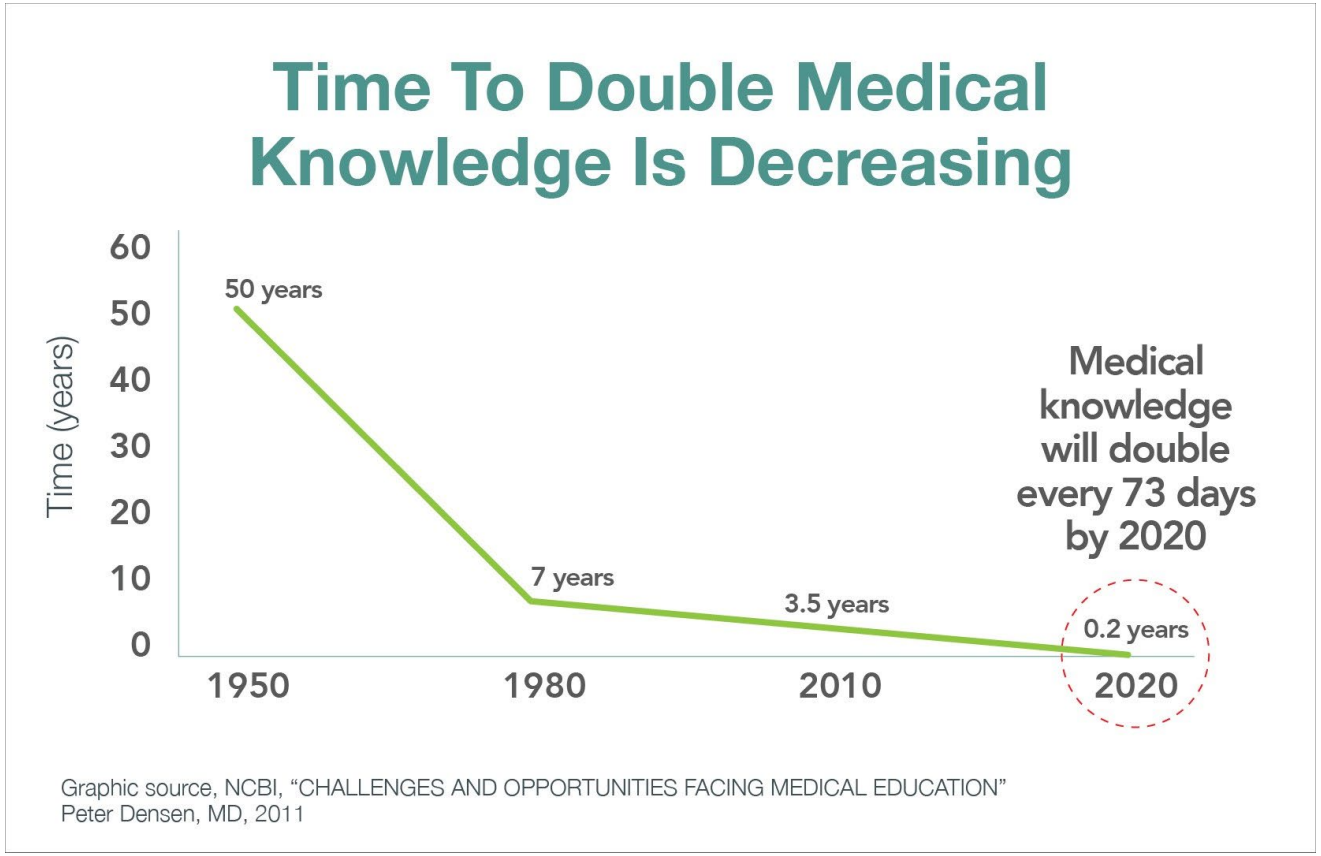

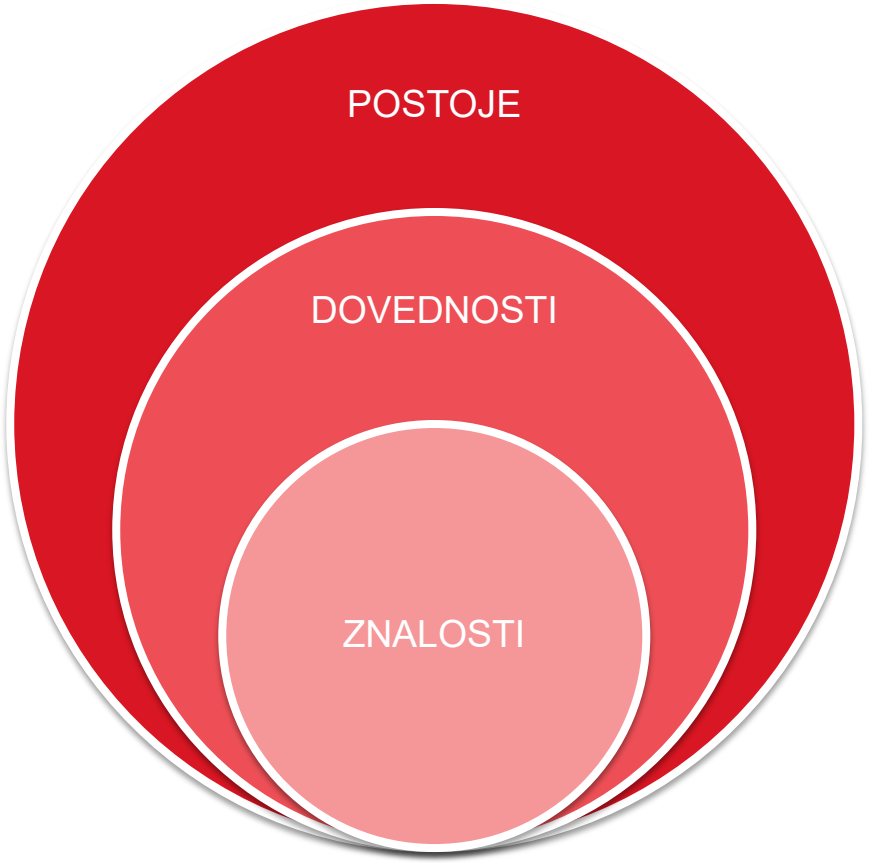

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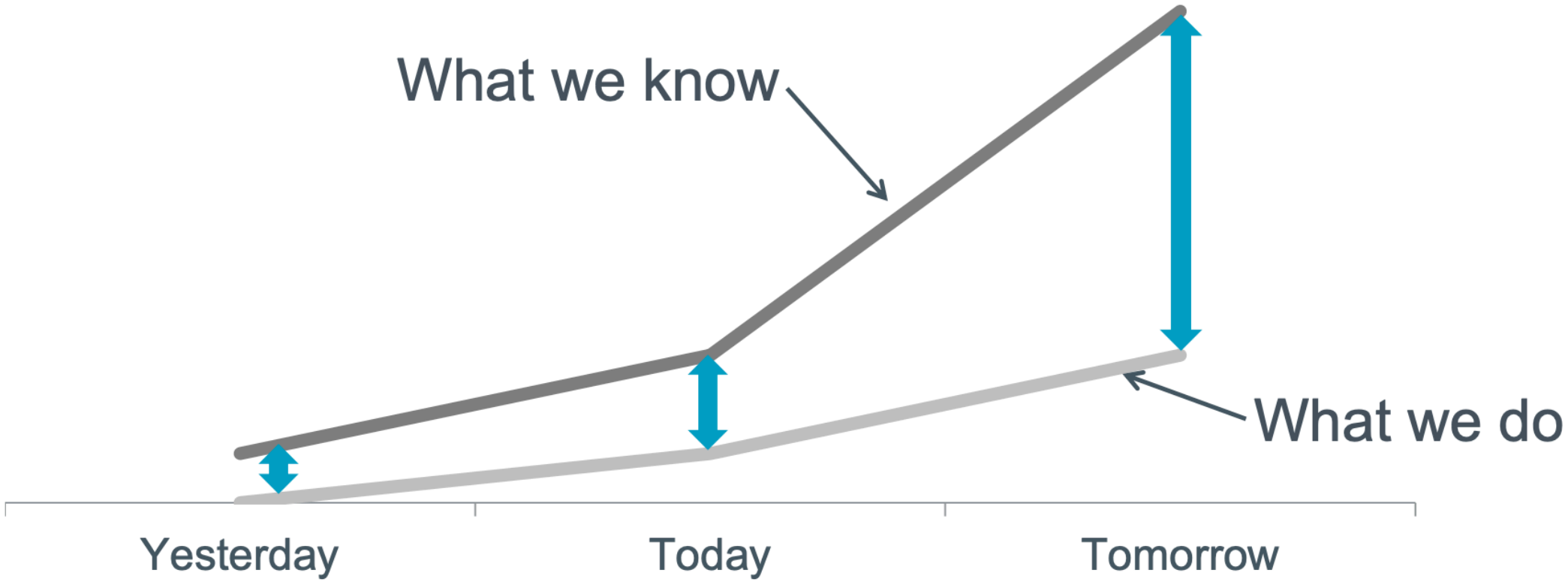
