Awakening the Learner Within: Purposeful Prompts and Lifelong Learning Measures in a First-Year Composition Course

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Abstract: Lifelong learning skills have been shown to benefit students during and after college. This paper discusses the use of the Effective Lifelong Learning Inventory (ELLI) in a first-year composition course. Reflective writing assignments and pre- and post-semester ELLI data were used to assess student growth as lifelong learners over the course of a semester. Statistically significant gains in lifelong learning dimensions were made by students in the study as compared to those in a control group who received no direct instruction. The authors reflect on the outcomes of the project for students and instructors and question the general assumptions often made about the outcomes of a college education, namely, whether students gain lifelong learning skills simply by virtue of attending college, or is more instruction on these "intangible" qualities needed?

Keywords: lifelong learning, reflection, first-year composition, resilience, ELLI, change, growth, assessment, student success, first-year experience

The first semester of college presents students with a rite of passage, an enormous challenge to prove themselves as worthy of their dreams; moreover, it offers them a chance to reflect on past learning strategies and determine if changes should be made to assist them in reaching their goals in the undergraduate sphere. Sadly, many students do not complete their four-year degree goals; approximately 41% of first-time, full-time college students fail to graduate in six years (National Center for Education Statistics, 2015). Enhancements in student learning and persistence have been highlighted as part of the possible solution to this statistic (Hoops et al., 2015; Kuh, Kinzie, Schuh, & Whitt, 2005; Reason, 2009). When students are motivated to learn, they experience an energy that drives their capacity for learning, especially in the area of adapting and changing to meet new challenges (Deakin Crick, Broadfoot, & Claxton, 2004; Deci & Flaste, 1996). Course designs that promote an awareness of lifelong learning strategies facilitate the students' transition into college learning while also preparing them for ongoing learning opportunities beyond the four-year college (Shaffer, Eshbach, & Santiago-Blay, 2015; Gill, Shaffer, & Seidel, 2017).

In order to support this positive transition into college, it was the intent of this project to expand students' capacities as lifelong learners through specific activities completed in their first-year composition course. Data was collected through reflective writing assignments as well as with pre- and post-semester scores using the Effective Lifelong Learning Inventory (ELLI), an online survey that measures dispositions in seven areas of lifelong learning: Resilience, Creativity, Changing and Learning, Meaning Making, Strategic Awareness, Critical Curiosity, and Learning

Relationships (Deakin Crick et al., 2004). Positive changes were found in student writing samples and across most areas of lifelong learning measured by ELLI. This paper describes the project design and outcomes which were quite positive for students and faculty alike.

Lifelong Learning

First of all, it is important to identify the scope of lifelong learning used in this study. The concept of lifelong learning has become a global trend (Head, Van Hoeck, & Garson, 2015). The goal here is to support learning throughout a citizen's lifetime, promoting their "social, cultural, economic and personal fulfilment" (Su, 2015, p. 10) via the learning process. Lifelong learners take intentional steps to learn throughout their lifespans; also, they live by basic principles such as "personal commitment to learning; social commitment to learning; respect for others' learning; and respect for truth" (Smith & Spurling, 1999, p. 9). An emphasis on lifelong learning skills, and on the student as a learner, can help to decrease the current trend among students (if not their universities) of thinking of students as consumers. When students do adopt the belief that they are customers and the university is the service provider, the focus of education experiences a negative shift, one that deemphasizes learning (Saunders, 2014).

To avoid this unwanted shift, institutions, including instructors, can incorporate research-based approaches to ensure that student learning is both meaningful and deep in and out of the classroom. Kuh et al. (2005) share a wealth of data about the conditions that make a difference for student success, emphasizing, "What students *do* in college matters" (p. 8). This project was purposely designed to investigate practices that encourage students to reflect upon their experiences *as learners*. In so doing, they encounter opportunities to develop insight and growth.

As a tool to support this growth as learners, we chose ELLI which has been used with success in other campus projects and which has been well vetted over time (Deakin Crick & Yu, 2008; Shaffer et al., 2014; Gill, Shaffer, & Seidel, 2017). The aim in the development of ELLI was to "identify the elements that define a good learner," and to develop an instrument that could evaluate where a person would be situated in relation to each element, creating a "starting point" for further development (Deakin Crick et al., 2004, p. 248). ELLI scores provide students with valuable information about themselves as lifelong learners which then can be used to measure growth over time.

