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Uncertainty Management and Sensemaking as Precursors to Transformative Learning in an International Immersion Service-Learning Experience

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Abstract

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INTRODUCTION

After nearly 20 hours of travel on four different flights, we were making our last approach above Chisinau, the capitol of Moldova, and our starting point for a three-week international immersion experience in the former Soviet Republic. Despite four months of preparation for our work in a country the students had never heard of, the questions came fast and furious.

> Student: "Will M (our translator) be waiting for us?"
> Teacher: "Yes."
> Student: "What if she's late?"
> Teacher: "We'll wait for her."
> Student: "What if she doesn't come?"
> Teacher: "She'll be there."
> Student: "But what if….?"
> Teacher: "We'll figure it out."

And so it went. Whatever the situation, whatever the concern, the fallback response became: "We'll figure it out." All of us had embarked on an endeavor unlike anything we had attempted before. As group leaders we relied on years of traveling off the beaten paths and a resolve that whatever new obstacle fell out of the sky, we'd figure a way over, around, under or through it. By the end of the trip it became a running joke. Whenever this inquisitive student would begin to question our response to unforeseen calamity, she'd stop herself and answer her own query, "*I know…we'll figure it out.*"

Managing student uncertainty and helping students make sense of the unfamiliar in the relative safety of the classroom can be difficult enough. Transplant that task to another country, another culture, another language, and the unexpected can be paralyzing, whether faculty or student. As universities progressively embrace and actively encourage international immersion and service learning experiences, guiding students as they encounter uncertainty and the unfamiliar demands greater attention, whether the context is the local community or a locale halfway across the world.

This qualitative study examines an international immersion service-learning (IISL)/research experience in a village in the Eastern European Post-Soviet nation of Moldova. Faculty and students taught journalism and helped create an online news outlet. Students' conceptions were challenged, they experienced uncertainty and struggled to make sense of their environment and experience. Using a phenomenological approach, this research grounds the IISL experience in varied disciplines revealing possible approaches to managing uncertainty, making sense of circumstances and achieving transformative learning outcomes while facing unexpected challenges.

BACKGROUND

Moldova, a former Soviet Republic, is a young democracy with an emerging free press that ranked as "partly free" in 2014, according to Freedom House (2014). Political independence came in 1991 with the fall of the Soviet Union. Since then, the country has taken one step back for every two forward in its attempts to build an independent press, a democratic government and an economy that will support its roughly 5 million citizens. As example, in November of 2014, the Moldovan people elected a pro- European parliament intent on aligning itself with European Union powers. But by May of 2015, just months after news that roughly 20 percent of the nation's assets had vanished from Moldovan banks, backlash evidenced a shift in allegiance back to Russia (Higgins, 2015).

Indeed, the country is one of many contradictions. When it comes to food, its rural residents are self-reliant, laboring long hours farming by hand to grow the crops needed to feed themselves and their families year round. But given generations of living under communist rule, where the state exercised great control over daily life, there has been little sense of self-agency in much of the population.

Our observations coincide with the research of scholars of Eastern European Post-Soviet democracies and opinions of Moldovans themselves. Lutsevych (2013) maintains that "Citizens acquiesce in corruption in order to receive services from the state and accept these practices because they feel powerless to change the system." In a study of philanthropic behavior in Moldova, researchers found that volunteerism and public participation is extremely low – only 4 percent participated in a social organization or volunteered within the previous year (as cited in EveryChild Moldova, 2010).

Rather, there is an implicit expectation that someone, somewhere else, should fix the problem. Although these were among our observations, Moldovans also can be their own harshest critics. "We know we are a constellation of the absurd," wrote Moldovan journalist Vladimir Lorchenkov (2013) in a New York Times, op-ed piece; "Like America, Moldova is a young nation. The difference is, we act like one. In contrast to Americans, who strive toward their

dreams, Moldovans prefer just to dream." So, when the power fails, when the one road through town is riddled with deep potholes, when no one shows for the scheduled meeting – a philosophical shrug of the shoulders and a resigned, "Ah…it's Moldova," from locals, seems explanation enough.

