

## **Transmedia (Social) Learning in the Wild: Exploring a Continuum of Support for Transitioning Service Members**

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### **ABSTRACT**

While social learning is not a new construct, we now have the ability to extend learning across place and time instantaneously with social media and digital tools. As we interact in new ways with multiple media we discover new approaches like transmedia learning, which leverages both social learning and social media. Transmedia learning is engagement-driven, learner-centric, unfolds across multiple media, and is designed to promote social learning. An I/ITSEC paper published in 2013 utilized the example of Warrior-Diplomat and was the first in a series introducing transmedia learning strategies to meet the demands of next generation learning. The present paper is the second in the series and expands on theories discussed in the 2015 I/ITSEC tutorial “Transmedia Learning in the Wild.” While the tutorial uses Warrior-Athlete as an example, the present paper departs from the tutorial and the 2013 paper by honing in on one aspect of transmedia learning—the practice of social learning as it applies to two approaches for preparing Veterans and transitioning Service members for the civilian workforce.

In the spirit of the definition of transmedia learning provided above, conference participants who review the 2013 paper and attend both the 2015 paper and tutorial presentations will obtain unique and complementary information from each presentation about transmedia (social) learning *in the wild*, or as it naturally occurs in a cultural context. The present paper is divided into three sections. The first section introduces the need to retrain transitioning members of the Force and provides a description of the Instruction (DoDI) 1322.29 issued in 2014, titled “Job Training, Employment Skills Training, Apprenticeships, and Internships (JTEST-AI) for Eligible Service.” DoD SkillBridge implements this instruction and is a Deputy Assistant Secretary of Defense (DASD) Force Readiness and Training initiative to connect transitioning Service members with civilian training opportunities. Semper Fi Odyssey, a 6-day intensive transition-assistance and career advancement program for injured veterans, is also presented to illustrate a range of social learning experiences presented as a continuum. The next section introduces three theories from learning science, cognitive psychology, and communication that support a social learning continuum. The theories support 5 key design features: Learning context, culture & community, calibration, and connections. The last section suggests a data collection plan for future measurement of digital engagement as it applies to transmedia (social) learning in the wild. ***Readers of the present paper will take away 5 key design features and unlock expanded content available online for a richer transmedia learning experience.***

### **ABOUT THE AUTHORS**

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**Tom Jones, Major General USMC (Ret)** is the founder and Executive Officer of Outdoor Odyssey. His final assignment before retirement in 2005 was Commanding General of Training and Education Command in Quantico, Virginia. He now leads the non-profit leadership academy oriented on impacting at-risk youth and injured veterans (Semper Fi Odyssey) through team building and mentoring. In 2010 he was recognized as Veteran of the Year.

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### **INTRODUCTION**

*“When you become a veteran, to me, that is a loss for [the military] but a gain for the country, because I think our people are some of the most promising, constructive, well-contributing citizens we have. It's best for them and therefore best for country if they start thinking about life after the military [as soon as] they're in the military.”* Ashton Carter, Secretary of Defense, at Syracuse University on March 31, 2015 (Harper, 2015, p. 1).

The United States Department of Defense (DoD) is facing significant challenges in transitioning Service members to post-military life. This challenge is driven by the need to assist those who are transitioning with training, job searches, and resiliency skills. Since the United States has been at war in Iraq and Afghanistan over 2.4 million have departed military service, and in the next four years another million of the 9/11 generation will likely make this transition (Flournoy, 2014). More than 300,000 Service members are expected to leave the military every year for the next few years (DiGiovanni, 2015). Often after several deployments Service members encounter difficulty entering a civilian workforce, especially if they are unable to 1) recast their military skill sets or 2) are among the vast numbers of injured active duty and Veterans who face physical, mental, emotional, or social challenges. The number of unemployed and/or homeless Veterans is staggering. There is no doubt that facilitating successful transitions of Service members into the workforce is important to ensuring U.S. economic competitiveness.