The Know-Do Gap



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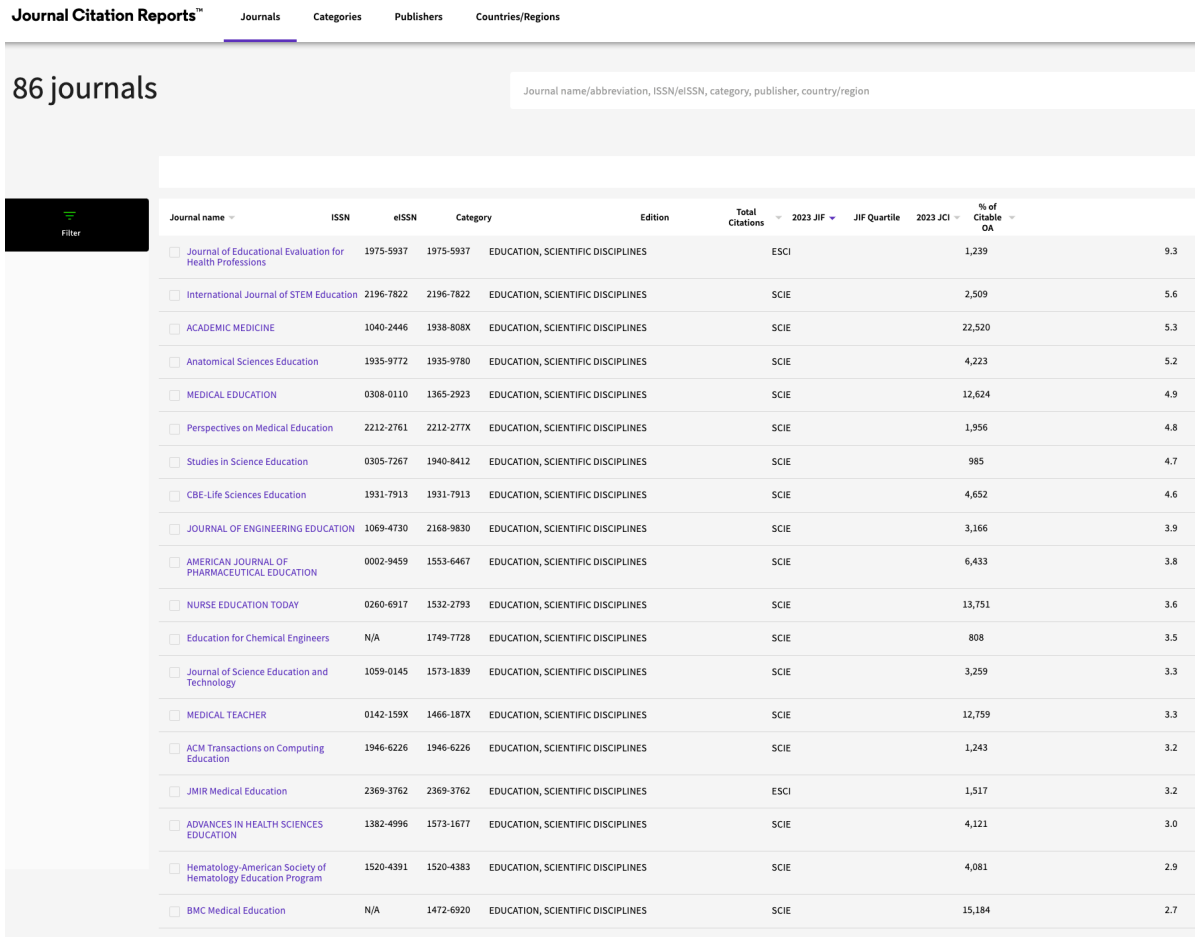
Evidence-based medical education