A Peace Corps volunteer had invited us to Giurgiulesti, a village of about 3,000 at the tip of southern Moldova along the Romanian and Ukraine borders where the Prut and Danube rivers meet. Giurgiulesti is a rural village with few jobs. Because it is on the border of Romania, some people find work with the customs department. There is no grocery store and few businesses. The nearest town is an hour away by bus. Villagers must grow their own food. Many working-aged adults leave the village to seek employment in Russia or further abroad. Grandparents, aunts, uncles and others care for their children. It was our task to teach journalism skills and values, help a group of students launch an online community news site that would be known as Radio Giurgiulesti and provide a base for local adults to form an advisory board that would offer hope of sustainability.

U.S. students lived with host families, some of whom spoke little or no English. Often the homes had indoor plumbing, but families used outhouses. Although few in the village had much in the way of disposable income, they cooked elaborate, multi-course meals made of home-grown ingredients from their gardens for the students and presented them with gifts. Students were invited into village homes on a daily basis and established close ties with community members and Moldovan students.

Our three-year effort in the remote village faced many obstacles. Language barriers, poor infrastructure and a weak culture of volunteerism, were but a few issues that needed addressing. We suspected our project had little long-term chance of survival, but we committed to trying and believed that there still was value in the effort for all parties involved. Throughout the project, students and faculty had to re-group and re-think expectations and outcomes.

Crabtree (1998) argued that communities with the capabilities required to be self-sustaining and to solve problems would provide stronger outcomes for students and more positive results for the community and organizational members participating in ISL projects. By definition, such communities are reflective of most U.S. university student contexts. But projects in less certain environs should not be avoided because of the likelihood of failure. There is opportunity for learning and growth as both teacher and learner face new expectations and strive to make meaning in the face of the unknown and unknowable.

Against this backdrop, this study investigates two processes -- uncertainty management and sensemaking – through which transformative learning occurs. Although immersion experiences are widely believed to have transformative effects, little is known about the communication processes that facilitate this outcome or the role faculty play. To fill this gap, we first elicited student reflections on their experiences, then examined their responses for evidence of these processes as instantiated in the text. We supplemented these findings with observational analysis, blog entries, and remembered conversations between faculty, students and Moldovan nationals. Using Husserl's phenomenological approach as a starting point allowed us as researchers to engage in our own sensemaking in beginning to both describe and understand our students and their lived experience as we followed the data. With a better understanding of these processes, faculty members may be better able to guide students in learning

processes that are transformative.

LITERATURE REVIEW

Understanding how faculty can best help students manage uncertainty and engage in sensemaking in an international immersion service learning/research (IISL) experience that results in transformative learning, may best be accomplished, as Crabtree recommends (2008), by examining scholarship that crosses disciplines. We drew from the fields of communication, sociology and philosophy to guide our methods and analysis.

Uncertainty reduction theory (URT, Berger & Calabrese, 1975) originally posited that, because people are uncomfortable with uncertainty in interpersonal situations, they will seek to reduce it using passive, active or interactive strategies. Berger & Calabrese believed that two kinds of uncertainty existed in initial interactions, cognitive (what does the other person think or believe) and behavioral (how predictable is the other's behavior). Further, they argued that people engage in both prospective and retrospective uncertainty reduction. Incentives for reducing uncertainty include desired future interaction, obtaining something the other has that one wants, and acting according to accepted norms.

URT has also been used to study intercultural interaction (Gudykunst & Nishida, 1984), online interaction (Carr & Walther, 2014), and chronic health condition management (Brashers, 2009). While acknowledging prior work involving uncertainty reduction, Brashers (2001) posits that "reducing uncertainty is only one of an indefinite number of responses to events or behaviors that are unpredictable, ambiguous, equivocal, or lacking information" (p.478). He suggests that the historic focus on reducing uncertainty has left undeveloped ways for managing uncertainty. When uncertainty is managed, Brashers contends, there is opportunity for hope, optimism (and action).

While uncertainty may lead to paralyzing anxiety, it does not have to be so. Accepting uncertainty is an adaptive measure (Mishel, 1990) that can begin the process of managing uncertain situations. Understanding the cause of the uncertainty can also help craft a positive response that will help people move forward. "Supportive others act upon uncertainty management processes by providing direct or indirect assistance as sources of information, collaborators in information gathering, evaluators of information, or buffers against information" (Brashers, 2001, p. 485). Ancona (2012) has suggested that faculty can prove valuable resources to students as they help them navigate uncertainty by continuing to express confidence in their abilities and guiding them in more fruitful directions.