Several federal government and Veteran nonprofit organizations have teamed to meet the needs of transitioning Service members. Semper Fi Odyssey is an example of nonprofit teaming between the Semper Fi Fund and the Outdoor Odyssey Leadership Academy. Semper Fi Odyssey is a six-day transition-assistance event designed to help participants network and develop actionable roadmaps to accomplish their professional goals. Additionally the DoD has partnerships with federal agencies to assist Service members and Veterans as they transition. One such example is the Department of Labor Transition Assistance Program (TAP) which was established to provide career development services.

Another example is DoD SkillBridge, initiated in January 2014. DoD SkillBridge is an initiative that implements guidance from the Under Secretary of Defense for Personnel and Readiness to authorize active duty, Reserve, and National Guard Service members who are within 180 days of separation or retirement to seek job skills training, internships, or apprenticeships (DiGiovanni, 2015). Additionally, since the beginning of fiscal year 2015, the Military Life Cycle (MLC) Transition Model has been implemented. The MLC transition model outlines key periods in the course of active duty and Reserve/Guard military careers that align with civilian career goals (MLC Transition Model Info Sheet). Initiatives such as these, and the transition model are designed to make Service members more aware of transition and career readiness—or as Secretary of Defense Carter indicated while he shared his vision for Force of the Future at Syracuse University in March 2015—to *help Service members start thinking about life after the military while they are still in the military*.

While the Force of the Future vision is still in early planning phases, career readiness reform including the manner in which Veterans, active, and reserve Service members are prepared to join the civilian workforce is underway at different levels of the U.S. military. A detailed discussion of these programs is not within the scope of the present paper. Instead the present paper discusses two efforts, DoD SkillBridge and Semper Fi Odyssey. While on the surface these efforts may seem qualitatively different, they in fact have very similar goals—to instill confidence among Service members as they start thinking about life after the military, and to engender learning from one

another, i.e., *social learning*. Social learning is defined in the present paper as “joining with others to make sense of and create new ideas” (Bingham & Conner, 2015, p. 8). While social learning is not a new construct, we now have the ability to extend learning across time and place instantaneously with social media and digital tools. Bingham and Conner (2015, p. 9) define social media as “a set of technologies used to engage two, three, or more people.” Social learning combined with social media “invites learners to contribute, engage, and participate with others online” (Bozarth, 2011, p. 2). The power of social learning with social media lies in its ability to facilitate human interaction, both synchronously and asynchronously. As we develop new ways to interact with multiple media we also interact with each other in manners we could not just a few years ago. Our interaction patterns move across media, devices, and content. As we interact with digital artifacts created by others we may engage in social learning. Interaction, social learning, and social media are integral to *transmedia learning*. The term, transmedia learning, was coined by one of the authors in November 2012, during a presentation to the President’s Council of Advisors on Science & Technology Meeting (DiGiovanni, 2012). Transmedia learning is defined as the scalable system of messages representing a narrative or core experience that unfolds from the use of multiple media, emotionally engaging learners by involving them personally in the story (Raybourn, 2014). Transmedia learning ecosystems leverage several new media trends including online peer communication and microlearning with social media, the scalability of Massive Open Online Courses (MOOCs), and the design of memorable experiences as stories to sustain learner engagement. The goal of transmedia learning is behavior change, whether physical, intellectual, attitudinal, or a combination resulting from the ability to synthesize information presented across multiple media channels. Transmedia learning is more than a digital storytelling approach, however, transmedia learning ecosystems are designed to scale to reach as many learners as possible when, where, and how they need it most. In these ways, transmedia learning is intended to be a force multiplier. In essence, it is an approach to *connect* learners with different content and each other. DoD SkillBridge and Semper Fi Odyssey were both conceived to connect transitioning Veterans and Service members with peers, mentors, or providers of training to better prepare them for civilian employment opportunities.

