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# Connecting High Impact Practices and Student Self-Efficacy: Social Cognitive Theory as a Window into Student Growth

**Colin E. Suchland and Suzanne A. Carbonaro**

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**Abstract:** High Impact Practices (HIPs) encompass a variety of educational opportunities proven to increase student engagement and persistence in their collegiate studies, but do they also lead to increased self-efficacy? By combining the literature of HIPs with Social Cognitive Theory (SCT) this research presents a combined assessment methodology tested in an undergraduate sociology class during the COVID-19 pandemic that includes high impact assignments, reflective practices, and a pre/post self-efficacy survey, giving students a more comprehensive practice, which provides tools to empower learners to connect collegiate and personal experiences to their professional goals.

## Introduction

Almost 15 years ago, the term High Impact Practices (HIPs) was first used by Dr. George Kuh in the National Survey of Student Engagement (NSSE) annual report as a way of collating and perhaps re-branding common experiential activities such as internships, capstone courses/projects and undergraduate research (Zilvinskis, 2017; Kuh, O'Donnell, & Geary-Schneider, 2017). Since then, researchers in multiple disciplines have conducted studies into HIPs and have highlighted their positive impact on recall and synthesis of knowledge, as well as engagement and retention. This makes way for more opportunities for students to use the skills gleaned from HIPs experiences in other coursework and future employment (Gray & Phillips, 2019; Lanning & Brown, 2019).

College campuses have adopted HIPs as a means to enhance student engagement in their learning and provide experiential opportunities which ultimately impact the institution's key performance indicators that are part of their strategic and quality assurance plans as a requisite for their regional and programmatic self-studies. As outlined in research and case studies by Kuh & O'Donnell (2013), HIPs include: First-Year Seminar and Experiences, Common Intellectual Experiences, Learning Communities, Writing Intensive Courses, Collaborative Assignments and Projects, Undergraduate Research, Diversity/Global Learning, Service Learning/Community-Based Learning, Internship and Capstone Courses and Projects. Kuh & O'Donnell (2013) indicate opportunities for campuses to explore their current implementation of HIPs and how to grow participation in these activities with more student groups. This calls for further research into the personal and individual skill development that students need in order for them to be successful in their careers and as lifelong learners. These skills are developed and refined through HIPs-based curriculum and a concurrent assessment plan that includes high impact assignments, reflective practices and a pre/post self-efficacy survey.

In addition, as evidenced by Hattie (2009) in his meta-analyses of learning achievement:

> achievement is more likely to be increased when students invoke learning rather than performance strategies, accept rather than discount feedback, benchmark to difficult rather than to easy goals, compare themselves to subject criteria rather than to other students, possess high rather than low efficacy to learning, and effect self-regulation and personal control rather than learned helplessness to academic situations. (p. 47)

The ability to successfully transfer skills attained in coursework to career requires practice and high levels of self-efficacy.

This study explored whether there was a connection between students' engagement and performance in HIPs and their self-efficacy as part of a newly designed assessment plan within the HIPs-based curriculum which included courses in the general education curriculum as well as an honors program. Furthermore, the online environment common in collegiate studies today complicates the deployment of HIPs-based teaching strategies as evidenced by this paper, and this study proposed that this required a fundamental shift in teaching strategies to (1) create a set of HIPs outcome statements where students could assess their skills to articulated standards as Hattie (2009) recommends; (2) provide students with opportunities to demonstrate their achievement of HIP outcome statements without being prescriptive and enabling student choice within an online environment; (3) give students the opportunity to reflect on their prior experiences before a course and after, engaging in both the content and practice of this course as a method to assess their self-efficacy and growth; and (4) empower students to connect collegiate and personal experiences to their professional goals. All of these concepts were distilled to one central research question: "Did the course noticeably increase student self-efficacy after completing this course within a HIPs-based curriculum?"

**Self-Efficacy Embedded in a HIPs-Based Curriculum**

The authors make the case that Social Cognitive Theory (SCT)—an interpersonal theory researched and developed by Albert Bandura (1989) that emphasizes the dynamic interaction between people (personal factors), their behaviors, and their environments—could be connected to HIPs and provide a deeper dive into learners' growth as they embark on HIPs as well as a lens to assess student self-efficacy before and after engaging in HIPs. This comprehensive practice encourages students to make direct connections between the skills learned in the classroom and those required in their professional careers.