Uncertainty management acknowledges that whether people are making decisions, planning an event or interacting with others, they will experience uncertainty (Brashers, 2001). Uncertainty management can then be defined as a process by which an agent can choose behavior options that facilitate the ability to act regardless of uncertainty.

Helping students manage uncertainty positively coincides with the need to promote sensemaking of situations and surroundings. Weick (1988) introduced the concept as a way of explaining how people and organizations make sense of unknown environments in order to act. Ancona (2012) and others have advanced the concept and view sensemaking as a leadership skill that allows individuals to frame uncertainty and act in the unknown. For faculty helping students develop the skill set and confidence to operate in changing and uncertain situations, sensemaking can be an important tool. Uncer-

tainty, in this setting, may be viewed as an "adaptive challenge" that requires people to respond in ways foreign to them (Ancona, 2012). Sensemaking is needed in order to act, but at the same time, acting is part of sensemaking as people experiment and test different responses against circumstances. In effect, sensemaking requires playing the game while you are still figuring out what the game is, its rules and its purpose (Ancona, 2012). This was particularly true of student experiences in Moldova as they sought to meet project goals while encountering unfamiliar social and cultural norms and behaviors. Students could not wait until all conditions were perfect, all information known and all situations understood in order to interpret and act.

Sensemaking, then, becomes the process by which an agent frames the unknown and the unfamiliar in order to act. In general, people interpret messages and responses based on norms of the social context (Feldman & Rafaeli, 2002). Interaction in new and relatively unknown contexts, such as different cultures and political systems, requires greater understanding and effort than usual. Travel to Moldova represented a significant departure from the context students typically experienced.

Students who might have sought to rely on the norms of their society and culture to determine their response to unexpected circumstances were immersed in a structure for which they had no prior frame of reference. The encounter pushed them to set aside their ways of knowing to adopt new lenses with which to understand their experience and new frameworks for acting to fulfill project goals.

As students set aside prior knowledge their response to unfamiliar structures and processes offers evidence of transformative learning. Transformative learning as conceptualized by Mezirow (1991, 1997, 2000) occurs when individuals work to sort through distortions they experience outside their current frames. Through critical reflection of one's own and others' assumptions and beliefs, frames of reference may be transformed and people become more open (Cranton & Roy, 2003). The use of critical reflection is also supported in a review of journal articles citing service learning as an effective method capable of resulting in transformative learning (Bowen, 2010).

Researchers have studied short-term, positive transformative effects through service learning (Eyler & Giles, 1999; Kellogg, 1999) and domestic immersion programs (Sax & Austin, 1997), and through international service learning (Grusky, 2000) and intensive interdisciplinary learning environments (White & Nitkin, 2014). In one longitudinal study, Kiely (2004) examined perspective transformation over a seven-year period, finding lasting perspective transformation on at least one dimension in each of the study's 22 participants. However, less is known about the process through which students work to resolve distortions in pre-existing assumptions, either as they encounter them, or as they reflect on them, and what long- term learning results (Jones, Neihaus, Rowan-Kenyon, Skendall & Ireland, 2012). While many conceptualizations of transformation and learning exist, Mezirow's formulation specifically addresses contexts characterized by challenges to existing frames, as mentioned, and draws on views from a variety of fields. Because one aim of this paper is to bring diverse fields of study to bear on service learning, Mezirow's conceptualization seems most relevant.

To further understand communication processes and how these result in transformative learning, this study uses a phenomenological approach to explore student communication choices and behaviors as they sought to manage uncertainty and engage in sensemaking. In this approach, we use a qualitative method to collect and analyze data about how students reconcile existing conceptions and expectations with lived field experience in order to understand the broader international immersion service learning experience, posing the following research question: How may transformative learning be accomplished through a) managing uncertainty, and b) sensemaking?