In the spirit of engaging others via a transmedia learning ecosystem, the present paper has also been written to support the activity of connecting learners at I/ITSEC beyond the scope of a single paper and its presentation. Transmedia learning has been introduced by the authors at previous conferences, but never before as a deliberate engagement ecosystem as it is this year, in 2015. In 2013, a paper presented at the conference was the first in a series by one of the authors introducing transmedia learning strategies to meet the demands of next generation learning (Raybourn, 2013). The 2013 paper utilized the example of Warrior-Diplomat. A tutorial and special event were offered the same year, but not communicated to the conference participants as being elements of an ecosystem. The tutorial content was later expanded to include a different use case, open source software, and design methods in 2014. In 2015 we offer conference attendees a *connected* experience pulling together a transmedia learning tutorial, paper, presentations, and special event on DoD SkillBridge as a demonstration of a transmedia (social) learning ecosystem in action, and—in *the wild* at I/ITSEC. To our knowledge, concerted coordination with three subcommittees (paper, tutorial, and special event) in a transmedia learning campaign supporting transmedia (social) learning is a unique contribution to the conference and presents an opportunity to measure its efficacy, and present results, at I/ITSEC in a subsequent year.

Therefore the present paper expands on content presented in the 2015 tutorial entitled “Transmedia Learning in the Wild.” It departs from the tutorial and a previous paper (Raybourn, 2013) by focusing on the practice of social learning as it applies to two distinct approaches used today to help transition Veterans and Service members to the civilian workforce. The present paper is divided into three sections. The first section introduces the Instruction (DoDI) 1322.29 issued in 2014, titled “Job Training, Employment Skills Training, Apprenticeships, and Internships (JTEST-AI) for Eligible Service Members.” DoD [SkillBridge](#) implements this instruction and is a Deputy Assistant Secretary of Defense (DASD) Force Readiness & Training initiative to connect transitioning Service members with posted civilian training opportunities. Semper Fi Odyssey is also presented to illustrate the range of social learning experiences. This section also describes how context, culture & community, calibration, and connections facilitate social learning—an integral element of transmedia learning. Cognitive, learning science, and communication theories that may explain why social learning is a powerful enabler when combined with social media tools are presented. The next section briefly explores a data collection plan for future measurement of digital engagement as it applies to transmedia (social) learning ecosystems. Finally, the paper concludes with a brief discussion of topics for future research.

## DOD SKILLBRIDGE AND SEMPER FI ODYSSEY

### DoD SkillBridge

*Excerpts from this section appear in “A new way to help our troops enter the workforce,” by Frank C. DiGiovanni, published [online](#) by Defense One, May 15, 2015. Watch a CBS Evening News [video](#) featuring DoD SkillBridge.*

DoD SkillBridge allows eligible transitioning Service members to participate in job skills training, including apprenticeships and internships. This is made possible via the USD (P&R) DoDI 1322.29 issued in 2014, titled “Job Training, Employment Skills Training, Apprenticeships, and Internships (JTEST-AI) for Eligible Service Members” (DiGiovanni, 2015). The training, which can be provided by organizations, trade unions, and certain academic institutions, can begin as early as six months before Service members leave the military, but typically occurs two to three months before separation. DoD SkillBridge facilitates the opportunity for participating training providers to gain early access to highly skilled Service members as prospective employees before they become veterans. Since Service members continue to receive military pay and benefits while participating, the training provider does not pay the Service member to participate. The training must be provided at no or relatively little cost to military personnel and must offer a high probability of employment. At the same time, DoD SkillBridge minimizes risk for businesses by allowing a test-run with a potential employee (DiGiovanni, 2015).