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International Journal of STEM Education	2196-7822	2196-7822	EDUCATION, SCIENTIFIC DISCIPLINES	SCIE				2,509	5.6
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Hematology-American Society of Hematology Education Program	1520-4391	1520-4383	EDUCATION, SCIENTIFIC DISCIPLINES	SCIE				4,081	2.9
BMC Medical Education	N/A	1472-6920	EDUCATION, SCIENTIFIC DISCIPLINES	SCIE				15,184	2.7

- BEME Collaboration
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Brick by Brick: The Origins, Development, and Future of Self-Determination Theory

Sebedeterminační teorie

= teorie motivace

Sebedeterminační kontinuum

Richard M. Ryan[*,1], **Edward L. Deci**[†]

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†University of Rochester, Rochester, NY, United States

[1]Corresponding author: e-mail address: richard.ryan@acu.edu.au

Abstract

Self-determination theory is a broad and widely applied theory of motivation, personality development, and wellness. The theory began with a narrow focus on intrinsic motivation but has expanded over time to encompass both intrinsic and extrinsic motivations and spawned new perspectives on well-being, life-goals, relationship quality, vitality and depletion, and eudaimonia, among other topics. In this overview of SDT, we first discuss the value of broad theory for psychological science. We then describe the strategy behind SDT's development, and the unfolding of its core mini-theories and topical models, from early studies on intrinsic motivation to the enormous body of research being produced today by a global community of SDT scholars. Throughout we highlight evidence for the critical role of supports for autonomy, competence and relatedness in human development and thriving, and the strong practical and translational value of a functionally-focused, and empirically-supported, theoretical framework.

„Představuje to, co lidi posouvá kupředu a co uvádí v chod sociální jednání“

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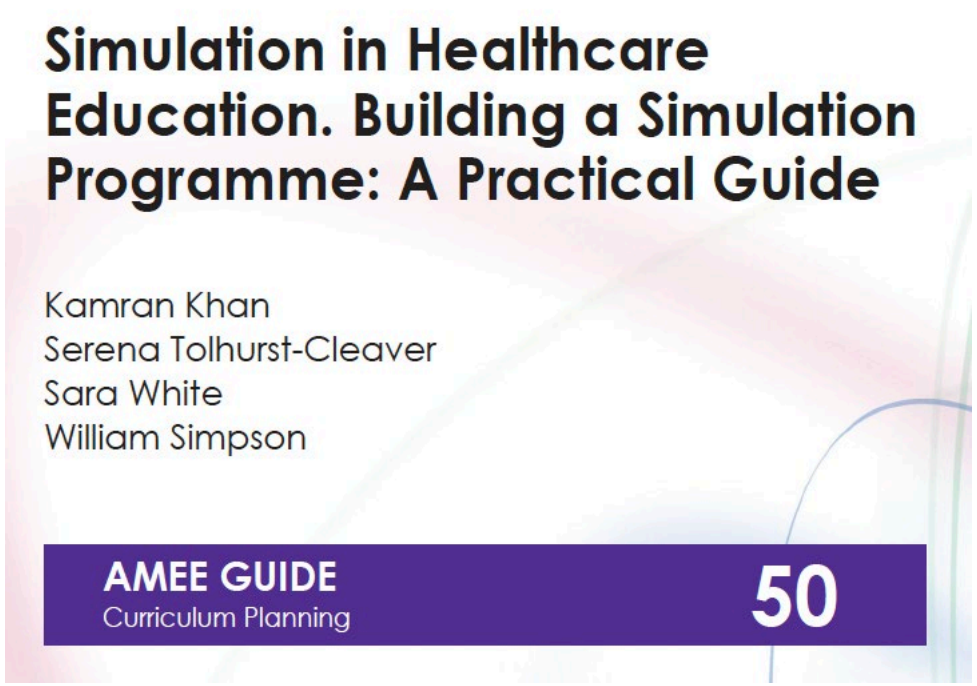

Základní principy simulačního vzdělávání a budování programu

WEB PAPER
AMEE GUIDE

Simulation in healthcare education: A best evidence practical guide. AMEE Guide No. 82

IVETTE MOTOLA[1], LUKE A. DEVINE[2], HYUN SOO CHUNG[3], JOHN E. SULLIVAN[1] & S. BARRY ISSENBERG[1]
[1]University of Miami Miller School of Medicine, USA, [2]Mount Sinai Hospital, Toronto, Canada, [3]Yonsei University College of Medicine, Seoul, Korea

Abstract

Over the past two decades, there has been an exponential and enthusiastic adoption of simulation in healthcare education internationally. Medicine has learned much from professions that have established programs in simulation for training, such as aviation, the military and space exploration. Increased demands on training hours, limited patient encounters, and a focus on patient safety have led to a new paradigm of education in healthcare that increasingly involves technology and innovative ways to provide a standardized curriculum. A robust body of literature is growing, seeking to answer the question of how best to use simulation in healthcare education. Building on the groundwork of the Best Evidence in Medical Education (BEME) Guide on the features of simulators that lead to effective learning, this current Guide provides practical guidance to aid educators in effectively using simulation for training. It is a selective review to describe best practices and illustrative case studies. This Guide is the second part of a two-part AMEE Guide on simulation in healthcare education. The first Guide focuses on building a simulation program, and discusses more operational topics such as types of simulators, simulation center structure and set-up, fidelity management, and scenario engineering, as well as faculty preparation. This Guide will focus on the educational principles that lead to effective learning, and include topics such as feedback and debriefing, deliberate practice, and curriculum integration – all central to simulation efficacy. The important subjects of mastery learning, range of difficulty, capturing clinical variation, and individualized learning are also examined. Finally, we discuss approaches to team training and suggest future directions. Each section follows a framework of background and definition, its importance to effective use of simulation, practical points with examples, and challenges generally encountered. Simulation-based healthcare education has great potential for use throughout the healthcare education continuum, from undergraduate to continuing education. It can also be used to train a variety of healthcare providers in different disciplines from novices to experts. This Guide aims to equip healthcare educators with the tools to use this learning modality to its full capability.