METHOD
Research Methods
Students who participated in the Moldova international immersion service learning/research experience were contacted by e-mail and asked to reflect on and write about their experience by responding to a post-trip questionnaire. Eleven questionnaires were sent to all student participants (three separate trips over a three-year period) by e-mail; eight were completed and returned.

The questionnaire included 10 items, with questions covering two areas. The first area included general aspects of the trip ("Were your efforts helpful to the Moldovan people? If yes, how did you know? If not, why do you think not?"). The second area of questions included aspects of the trip that literature suggests are transformative ("Did you have to change your goals or plans based on unexpected events or cultural realities? If so, what were these unexpected events or realities? How did you change your activities and what effect did this have on you?").

Responses to the post-travel questionnaire were first broken down into thought units defined broadly as representing any process. Researchers then independently coded units as representing either uncertainty management efforts, sensemaking, both or neither. For coding purposes, we defined uncertainty management as "Articulating a course of thinking or action that came about based on experiencing something unclear or unexpected, or showing evidence of having made a change or adjustment in behavior in response to something unknown or unclear." This aligns with uncertainty management literature (Brashers, 2001; Ancona, 2012) that defines it as a process of choosing behaviors to enhance one's ability to act in contexts characterized by a lack of clarity.

Based on Weick's conceptualization, sensemaking was defined as "Showing evidence of having come to some conclusion or having figured something out; articulating some realization; reasoning to come to some understanding; or using experience, thought, or both to determine meaning." This aligns with literature on sensemaking (Weick, 1988; Ancona, 2012) that explains how actors frame, or explain to themselves, what is going on around them to determine how to act. In some cases we identified instances of both uncertainty management and sensemaking, using the operationalization of both concepts above.

Two researchers then compared coding, initially disagreeing on six of 137 thought units, representing intercoder reliability of .96 based on percentage agreement. Next, researchers discussed individual findings and agreed on identification of textual material as one or the other, neither or both, reaching agreement after discussion on placement of all thought units. Results of this analysis were supplemented with faculty recall of conversations and experiences, and student blog entries posted on the Department of Communication and Journalism web site. Blog entries were made voluntarily before, during, and after the trip by several different students, all of whom participated in the two most recent trips. Students who contributed to the blog were given freedom to choose topics of interest to share with readers. Faculty previewed the posts for minor editing of punctuation, grammar and spelling.

Participants

During the winter of 2011 and the summers of 2012 and 2013, faculty led teams of three to four communication and journalism students on a three-week international immersion service learning research project to the former Soviet Republic of Moldova, its capitol city Chisinau and the rural village of Giurgiulesti.

Two men and nine women participated over the course of the project. Faculty interviewed students and students were selected for the project based on their skill sets and perceived ability to complete project tasks. Only students who had performed well in their academic program were considered. Most of the students had either studied abroad for a semester or traveled to another country as part of a family or high school trip. Three of the students had never been outside the United States. One had never flown in a plane.

Of the 11 students, all, save one, were traditional college-aged. All, save one, were of white, Western European descent. The remaining student was of Hmong-American descent.

Students who participated in the project were either journalism or organizational communication majors. The journalism students were charged with developing basic training materials in the fundamentals of journalism. Journalism students led multiple two-hour training sessions for Moldovan students aged 10-17 over a five-day period in the village. In addition to in- class training, U.S. students were expected to mentor the Moldovan students (all of whom spoke some English) working on stories about their village. The U.S. students taught the Moldovan students how to operate and maintain the online news site www.radiogiurgiu.com. The U.S. students accompanied the Moldovan students on interviews and coached them on how to use the equipment. The U.S. students completed the tasks, often without the aid of a translator. The organizational communication students joined the project the second and third years and were charged with designing materials and training local adults who would serve as an advisory board and advocates for the student-run news site. They facilitated board sessions and worked to develop a method for the board to seek external funding support for Radio Giurgiulesti.

RESULTS

Researchers coded a total of 137 thought units. Table 1 shows the frequency of thought units by category and includes samples of thought units for each category. These results are further analyzed below, and supplemented with other source material described.

The total number of thought units identified suggests the thoughtful, sometimes lengthy responses students provided, which illuminated their thought processes and choices. It was this quality of thinking and response that enabled us to examine responses specifically for uncertainty management and sensemaking; simple yes/no or brief responses would not have provided us with the same view into student understanding or the ways this understanding connected with student communication during and after the process.