Bandura (1997) argued that self-efficacy is central to the perspective in which individuals are producers of experiences and shapers of events. In addition, efficacy beliefs have been found to predict how much effort individuals are willing to put into their work, their perseverance when faced with challenges, how well they self-monitor and motivate themselves, what they achieve, and the choices they make in life (Bandura, 1997). Bandura (1997) defines metacognition of which SCT is a measure as:

> thoughts about one's cognitive activities rather than simply higher order cognitive skills. In constructing solutions, people must channel their attention, decipher environmental task demand, draw on relevant factual and operational knowledge, appraise the adequacy and versatility of their skills, conduct tests of their understanding, and evaluate and revise their plans and strategies depending on the results their efforts produce. (p. 223)

Bandura (1997) identified four factors which can influence and shape self-efficacy. These include (1) enactive mastery experience; (2) vicarious learning; (3) verbal persuasion; and (4) physiological and affective states. All of these factors are relevant with regards to learners' participation in HIPs but as Elliot, McCormick, & Bhindi (2019) state in their study of self-efficacy in the classroom, enactive mastery experience is the most powerful as it provides the context for an individual to recall and reflect on past successes and failures in order to shape one's belief in one's capability to be successful in future opportunities. Grusec (1992) found that SCT also seeks to examine the notions of power and agency with respect to what capacity individuals think or believe they have to exercise control over their experiences and lives. A well-developed HIPs curriculum would lay the foundation for intentional reflection of self-efficacy in context with skills-based learning, and SCT provides a metacognitive window for students.

This study examines the need that beyond institutions' offerings of HIPs and students' demonstration of their growth in specific skills gleaned from their participation in HIPs linked to institutional outcomes, there needs to be an assessment of students' self-efficacy which ultimately supports student growth and visible learning practices. Bandura (1997) suggests that enactive mastery experiences are beneficial to students precisely because they promote self-reflection on success and failure. "Difficulties provide opportunities to learn how to turn failure into success by honing one's capabilities to exercise better control over events," (p. 80). Students gain a measure of self-direction when presented with a HIPs curriculum, but research indicates that the lasting benefits, if any, are unknown. Students should be encouraged to metacognitively assess the value of their participation in HIPs and how it will impact their future experiences. A self-efficacy survey adapted from Schwarzer & Jerusalem (1995) provides an opportunity to understand this growth within students.

It is the intention of this study to draw a direct and previously unexplored connection between student experiences in HIP curriculum and the known benefits of assessing student self-efficacy. Simply assessing HIPs in isolation serves primarily institutional goals and does not explicitly provide students with opportunities to review their evidence within the context of their own growth and professional goals. Instructors also benefit when they are able to mentor students toward the connection of their collegiate experiences with their professional aspirations. The methodology suggested in this paper provides the real-time data required for effective mentoring. Finally, the ultimate goal of the authors is to center assessment of HIPs within an environment that supports student self-reflection on what they are learning in the context of general education outcomes and professional goals. SCT can not only affect change in students but it can be the catalyst for students' growth and transformation.

Two previous studies on student self-efficacy found individual gains in persistence of educational outcomes and employable skills. Cervone, Mercurio, & Lilley (2020) found in their study with freshman STEM students that using a self-efficacy framework including multiple self-reflective practices over a period of time provided faculty advisors with better insight into supporting their learners and talking points

for mentoring meetings. This self-efficacy driven approach enables advisors to drill down to the specific needs, concerns and "gaps" in knowledge students have without the need for lengthy individual student interviewing. "Clinicians can guide clients in exploring ways in which their self-identified strengths might help them cope with difficult challenges," (Cervone, et al., 2020, p. 1609). Wang, Peng, Xu, Simbi, Lin, & Teng (2020) found that by "establishing a knowledge-sharing learning environment" students are better able to problem-solve because they gain multiple points of reference from instructors, peers, and - in the case of service learning - community partners. Further, this means giving students the tools they need to record their experiences in the HIPs curriculum, and reflect on the skills they have practiced, leading to improved employability.