Since 2014 some 1,500 members of the U.S. military have participated in such training across a variety of industries, many obtaining jobs through their participation. Organizations that have started DoD SkillBridge initiatives, from General Motors to Georgia Power to Microsoft, indicate that Service members deliver value to their programs. Microsoft, through its Microsoft Academies at several military installations such as Fort Hood in Texas, is training Service members in the high-growth information technology field. Microsoft’s Vice President Chris Cortez, in an April 3, 2015 CBS News report, said “These young military people bring skills, work ethic, and this is the kind of employee the industry needs today” (Andrews, 2015). Damian Gilbert, who graduated from a DoD SkillBridge welding skills training program at Camp Lejeune while a Marine, is one such example. Though he had no previous welding experience, Gilbert indicated in a CBS News interview that the program had given him a “great opportunity” to improve his skills (DiGiovanni, 2015). He called going into welding “a dream job,” and in April 2015 started a new career. This career development program, sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry, addresses a nationwide skills gap and labor shortage for welders by providing training for transitioning Service members at seven military bases. Marines participate in 18 weeks of training in welding, HVACR (refrigeration), or sprinkler fitting while earning certifications and college credit. As of June 11, 2015, Camp Pendleton has conducted 19 class [graduations](#). The Department of Energy (DOE) also leverages the DoD SkillBridge authorization. In 2015, ten military installations will offer training for careers in the solar industry as system inspectors, installers, and sales representatives (White House Fact Sheet, 2015). The [Solar Ready Vets](#) Initiative will train 200 transitioning Service members at Camp Pendleton alone during the pilot period and as of February 2015 has already graduated one class (*The News*, February 15, 2015).

With the goal of raising awareness about the opportunities provided by DoDI 1322.29, DoD SkillBridge seeks to reach over 300,000 transitioning Service members each year through multiple media such as videos, discussion forum, a mobile app, and Twitter. A Website and associated mobile [app](#) (Figure 1) anchor the transmedia engagement and may link transitioning Service members with civilian training opportunities. The DoD SkillBridge mobile app offers a searchable index of training opportunities that uses Twitter for user management and for posting training opportunities (Gallagher, 2014). Service members can create DoD SkillBridge profiles for notifications on training opportunities, and training opportunity providers can post their information so Service members can contact them when there is a match. Therefore, the DoD Skillbridge mobile app can be used by Service members seeking training opportunities, and the organizations providing them.



Figure 1. DoD SkillBridge for Web and Mobile



## Semper Fi Odyssey

Excerpts from this section are found in “Semper Fi Odyssey Team Building,” published [online](#), by Outdoor Odyssey, 2014. Watch a WQED [documentary](#) featuring Semper Fi Odyssey.

Semper Fi Odyssey helps participants get ready for life after military service while preparing them for success during a six-day workshop. Sessions have numbered between twenty-five to thirty-five participants attending each event. Participants are grouped into teams of three to five and each team is assigned a volunteer team leader who is committed to following each participant’s individual progress (Figure 2). The team leaders are carefully screened, volunteer professionals who have successfully transitioned out of the military into the civilian workforce, many of whom have walked in the same shoes as the participants (Jones, 2015). Throughout the week, volunteers present material that help participants network and build career development skills such as interviewing, identifying professional goals, and developing an actionable road map to accomplish each goal identified during the week. The ability to set personal and professional goals, as well as build a plan of action to meet those goals is imperative for success. Most importantly the participant must identify, with laser-like intensity; obstacles that must be overcome (Jones, 2015). Therefore, Semper Fi Odyssey is not entirely classroom-driven. Team cohesion and confidence-building activities include outdoor climbing, zip lines, [yoga](#), and other forms of physical exercise. Participants engage one-on-one with team leaders to not only determine their personal life and professional goals, but also to receive insights, and obtain valuable performance improvement feedback.



Figure 2. Semper Fi Odyssey teams during session

Often participants may still be learning how to cope with stressors that impact their ability to train for skill development or identify a definitive career that they desire to pursue. Many have fractured relationships that significantly impact their ability to succeed in training or follow-on employment (Jones, 2015). Unfortunately, a sizable number of veterans must be helped with building resiliency and positive coping mechanisms to counter challenges with mental health; many continue to refuse adequate treatment due to the rather pervasive stigma associated with certain medical conditions. Most do not understand the neurobiology behind their biological and physiological responses to certain experiences, resulting in often judging themselves as weak as opposed to having a normal reaction to abnormal circumstances. Finally, all need to be part of a [team](#) who engage in a covenant of trust with one another; as many suffer mightily due to the absence of a genuine *connection to others*. This has been a significant insight that has come out of the program.