In this analysis, we found 43 (31%) thought units that represented uncertainty management. Each thought unit fit our operationalization in that it either reflected an effort to articulate how students came to a decision on what to think or how to act when they experienced something unexpected or unclear, or how they came to respond to something unknown or unclear by changing or adjusting behavior.

Considered an adaptive challenge that must be faced, uncertainty management is evident in the way students report changing or adjusting their behavior in response to ambiguity. For example, student journalists charged with teaching Moldovan students the principles and practices of journalism had highly developed lesson plans with specific time frames assigned to various tasks. In their questionnaire responses, they reported continually adjusting and adapting in response to unknown circumstances. "…*We had to go with the flow… The abrupt change in plans only added excitement to activities,*" wrote one student. "*Exciting interview opportunities sparked up spontaneously which made for unexpected turns of events, but spectacular content.*" Still another shared similar needs to adjust, writing, "*There is only so much you can plan and anticipate.*"

Likewise, students responsible for working with the adult advisory board operated in a rapidly changing environment in which they reported making decisions on what to think when faced with the unexpected. One student recalling her experience wrote, "*My entire goal of the trip was changed within the first few days. When I realized that the chance of the board of directors meeting was slim, I had to refocus the purpose of the trip…*"

Faculty also observed students deciding on behavioral changes when something was unexpected. In the case of one student who initially struggled to manage uncertainty – asking multiple what if questions before the plane had even landed – growth occurred as the student learned to act amid the uncertainty. On one particular day, the student worked with the Moldovan students on the news site while the faculty researcher went to interview local residents. During that time, there was a significant technical problem with the web site that required the U.S. student to take initiative to repair the site. Often, such difficulty could lead to paralysis and all work stalled until the faculty researcher could be consulted. But not this time. Despite the ambiguity about which course of action might be preferred or even more successful, the student chose a path and acted. The faculty researcher didn't hear about the situation until a day or two later during an informal conversation and the student noted she had

TABLE 1. Coding Results by Category			
Category	# Thought Units	% of Total	Sample
Uncertainty management	43	31%	"If there were any obstacles that involved scheduling interviews, we would find other activities to work on."
Sensemaking	84	61%	"If a person believes an injection will make her feel better and (sometimes purely as a function of that belief) she does feel better after receiving it, she will almost certainly continue that behavior."
Both	10	7%	"Human history is wrought with the tug- of-war battle between our security in the familiar and our acknowledgement of the new, possibly more correct, unfamiliar."
Total	137		

"*figured it out.*"

On another trip, student researchers were reporting with Moldovan students in the market place when someone challenged their right to film and ask questions. The local constable showed up, telling the U.S. students they would have to go with him and make sure their papers were in order. Unfamiliar with Moldovan press laws and fearful of offending their hosts, the U.S. students suspended their reporting and returned to the village school. They did not follow the constable. Later they approached a Moldovan teacher and shared their misadventure. She assured them there was no reason they could not film in the market place and expressed shock and dismay at the constable's attempt at intimidation. Though disappointed in themselves for not challenging the constable, the two remained confident they had enough audio and video to produce the intended story. In both of these examples, students encountered unexpected and unfamiliar situations. And, in each, they demonstrated the hallmarks of uncertainty management. They demonstrated hope and optimism and took action despite uncertainty about the results.

Closely intertwined with uncertainty management is the process of sensemaking. Students could not always rely on their current understanding or knowledge of the way things work, because the ways of doing and being they considered the norm were not always part of the Moldovan landscape. For example, one student reported what she considered a contradiction through a sensemaking effort to understand that although professional Moldovan journalists valued independence, they accepted corruption as part of the landscape. The student recalled her interview with the Moldovan journalist, writing, "*…she voiced her opinions about how critical it was to have impartial journalists who declined bribes from parliament members. However, she also said that sometimes you just 'have to do what you have to do,' to provide for family, even if that means accepting bribes from politicians. The journalist, however, noted that she did not personally accept bribes.*" The student ultimately concluded that, "*When faced with extreme situations, people do what's necessary to survive.*"