The case study presented here is emblematic of the need for both instructors and learners to adapt and overcome the challenges and limitations of traditional general education curriculum. Participation in HIPs curriculum that connects HIPs and SCT within an Introduction to Sociology course provides an interesting lens and platform to test this methodology. A final wrinkle in implementing the curriculum outlined here is that spring semester 2020 was drastically altered by COVID-19, forcing the test-bed course into a completely online environment at mid-semester. This paper offers discussion to the challenges of implementing and assessing HIPs during the COVID-19 pandemic.

**Foundations for a HIPs-based curriculum**

Lincoln Land Community College (LLCC) is located in Springfield, Illinois and enrolls more than 5,000 full-time learners annually. LLCC serves its stakeholders by providing a wide-range of degree programs and certificates. Its Honors Program, which is scholarship-based and well-sought by area high school students, offers a rigorous general education curriculum oriented toward transfer students. LLCC honors students expect to be challenged and engaged through their college experiences, with opportunities to participate in learning beyond the classroom. LLCC honors students function as a learning cohort and cohesive student organization, taking courses in common while completing general education studies and ultimately their associate degrees.

In alignment with Marzano's research on instruction (1998) which recommends giving students clear targets and strategies to meet expectations of knowledge and skills required of them during learning processes, the first author (a faculty member in the LLCC Honors Program) planned a class community service project as the course final for SOC 101: Introduction to Sociology for honors students during spring semester 2020. The sociology course (offered once annually) was selected as a test-bed for conducting research on a HIPs-based curriculum and assessment plan. The goal was to test the feasibility of revising, embedding and scaling a HIPs-based curriculum and assessment plan within the LLCC Honors Program, which includes both curricular and extracurricular activities (such as leadership training and service projects). One explicit goal of the project outlined in this paper was to develop and examine the utility of HIPs-based assessment tools for LLCC. This interest has expanded with the involvement of a second author, whose background in curriculum and assessment and current role as an academic leader at an

educational technology company, provided an opportunity to incorporate her role to create a framework that could scale a HIPs curriculum and assessment plan to other institutions. Initial data analysis suggests this "proof of concept" can and should be ported beyond LLCC to fully understand the connections between HIPs and self-efficacy.

The assessment plan in this study was two-fold: (1) use a custom-designed rubric to assess student performance in specific HIPs to establish a baseline, and (2) use an instrument to determine if participation in HIPs leads to increased student self-efficacy. The instrument chosen was a pre/post survey based on an instrument adapted from Bandura and implemented in research by Schwarzer & Jerusalem (1995). The second author previously used this instrument in a three-year study of pharmacy students on rotation during their advanced pharmacy practice experiences and with science teachers in New Jersey at the onset of the state-wide implementation of the Next Generation Science Standards (NGSS). It is the authors' intent that HIPs be seen as a treatment that fosters the development of self-efficacy and metacognition (Bandura, 1989) and provides a window into students' learning experiences from the students' perspective.

**HIPs-based Curriculum and Assessment Plan in Sociology 101**

Introduction to Sociology began as a regular face-to-face class in spring semester 2020, but by mid-March external concerns led to a drastic change in plans. With COVID-19 forcing classes at LLCC online, the first author reached out to the second author, as an academic colleague and partner, for support. The authors collaborated to create a sequenced final project for students over the last six weeks of the semester that kept the spirit of HIPs alive but also required a shift in the original assessment plan which included a collective class service project. The course was delivered through Canvas (learning management system, LMS) and Microsoft Teams for synchronous meetings. AEFIS, LLCC's institution-wide assessment management platform, was used to capture a pre/post snapshot of student self-efficacy, as well as manage HIPs Outcomes along with an associated rubric (modeled after the Association of American Colleges & Universities Valid Assessment of Learning in Undergraduate Education (AAC&U VALUE) Rubrics used by LLCC faculty in the General Education Program). The authors met with students weekly for the remainder of the semester, serving as instructor and course mentor respectively. The second author introduced a 'SMART Goals' worksheet that was used for one of the revised assignments and inspired the development of a 'Media and Messages' framework that learners then used to guide their efforts.