While an appreciation of lifelong learning has been part of the classic tradition, educators have not always been able to collect relevant data points to support their claims of growth in such an "intangible" topic. With the development of ELLI, there exists a validated and reliable instrument that can help users develop a deeper understanding of lifelong learning (Deakin Crick & Yu, 2008). This work reveals that some participants are predisposed to seeing learning as a muscle that can be exercised and strengthened; other participants are much more likely to believe that learning is "fixed," and this category of learner is less likely to come to the natural conclusion that difficulties can become opportunities for growing as a learner (Deakin Crick et al., 2004; Dweck, 2008).

Dweck's work on fixed and growth mindset is particularly relevant in the case of first-year students. College may be the first time that naturally "bright" high school students experience academic challenges. Without guidance at this critical juncture, students may lose confidence and give up prematurely. Carefully crafted writing assignments that give students a chance to reflect

on their college learning experiences along with faculty input can provide a timely opportunity for students to change from "fixed" to "growth" mindset—an outcome that can serve them well throughout their lives (Dweck, 2008). ELLI scores provide the starting point for a conversation about growth as a learner.

The concept of ELLI—this set of "values and attitudes"—is particularly complex because it considers relationships, which by nature fluctuate; furthermore, values at the heart of ELLI also develop over time. The exciting part of harnessing ELLI in the first-year classroom is that ELLI can "be skillfully mobilised to scaffold 'forwards" to support new strategies and attitudes that will enhance students' ability to become adept learners (Deakin Crick & Yu, 2008, p. 389). Growth, then, is possible and can be measured. The next step would be to devise ways in which these qualities could be acquired by learners.

Self-Knowledge and Reflection as a Mechanism for Change

Researchers who want to use ELLI (available through ViTaL Partnerships/ELLI Global at http://www.elli.global/), must first complete training in its appropriate use which incorporates activities that promote self-knowledge, critical reflection, and coaching to help students identify target areas and make improvements. When students complete ELLI, they receive their scores in a spidergram including all seven lifelong learning dimensions. If students take ELLI multiple times, they can see the changes over time with concentric lines on the diagram (see Figure 1).

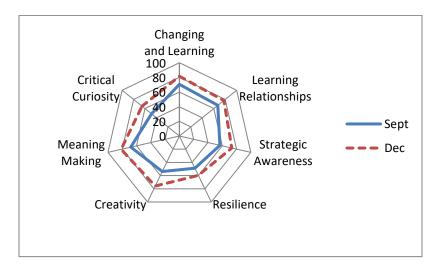


Figure 1. Sample spidergram of student pre- and post-semester ELLI scores (Shaffer et al., 2015).

When students see their ELLI scores for the first time, it creates an opportunity for dialogue about themselves as lifelong learners. Over time, they begin to develop the *language* of lifelong learning and change (Deakin Crick et al., 2004). It is this newfound language, combined with critical reflection, which helps students to imagine and contextualize the changes they hope to see in themselves (Dzubak, 2013; Mezirow, 1998; Shaffer, 2015). Mezirow (1990) further explains the role of reflection in fostering transformation. When students experience "disorienting Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu

dilemmas" such as doing poorly on exams for the first time in their academic careers, or the struggle to make friends in a new environment, for example, critical reflection can help them to identify old approaches that may no longer work at the college level, making room for change (Mezirow, 1990). Offering students direct instruction in reflective and self-regulated learning (SRL) early in their college careers could also help to produce the maximum benefit to students' overall success (Hoops et al., 2015). While this learner-centered composition course design does not replace a Student Success Course (SSC), it does offer a means of integrating components of student learning success into programs which do not schedule SSCs. This type of embedded course design could be expanded to other typical first-year courses to help students acquire skills that are extraneous to the normal course content (Shaffer et al., 2014). The question before us was whether this extra instruction was necessary for growth in learning proficiency, or would students gain lifelong learning skills simply by virtue of attending college? In this next section of the paper, we describe the actual course design, followed by the procedures used and results obtained.

The Course Design: ELLI in a First-Year Composition Course

In addition to the traditional objectives for a first-year composition course, the objectives for using ELLI were to enhance students' awareness of their control over their own learning and its direct connection to their success in college. Ideally, the program would also promote their development of lifelong learning abilities for the long term. It was hoped that by learning about the possibilities of lifelong learning, they would begin to see the joy of learning rather than follow the growing trend of appreciating a college education entirely as a consumer-driven experience. A first-year writing course seemed like a natural fit for incorporating the types of personal and critical reflections integral to ELLI use which could at the same time provide many benefits for students in their first year of college.