Students also reported making concerted efforts to understand that, although Moldovan villagers were self-sufficient and resourceful in many respects, they did not evidence a great degree of self-agency or much experience with community activism (Lutsevych, 2013). When two students arrived on the scene charged with the task of creating processes and systems by which an adult community board could be established to help assure the future of the student-run community news site, they encountered numerous challenges. When board members came late to meetings, or didn't show up at all, it became apparent to the students that the theories and practices known to work in western non-profits were not necessarily effective in the village. This is supported by literature on NGOS in post-Soviet countries and their difficulty gaining traction in Moldova (Howard, 2003; Lutsevych, 2013). In a questionnaire response, one student commented: "*Meetings to develop an Advisory Board from the ground up, for example, simply did not carry as much importance as food security and loyalty to one's family duties.*" Supporting this student's sensemaking efforts, we observed that the students regrouped, worked with their faculty mentors and came up with new ways to communicate the concepts with board members.

In another example of sensemaking, specifically reasoning to understand, one student shared multiple examples borne of experiencing the contradictions of Moldovan life.

•"*Although they do have access to washing machines, they save the*

energy and water and hand wash instead.*"

•"*They could use their working toilets but knowing the sewage system is practically nonexistent they opt instead to use pit toilets to ensure the community doesn't face a sewage leakage.*"

•"*When teaching journalism, I saw the desire to learn but also not to interfere or step over the line. They wanted to get the story but not get in trouble, which can be difficult when you need to obtain facts.*"

Finally, data analysis revealed 10 thought units (7 percent) that represented both uncertainty management and sensemaking. We noted that at times, students struggled to manage uncertainty and engaged in sensemaking as they worked to understand their surroundings and act. In those instances, students encountered the unfamiliar, understood that their existing lens did not fit the situation and adjusted their behavior or came to a new truth as a result. This was the case for one student who came to a new realization regarding her own existing beliefs about work in the face of her experience in Moldova, writing, "We *often brag of our American work ethic….I can brag no longer. I was astounded by the Moldovan way of life and ashamed of what I used to consider 'hard work.'*"

Another student reported her reactions to some Moldovan health practices, further reflecting aspects of both sensemaking and uncertainty management: "*One prominent area of Moldovan culture that continuously struck me as curious was that of public health. My host mother, (personal reference omitted), would get visitors to the house nearly every day seeking medical attention. She would take them in the side living room and administer 'an injection.' Due to the language barrier, I couldn't ask any details about these injections or their purpose; I must admit it did not feel entirely legitimate…Almost equally abided by, however, was a diet consisting of fresh fruits and vegetables directly from the earth; protein provided by the poultry and cattle residing outside the bedroom window. No obsession over adequate water intake existed in this country; only a small cup of juice (but more likely 5 ounces of homemade liquor) was taken with any meal. Altogether, I saw and participated in, health practices that sometimes felt so organic and beneficial, and sometimes quite unhealthy.*" Embedded in this recollection is the uncertainty of encountering – to the student's mind – suspect injections and hard liquor with breakfast – and her not altogether successful effort to make sense of those practices in the context of what she viewed as coinciding healthy habits of consuming organic food.

Still another student recollection moves back and forth between recalling her uncertainty and her subsequent sensemaking of her circumstances while in Moldova. "*I would say that navigating uncertainty and constantly reassessing to adapt to new information was one of the foremost themes of this experience…. It was of course draining to continuously regroup, reassess, and redirect. To psychologically accept and then physically enact change will always take more energy than remaining blissfully ignorant. But as challenging as the circumstances proved to be, I felt our group adapted impressively well. We communicated well with each other, never falling victim to disengagement or resentfulness. When confronted with what we knew to be a hard reality, we simply changed our goals without necessarily feeling like we were lowering them. And even when our 'professional' endeavors were faltering, it was uplifting to feel the heartfelt interpersonal connection with the Moldovan people, and the inevitable learning that accompanied that.*"

The following blog entry provides another example of both sensemaking and uncertainty management, as a student wrote about perceived contrasts in daily life as she considered her own experience. "*The economic situation in Moldova doesn't allow for a life of relaxation*

and free time… Bed time comes long after the sun sets. It seems there is no end when it comes to work. As a result there is great sacrifice…"

Outside their specific training duties, students engaged in the Moldova project encountered a variety of different social and cultural norms as they navigated village and city life that prompted them to reconsider their current world views. "*In regard to international travel, one thing is certain: Your expectations will be blown away,*" one student wrote in a blog post.