The Semper Fi Odyssey focus on one-on-one mentorship leverages evidence-based benefits (Schultz, 1995). Mentorship and heartfelt face-to-face communication are key since very few veterans have invested any time in coping with mental, emotional, physical and spiritual aspects of their lives. They often lack clear understanding of the different skills they possess that would be attractive to an employer. Consequently, very few have a good appreciation for the intangible skills that their experiences in the military have provided them (Jones, 2015). Team leaders and others have found that although many veterans do not come to Semper Fi Odyssey with clear ideas of the future, and many are without any ability to successfully build a definitive plan, most if not all leave with clearer ideas about their futures and an actionable roadmap.

Primarily focused on career advancement and holistic wellness, Semper Fi Odyssey reinforces the significance of mental, physical, spiritual, emotional, and social well-being. Genuine concern and care for the participants is evident throughout all aspects of the program. The ability to communicate career goals, establish high profile contacts, and create a network of resources is also one of the cornerstones of the program (Jones, 2015). Since 2008, over 1,500 military men and women have attended more than 45 week-long sessions. Like DoD SkillBridge, the Semper Fi Odyssey program is provided at no expense to transitioning, active duty injured Service members and veterans. Therefore, like DoD SkillBridge, Semper Fi Odyssey works hard to set the stage for follow-on social engagement via digital means and social media to the degree possible. Connections made during the workshop between the team and team leaders usually migrate to asynchronous follow-on work facilitated by digital tools (Jones, 2015).

In summary, these two programs address the national security challenge of successfully transitioning veteran, active duty, Guard, and Reserve Service members. DoD SkillBridge may provide Service members the opportunity to identify training programs that match their profile, and also provides companies the opportunity to gain early access to transitioning Service members. Semper Fi Odyssey provides the vehicle for injured Service members to build life skills and create a career development plan that will help identify to whom they can reach out to in the civilian workforce. These complementary initiatives provide a unique opportunity to characterize transmedia (social) learning in the wild. That said, what role does social learning play in instances similar to these examples? Does transmedia learning leverage social learning, and if so, how? The subsequent section explores these questions considering a social learning continuum from formal learning to informal learning, with each example in overlay. We situate the examples on the continuum by applying the following five design themes: context, culture & community, calibration, and connections.

## A SOCIAL LEARNING CONTINUUM

### Context

In order to visualize the role of social learning, it may be helpful to examine a continuum for social learning that has been adapted from a workplace model (Hart, 2012). In Figure 3 (below) we can characterize the activities that occur at the Semper Fi Odyssey sessions as beginning at the face-to-face, formal learning end of the continuum. The learning opportunities are mostly formal because the participants receive structured information from subject matter expert presentations and group discussions. Moving from left to right on the continuum, several team activities facilitate collaborative learning such as the development of a roadmap, etc. After the participants complete the workshop they remain in contact with team leaders and each other via phone calls, email, and Facebook. Some participants who live in the same community continue to meet in person. They also support each other through networking, sharing job searches, and gaining access to professional communities. After the workshop, their learning moves even further to the right of the continuum toward self-organized, personal learning, augmented by trusted connections formed during “eyeball-to-eyeball” interactions (Jones, 2015).

In contrast, DoD SkillBridge activities can be best characterized as beginning at the informal learning end of the continuum (Figure 3). At this end of the continuum, we assume that social learning is facilitated by one’s use of social media, an integral element of transmedia learning ecosystems. The DoDI facilitates a Service member’s self-organized, personal learning primarily through the use of the Website, Twitter, and mobile app. Moving toward the left of the continuum, Service members may also find support through a variety of forums and Facebook. Social learning in this case may eventually lead to face-to-face, formal learning, but does not start there.



**Figure 3. Examples initially grounded on one end, but each offer support across continuum.**

These examples illustrate how social learning manifests differently in each context along the continuum. Additionally, the examples illustrate how both formal learning and informal learning opportunities complement and

support each other. Whether Service members are sharing emotional lessons learned from their deployment, asynchronously collaborating to create career development roadmaps, discussing the nuances of the DoD authority on a forum, or following posts about new training opportunities via social media—they are learning *together*. This context in which Service members are learning is important to appreciate because humans learn socially, but as illustrated by the examples in overlay along the continuum, not always, nor initially, with technology (see Bingham & Conner, 2015).