Course Design Elements

Students completed exercises that challenged them to reflect on their identities as learners and practice methods for revising learning habits. The course design allowed for multiple reflective opportunities targeting these dimensions, culminating in a final essay that asked students to craft a thesis-driven argument that showed how their first semester of college had changed them as learners. Students were not required to include the ELLI test findings in their responses, but many chose to do so. ViTaL Partnerships provides participants with the handbook *My Learning Power*; this content is especially helpful for its pithy explanations of the dimensions and its identification of the dimensions' opposite qualities. For example, Passivity is the opposite of Critical Curiosity (*My Learning Power*, 2011, p. 15).

The following section describes the procedures followed for the project including the collection of qualitative and quantitative data, results, and insights gleaned from the project.

Procedures

An Institutional Review Board proposal was submitted and approved for this project (Study # 3040) under the title, Supporting Student Development as Lifelong Learners Using The Effective Lifelong Learning Inventory as a Content Framework.

Students enrolled in the first-year composition course through the normal registration process in fall of 2015. The informed consent process was carried out during the first week of classes. Of the forty-one students enrolled in two sections of the course, thirty-one consented to participate in the study, agreeing to share their course writing assignments as well as ELLI scores for analysis. All student names in this paper are pseudonyms to protect student anonymity.

In the first week of classes, all students took ELLI and viewed their scores. They took ELLI again during the last week of the semester so that scores could be compared. During the course of the semester, six of the seven ELLI dimensions were introduced as course content, and students were assigned various associated reflective writing assignments to complete.

As a first-year composition course, students learned about writing techniques and completed five process writing assignments. Students did have access to the ELLI workbook *My Learning Power*, but the reading they completed for the course focused on successful samples of memoirs, profiles, process analyses, and research papers. While the earlier essay assignments did not specifically incorporate ELLI concepts, the final one, a Lifelong Learning Essay, offered students the chance to write about ELLI themes in a thesis-driven essay (see Appendix A).

Qualitative Analysis

We will now turn to a description of the ELLI dimensions covered as content, the associated assignments, and the insights gleaned from the analysis of student writing.

Learning Relationships

The intriguing aspect of this dimension is the fact that it represents a balance between reaching out for help when it is needed, but also being confident in some aspects of private learning; these students "know the value of learning by watching and emulating... their peers," but they also can study independently (Deakin Crick et al., 2004, p. 256). To initiate students in this area, we modeled what a successful peer review looks like. Students completed four guided peer reviews of composition assignments during class. After the second such collaborative activity, students reflected, in writing, about how they had benefitted from the peer reviews and what could make their peer review involvement more successful.

At the end of the course reflection, several students, especially those who identified themselves as being shy, wrote about how they increased their efforts in Learning Relationships during the semester. Mark wrote, "I have realized over the course of this semester that I could be much more social with my classmates and have improved my interactions with others. This has affect by [sic] learning because I was able to collaborate more frequently with others and improve project outcomes." His classmate, River, also saw that reaching out to other people in her classes "helped tremendously [by keeping] me focused and motivated." Additionally, some students came to realize that engaging with their instructor could result in increased learning.

Strategic Awareness

This dimension resonates with first-year students and their struggle to balance the demands on their time. Strategic Awareness involves making plans to accomplish your goals, managing yourself and the processes involved in attaining your goals, and "taking responsibility for your learning" (*My Learning Power*, 2011, p. 23). To introduce this concept in a nonthreatening way, we focused on encouraging students to see projects as a collection of small steps, each of which could be manageable. We discussed essay-writing in steps, emphasizing the stages of the semester's largest project, the research paper. The course design emphasized process writing, a long-established method of writing in drafts and working slowly toward the completed version. Students submitted small-steps in the process along the way, a syllabus strategy designed to avoid any last minute rushing to write the entire essay.

Three times during the latter half of the semester, students participated in goal visualization; this consisted of journal entries in which they envisioned the next step they planned to take in an assignment. Students reacted especially well to the message that everyone at some point feels helpless in their learning, but we all have the opportunity to take control through strategic planning. A few students claimed that taking part in the exercise helped them to deal with stress in a positive way. Patricia wrote, "Without my improvement in managing my time, I never would've seen such amazing results. Even my friends and family described me as 'less stressed' and before this seemed inconceivable." Several other students used the final essay to express their need to continue working on time management, but at least strategically planning for future assignments was becoming part of their mindset.