From our observation and interpretation, what is happening in each of these instances, is an effort to manage uncertainty in a given situation and make sense of the unknown on the way to new understanding and acceptance that ultimately led to transformative learning. Uncertainty management and sensemaking do not demand agreement – as was the case with students who traveled frequently on crowded public buses with patrons who refused to open the windows despite stifling heat because they believed the "current" from the breeze generated would cause illness – but it does require a level of respect and willingness to consider other viewpoints. One student stated "*…public transport is a bit of a mystery that takes time to unravel. In Moldova, bus drivers pack vehicles beyond capacity. Road lanes appear to be a suggestion rather than a definitive boundary.*" Although initially baffled by the unspoken rules of the public bus system, students quickly adapted and learned to maneuver on and off the crowded buses. "*At one stop, a woman got on the hot bus and immediately rolled up the window. The Moldovans thought nothing of it, but as Americans … we could only stifle our amazement and frustration.*" Again, students may not have liked the practice, but they bore it with grace and adjusted their behavior to local custom and refrained from opening windows on Moldovan buses.

As we analyzed the student survey responses and blog posts and recalled events and conversations, it became clear that we and the students came to a shared realization: Success in the context of meaningful learning and service does not mean the absence of difficulties, challenges and even, failure. Through our data analysis, we found indications that uncertainty management and sensemaking processes can indeed serve as precursors to transformative learning. Long after her trip, one student noted that learning to manage uncertainty was a skill that stayed with her, writing, "*Moldova did stretch and grow me in my personal life by increasing my ability to adapt to change and uncertainty which has helped me in my job…*" Another student experienced similar lasting effects, writing, "*This trip has also taught me to approach every situation with total neutrality…I remember thinking that all parliamentary members are evil and corrupt for bribing journalists and controlling content until I spoke with a parliamentary member working to resolve the problem.*"

Students reflected on transformative changes that occurred as they learned to manage uncertainty. "*Every challenge and uncertain moment becomes easier when you realize you're navigating it with people just like you in some ways,*" wrote one. "*Our group often found ourselves in less-than-optimal situations (i.e. broken equipment, language barriers, scheduling conflicts, small frustrations, etc.) …there's something about overcoming challenges that brings a group of people together no matter their difference,*" added another.

Transformative learning was evident in student reports of perspective changes regarding things they believed they already knew.

"*It was only what I experienced firsthand in Moldova that I no longer took for granted the unique privileges I have in the United States. As journalists, we are privileged that we can work in an environment where freedom of expression is not a novel concept.*

We don't have to accept bribes from politicians to lean writing towards one partisanship or another, fearing that if we don't accept the extra income our families will go hungry. I would even dare to say that many Americans couldn't name their First Amendment rights. Why not? Because they've never had to live without them. It is only when we have our rights taken away or withheld that we begin to speak up. For many Moldovans the fight for journalistic freedom is an everyday battle."

In another instance, a student reported changing the lens with which she viewed the developing democracy, allowing the move from disdain to respect.

"*Through the eyes of U.S. citizens, Moldova is corrupt in every which way and seems an unsuitable home. I remember thinking that those who had the capability to move abroad and didn't were crazy. Who am I to judge or say their home was uncivilized? …One of the young adults who had remained quiet for much of the conversation perked up and said, 'Why would I want to leave Moldova? This is my home. This is my country.' In that moment a light bulb went off in my head. How naïve for me to assume that all Moldovans think poorly of their own nation….When reflecting on Moldova, that's what I remember most: the tenacity and loyalty of the Moldovan people who refuse to waiver…*"

DISCUSSION

Mezirow's (1991, 1997) concepts of transformative learning suggest that uncertainty and sensemaking activities are an integral part of meaningful learning that extends beyond course content. This research sought to explore how students managed uncertainty and sought to make sense of their environment while working in a challenging environment as part of an international immersion service-learning experience. A qualitative phenomenological approach reveals how these two processes contributed to transformative learning. Student responses to the survey prompts and their own blog posts pointed to new insights and new ways of thinking that developed as a result of their immersion experience, their willingness to manage uncertainty and their desire to make sense of their experience while working to serve others.

