# Planning and Facilitating Debriefs of Experiential Learning Activities in Skills-Based Health Education

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#### ABSTRACT

**Purpose:** This paper highlights the importance of conducting structured, student-centered discussions, known as debriefs, following experiential learning activities in health education. Drawing upon Kolb's experiential learning theory and literature from scholars in simulation-based training, the authors outline key considerations for planning and facilitating debriefs. **Methods:** The debrief is initiated immediately following the learning experience. Students are prompted to describe and analyze their experiences, identify lessons learned, and discuss their application. **Conclusions:** Conducting debriefs with experiential learning activities helps students find meaning in their experiences and connect what they have learned to lesson objectives, the real word, and their own lives.

Keywords: Debrief, experiential learning, skills-based health education, transfer of learning

### INTRODUCTION

Until relatively recently, health instruction consisted primarily of using teacher-centered, didactic approaches to present students with large amounts of facts and information. The effectiveness of an information-only approach is based upon two interrelated assumptions: 1) Youth engage in risky behavior such as substance use because they are unaware of the

potential consequences of their actions; and 2) if youth knew the potential consequences of the risk behavior, they would choose not to engage in it (Botvin & Griffin, 2003). It has since been recognized that a skills-based approach with a focus on providing relevant, functional health information in conjunction with opportunities to develop essential skills is more effective at preparing students to engage in behavior that protect, promote or enhance their health and the health of others than was an information-only approach (Centers for Disease Control and Prevention, 2012; World Health Organization [WHO], 2003). According to the Center for Disease Control and Prevention (CDC), the most effective health education curricula use experiential learning strategies that allow students to apply functional knowledge and perform essential health skills through participation in authentic, real-life scenarios (2012). Put another way, the most effective health education curricula provide students with opportunities to learn by doing.

Today, teachers use a wide array of experience-based teaching strategies in their lessons. education The impact health experience-based teaching strategies have on student learning, however, hinges on the degree to which students can connect the insights gained through the experiences to the lesson's learning objectives and ultimately to the real world and their own lives. Following an interactive activity, if time remains in a class period, many teachers use the last few minutes of the class period to close the lesson by reiterating the key points of the entire lesson. There is no concerted or deliberate effort by teachers to help students process what they might have learned particularly during the learning activity. In other instances, some teachers might intend to conduct a closure but unless adequate time is reserved for it, when time during the class period runs short, the planned closure is shortened or omitted entirely. In either case, teachers are leaving up to chance whether their students will be able to transfer what they learned during an experience-based learning activity to their own lives in relevant and useful ways. To avoid this risk, teachers must set aside time during the lesson to help students make these connections. This time must be respected as an integral part of the activity, rather than as a supplemental or afterthought that is included if time at the end of class allows. This paper describes how to plan and facilitate a

*debrief* and outlines a teacher-led, three-phase process through which students deconstruct an experience to identify its critical elements and explore its application to the real world. In specific, the aims of this paper include:

- Outlining factors that can influence students' ability to participate fully in experiential learning activities and debriefs and recommending strategies for minimizing or eliminating barriers to participation;
- Explaining how to plan and facilitate a three-phase debrief of experiential learning activities in health education;
- Providing a rubric with which to assess the planning and facilitation of debriefs of experiential learning activities in health education.

### TEACHING METHOD

# Experience-based learning and the experiential learning theory

Experience-based learning activities encourage engagement, foster decision-making and critical-thinking skills. and provide opportunities for students to apply functional knowledge and practice health-related skills in authentic ways. Today, teachers use a wide array of experience-based teaching strategies in their health education lessons. Kolb, an educational theorist, integrated and built upon earlier work by experiential learning scholars such as Dewey and Lewin to create the experiential learning theory to explain how people learn though experience (Kolb, 2015). Per the experiential learning theory, learning is defined as

"the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience. Grasping experience refers to the process of taking in information, and transforming experience is how individuals interpret and act on that information" (Kolb, 2015, p. 51).

Kolb (2015) theorized that learning through experience occurs through a four-phase, iterative process. Kolb described the process as beginning with the *experiencing* phase during which learners participate in a concrete or authentic experience. The second phase,

reflective observation, was described by Kolb as involving the careful consideration and summation of everything that happened during the experience from all perspectives, including their observations of and impressions about what occurred, when and where it occurred, and how and to whom it occurred. Learners are then prompted to compare their observations, emotions and understandings generated though the learning experience to their existing understandings and mental models of the phenomena. The third phase, referred to by Kolb as abstract conceptualization, involves extracting lessons to be learned through having participated in the experience and using these lessons to inform the revision of existing mental models and/or the creation of new plans of action for future experiences. During the fourth phase in the process, identified by Kolb as active experimentation, the learners are provided with opportunities to test out what they have learned in authentic or real-world situations. As the final phase in the process, active experimentation serves to provide learners with a fresh set of experiences upon which to reflect, thus restarting the four-phase learning cycle (Kolb, 2015).