Creativity

Rather than being "rule-bound," learners who harness Creativity find new ways to approach ideas, typically using diagrams and visual representations of concepts; they might also welcome the "inklings that bubble up into their minds" (Deakin Crick & Yu, 200, p. 391) as inspiration for new ways of approaching what they need to learn. This was the one dimension we did not treat at all in classroom instruction. Several students wrote about Creativity in their final papers, but they were self-taught in this topic, since we did not mention it in class.

Changing and Learning

In a way, this dimension represents a fundamental approach to the power of lifelong learning: learners can take control and adapt to learning challenges. It is deeply connected to implementation of the other six dimensions. Students who accept that they can change as learners are able to develop new strategies in their Strategic Awareness, their Creativity, and their Learning Relationships. This served as the foundational concept behind the final essay, in which students were asked to see themselves as learners who adapt themselves to face learning challenges.

Cory expressed his story of Changing and Learning joyfully: "The first chapters [in Chemistry] which was review for [the rest of the class] was all new to me, and it forced me to read outside of class and watch videos on the subject....I began to catch up....With this newfound confidence in my abilities I began to apply it to all of my classes, and just like in Chem my understanding of the topics skyrocketed and so did my excitement. Not only was learning

important to me it was also enjoyable. Never before could I sit down and read three chapters on the Noble Gas Laws and actually enjoy it, but now it is no longer the tedious activity it was." The opposite of Changing and Learning is being fixed or static (*My Learning Power*, 2011, p. 13). Cory had expanded his learning abilities and recognized that he could apply this approach to his entire education.

Meaning Making

Students who have a predisposition for Meaning Making are already able to "make connections and integrat[e] ideas" (*My Learning Power*, 2011, pp. 17-18); these students recognize how learning relates to ideas that already interest them. To encourage this practice in students who were not already predisposed, we encouraged students to write about topics that already had relevance in their lives. One student exemplified this beautifully when he likened the essay-writing process to his unique hobby of "turning wood, bone, antler, and resin into pens with my dad." He explained that writers, like turners, need to plan out each part, or it will not work in the end.

Selecting essay topics can be the most daunting part of the task for a large segment of the class, so building off of what they knew offered an avenue for Meaning Making. A student contemplating a science major, Alex, reflected on his growing enthusiasm in his first semester composition course: "With each assignment I was given, I decided to make it appealing to me. So, I wrote papers on hunting experiences, land management, and other related topics. Once I got started, I became hooked on my assignments. I never thought in all my years of school that I would actually enjoy writing papers so much." We appreciated reading essays written with enthusiasm because the author was more deeply pursuing topics that had already been a part of his life. Alex and some of his classmates were taking new skills (citation, paragraph layout, thesis writing) and applying them to that which already mattered to them.

Resilience

To begin the conversation about Resilience, students took a "12 Item Grit Scale" assessment online, and we then watched a TedTalk on grit presented by Angela Duckworth. Students responded very well to this idea of overcoming obstacles. We asked them to journal about an obstacle in their past that they had overcome, and we reflected on this element of our characters. In the final ELLI survey, this was the one dimension that showed shrinkage in the class over all. After reviewing students' final reflection essays, we were poignantly reminded of the fragile nature of the first-year experience. Perhaps the most heartbreaking comments came from River: "This first semester has caused me to fear more for the future and realize that my previous vision of myself going to vet school one day may not be realistic for someone like me. I am currently looking into careers that would take less than eight years in school to achieve."

One specifically stated that an increase in Resilience had been her goal since being introduced to the concept at the start of the semester; another celebrated her 30% growth in Resilience, declaring that "This first semester of college is not a challenge academically. It is a challenge emotionally."

Another student, Dallas, connected her loss in Resilience during the semester to the deaths of two father figures in her life. After reflecting on her grandfather's recent death, she added, "As

soon as I viewed the results from the ELLI survey I knew exactly why my resilience diminished. Early in the semester, around week five, I lost a fatherly figure to me. My best friend of thirteen years' father passed away, unexpectedly, crushing her whole family and the lives of many others. I have never lost someone who has played as big a role in my life as he had, so I took it very hard. The situation was tough but it taught me that it was possible to just keep pushing on. For future references, I can look back and tell myself that I can get through anything to try to improve my resilience." The shrinkage in Resilience is an important outcome, and it will be explored further in the Discussion section.