Several theories explain why humans engage in social learning. Three were chosen, each from different disciplines, to more broadly explore how humans make sense of new ideas, together along the continuum. The subsequent sections briefly introduce the theories of Social Development, Distributed Cognition, and Narrative Paradigm. Vygotsky's theory of Social Development offers support for understanding the cultural context of social interactions in which learning and cognitive development happens. Hutchins' Distributed Cognition extends Vygotsky's notions to posit that cognition is a distributed, social process in which human knowledge and cognition are not confined to an individual and often reside in others—people, environment, tools, or digital artifacts. Finally, Fisher's theory of Narrative Paradigm ties the two ends of the social learning continuum together—both cases leverage storytelling to situate information and engender feelings of belonging to a community. These three theories are applicable to transmedia learning and serve to explain why learning with each other and through multiple communication channels (media) can foster rich opportunities and memorable experiences.

### **Culture & Community**

Semper Fi Odyssey social learning is specifically grounded in what one of the authors characterizes as “eyeball-to-eyeball” communication in order to accelerate personal growth and cognitive behavior change. The theory of Social Development and concept of the zone of proximal development reminds us of the importance of social learning through interaction, scaffolding, and dialogue. The theory of Social Development focuses on the role of guided, social interactions and community in making meaning toward cognitive change (Vygotsky, 1978). In Vygotsky's concept of the zone of proximal development, a novice and an expert working together on a problem allows the novice to work successfully in ways that s/he could not alone (Bruning, Schraw, Norby, & Ronning, 2004). As novices and experts interact, each brings her/his own sense-making to the social interaction, thus the interactions are culturally situated as sense-making systems are shared. “Cognitive development, in Vygotsky's view, is not simply a matter of individual change, but rather is the result of social interactions in cultural contexts” (Bruning et al., 2004, p. 198). The theory of Social Development can be used to situate the “eyeball-to-eyeball” mentoring occurring at Semper Fi Odyssey. As teams and their leads cooperate, the team leads help the participants make sense of their situation and collaborate to develop a plan for the future. Under the tutelage of skilled team leaders, the participants learn modeled behaviors that they can later internalize toward cognitive and behavioral change. Participants learn life skills with their team leaders and accomplish what they could not if alone.

Drawing from Vygotsky and others, the theory of Distributed Cognition provides a framework from which cognition can be viewed as an ecosystem involving people, artifacts, tools, and environments. The social learning continuum (Figure 3) can be understood by applying Distributed Cognition and the notion of “cognition in the wild.” Cognition in the wild refers to human cognition as it naturally occurs and adapts in the everyday world—situated in culturally constituted human activity (Hutchins, 1995). Distributed cognition is a distributed, social process in which human knowledge and cognition are not confined to the individual and often reside in other people, tools, or artifacts. As we move along the social learning continuum from left to right supporting learning with technology, we can see the application of Distributed Cognition. For example, Semper Fi Odyssey participants may work around a table to develop a career plan, but they also use media—paper, pencils, tablets, collaborative tools, computers, etc. They may engage in dialogue as they talk through ideas, but they may also take notes or save data to extend the memory of their collaboration. Their cognition may be characterized as distributed among artifacts and people and situated in the cultural context of the transition-assistance event. Conversely Service members using the DoD SkillBridge app have the potential to learn from each other about the implementation of the authority through forum discussions and social media. Their cognition is also distributed among persistent artifacts such as digital messages that facilitate asynchronous collaboration and help them remember, understand, and connect with others. In this sense, their working knowledge exists among different systems and cannot truly be understood without taking this socially distributed sense-making into account (Bruner, 1991). These examples illustrate how Distributed Cognition provides a useful frame from which to understand transmedia (social) learning ecosystems and cultural contexts (Raybourn, 2014).