Respect and the ability to consider alternative ways of thinking and doing are essential components of transformative learning. Transformative learning is said to occur when experiences outside the individual's norm require them to consider situations and events with an alternate perspective. Evidence of such learning is found in the words of the students themselves – whether engaged in the immersion experience or in post-trip reflections -- and in our observations. For example, the student who viewed life in the village as being far too difficult later acknowledged that there was beauty in the difficulty because the everyday challenges provided a path to finding joy in small moments of rest. We view her shift as transformative learning because she was able to move beyond her own frame to understand another perspective.

In addition to cultural revelations, students also experienced transformative learning related to their disciplines. The experience amplified their understanding of the practice and purpose of journalism. Several shared how their Moldova experience taught the importance of flexibility and creativity in journalism because, "*there is only so much you can plan and anticipate.*" Another reflected on the difficulty of arriving at truths in journalism. She decided she could no longer write in absolutes, but needed to achieve more nuanced reporting

and work to ensure all voices are heard. When it comes to managing uncertainty, faculty found that it is important to promote an environment where students can embrace uncertainty. Rather than be paralyzed by uncertainty, students recognize they have the confidence and self-agency to experiment and seek solutions free of the stigma of failure.

As faculty mentors, we sought to encourage students to embrace the unknown and act despite uncertainty. We worked to promote a positive, can-do atmosphere. We provided multiple opportunities and methods for students to communicate their uncertainty and to engage in sensemaking. At times we had group debriefing sessions. In other instances we had conversations one-on-one with students throughout the trip. We used reflection and conversation, both informal and planned, to help students process the experience. The use of reflection in particular, supports findings from a review of literature on the importance of making meaning through reflection (Bowen, 2014). In that review, Bowen notes reflection is most effective in achieving learning when faculty facilitate reflections that help students think critically and intentionally about the experience, linking it to their courses and learning objectives (Bowen, 2010). In the case of our IISL research effort, we encouraged students to reflect on the experience in light of their discipline and as global citizens.

By allowing students to rely on themselves and one another to problem solve, we saw students grow in confidence and ability. The reported growth in confidence and personal ability that comes from deeper student engagement also supports similar findings in earlier studies (White & Nitkin, 2014). Learning the value of collaboration and interaction as a means toward achieving goals also mirrors previous work (Bowen, 2010).

We also acted as models as we encountered unanticipated challenges to our efforts and engaged in our own uncertainty management and sensemaking. The shift in our roles as instructors at the head of the class with an answer for every question, to colleagues and guides, both sharing and facilitating an experience, were essential elements in providing a transformative learning opportunity (Slavick & Zimbardo, 2012).

CONCLUSION

This research underscores the importance of an interdisciplinary, multi-faceted approach to frame and examine how students manage uncertainty and make sense of their environment as they work in challenging circumstances. We understand some of the findings are specific to Moldova and our project, but see applicable connections for other contexts. Faculty working with students on immersion projects in unfamiliar settings, regardless of location, need to pay particular attention to how students are processing the experience and provide multiple opportunities for students to communicate individually and as a group about their understanding and interpretation of events. Faculty also may want to consciously examine the ways in which their roles shift as they work alongside students to manage uncertainty and engage in sensemaking can manage the challenges ahead, optimism that obstacles can be overcome and agency to act. If they are to make sense of their circumstances, students require the freedom and encouragement to act before knowing all the answers. For learning to be transformative (i.e., to take them beyond their current understanding and knowledge), they should not be shielded from uncertainty, but be asked to embrace both it and the experiences that do not fit their pre-existing presumptions and references.

Future research would add to this study's small number of participants, and could include more diverse students' perspectives. As with all recall and observation, researchers should be mindful of memory reliance and bias when seeking to analyze and characterize past events.

Other instructors who guide and mentor students in international, national, regional or local immersion experiences may find this study helpful in developing practices that help faculty and students successfully manage uncertainty and make sense of their environment on the way to meaningful service and transformative learning.

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