Critical Curiosity

Von Strumm, Hell and Chamorro-Premuzic (2011) argue that an overlooked element in students' success is their propensity for intellectual curiosity. Arguing that this element of academic success can rival the forces of intelligence or conscientiousness (the term they use to signify effort), the researchers found that "intellectually stimulated students are likely to be more satisfied with their university experience and to enjoy their studies to a greater extent than students who fell victim to ...hard dogmatism" (von Strumm et al., 2011, p. 582). Coaching students toward this place of satisfaction should be the goal of the university, and practices in ELLI are well-suited to the purpose.

For this dimension, we listened to a National Public Radio story about a high school student who left the classroom and designed his own studies for a year (Brundin, 2015). We applied the usefulness of curiosity to the students' selection of a research paper topic, since they were asked to choose a topic that would allow them to become an undergraduate specialist in some area of their future major. For that assignment, students were asked to research a topic that would allow them to pursue their natural curiosities, as long as it was a researchable topic that provided multiple viewpoints; they would end up arguing one side of the multi-sided issue.

At least two students wrote about their growth in Critical Curiosity, and one, Michelle, devoted her final paper to how she has fallen back in love with learning through focusing on this dimension: "[In high school] I cared less about learning and more about what would appear on my transcript. A few weeks into my first semester of college, my attitude shifted; I fell back in love with learning. I regained my curiosity in school like I had when I was a child: I started asking questions; I began to enjoy making connections between what I was learning in my classes to experiences I have had. . . . I learned well this semester because I gained a critical curiosity for learning and the drive so I would not only receive a good grade in my courses, but that I could also genuinely understand the material and apply it in other areas of my life."

This story was perhaps the most exciting of the semester, as Michelle spent hours researching her topic, the importance of bi-lingualism in brain development for children of various ages. While she had one full version completed by the due date, she asked for an extension so that she could include more scholarly sources, more than doubling the assignment's requirement. Our own appreciation of Critical Curiosity was informed by our work with this topic, and so we permitted the extension on these grounds, as we saw growth happening in the student. The original assignment asked for six scholarly sources, but Michelle accomplished her goal of reviewing and applying fourteen scholarly sources. Our observation of her success suggested that her curiosity about the subject, not her intelligence, was behind this devotion to pursuing the topic beyond the

bounds of the course's expectations. We came to see in this case that, "both conscientiousness and intellectual curiosity influenced academic performance to the same extent as intelligence" (von Strumm et al., 2011, p. 583).

Quantitative Analysis

In addition to the insights derived from student writing, ELLI spidergrams offer quantitative data about their progress. Three groups of students were used to make statistical comparisons: 1) the treatment group were those students in the first-year composition course who received direct instruction in ELLI dimensions (N=31); 2) the control group were students in several other typical first-year courses (another first-year composition course, a college algebra course, and an environmental science general education course) who took ELLI pre- and post-semester but who did not receive any instruction in ELLI (N=48); and 3) the benchmark group were first-year students (not in either of the other two groups) who took ELLI pre-semester for the campus to gain a general understanding of incoming students' ELLI levels to be used for comparison over several academic years (N=145).

To make sure that students in the treatment group were not "super performers" compared to other students in their class, a one-way ANOVA was conducted to compare the differences in ELLI scores pre-semester between the treatment, control, and benchmark groups. There were no statistically significant differences between groups in any of the ELLI dimensions pre-semester (see Table 1).

Table 1. One-way analysis of variance of pre-semester ELLI scores by treatment, control, and benchmark groups

ELLI Dimensions	df	SS	MS	F	P
Changing and Learning					
Between Groups	2	174	86.8	0.26	0.77
Within Groups	221	73814	334		
Total	223	73988			
Learning Relationships					
Between Groups	2	380	190	0.57	0.56
Within Groups	221	73148	331		
Total	223	73528			
Strategic Awareness					
Between Groups	2	699	349.4	1.26	0.29
Within Groups	221	61080	276.4		
Total	223	61779			
Resilience					
Between Groups	2	1280	639.9	2.58	0.08
Within Groups	221	54835	248.1		
Total	223	56115			
Creativity					

Between Groups	2	367	183.3	0.51	0.60
Within Groups	221	79662	360.5		
Total	223	80029			
Meaning Making					
Between Groups	2	58	29.18	0.11	0.90
Within Groups	221	59224	267.98		
Total	223	59282			
Critical Curiosity					
Between Groups	2	399	199.4	0.49	.62
Within Groups	221	90408	409.1		
Total	223	90807			

Note. Statistical significance at p<.05 was not achieved for any dimension.