# Debriefs: Translating an experience to lessons learned

Without proper guidance, however, students often struggle to understand how their impressions of an experience, manufactured or replicated in the artificial setting of the classroom, can be translated to and applied in situations they are likely to experience in the real world (Lederman, 1992; Nicholson, 2012). Furthermore, the highly engaging nature of participating in experience-based learning activities such as role plays can easily overshadow the teacher's intended learning outcome, reducing the educational value of the role play to little more than simply good theater. (Nicholson, 2012). Paige and colleagues (2015) suggested a formal process following the experiential learning experience is needed to "...beyond students help move merely 'experiencing' [the activity] and actually 'making sense' of what happened" (Paige et al., 2015, p. 127). A primary role of the teacher when using experience-based learning strategies in classroom settings is to help students make sense of their impressions and to learn from their experiences. This "facilitation of learning from experience," when conducted as a planned, integral element of the lesson or training, is

called a *debrief* (Greenaway, 2007, p. 60). In classroom settings, a debrief is a teacher-guided discussion used to help students process what happened during an experiential learning (EL) exercise, identify lessons to be learned from participating in the experience, and apply those lessons to the real world and to their own lives (Fanning & Gaba, 2007; Lederman, 1992; Lewis & Williams, 1994; Nicholson, 2012).

Debriefs are used across a wide range of training settings including medicine, aviation, disaster and crisis response, military, management, teambuilding and adventure education, among others (Bolton, 2016; Fanning & Gaba, 2007; Paige et al., 2015; Tannenbaum & Cerasoli, 2013). Greenaway, in Silberman's *Handbook of Experiential Learning* (2007, p. 61) listed the potential benefits of debriefing, including:

- Add value to what is already happening
- Increase awareness of other perspectives
- Develop communication and learning skills
- Help learners clarify, achieve, and even surpass their objectives
- Use success or failure as a source of learning and development
- Make benefits tangible and generate useful data for evaluation
- Improve prospects for the effective transfer of learning
- Communicate to students that you care about what they experience and value what they have to say, and that you are interested in the progress of each student's learning and development

#### TEACHING METHOD

In classroom settings, a debrief is a teacherguided discussion during which students are led through an exploration of what they learned during an EL experience and how they can apply what they learned to the real world and to their own lives (Fanning & Gaba, 2007; Nicholson, 2012). Debriefs are conducted immediately, or very soon after an experiential learning activity has concluded, when memories of events and feelings about the experience are still fresh in the minds of the students.

Step-by-step processes for facilitating debriefs have been described in the literature

with varying degrees of complexity (Fanning & Gaba, 2007). Such variability is necessary to meet the unique demands of each specific training application or context, the current knowledge and skills of participants and the desired learning outcomes of the experiential learning (EL) experience with which the debrief is employed. Fanning and Gaba (2007), after conducting a review of the simulation-based literature, concluded training that the frameworks for debriefing an EL experience or activity shared among them a number of principal elements. They further argued that these elements can be condensed into three phases (Fanning & Gaba, 2007, p. 117). The three-phase debrief described by Fanning and Gaba echo the features of three-phase model proposed by Steinwachs (1992) and since by other authors (also see Bolton, 2016; Lederman, 1992; Nicholson, 2012; U.S. Department of the Army, 2013). Steinwachs labeled the phases as the "description phase," the "analysis phase," and the "application phase" (1992, p. 187). The three-phase debrief model that follows aligns with the four-stage learning cycle of Kolb's ELT (see Kolb, 2015). This simple, three-phase process is well-suited for helping students reflect upon and make sense of EL experiences in their health education classes. In the sections that follow, planning considerations and steps for developing and facilitating each of the three phases of a debrief are discussed in detail.

#### Preliminary planning considerations

Prior to planning an EL activity and debrief for a group of students, teachers must consider factors that can influence student engagement in either the activity, the debrief, or both. The following preliminary considerations, if not properly addressed, can hinder or prevent students from participating in an EL activity or debrief to their fullest potential, regardless of how well they were planned. First among these considerations is classroom climate. When students perceive the classroom climate as physically and emotionally safe, they can feel free to participate in experiential learning experiences even though they may face difficult and unfamiliar challenges (Shukla, Konold, & Cornell, 2016). During the subsequent debrief, they can feel free to share their points of view about their experiences without fear of criticism or derision (Fanning & Gaba, 2007; Gillies, 2003). A positive classroom climate has the power to foster student engagement, encourage cooperation and collaboration among students,

and improve learning outcomes (Marzano, 2003; Shukla, Konold, & Cornell, 2016). Creating and maintaining a positive classroom climate depends a great deal on teachers' practicing effective classroom management and communicating clear expectations for student behavior (Marzano, 2003). Teachers are encouraged to incorporate whole class and small group activities in lessons leading up to an EL-based lesson to familiarize students with the ground rules and expectations for participation they must adhere to while participating in EL activities (Cinelli, Symons, Bechtel, & Rose-Colley, 1994).