Through these changes the class final quickly evolved from a collective class service project to individual, partnered projects that the students developed in conjunction with an entity within their local community. Students were asked to make connections with and create a profile of a local not-for-profit or public institution. Among the partners chosen were schools, libraries, museums, churches and day care facilities.

Just as LLCC was adopting pandemic protocols, so were these partner institutions. This presented an unexpected opportunity for service learning where the honors students were asked to develop a plan to assist their external partners in communicating with various stakeholders during the pandemic. The weekly online class meetings, meanwhile, became a space for students to seek advice and guidance on what had become independent and self-guided work. This was a

daunting course adjustment accomplished in a narrow timeframe.

It was always intended that a HIPs outcome framework be developed and linked to LLCC's institutional outcomes but the pandemic accelerated this need. The six HIPs outcome statements for which students could compare themselves to as they completed their self-created projects outlined by the revised curriculum while working collaboratively and using existing research and resources stemming from the institution's use of the AAC&U VALUE Rubrics to assess general education outcomes. Gray & Phillips, (2019) piloted the use of AAC&U VALUE Rubrics for critical thinking and oral communication in order to assess students' work within a HIPs-based curriculum. This study furthered that and developed a set of HIPs outcomes and a rubric for assessing HIPs practiced in the course.

The Six HIPs Outcomes are:

1. **Professional Learning**: Learners will develop, enhance and integrate a multitude of skills in alignment with their professional goals and relevant to their future career pursuits.
2. **Civic Engagement**: Learners will develop intentional ways and outlets for contributing knowledge, skills, and abilities within a workplace, organization or field/industry, or a collaborative community.
3. **Collaborative Skills**: Learners will foster an environment where group members can contribute their individual ideas and insights in order to synthesize all contributions to develop one holistic vision for solving a problem or creating something new.
4. **Communication**: Learners will develop and implement oral and written communication practices in collaborative, learning environments to meet the needs of diverse audiences.
5. **Cultural and Social Awareness**: Learners will develop opportunities to foster cultural and social awareness in all learning environments both in and outside of the classroom, with an emphasis on differences and inequalities.
6. **Academic Research**: Learners will develop the skills and practices associated with conducting academic research and data analyses.

The HIPs rubric created in this study employs a scoring system of 0-4 points (Appendix 1). A score of 0 represents data missing; 1 is a benchmark representing expectations for first-year undergraduate students; 2 and 3 are performance milestones and 4 represents a capstone level of mastery associated with the completion of an undergraduate degree program. It is hypothesized that the class average on the HIPs outcomes would be 2 (the Milestone level of performance). This rubric was deployed in AEFIS software and student artifacts were scored by the course instructor.

Students were introduced to the project documentation, 'Means and Messages Worksheet' (Figure 1), during weekly live meetings online. Their completed worksheets were submitted via Canvas, and then electronically pushed to AEFIS using Learning Tools Interoperability (LTI) for scoring.

Figure 1

*Means and Messages Worksheet*

**SOC 101: MEANS and MESSAGES Worksheet**

**Instructions:** Please complete this worksheet in order to profile the means of communication and the messages being sent by your chosen not-for-profit or public institution. Be sure to indicate who the intended audience for each of the means/messages. You will need to work closely with your chosen institution to complete this worksheet. *Means* of communication will include: traditional media (newspapers, radio, tv, etc.), Internet media (Websites), Direct contact (phone, mail and email), and Social Media (Facebook, Twitter, etc.) *Messages* are the types of information being conveyed through a particular type of media. There may be more than one message coming through the same channel.

| Means of Communication | Messages Being Sent | Intended Audience(s) | Who Creates the Messages? |
|---|---|---|---|
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The revised final project had four Artifacts for learners to innovate, collaborate with their community partner, and design with the elements of the HIPs Outcomes in mind:

Artifact 1. Students created a profile of the partner institution.