Students in the treatment group received direct instruction in ELLI dimensions and completed reflective assignments as outlined in this article. It is this group of students whose excerpted reflections appear here. A paired-samples t-test was conducted to compare the ELLI scores pre- and post-semester for students in this group. Statistically significant differences were found in all dimensions except Resilience (see Table 2).

Table 2. Paired samples t-test of significance for ELLI scores pre-and post-semester for treatment group

	n	T	М	SD	M	SD
ELLI Dimensions	p	1	pre-	pre-	post-	post-
Changing and Learning	0.015	-2.55	72.16	17.48	79.80	16.53
Learning Relationships	.001	-3.52	62.35	20.33	69.31	18.96
Strategic Awareness	<.001	-3.88	55.39	15.03	64.05	18.16
Resilience	.49	-0.69	59.55	14.29	61.12	14.00
Creativity	.003	-3.25	52.07	17.82	60.35	21.65
Meaning Making	.004	-3.10	70.29	13.84	77.75	12.57
Critical Curiosity	.033	-2.22	58.70	14.19	64.09	17.56

Note. N = 31

Students in the control group were given no direct instruction about ELLI or lifelong learning and were simply taking typical first-year courses (a first-year composition course, a math course, and an environmental science general education course). A paired-samples t-test was conducted to compare their ELLI scores pre- and post-semester. There were no statistically significant differences in any of the ELLI dimensions pre- to post-semester for the control group (see Table 3).

Table 3. Paired samples t-test of significance for ELLI scores pre-and post-semester for control group

	12	T	М	SD	M	SD
ELLI Dimensions	p	1	pre-	pre-	post-	post-
Changing and Learning	.27	-1.12	69.72	19.30	73.33	23.62
Learning Relationships	.82	0.23	62.22	18.34	61.67	24.57
Strategic Awareness	.18	-1.37	58.51	16.16	61.28	19.27
Resilience	.36	0.93	58.19	14.91	56.28	18.98
Creativity	.82	-0.23	52.93	18.81	53.54	21.13
Meaning Making	.44	0.78	70.97	16.91	69.03	21.54
Critical Curiosity	.79	-0.26	51.91	21.73	52.52	20.96

Note. N = 47

Discussion

What do we hope students learn and become as a result of a college education? Often, the "intangible" elements—things like emotional intelligence, ethical decision-making, and lifelong learning—are just assumed to happen as a result of student participation in coursework and/or co-curricular endeavors. However, the data from this project bring this assumption into question. It is interesting that students in the control group made no gains in any area of lifelong learning over the course of a college semester, yet those students who received direct instruction in lifelong learning with opportunities for self-reflection were able to make statistically significant gains. It could be argued that, if given more time, students in the control group might still show positive change through the regular activities of college. Currently, the campus is collecting ELLI senior benchmark data for comparison with the first-year dataset to help answer this question. We are hopeful that positive gains will be present. It would be disheartening to think that students who graduate from college make few gains as lifelong learners.

In this study, while we saw positive gains in most of the ELLI categories, not all of the students who completed the class expressed such positive, self-aware reflections as the ones described earlier. It does seem that by covering a spectrum of learning dimensions, students had multiple opportunities to connect with at least one of them. Their final essays revealed that they were interested in aligning themselves more with one or two dimensions rather than finding their identity in all seven.

The least amount of growth occurred in the area of Resilience. This has been a consistent finding across all campus ELLI projects which included direct instruction on lifelong learning (Shaffer et al., 2015; Gill, Shaffer, & Seidel, 2017). The lessons devoted to grit or Resilience seemed to engage the students, judging by their discussion; this finding, however, shows that, while they might be informed about the vocabulary of Resilience, the changes that they must make as learners during their first semester of college learning can result in a feeling of fragility. As discussed, students may be struggling with their confidence levels as they experience academic and other challenges (Dweck, 2008). River's stated fear of losing her dream of becoming a vet is a good case in point. The college experience begins for many full of promise, but challenges can add up, putting success in jeopardy.