In addition to the influence that the learning environment has on all the students in a class, a variety of individual factors affect each student's level of engagement in debriefs. Included among these individual factors is each student's developmental needs and characteristics. In keeping with the tenets of developmentally appropriate practice, teachers must be aware of, and responsive to the cognitive development, emotional maturity, and life experiences of their students (Cantor, 1995; Centers for Disease Control and Prevention, 2015; Fanning & Gaba, 2007; Telljohann, Symons, Pateman, & Seabert, 2015). Each of these characteristics will influence how students their interpret experiences and internalize what they learned (Fanning & Gaba, 2007).

A second source of influence on student engagement in debriefs at the individual level is a student's current level of mastery in several key, requisite skills. Debriefs are typically conducted as a group or class discussion. Therefore, included among these requisite skills are communication skills and group processing skills. For example, during the description phase of the debrief, students must be able to summarize their observations and feelings clearly, express their points of view assertively, and listen to others actively (Gillies & Boyle, 2010; Johnson & Johnson, 1999). Students who lack experience and confidence in performing these communication skills will likely have difficulty participating in debriefs. Second. debriefs and many of the EL activities upon which they are based are, by design, cooperative learning approaches. Teachers can support and foster student engagement in EL activities and debriefs by introducing their students to the elements of effective cooperative learning (see Johnson & Johnson, 1999) and

providing them with opportunities to practice working in small groups and participating in class discussions in advance (Davis, 2009; Telljohann et al., 2015).

A third consideration at the individual level that influence a student's participation in a debrief is the level of health knowledge and health skills that the student possesses relative to the topic being explored. Participation in the EL activity provides students with opportunities to draw upon their health knowledge to inform their decision-making and perform an array of essential health skills (i.e. analyze influences, access information and resources, perform actions to improve health or reduce risk, etc.). When planning EL activities and debriefs for students who are in the early stages of acquiring functional health information and developing new health skills, teachers should select activities that will facilitate the scaffolding of instruction and provide a safe, non-threatening environment in which to practice new skills, receive helpful feedback and build selfconfidence. Debrief discussion prompts that focus on describing models and attributes of performance, and exemplarv identifying elucidating incremental steps that led to success, and formulating plans for revising one's actions during future trials are all appropriate at this stage.

When working with students who already possess advanced levels of health knowledge and skill, teachers can increase the degree of complexity by designing EL activities that support the use of multiple or combinations of health skills and allow for greater variability among possible inputs and outcomes. They can complement these activities with debrief discussion prompts that explore contingency planning across a range of real world applications and life experiences. Regardless of the level of sophistication, the debrief serves as the means through which the experiences that students had during the activity become the foundation for learning.

One final point with respect to supporting student participation: If students believe they will be evaluated or graded on what they write or say during the debrief, they are less likely to be open and candid in their reflections (Nicholson, 2012). For example, students who struggled to perform a specific task might be reluctant to share their experiences if they thought doing so would result in earning lower marks on the task. For this reason, experts have argued against using the insights shared by students during debriefs as a form of summative assessment for grading purposes (Markulis & Strang, 2003; Nicholson, 2012).

With careful planning, debriefs can be tailored to fit any EL activity, any group of students, and any level of existing knowledge and skill development. Students' participation in debriefs and in the experiential learning activities upon which they are based is influenced by a myriad of environmental and individual factors. These factors include the classroom climate. relationships among students and their ability to work together, and the developmental attributes, past life experiences, and the current health knowledge/skills of the students (Fanning & Gaba, 2007; Lederman, 1992). Anticipating the influence of these factors and planning accordingly will help teachers minimize and possibly eliminate barriers that often prevent students from participating to their fullest potential and greatest benefit (Fanning & Gaba, 2007; Lederman, 1992).

#### Planning the debrief

Once teachers are confident that their students are equipped with the requisite communication and group processing skills and an adequate level of health essential skills and functional knowledge about the topic of interest to participate in the lesson to their greatest potential, teachers are ready to proceed with selecting the EL activity and planning the debrief. Planning the debrief begins with identifying the intended learning objectives for the EL activity (Bolton, 2016; Lederman, 1992). The learning objectives should identify learning targets for using health functional knowledge, demonstrating health-related skills. and examining health-related personal beliefs and group norms. The learning objectives should also align with the National Health Education Standards and, where applicable, state and local standards. These student learning objectives guide the selection of the EL activity and the discussion prompts to be used during the debrief (Bolton, 2016; Wiggins & McTighe, 2005).