Artifact 2. Students catalogued the communication between their partner and stakeholders in the Media and Messages worksheet.

Artifact 3. Students proposed a project where the students would assist their partner institution in a media campaign using the SMART goals worksheet.

Artifact 4. Students completed a self-reflective essay as well as participated in a pre/post self-efficacy survey.

These student artifacts were linked to assessment criteria as follows in Table 1.

Table 1

*Alignment of Final Project Artifacts with HIPs Outcomes*

| HIPs-based curriculum components | HIPs Outcome Criteria |
|---|---|
| Artifact 1. Profile and partner with a local not-for-profit or public institution (ex: schools, churches, libraries, museums, etc.) | Civic Engagement & Cultural and Social Awareness |
| Artifact 2. Analyze the public interaction (Means and Messages) of the chosen institution to find a service opportunity | Academic Research & Communication |
| Artifact 3. Develop and propose a service project based on the media analysis (SMART Goals) in partnership with the community organization | Collaborative Skills & Professional Learning |
| Artifact 4. Complete a self-reflective essay and participate in a pre/post self-efficacy survey | Self-efficacy instrument (Non HIPs activity) |

**Findings**

Two methods were used to evaluate the research question "Did the course significantly increase student self-efficacy after completing this course within a HIPs-based curriculum?" Scores from the HIPs rubric were used to determine if the students met or exceeded the hypothesized Benchmark rating for the two assignments overall. The second measure was the self-efficacy pre/post survey which explored 20 statements with a four-point scale. The research hypothesis predicts that 80% or more of learners would reach the Benchmark rating (a score of 1), which is itself equated with the expected abilities of first-year college students. Learners submitted two artifacts for review and later a self-reflection of their learning within the context of the course and their final projects: Artifact 1: Profile a Not for Profit/Public Institution, Artifact 2: Media Profile and Proposal. Average scores on the HIPs rubric showed mild improvement between the submission of Artifact 1 and Artifact 2, which were only two weeks apart (Table 2).

Table 2

*Average HIPs Rubric Scores for Artifact 1 and Artifact 2*

| Artifact | Mean Score | Level |
|---|---|---|
| 1. Profile of a Not for Profit/Public Institution | 1.75 average rating on the HIPs rubric (n=11) | Benchmark |
| 2. Media Profile and Proposal | 2.17 average rating on the HIPs rubric (n=9) | Milestone 2 |

In exploring the individual criteria in the HIPs rubric, there were also two areas where students showed a mild decrease in skills assessed (Table 3), Cultural and Social Engagement and Professional Learning. The comparison is provided as an anecdotal data point for consideration.

Table 3

*Average HIPs Rubric Criterion scores for Artifact 1 and Artifact 2*

| HIPs Criterion | Artifact 1 (n=13) | Artifact 2 (n=13) |
|---|---|---|
| Academic Research | 1.69 | 1.83 |
| Civic Engagement | 1.46 | 1.75 |
| Collaborative Skills | 1.15 | 1.50 |
| Communication | 1.08 | 1.50 |
| Cultural and Social Engagement | 1.92 | 1.08 |
| Professional Learning | 1.69 | 1.50 |

The data from the two artifacts scored on the HIPs rubric reveal that learners met the threshold of Benchmark or better overall. Academic Research, Civic Engagement, Communication and Collaborative Skills were the HIPs outcomes where learners had an increase between the two artifacts scored.

The self-efficacy instrument was deployed electronically through the AEFIS Assessment Management System as a pre/post survey for learners to consider their appraisals of their personal capabilities related to measures of self-efficacy including problem solving, collaboration, coping and confidence. The instrument explored 20 statements with a four-point scale: (1) Not true at all, (2) Hardly true, (3) Moderately true, and (4) Exactly true. The questions were organized into two metrics: 10

statements on Self-Efficacy & 10 statements on Sociological Mindfulness (Table 4). The data gleaned from the distribution provide a comparison of scores given the small sample size (Table 5). In the future, the authors hope to collect additional data to run a meaningful statistical analysis. This serves as a proof of concept for future scaling of HIPs to a larger group of students at LLCC.