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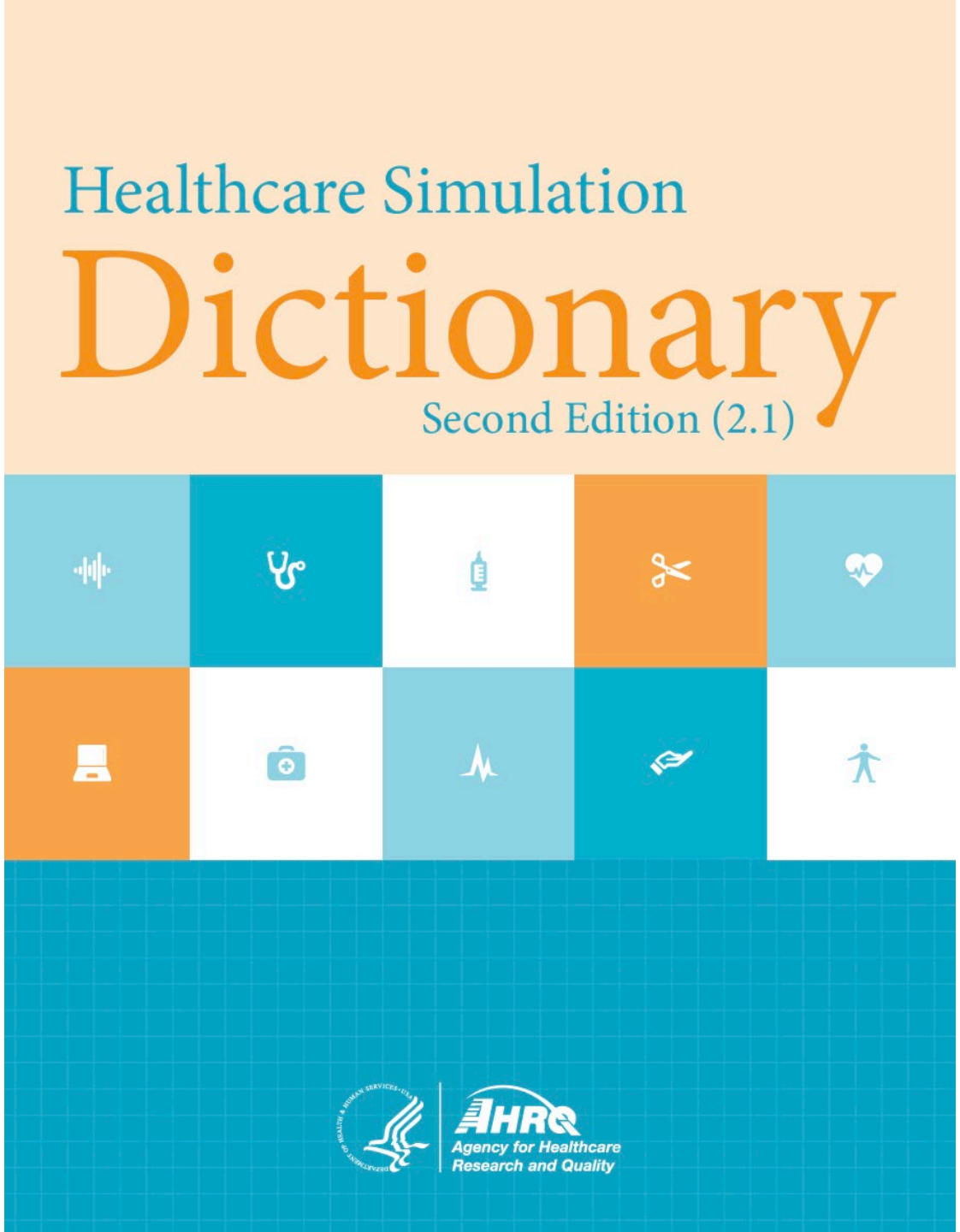
Definice termínů týkajících se simulačního vzdělávání



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Cognitive Load Theory for debriefing simulations: implications for faculty development

Kristin L. Fraser[1*], Michael J. Meguerdichian[2], Jolene T. Haws[3], Vincent J. Grant[4], Komal Bajaj[5] and Adam Cheng[4]

Abstract

The debriefing is an essential component of simulation-based training for healthcare professionals, but learning this complex skill can be challenging for simulation faculty. There are multiple competing priorities for a debriefer's attention that can contribute to a high mental workload, which may adversely affect debriefer performance and consequently learner outcomes. In this paper, we conceptualize the debriefer as a learner of debriefing skills and we discuss Cognitive Load Theory to categorize the many potential mental loads that can affect the faculty debriefer as learner. We then discuss mitigation strategies that can be considered by faculty development programmes to enhance professional development of debriefing staff.

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Cognitive Load Theory (CLT)

„CLT contends that in order to learn something novel, the learner must attend to, manipulate and understand the information in a conceptualized "area" of the brain known as "working memory". … Working memory is limited in both capacity and duration."

Intrinsic load:
Related to task difficulty and debriefer expertise

Extraneous load:
Imposed by poor instructional design and not relevant for learning

Germane load:
Conscious, effortful attempts to learn from the debriefing experience

Leveraging the Psychology of Change

How leaders can activate people to advance and sustain improved care.

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Institute *for* Healthcare Improvement

Leveraging the Psychology of Change

How leaders can activate people to advance and sustain improved care.

Psychology of Change framework

„The Psychology of Change framework recognizes the importance of identifying the ways in which all people affected by the improvement can meaningfully contribute to the improvement's solution."

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IHI Psychology of Change Framework

Unleash Intrinsic Motivation

Tapping into sources of intrinsic motivation galvanizes people's individual and collective commitment to act.

Adapt in Action

Acting can be a motivational experience for people to learn and iterate to be effective.

Co-Design People-Driven Change

Those most affected by change have the greatest interest in designing it in ways that are meaningful and workable to them.

Distribute Power

People can contribute their unique assets to bring about change when power is shared.

Co-Produce in Authentic Relationship

Change is co-produced when people inquire, listen, see, and commit to one another.