After the learning objectives for the lesson have been determined, the next planning task is selecting the specific participatory learning strategy and planning the EL activity upon which the debrief will be based. In experiential learning, students acquire new knowledge, develop skills, and examine personal perceptions through, and as the result of, participating in the learning experience (Cantor, 1995; Fanning & Gaba, 2007; Lederman, 1992). Whether adapting an existing participatory learning strategy or developing a new one for a specific application, an activity adapted for use as an experiential learning experience in elementary and secondary health education lessons should have the following attributes:

- Opportunities to apply the functional health knowledge while performing the essential health skills that were specified in the learning objectives (Centers for Disease Control and Prevention, 2012)
- Opportunities to experience what they are learning about in authentic ways (Association for Experiential Education, n.d.)
- Opportunities for learning through trial and error and from one's own mistakes (Association for Experiential Education, n.d.)
- Learning content that students perceive as directly useful, with practical and personal relevance in the real world and in their own lives (Centers for Disease Control and Prevention, 2012; Telljohann et al., 2015; World Health Organization [WHO], 2003)
- Opportunities for the personalization of health-promoting attitudes, knowledge and skills (Centers for Disease Control and Prevention, 2012) and the assimilation of feedback and learning into future behavior and performance (US Department of the Army, 2013)
- Opportunities for reflection and selfassessment (Association for Experiential Education, n.d.)

Note that this list of attributes highlights the qualitative nature of experiences afforded by participating in an EL activity, rather than the specifications of a product or performance associated with completing the activity. Like the popular saying, "It's not about the destination; it's about the journey," in experiential learning, the degree to which students are successful in completing a specific task or challenge is less important than the insights gained while engaged in the experience.

health education In the classroom, participatory. experience-based learning strategies "utilize the experience, opinions, and knowledge of group members; provides a creative context for the exploration and development of possibilities and options; and affords a source of mutual comfort and security that aids the learning and decision making process" (CARICOM & UNICEF, 1999 as cited in World Health Organization [WHO], 2003, p. 13). Participatory learning strategies commonly used for building health-related skills through experiential learning include:

- One-on-one rehearsals
- Unscripted role plays
- Skits (scripted role plays)
- Scenarios and decision stories
- Situation analyses and case studies
- Tabletop drills
- Simulations
- Metaphors and analogies (World Health Organization [WHO], 2003)

A number of contextual factors should be considered when deciding which of these EL strategies holds the greatest potential to help students acquire the knowledge and skills identified in the learning objectives. First, in keeping with the tenets of developmentally appropriate practice, teachers must be sensitive to the cognitive development, emotional maturity, and life experiences of their students (Cantor, 1995; Centers for Disease Control and Prevention, 2015; Fanning & Gaba, 2007; Telljohann et al., 2015). Each of these will how characteristics affect students participate in an EL activity, the lens through which they observe the events that occurred, and the meanings they assign to their experiences (Fanning & Gaba, 2007).

A second contextual factor to consider when selecting the EL strategy is the amount of time available during the class or training period. In experiential learning, students learn as a result of participating in an activity or exercise and the subsequent debrief serves to guide students through reflecting upon the implications and applications of what they experienced (Lederman, 1992). Consequently, the sum of both pieces are integral to the impact the experience will have on student learning (Lederman, 1992). If time during the instructional period expires and either part cannot come to fruition, the overall impact the experience has on

student learning is likely to be compromised. Exactly how much time during a lesson should be reserved for an EL activity and debrief is influenced by the type and complexity of the EL activity planned as well as the level of depth and breadth of discussion desired for the debrief. and the number of students in the class and the pace at which they work. Additional factors that can influence the selection of one EL strategy over another strategy include having access to the instructional resources and materials the physical characteristics needed, and accessibility of the classroom space, and the teacher's own expertise and familiarity with conducting experience-based learning activities. Lederman (1992) referred to the "contextual factors that may have shaped the debriefing experience" collectively as "situational constraints" and emphasized the degree to which a debrief is effective in achieving the educational goals of the lesson depends on how effectively teachers anticipated and addressed them (p. 155). Fortunately, even when an EL activity does not go as planned, a well-executed debrief will help students glean valuable lessons from the experience (Nicholson, 2012).

After an appropriate EL strategy has been selected and the actual activity planned, teachers are ready to move on to planning the debrief. This final step involves drafting the reflection and discussion prompts that will be used to guide students through each phase of the debrief. Each phase of the debrief has a specific goal or purpose. The descriptions of each phase given here are an amalgamation of the three-phase models proposed by Lederman (1992) and by Steinwachs (1992). A number of general reflection and discussion prompts have been provided as examples (see Tables 1-3) but also to illustrate the focus of each phase. In practice, teachers will need to tailor the discussion prompts to match the unique parameters or demands of the EL activity, the learning objectives of the lesson they are planning and the developmental needs and attributes of their students.

#### Planning the description phase.

The first phase of the debrief, the *description* phase, is often the shortest of the three phases. During the description phase, students are prompted to provide an objective account of what happened during the activity from their unique points of view and to listen to descriptions and observations shared by other

students (Lederman, 1992; Steinwachs, 1992). The goal of this first phase is to help students develop a rich and detailed, collective understanding of what happened during the EL activity. Interrogatives such as who, what, when, where, why and how, also known as Five Ws and an H, or as journalists' questions, provide a simple framework upon which open-ended discussion prompts can be generated. General examples of prompts that can be adapted for use during the description phase are listed in Table 1. Close observation of students as they participate in the EL activity will likely provide additional contexts and "teachable moments" for more discussion. The information gleaned during the description phase becomes the starting point for the next phase.