The skills associated with collaboration increased in both the HIPs rubric criterion and the self-efficacy survey statement from the beginning to the end of the six-week treatment. This is particularly interesting because the students' final project was delivered and supported exclusively in an online environment due to COVID-19. Furthermore, the self-reflective essays revealed that several students regarded their community partnerships as the most rewarding aspect of the course, even as they called it the most challenging due to social distancing. This goes directly towards Bandura's (1997) contention that challenging work that risks failure yields longer lasting impact. "After people become convinced that they have what it takes to succeed, they persevere in the face of adversity and quickly rebound from setbacks. By sticking out through tough times they emerge from adversity stronger and more able," (p. 80).

**Proof of Concept and Scalability**

The small sample size provides only pilot data but serves as proof of concept for scaling HIPs at LLCC, specifically within the Honors Program. In addition, only one semester of data has been collected and only half of the learners were able to complete the pre/post assessment. The authors believe this could be as a result of the pandemic. This assessment will run again in fall of 2021 in SOC 101: Introduction to Sociology with the potential for more Honors Program courses to be included in the study. The authors will continue to collaborate and gather data to determine additional impact of HIPs and SCT in a HIPs-based curriculum.

**Implications for future study**

This study provides a guide for innovating and collaborating both between colleagues and co-learners. The authors' hope is to expand the use of HIPs Outcomes, the related rubric, and the use of the self-efficacy instrument at LLCC and ultimately at other institutions. Treating the limited empirical results as proof of concept, a larger scale deployment of the methodology in this paper is required to test both reliability and replicability of results. The small number of participants and short course of treatment (notwithstanding the data gleaned in this pilot project) points toward the utility of connecting HIPs with theories of metacognition such as SCT. To provide more visibility to learning evidence linked to outcomes, the authors will include Comprehensive Learner Record (CLR) in future iterations of this research. CLR empowers learners to curate their achievements and share the story of their learning journey—from K-12 through higher education through workplace learning—in a secure, verifiable digital record, (Carbonaro, 2020). CLR brings together all learning, both curricular and co-curricular as well as student self-issued and prior learning experiences. Typically, HIPs are not part of the official transcript and often get hidden from students after they complete their programs. CLR keeps HIPs visible to both learners and employers. CLR gives learners the ability to communicate their experiences to employers through a digital record of achievement as well as another opportunity to bolster their confidence and self-efficacy through sharing their stories of achievements to potential employers with the evidence to

do so. CLR serves as a vehicle for mentoring within the context of academic programs, and although previous research points to having specific data on student learning to foster more effective mentoring, CLR provides a tangible record and catalyst to ignite both internal and external dialogue. The LLCC Honors Program is just one example of how CLR could improve student outcomes and employability. Assessment data and practices must not remain siloed in the house of compliance. HIPs are more than tools to support institutional goals. They create opportunities for self-reflective practices that will carry learners well beyond their collegiate days.

Table 4
*Self-Efficacy Scale Individual Statement Pre/Post Results (n = 8)*

| **Statement** | **Pre** | **Post** |
|---|---|---|
| I can always manage to solve difficult problems if I try hard enough. | 3.25 | 3.375 |
| If someone opposes me, I can find the means and ways to get what I want. | 2.62 | 3.12 |
| It is easy for me to stick to my aims and accomplish my goals. | 3.25 | 3.375 |
| I am confident that I could deal efficiently with unexpected events. | 3.00 | 3.25 |
| Thanks to my resourcefulness, I know how to handle unforeseen situations. | 2.75 | 3.25 |
| I can solve most problems if I invest the necessary effort. | 3.5 | 3.625 |
| I can remain calm when facing difficulties because I can rely on my coping abilities. | 2.875 | 2.875 |
| When I am confronted with a problem, I can usually find several solutions. | 2.62 | 3.00 |
| If I am in trouble, I can usually think of a solution. | 3.00 | 3.25 |
| I can usually handle whatever comes my way, | 3.25 | 3.625 |
| I feel confident in my own abilities when I collaborate with my peers. | 2.75 | 3.5 |
| I generally keep up with current events in my community. | 2.875 | 2.875 |
| I feel like I can be an agent of change in my own life. | 3.625 | 3.5 |
| When I start a job I generally finish it. | 3.625 | 3.5 |
| It is important to me that my ideas/opinions are supported by evidence. | 3.375 | 3.25 |
| If I am not sure about something I know trustworthy sources to find an answer. | 2.875 | 3.00 |
| I feel comfortable sharing my ideas/opinions with others. | 3.125 | 3.00 |
| I am comfortable taking a leadership role when I collaborate with others. | 3.375 | 3.375 |
| I generally feel like I have the skills I need to be successful no matter what I do. | 3.125 | 3.25 |
| When I need to make a big decision, I know where to get the facts. | 3.0 | 3.25 |