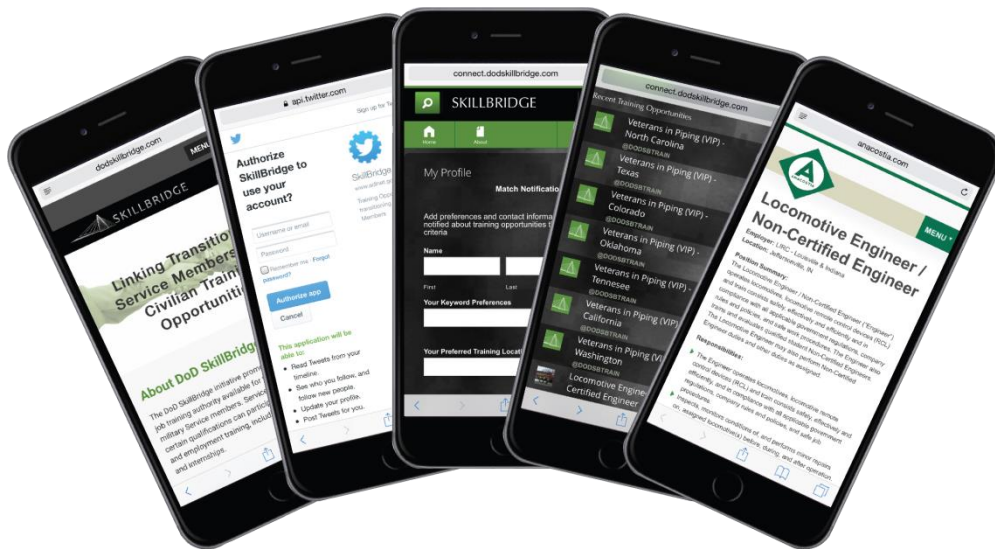
## Calibration

Transmedia (social) learning is calibrated, or scaled, across the continuum. Recall that transmedia learning is a scalable system of communication messages representing a narrative or core experience that unfolds from the use of multiple media, emotionally engaging learners by involving them personally in the story (Raybourn, 2014). A particularly useful definition of narrative, which accounts for calibration, is provided by Fisher's Narrative Paradigm. Narration or storytelling is "any verbal or nonverbal account that has a sequence of events to which listeners assign meaning" (Littlejohn, 1996, p. 174). The Narrative Paradigm holds that meaning is assigned through applying reasoning and rationality to narratives and that all narratives are culturally situated. We "buy into" or are persuaded by narratives based on the degree to which they make sense, and are credible. Therefore, when calibrating or scaling social learning over time and technology, it is important to review the quality and reliability of the message. For instance, an intimate story about survivor's guilt told in a small group of trusted team members may lose its power if relayed in the same manner to strangers and/or out of context. An intimate narrative may have to be recalibrated to appeal on a personal level to a mass audience, or one that is distributed. Transmedia learning leverages the unique contributions of different media for precisely this purpose. An intimate story may be recast visually, mediated by technology to leverage verbal and nonverbal elements. One example of a personal story recalibrated to appeal to a wider USMC training audience was the creation of the video "[Survivor's Guilt](#)" (Raybourn, 2013). The video was produced to tell an intimate, emotional story that many could identify with and share with others during pre-deployment training events.

Both DoD SkillBridge and Semper Fi Odyssey calibrate narratives to scale the propagation of messages related to their operations. In each initiative, narratives have the potential to inform and incite action. Both initiatives use complementary engagement strategies—DoD SkillBridge is designed to use transmedia (social) learning in the wild to bring people eyeball-to-eyeball with training opportunity providers, while Semper Fi Odyssey uses an intensive eyeball-to-eyeball workshop to prepare participants for career advancement opportunities when they go back into the wild.

## Connections

Both Semper Fi Odyssey and DoD SkillBridge help transitioning Service members build connections to ensure successful entry into the civilian workplace. Over 1,500 veterans have strengthened their networks by participating in Semper Fi Odyssey sessions, and the DODI has facilitated numerous transitioning Service member hand-offs to training opportunity providers.