#### Planning the analysis phase.

The second phase of the debrief, analysis phase, is often the longest and most in-depth of the three phases. The overarching purpose of the analysis phase is to guide students through the identification and investigation of lessons to be gleaned from participating in the activity. These lessons are examined from two perspectives. The first perspective examines what has been learned in relation to prior learning, current course content, and the intended learning objectives and performance expectations associated with participation in the EL activity (Lederman, 1992; Paige et al., 2015; Steinwachs, 1992; US Department of the Army, 2013). The second perspective examines what has been learned in relation to similar events and situations occurring in the real world (Lederman. 1992; Paige et al., 2015: Steinwachs, 1992; US Department of the Army, 2013). In specific, the goals of the analysis phase include helping students:

- Analyze the relationship between the information and skills they used during the activity and course/lesson content (Lederman, 1992; US Department of the Army, 2013).
- Determine the degree to which the intended learning objectives and performance expectations were achieved and which actions contributed to success and/or failure (Bolton, 2016; Lederman, 1992; US Department of the Army, 2013);
- Compare the simulated experiences of the EL activity to environments and situations they have experienced or expect to experience in their own lives

and in the real world (Lederman, 1992; Paige et al., 2015; Steinwachs, 1992; US Department of the Army, 2013).

 Identify and analyze cause and effect relationships occurring in the EL activity and extrapolate to predict outcomes across a variety of contexts in the real world (Steinwachs, 1992);

As the goals listed above reveal, participating in the analysis phase involves the use of higherorder cognitive and critical thinking skills to elucidate the lessons learned. General examples of prompts that can be adapted for use during the analysis phase are listed in Table 2.

Learner tasks associated with both the description phase and the analysis phase of the debrief, including describing the experience from multiple perspectives, comparing the new information and experiences to prior knowledge, and identifying lessons learned have been grouped together in the experiential learning theory as occurring during the reflective observation stage (see Kolb, 2015). When facilitating the debrief, however, creating a clear demarcation between description phase and the analysis phase serves as a reminder to teachers and students that each phase has unique goals associated with it.

#### Planning the application phase.

The third and final stage of the debrief is the *application* phase. The application phase of the debrief aligns with the abstract conceptualization stage of Kolb's experiential learning theory (Kolb, 2015). The purpose of this phase is to help students transfer or apply what they have learned to their own lives and behavior in personally meaningful ways. For this reason, of the three phases of the debrief, the application phase is likely the most important to health education teachers. The specific goals of the application phase include helping students:

- Translate what they learned about their thoughts, feelings and actions during the activity to how they might think, feel, and act in similar situations they are likely to encounter in the real world (Lederman, 1992);
- 2. Make the decision to act, set goals, and develop a plan for applying what they have learned to modify current behavior or to adopt new behavior.

Examples of prompts that can be adapted for use during the application phase are listed in Table 3.

There are no specific guidelines specifying how few or how many prompts must be discussed in each phase of the debrief. Time is a scare commodity in the health education classroom and the number of prompts planned for each phase of the debrief will influence how much time will be needed to complete the phase. Debriefs often run longer than anticipated (Bolton, 2016) so teachers should be conservative in the number of prompts they expect to cover, judicious in their selections, and generous in their estimations of how long they expect each phase will take to discuss. Fortunately, debriefs need not be exhaustive to be effective. Using the lesson's learning objectives as a guide, the number of prompts can often be distilled down to three or four key or high priority, essential questions for each phase. Supplementary prompts can be planned and kept in reserve in case the discussion stalls or if time allows for further discussion.

#### **TEACHING PROCEDURES**

#### Facilitating the debrief

As soon as the EL activity portion of the lesson is completed, teachers should begin debriefing the experience with their students. For many teachers, the debrief is often the most enjoyable and rewarding part of teaching lessons that include EL activities. The debrief is the point in the lesson at which teachers step down from their central role as "sage of the stage" (King, 1993, p. 30) to assume the supporting role of facilitator as they journey with their students through processing the experience through which they have just come and exploring the implications of what the experience has taught them. Facilitating the debrief involves posing the discussion prompts planned for each stage of the debrief, moderating discussion, and supporting student engagement. The following paragraphs expand on this simple description, highlighting key considerations and strategies for teachers as they facilitate debriefs.

When teachers decide the time to end the EL activity and begin the debrief has been reached, they should bring the EL activity to a clear and definitive stop. Creating a distinct demarcation between the end of the experience and the start

of the debrief will help students transition, both literally and psychologically, from being immersed in the activity and continuing the experience, to exiting their roles as participants so they can begin to reflect upon what happened (Steinwachs, 1992). Bringing an EL activity to a full stop could involve, for instance, signaling students to immediately stop what they are doing, put away any materials or equipment used during the activity, and then gather together in the predetermined area.