Table 5

*Average Pre/Post Self-Efficacy Overall Results*

| Instrument | Pre-Test | Post-Test |
|---|---|---|
| Self-Efficacy Survey | 3.09 | 3.25 |

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## About the Authors

Dr. Colin E. Suchland is a Professor of Sociology at Lincoln Land Community College in Springfield, Illinois. He can be reached at Colin.Suchland@llcc.edu.

Suzanne A. Carbonaro is Director of Academic Partnerships at AEFIS. She can be reached at scarbonaro@aefis.com.

## **Appendix 1.** HIPs Rubric

| Criteria | Capstone (4 points) | Milestones (3 points) | Milestones (2 points) | Benchmark (1 point) | Data Missing (0 points) |
|---|---|---|---|---|---|
| **Professional Learning** Learners will develop, enhance and integrate a multitude of skills in alignment with their professional goals and relevant to their future career pursuits. | Learner exceeds the specified proficiency demonstrating synthesis, innovation, and creativity. | Learner demonstrates a mastery of the outcome and its application. | Learner demonstrates a basic understanding of the outcome but needs further development. | Learner demonstrates an incomplete understanding of the outcome. | Learner fails to address the outcome. |
| **Civic Engagement** Learners will develop intentional ways and outlets for contributing knowledge, skills, and abilities within a workplace, organization or field/industry, or a collaborative community. | Learner exceeds the specified proficiency demonstrating synthesis, innovation, and creativity. | Learner demonstrates a mastery of the outcome and its application. | Learner demonstrates a basic understanding of the outcome but needs further development. | Learner demonstrates an incomplete understanding of the outcome. | Learner fails to address the outcome. |
| **Collaborative Skills** Learners will foster an environment where group members can contribute their individual ideas and insights in order to synthesize all contributions to develop one holistic vision for solving a problem or creating something new. | Learner exceeds the specified proficiency demonstrating synthesis, innovation, and creativity. | Learner demonstrates a mastery of the outcome and its application. | Learner demonstrates a basic understanding of the outcome but needs further development. | Learner demonstrates an incomplete understanding of the outcome. | Learner fails to address the outcome. |
| **Communication** Learners will develop and implement oral and written communication practices in collaborative, learning environments to meet the needs of diverse audiences. | Learner exceeds the specified proficiency demonstrating synthesis, innovation, and creativity. | Learner demonstrates a mastery of the outcome and its application. | Learner demonstrates a basic understanding of the outcome but needs further development. | Learner demonstrates an incomplete understanding of the outcome. | Learner fails to address the outcome. |
| **Cultural and Social Awareness** Learners will develop opportunities to foster cultural and social awareness in all learning environments both in and outside of the classroom, with an emphasis on differences and inequalities. | Learner exceeds the specified proficiency demonstrating synthesis, innovation, and creativity. | Learner demonstrates a mastery of the outcome and its application. | Learner demonstrates a basic understanding of the outcome but needs further development. | Learner demonstrates an incomplete understanding of the outcome. | Learner fails to address the outcome. |
| **Academic Research** Learners will develop the skills and practices associated with conducting academic research and data analyses. | Learner exceeds the specified proficiency demonstrating synthesis, innovation, and creativity. | Learner demonstrates a mastery of the outcome and its application. | Learner demonstrates a basic understanding of the outcome but needs further development. | Learner demonstrates an incomplete understanding of the outcome. | Learner fails to address the outcome. |