Source: Hilton K, Anderson A. *IHI Psychology of Change Framework to Advance and Sustain Improvement*. Boston, MA: Institute for Healthcare Improvement; 2018. ihi.org/psychology

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Establishing a Safe Container for Learning in Simulation

The Role of the Presimulation Briefing

Jenny W. Rudolph, PhD;

Daniel B. Raemer, PhD;

Robert Simon, EdD

Summary Statement: In the absence of theoretical or empirical agreement on how to establish and maintain engagement in instructor-led health care simulation debriefings, we organize a set of promising practices we have identified in closely related fields and our own work. We argue that certain practices create a psychologically safe context for learning, a so-called safe container. Establishing a safe container, in turn, allows learners to engage actively in simulation plus debriefings despite possible disruptions to that engagement such as unrealistic aspects of the simulation, potential threats to their professional identity, or frank discussion of mistakes. Establishing a psychologically safe context includes the practices of (1) clarifying expectations, (2) establishing a ''fiction contract'' with participants, (3) attending to logistic details, and (4) declaring and enacting a commitment to respecting learners and concern for their psychological safety. As instructors collaborate with learners to perform these practices, consistency between what instructors say and do may also impact learners' engagement. (*Sim Healthcare* 9:339–349, 2014)

Key Words: Debriefing, Prebrief, Psychological safety, Realism, Education

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Safe Container for Learning

„We believe that a strong presimulation briefing begins the process of creating a safe container for learning that allows learners to tolerate and welcome direct and critical feedback, create opportunities to “redo” a skill, work outside their comfort zone, accept and deal with surprises, change their current clinical practice, recast their current ways of thinking, and validate themselves as professionals.“

Managing psychological safety in debriefings: a dynamic balancing act

Michaela Kolbe ,[1,2] Walter Eppich,[3] Jenny Rudolph,[4,5] Michael Meguerdichian,[6,7] Helen Catena,[8] Amy Cripps,[8] Vincent Grant,[8,9] Adam Cheng[8,9]

ABSTRACT

Debriefings should promote reflection and help learners make sense of events. Threats to psychological safety can undermine reflective learning conversations and may inhibit transfer of key lessons from simulated cases to the general patient care context. Therefore, effective debriefings require high degrees of psychological safety—the perception that it is safe to take interpersonal risks and that one will not be embarrassed, rejected or otherwise punished for speaking their mind, not knowing or asking questions. The role of introductions, learning contracts and prebriefing in establishing psychological safety is well described in the literature. How to maintain psychological safety, while also being able to identify and restore psychological safety during debriefings, is less well understood. This review has several aims. First, we provide a detailed definition of psychological safety and justify its importance for debriefings. Second, we recommend specific strategies debriefers can use throughout the debriefing to build and maintain psychological safety. We base these recommendations on a literature review and on our own experiences as simulation educators. Third, we examine how debriefers might actively address perceived breaches to restore psychological safety. Re-establishing psychological safety after temporary threats or breaches can seem particularly daunting. To demystify this process, we invoke the metaphor of a 'safe container' for learning; a space where learners can feel secure enough to work at the edge of expertise without threat of humiliation. We conclude with a discussion of limitations and implications, particularly with respect to faculty development.

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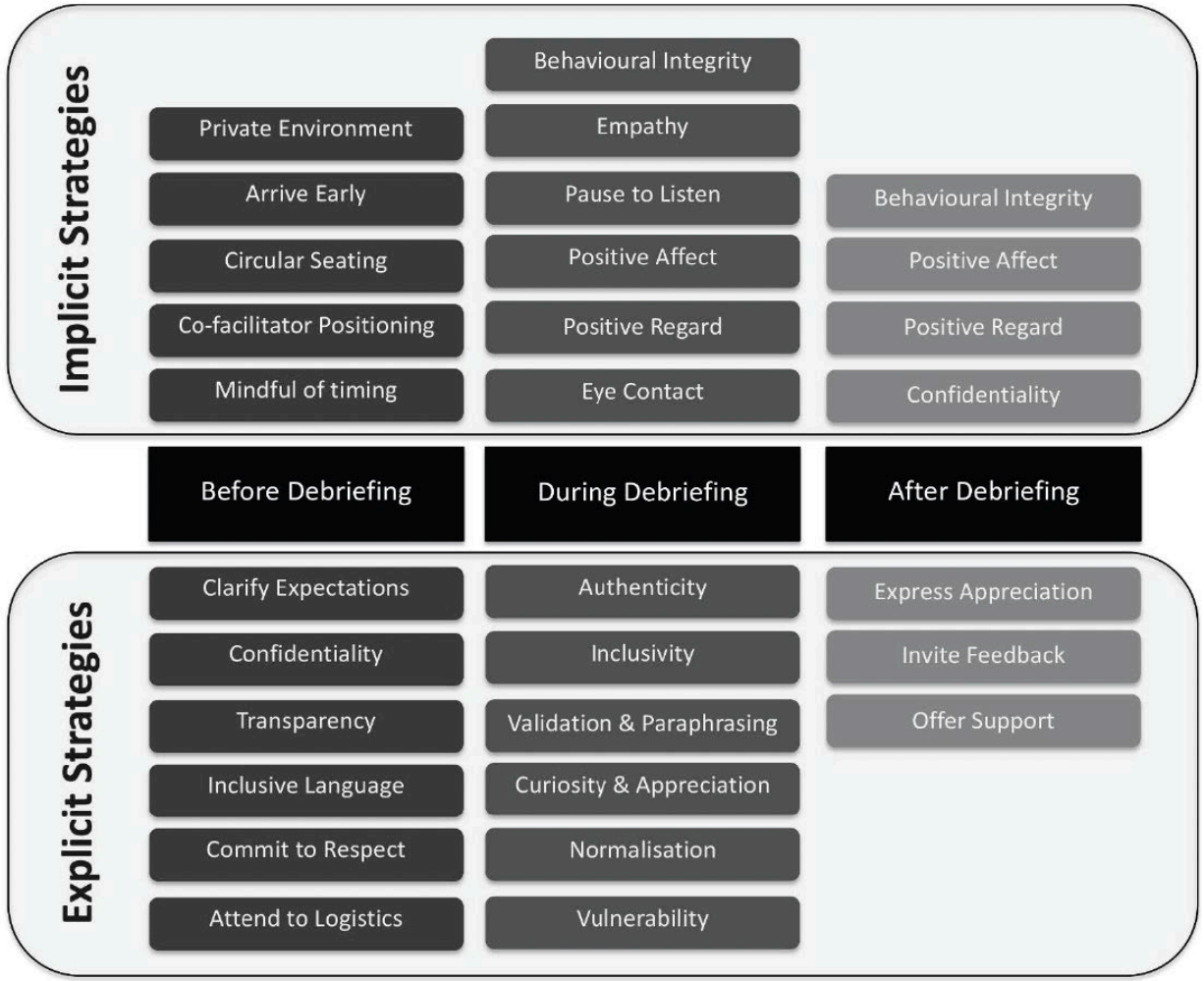
Psychological safety

„Psychological safety is a complex, fragile perception influenced by multiple factors interacting on organisational, team and individual level.“