As soon as students are settled and listening, teachers should introduce the debrief by explaining the overall purpose of the debrief and how it relates to the lesson's objectives as well as the goals of each phase and how they will be conducted (Markulis & Strang, 2003). Teachers should emphasize that all contributions to the discussion, no matter how small or from whom, provides a valuable piece of the puzzle and contributes to the class' collective understanding of what happened and what it might mean. Also, investing a couple minutes to review with students the qualities of a good partner/

teammate, the elements of effective cooperative learning (see Johnson & Johnson, 1999), and the expectations for participation and personal conduct will help ensure a positive learning experience for everyone. Last, if the class will be subdivided into smaller groups, teachers will want to explain to students how they will be placed into groups and how the groups will share information with the rest of the class.

#### Facilitating the description phase.

Whenever possible, the description phase of the debrief should be initiated immediately after the EL activity has ended, as this is when students' recall of details and of their impressions can be expected to be the most vivid, authentic, and self-determined. Second, because students tend to be highly motivated to begin talking about what they have experienced during the activity, moving directly to the debrief allows teachers to take advantage of this tendency. Similarly, starting the debrief without allowing for a break will help discourage students from beginning to share their thoughts with individual students in a spontaneous, informal manner, rather than as part of a facilitated discussion among the entire group (Steinwachs, 1992).

The performance expectation of students during the description phase is for each student

to share his/her observations and impressions of the experience and to listen closely to the observations shared by the other students. Consequently, students will rely heavily on their interpersonal skills during this phase. Bv combining everyone's input and the answers generated to the discussion prompts, a comprehensive and detailed description of the experience will emerge. The role of the teacher during the description phase is to guide the discussion by posing the prompts planned, encouraging and acknowledging each student for his/her contribution, precluding any one person from monopolizing the discussion, and modeling active listening skills. As much as possible, teachers should try to avoid inserting themselves into the discussion (Steinwachs, 1992). If students appear to be overlooking a key detail, however, teachers can nudge the discussion toward it by asking students to elaborate on a specific observation or by calling attention to elements not yet discussed. A particularly important function of the teacher in this first phase is to ensure that any details related to the lesson's learning objectives have been identified and described. When teachers feel the discussion prompts have been adequately addressed, teachers should bring the phase to a close by quickly summarizing the information gathered by the group and highlighting key details about the experience that will become the focus of discussion during the second phase.

Ideally, the teacher will have reserved an adequate amount of time during the lesson to work through all three phases of the debrief in a single class period. In many settings, however, the length of a class period is too short to allow for both the EL activity and a full debrief, requiring a second class meeting to complete the debrief. When this is expected to occur (or occurs unexpectedly), teachers should plan for and strive to complete the description phase immediately following the activity and prior to class dismissal. As mentioned above, having students describe the details of the event before their memories have faded is important for accuracy and completeness. The description of the activity they generate will serve as the starting point for the analysis and application phases of the debrief during the next class meeting. As a means of closure, teachers should briefly summarize key aspects of the description and any additional details about the activity itself that they want students to keep in

mind or think about in preparation for the analysis phase of the debrief.

If beginning the debrief immediately after the EL activity is not possible (e.g. the EL activity required the entire class period to complete), teachers can help students prepare for the initial, description phase of the debrief by assigning independent work intended to help them remember and later recall what occurred. For example, teachers can ask students to:

- Draft a timeline, placing descriptions of the events in the order in which they occurred;
- Create a graphic organizer depicting the individuals involved and what each of them did or said;
- Write a reflective essay describing their impressions of the activity and their experience;
- Draft a newspaper article chronicling the Five Ws and an H (who, what, when, where, why and how);

The discussion prompts planned for the description phase can also serve as the substance of additional ideas for independent work. This independent work can be completed as in-class assignment, as homework, or some combination of both. With thoughtful planning, teachers can minimize the negative effects that delaying the start of the group discussion portion of the description phase could have had.

#### Facilitating the analysis phase.

Teachers should begin the analysis phase by providing students with a quick explanation of the purposes of the analysis phase, which include 1) identifying the lessons they learned through participating in the activity and comparing these lessons to the learning objectives of the lesson; and 2) examining the similarities between the activity and the real world. Note that the lessons learned are realized from the students' perspective, not dictated to them from the teacher's perspective or expectations (Lederman, 1992; Steinwachs, 1992). If a break in time occurred between the first and second phases, including a short summary of the EL activity and a recap of the perspectives shared will help students recall key details. Students can be called upon to volunteer this information but teachers should be careful to not allow the discussion to digress back to describing what happened to them (the focus of the first phase).

Performance expectations of students during the analysis phase include using higher order cognitive skills and critical thinking skills as they consider their responses to the discussion prompts and practicing effective communication, teamwork and group processing skills while they interact with their classmates. As students discuss what went well and what did not go well during the activity, teachers might need to remind them to focus on understanding why and how things went the way they did, rather than on assigning blame to a specific person for something that did not go well (Paige et al., 2015; US Department of the Army, 2013).The teacher's role during this phase is the same as it was during the description phase, including presenting students with the discussion prompts planned, encouraging and acknowledging each student for his/her contribution, precluding any one person from monopolizing the discussion, modeling active listening skills and monitoring the passage of time to keep the debrief on schedule. Teachers may also wish to "play the devil's advocate" to challenge assumptions and logical fallacies as they arise. Note, however, that the role of the teacher does not include deciding for students or dictating to them what they have learned or how they should feel about it (Lederman, 1992; Steinwachs, 1992).