**Figure 4. Screen captures illustrate the connection process via the DoD SkillBridge app.**



One program leverages social learning in formal settings to create connections, and the other leverages social media. A strong network and the ability to instantaneously reach out to others not necessarily in the same network is a force multiplier. Connections to online posts for training opportunities across the United States can be made by using the DoD SkillBridge [app](#) (Figure 4). It allows Service members to search for training opportunities upon login and optionally set-up user profiles to receive notifications on training opportunity matches. The user profile is configured to send training opportunity notifications to Service members through [Twitter](#) and email. In the example illustrated above (Figure 4), a Service member learns about DoD SkillBridge from the Website and signs up for access to the app. After associating the DoD SkillBridge app with their Twitter account, they are able to login to the app and create a profile. The app provides both basic (shown above) and advanced search capability. Once a training opportunity is found it can be retweeted to followers or inquired about with the training opportunity provider—usually involving the completion of an online registration form managed by the training provider. The DoD SkillBridge app was developed to potentially support a growing, self-organizing community over time and to facilitate personal learning with asynchronous digital artifacts (user-generated content) generated by the community of practice and training opportunity providers.

## DATA COLLECTION PLAN

As discussed in previous sections, cultural context is an important factor in transmedia learning. The learners' lifestyle, media habits, and goals are key considerations when planning activities across the social learning continuum. Learners should also be given opportunities to co-create content, inspect, and comment on content shared with others. Extending stories in the transmedia learning ecosystem can create an emergent culture of audience participation that acts as a foundation for the iterative and participatory design of further social learning experiences (Raybourn, 2007). We propose a data collection plan to measure participant engagement with a transmedia learning tutorial, paper, presentations, and special event on DoD SkillBridge as a demonstration of a transmedia (social) learning ecosystem in action and—in the wild at I/ITSEC 2015. We intend to collect data on conference attendee engagement with artifacts in the ecosystem to answer the following research questions: What are the learners acting on (quantifiable impact)? Does learner contribution to the narrative add value to others (user-generated content)? Do story elements or specific media convert learners to multi-channel users (narrative attribution)? We intend to use mixed methods, both qualitative and quantitative, to collect and analyze data from the naturalistic setting of a conference and naturally occurring associated activities.

## FUTURE RESEARCH

Transmedia learning ecosystem assessment may include standard usage analytics or customized learner activity tracking. Future research will continue to focus on engagement measurement, learner modeling, privacy and data security, and learner activity tracking (Raybourn et al., 2015). One method to collect and record learner actions currently under exploration is the ADL Experience [API](#) (xAPI). The xAPI tracks and reports a learner's activities using an <actor> <verb> <object> expression as in "Sarah watched Army Knowledge Online Video X" (Regan, Raybourn, & Durlach, 2013). Activity data are then collected, stored, and securely made available through a Learning Record Store ([LRS](#)) for post activity analysis, achievement badges, or inputs to learner models. Likewise, third party applications such as games, virtual environments, digital tutors, etc., can publish activity data to the LRS which can then inform learner models. Social media may also be mined for discourse patterns (Raybourn, 2014). Feedback and reflections on ecosystem elements could be captured from Instagram, Tumblr, Facebook, and Twitter. Interactive approaches for capturing feedback may also be through text chat interfaces or chatbots and embodied conversational agents (Morel, 2004; Morel & Ach, 2011).

## CONCLUSION

The present paper discussed how transmedia learning leverages social learning and social computing. Transmedia learning represents an andragogical process that has the potential to revolutionize the way we learn in the next 5-10 years. It has the potential to be one of the most adaptive learning science methodologies under exploration. Not only is the process non-linear, but also social. Transmedia learning leverages human social interactions, which are the most dynamic of all. Adaptive, stealth assessment techniques will be required to keep up with learners as they shift intellectually, and move physically across media. Transmedia learning will need to scale to appeal to thousands of learners in order to become a true force multiplier for DoD. With over 300,000 transitioning Service members each year, our pedagogical and andragogical processes must be more agile to meet their needs how, when, and where they

are needed most. Finally, transmedia learning is a 21<sup>st</sup> Century transformational approach toward more connected, enduring, and memorable experiences.

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