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Co-debriefing for Simulation-based Education

A Primer for Facilitators

Adam Cheng, MD, FRCPC, FAAP;

Janice Palaganas, PhD, RN, NP;

Walter Eppich, MD, MEd;

Jenny Rudolph, PhD;

Traci Robinson, RN, BN;

Vincent Grant, MD, FRCPC

Summary Statement: As part of simulation-based education, postevent debriefing provides an opportunity for learners to critically reflect on the simulated experience, with the goal of identifying areas in need of reinforcement and correcting areas in need of improvement. The art of debriefing is made more challenging when 2 or more educators must facilitate a debriefing together (ie, co-debriefing) in an organized and coordinated fashion that ultimately enhances learning. As the momentum for incorporating simulation-based health care education continues to grow, the need for faculty development in the area of co-debriefing has become essential. In this article, we provide a practical toolbox for co-facilitators by discussing the advantages of co-debriefing, describing some of the challenges associated with co-debriefing, and offering practical approaches and strategies to overcome the most common challenges associated with co-debriefing in the context of simulation-based health care education.

(*Sim Healthcare* 10:69–75, 2015)

Key Words: Simulation, Facilitation, Debriefing, Co-facilitation, Co-debriefing, Education.

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Co-debriefing, co-debriefing checklist

„Some of the key advantages of co-facilitation are the potential for facilitators to complement each other's styles, to provide a larger pool of expertise with potentially diverse view points and to help cross-monitor and collectively manage learner expectations and needs. … Co-facilitators may also model effective teamwork, communication, and negotiation skills to help further enhance the learning outcomes from the simulation session. Finally, co-facilitation also offers the opportunity for enhanced faculty development through direct observation and peer feedback.“

Difficult debriefing situations: A toolbox for simulation educators

V. J. Grant[a,b], T. Robinson[b], H. Catena[b], W. Eppich[c] and A. Cheng[a,b]

[a]Department of Pediatrics and Emergency Medicine, Cumming School of Medicine, University of Calgary, Calgary, Canada; [b]KidSIM Simulation Program, Alberta Children's Hospital, Calgary, Canada; [c]Departments of Pediatrics and Medical Education, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, USA

ABSTRACT

Background: Simulation-based education (SBE) has emerged as an essential modality for health professions education. One of the central tenants of effective SBE is reflective practice, typically guided by a facilitated debriefing. The debriefing conversation has the possibility of becoming a difficult conversation based on learner and situation-related factors. Difficult debriefing situations may threaten the learning environment, thus requiring an appreciation and understanding of the various ways that learners may react adversely to simulation and debriefing.

Aim: This article provides a review of the various phenotypes of difficult debriefing situations and a toolbox of proactive and reactive strategies to help guide the simulation educator to manage these situations, with the ultimate goal of achieving learning objectives.

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Phenotypes of difficult debriefing situations

„Difficult debriefing situations are a threat to the psychological safety of the learning environment and may impact learning outcomes. Several manifestations (phenotypes) of difficult debriefing situations exist, each of which may be influenced to varying degrees by learner-specific and situation-specific factors.“

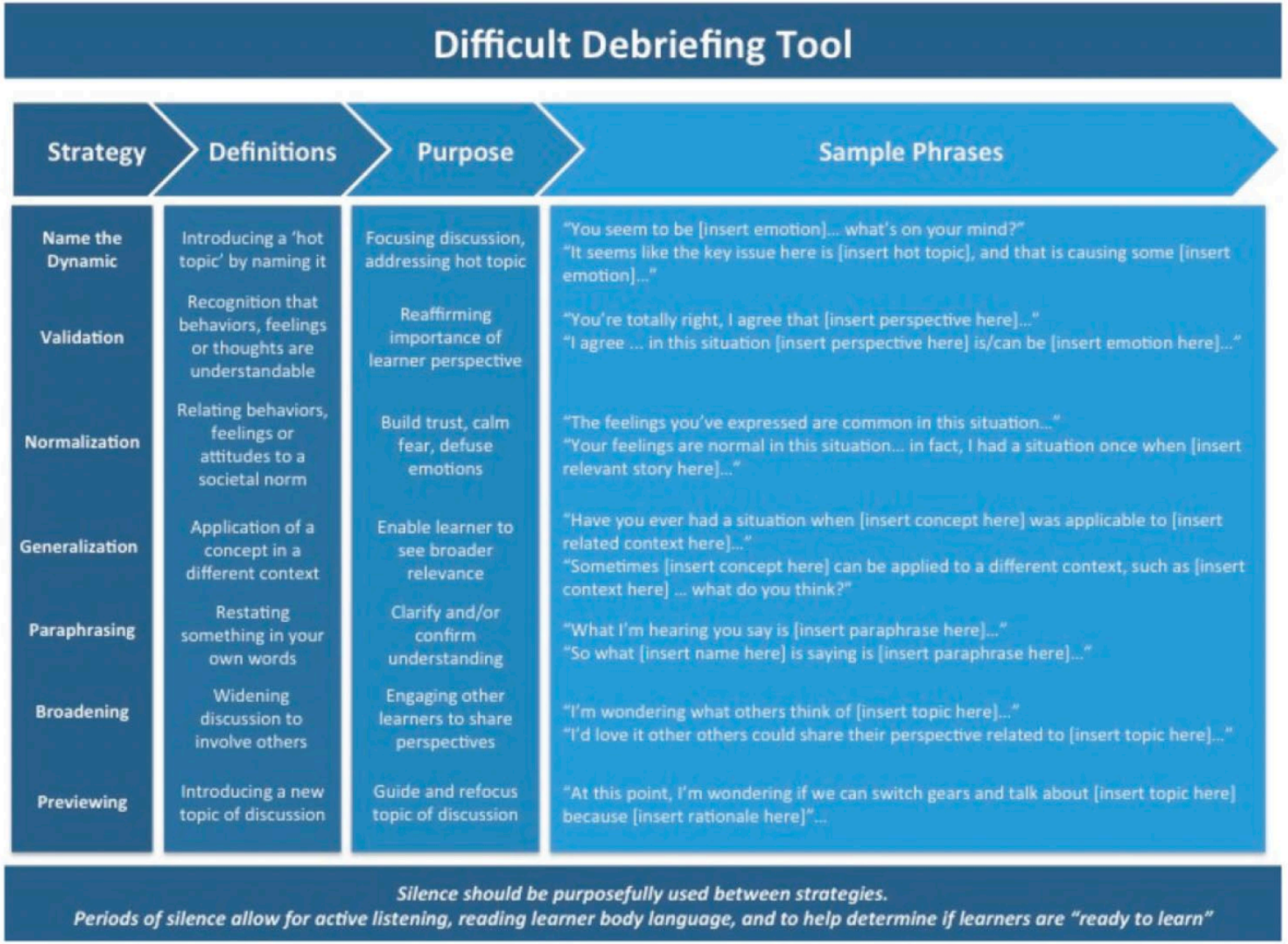

Figure 1. Difficult debriefing tool for simulation educators.