When teachers are satisfied with the identification and analysis of the lessons learned and ready to proceed to the final stage of the debrief, they should close the phase with a brief summary of the main points discussed. Included among the main points summarized should be any lessons or insights related to the lesson's learning objectives.

#### Facilitating the application phase.

The application phase is the final phase of the debrief. The purpose of the application phase is to help students transfer or apply the insights and feedback generated in the previous phases to guide their own health-related decisions and their actions. Performance expectations of students include using essential health skills for accessing information/products/ services, decision-making, goal-setting and action planning to create plans for adapting an existing health behavior or adopting a new behavior. The teacher's role during this phase include serving as moderator, motivator, and time-keeper. The teacher might also assist students with brainstorming strategies for

overcoming potential barriers to adopting what they have learned.

# ASSESSMENT PROCEDURES AND EVALUATION RUBRIC

Planning and executing a successful debrief and the EL activity upon which it was based requires the identification and careful consideration of a wide range of situational constraints, many of which have been described in the detail in the preceding sections. The extent to which these factors are adequately addressed will affect the degree to which the debrief is successful in attaining the educational goals identified (Arora et al., 2012; Lederman, 1992). Lederman (1992) proposed a model that used a series of questions to assess five separate aspects of the debriefing process, beginning with the "examination of learning objectives" and concluding with an "evaluation of the processing experience" (Lederman, 1992, p. 156). The attached rubric, titled the Debrief Planning and Facilitation Rubric (see Table 4), is based upon Lederman's assessment model but has been adapted to align with the planning considerations, contextual factors and situational constraints specific to planning and executing debriefs in health education classes. Teachers can use the rubric to guide the planning of a lesson featuring an EL activity and debrief or as a self-assessment tool after the delivery of an EL-based lesson.

#### CONCLUSION

A debrief is much more than simply a quick recap of the lesson's highlights and key themes; the debrief is an indispensable component of experience-based learning. Experiential learning, as a form of participatory learning, provides students opportunities to practice and build selfconfidence in applying functional knowledge and performing health-related skills in nonthreatening, authentic situations before they must do so in the real world. Without a formal process tied to the EL activity to compel students to reflect upon the personal significance and implications of an experience through which they have just come, teachers leave entirely up to chance whether students can and will do this on their own. In the health education context, the three-phase debrief is a carefully planned, teacher-facilitated discussion conducted after an EL activity to help students deconstruct an experience, identify lessons to be learned as a result of participating in the activity, and apply those lessons to the real world and to their own lives (Fanning & Gaba, 2007; Lederman, 1992; Lewis & Williams, 1994; Nicholson, 2012). To that end, a well-executed debrief will help students glean valuable lessons from the experience, even when an EL activity does not go as planned (Nicholson, 2012). Teachers are encouraged to use the sample prompts for each phase and the rubric provided in this paper to guide the development of debriefs and to assess their effectiveness in their facilitation.

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#### Table 1: Sample Prompts for the Description Phase

- Recount the order of events: What happened first? What happened next? How did the situation end? (Creating a timeline, recounting the order of events)
- What was your role during the exercise and what actions did you take? (Then, directing your question to a different student or group of students) What were you doing while he/she was doing that?
- \*"How did your thinking/feeling/actions change during the exercise?"
- What did you expect or assume would happen during the exercise? How did your expectations compare to what actually happened? For example, what events occurred that you did not expect or that surprised you?
- \*What were some of the principal challenges you (or your group) faced? Were they overcome?"
- \*"What decisions did you (or your group) make during the activity and why?"
- Which health skills were performed during the EL activity? What health information was needed or used during the EL activity?

\* Adapted from, Steinwachs (1992).

#### Table 2: Sample Prompts for the Analysis Phase

- \*During the exercise, what did \_\_\_\_\_ mean [or symbolize]? (Fill in the blank with a key concept or reality that is at the heart of what the experience simulates).
- Where have you seen this concept (or used this skill) before?
- \*What specific real-life situations does this [exercise] remind you of? What [similar] real-life experiences have you had?
- We have learned that our thoughts, perceptions and actions are influenced by many factors (i.e. our friends and families, the media, the built environment, etc.). What factors were likely influential here and in what ways?
- Based on what has been learned thus far, how should a healthy and safe outcome in this situation be defined?
- What were the learning objectives or goals for this activity? How did we do? Which learning objectives were met and how do we know?
- What actions or strategies led to the successful outcomes? Which actions or strategies were counterproductive or ineffective?
- \*We have mentioned several major issues (or situations/problems) that arose during the experience. What are some of them?
- \*What were the underlying causes of the problems or obstacles you encountered during the experience?"
- What might have occurred if...? (Challenge students to predict the impact of different circumstances or human actions on the outcome.)
- \*Describe an alternative strategy or approach for handling the situation in a safer, healthier manner. (Challenge students to identify pros /cons of each alternative as a means of identifying healthier, safer options.)
- What does this exercise need to make it more realistic? \*"What was missing from this experience? Who/what else must you deal with in real life that was not simulated here?"