Resilience scores may also remain stagnant if students cannot perceive the changes that are happening. Students almost certainly have overcome many challenges in the first semester of college, but they may not yet fully realize the extent of these changes. Students need to see the changes to be able to account for them in the ELLI survey. An area for future study would be to explore this notion further. An important aspect of ELLI use is the development of shared language of lifelong learning and growth. It is possible that a combination of strategies that: 1) encourage students to reflect on their successes in resilience and 2) continue to build the language of resilience could produce positive results. More research is being conducted on campus with first-year students to investigate this approach.

The greatest growth appeared in the Strategic Awareness dimension; we attribute that to the success of the tiny-goal journaling activities, to which the students responded positively.

We would be remiss if we did not talk briefly about how this process affected us as instructors. Reviewing student reflections reminded us of the enormous challenge traditionally aged, recent high school graduates face when they re-make themselves into college students. Including opportunities for reflection offered a window into that internal struggle. We did not become "easier graders" as a result, but we feel that we did become more compassionate teachers as students opened up about their learning troubles. Their stories inspired us to reevaluate ourselves as learners. After succeeding in college and graduate school, we might have felt we had little to learn about adapting to new learning situations. However, after working through ELLI concepts with our students, we have realized that we now approach new learning situations differently as a result. The reflective process has become a very meaningful two-way street.

Since we had been searching for a useful final essay assignment for years, we were greatly pleased by the results of the Learning Reflection essay. It allowed students one final chance in our class, to probe their identities as learners and to evaluate their personal successes. They were encouraged to see this as a habit flexible learners undertake throughout their careers. The reflection essay gave students the opportunity to participate in self-assessment, and it presented self-assessment as a means of reflecting on and adjusting their learning habits. Students were encouraged to think beyond "immediate outcomes to consider what these outcomes mean for the learner's future goals" (Su, 2015, p. 13).

We will conclude with the thoughts of two students. One, Katherine, began her final reflection essay by chronicling her disappointments early in her first semester. Like many of the students in the study, it took her time and reflection to notice that her learning habits from high school would not be enough to succeed in college; she eventually recalibrated her efforts to better reach her expectations: "Overall my first semester in college has been a huge success, and I contribute it all to making a change in the way I learn. My grades are all A's and B's, but the best part is that I know I learned the information from my classes.... Learning used to be a chore, but now it is thought provoking and an enjoyable experience."

River, who struggled with absenteeism and the decision to medicate her ADHD, came to recognize the level of dedication that obtaining a degree in veterinary science would require. Despite the struggles she dealt with in her first semester, her participation in the ELLI program offered her hope: "I have learned most importantly that I possess the ability to change as a learner, and that is something that I had always doubted before. If I can continue to do that, then there is nothing that I cannot accomplish if I want it badly enough."

It is our hope that Katherine, River, and all of their peers, will continue to reflect on the pleasures and power of learning. At the same time, we hope that institutions, already heavily invested in assessing learning outcomes as part of improvement and accreditation processes, will also carefully consider whether students are also acquiring the "intangible" qualities and skills hoped for as a result of attending college.

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Appendix A Lifelong Learning Essay Assignment

This final assignment is designed to test the skills we have been working on all semester. So, you will be writing a thesis-driven, source-supported essay that argues how you have seen yourself develop as a learner during this term.

The thesis can center on your involvement with this class, or you can take anecdotes from past experience and other current classwork to show your development.

Source Use: You should plan to use at least three outside sources; these can include the ELLI booklet distributed in class and any scholarly article about learning or ELLI. Additionally, you might consider reevaluating your style of learning (auditory, visual, kinesthetic) from the quiz you took earlier in the course.

You may refer to your own past papers and reflections as examples, but these will not count toward the source total. Source use—including quote introductions, paraphrases, works cited entries, and citations—will be graded for accuracy. This includes how meaningful the quotes/paraphrases employed in the essay actually are.

Thesis: Perhaps your thesis will involve one or more of the seven ELLI dimensions where you saw the most growth. It could also express a life lesson about learning that you realized during this semester. Whatever it is, make sure there is enough support to fill three full pages of analysis and proof. The thesis must appear in the correct, academic thesis location, and it should clearly argue something related to your current academic learning, ideally connected to writing.