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How to debrief teamwork interactions: using circular questions to explore and change team interaction patterns

Michaela Kolbe[1,2*], Adrian Marty[1,3], Julia Seelandt[1,4] and Bastian Grande[1,3]

Abstract

We submit that interaction patterns within healthcare teams should be more comprehensively explored during debriefings in simulation-based training because of their importance for clinical performance. We describe how *circular questions* can be used for that purpose. Circular questions are based on social constructivism. They include a variety of systemic interviewing methods. The goals of circular questions are to explore the mutual dependency of team members' behavior and recurrent behavior patterns, to generate information, to foster perspective taking, to "fluidize" problems, and to put actions into relational contexts. We describe the nature of circular questions, the benefits they offer, and ways of applying them during debriefings.

Keywords: Debriefing, Teamwork, Circular question, System, Team interaction pattern

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Circular questions as a way of debriefing team interactions

„Discussions during debriefings tend to be focused on team members' individual behaviors and frames about their individual actions. This focus is important for uncovering the reasoning behind individual actions. Yet, it is potentially not sufficient for surfacing team dynamics because it does not yet allow for uncovering mutual dependency of behavior or self-reinforcing behavior patterns."

„Circular questions can complement this approach by highlighting the diversity of assumptions within a team, exploring team dynamics, and by helping the team to develop systemic solutions."

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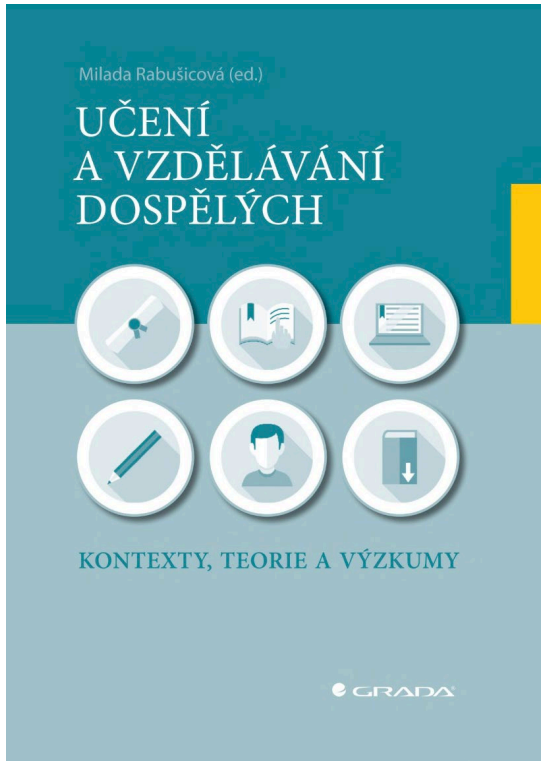