\* Adapted from, Steinwachs (1992).

#### Table 3: Sample Prompts for the Application Phase

- If you encountered the same situation again, which strategies should be used again? Which strategies can be useful but need some revision first? Which strategies should be dropped or replaced? (Challenge students to provide a rationale for each.)
- \*Knowing what you know now, how could you have handled the situation differently?
- How does this experience and what you have learned today change your understanding of situations like this?
- \*How will the events that occurred during the activity help you to respond to real-life situations?
- \*What will be your next real-life opportunity where you might apply what you learned from this experience?
- If you found yourself in a similar situation, how would you know if you were achieving a healthy and safe outcome?
- If you wanted to apply what you have learned about \_\_\_\_\_\_ tomorrow, what resources (skills, information, social support, money/access, materials, etc.) would you need to be successful?
- \*"What is the single most important principle you learned from the [exercise] today?"
  - \* Adapted from, Steinwachs (1992).

	Level 1	Level 2	Level 3
Learning objectives for the EL activity	There is no evidence of learning objectives to assess the cognitive, behavioral, and/or beliefs/norms domains	Learning objectives to assess the cognitive, behavioral, and/or beliefs/norms domains lack specificity and/or measurable	The learning objectives meet SMART criteria and span all three learning domains (cognitive, behavioral, and
	<and or=""> The EL activity selected is inappropriate for the learning objectives.</and>	criteria. <and> The EL activity selected is appropriate for the learning objectives.</and>	beliefs/norms) <and> The EL activity selected is appropriate for the learning objectives.</and>
Classroom climate and management of the learning environment	There is no evidence that steps are taken to assure a positive classroom climate and/or to manage the learning environment to encourage student engagement.	Evidence indicates that steps are taken to support a positive classroom climate and student engagement but rely heavily on reactive and passive measures.	Evidence indicates a balance of active and passive measures are used to create and maintain a positive classroom climate and to maximize student engagement.
Knowledge of the students	There is no evidence that the developmental needs, prior academic learning/prerequisite skills, or life experiences of students have been considered in the selection and design of the EL or debrief strategy. <or> The EL strategy and/or debrief strategy is inappropriate for the students in the class.</or>	Evidence indicates that the selection and design of the EL and debrief strategies are designed to be responsive to developmental norms and risk factors of students of a particular age or grade level.	Evidence indicates that the selection and design of the EL and debrief strategies are designed to be responsive to the individual developmental needs, prior academic learning/prerequisite skills, and/or life experiences of students in the class.
Review of the experiential learning (EL) activity	The EL activity is unrelated or inappropriate for the learning objectives identified. <and or=""> The EL activity cannot be conducted effectively due to limits in time, physical space, or materials.</and>	The EL activity supports the use of functional knowledge, the performance of health skills, and the examination of health-related beliefs and norms. <and> Adequate time, physical space and materials allows the EL activity to be conducted as planned.</and>	The EL activity facilitates the deepening and extending of students' understanding of functional knowledge, the performance of health skills, and the development of pro- health beliefs and norms. <and> Adequate time, physical space and materials allows the EL activity to be conducted as planned.</and>
Facilitation of the debrief	There is no evidence that the goals, process, roles and performance expectations are communicated to students; Physical space and/or student materials for the debrief are inadequate or not prepared; Start of the debrief is chaotic or unnecessarily delayed; Poor time management results in debrief being omitted.	The goals, process, roles and performance expectations are communicated with uneven clarity; Physical space and student materials for the debrief are sufficient but loosely organized; Start of the debrief occurs in a timely manner; Time is not well managed, causing shortening of the debrief.	The goals, process, roles and performance expectations are communicated clearly and with checks for understanding; Physical space and student materials are well organized and readily available; Start of the debrief occurs in a timely manner; Time is managed effectively and debrief is completed as planned.
Evaluation of the processing experience	No evidence that the discussion prompts are identified in advance; Discussion produces no evidence that students could describe what happened, what it was like, and what it meant; Prompts do not align with the EL activity; Prompts are overly simplistic and do not evoke critical thinking. Phases are removed from discussion or unexplored.	Prompts align with the EL activity. Discussion produces vague evidence that students can describe what happened, what it was like, and what it meant; Prompts stimulate discussion do no consistently support critical thinking or the use of higher-order cognitive skills. Each phase and necessary steps in the debriefing process are explored for effectiveness.	Measurement of the learning process demonstrates the participant can identify what happened, what it was like, and what it meant. Each phase and necessary steps in the debriefing process is fully explored.

## Table 4: Debrief Planning and Facilitation Rubric