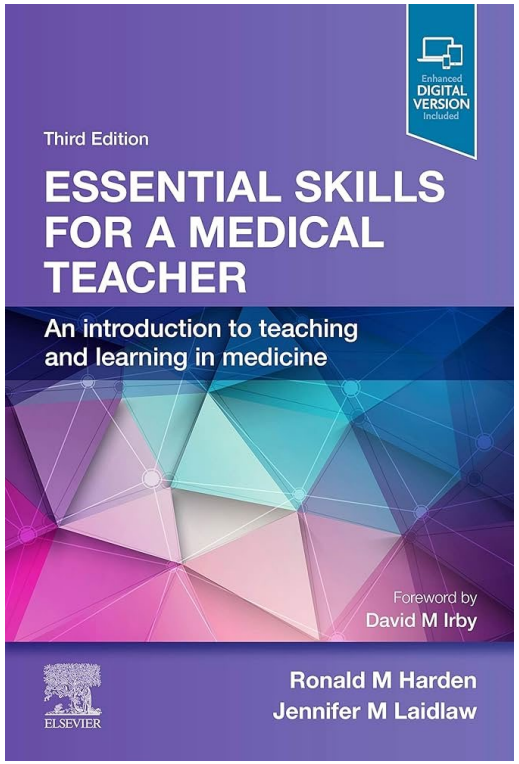

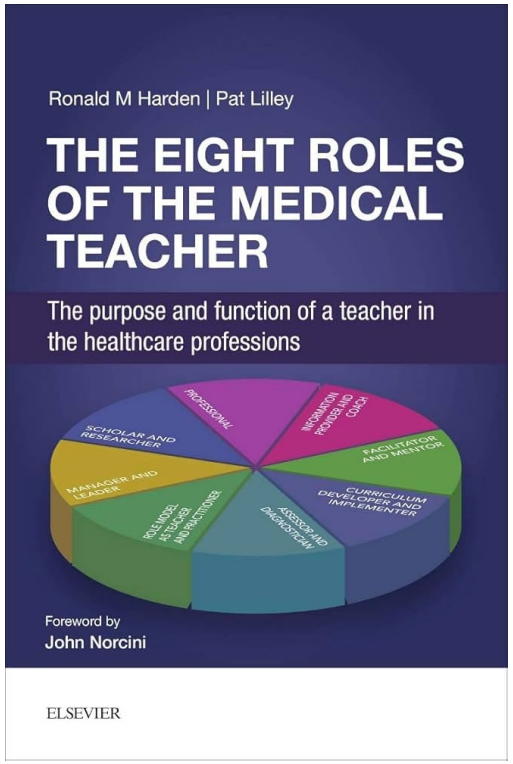

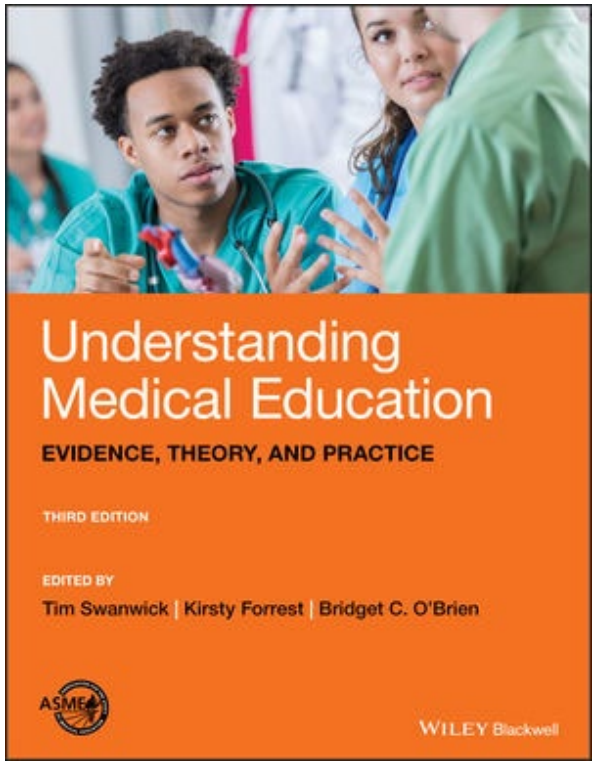

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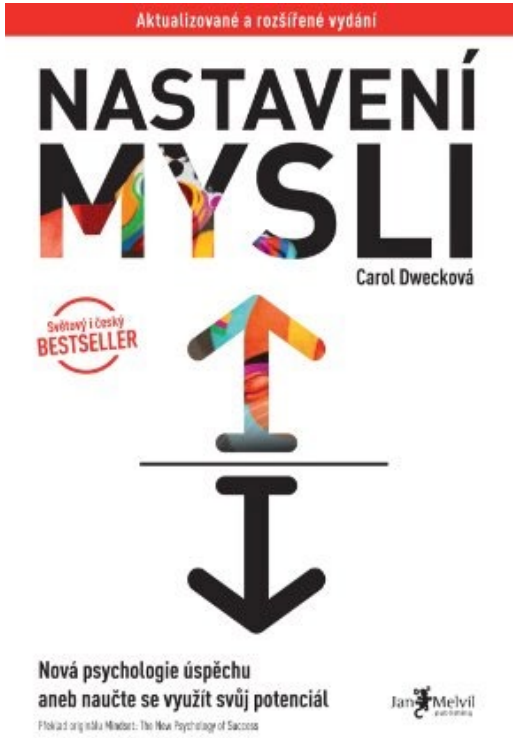

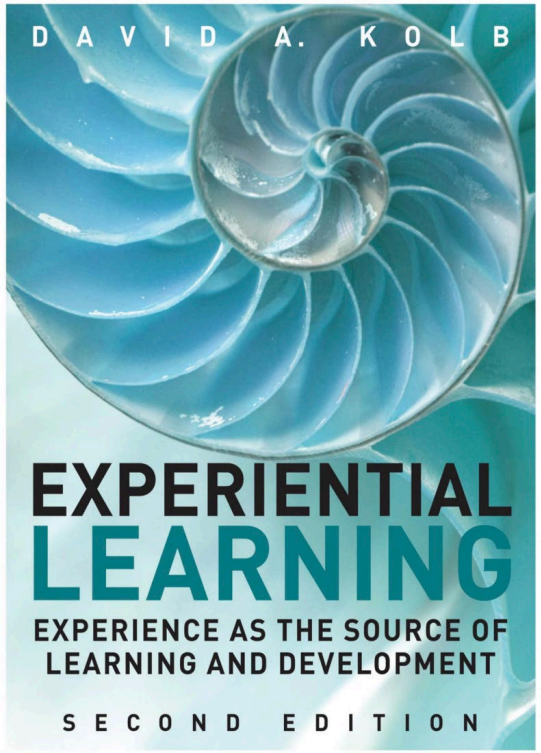

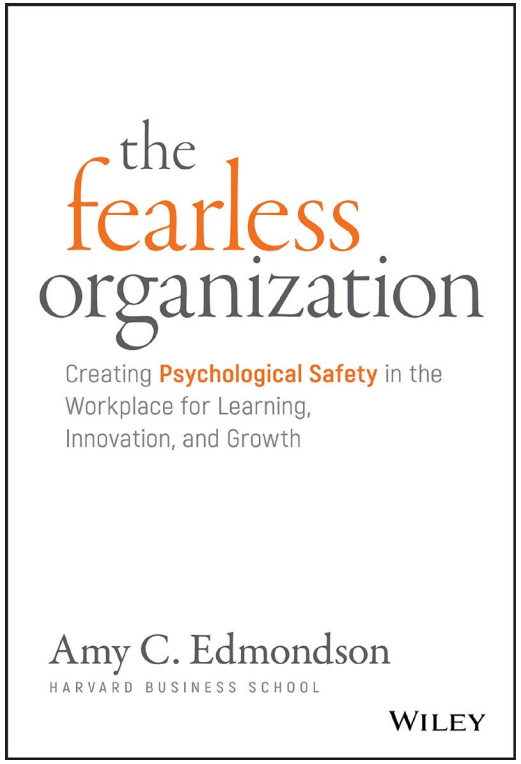

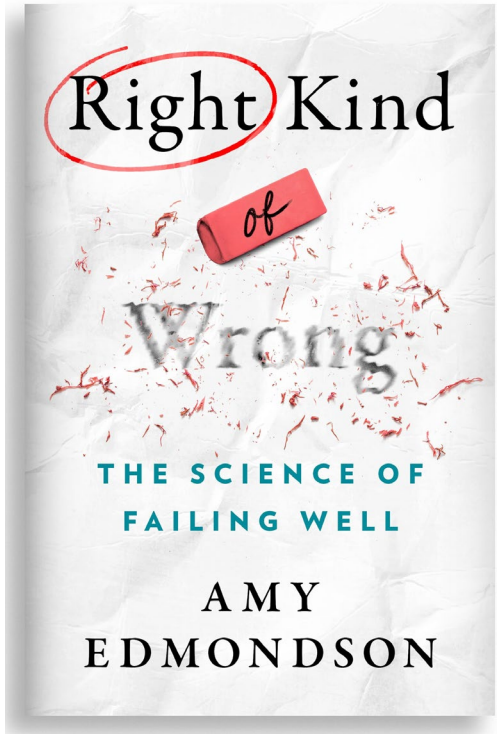

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Take home message:

Evidence existuje,
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