

## **Intercollegiate Athletics Experience as a High Impact Practice: Examination of Quality Indicators**

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*Abstract:* Intercollegiate student-athletes have lower access and participation rates across the high-impact practices (HIPs) compared to peers. HIPs are an active pedagogy that deepen learning through engagement. Recently, there has been a call to examine student experiences to identify ‘next-generation’ HIPs. The intercollegiate athletic experience shows lasting transformative benefits for participants and thus constitutes a ‘next-generation’ HIP. This paper provides evidence to support the concept of intercollegiate athletics as a HIP by: (1) presenting data from the National Collegiate Athletic Association studies and the National Survey of Student Engagement in support of athletics as a HIP; (2) share the perceptions from interview and survey data of academic personnel in a mid-major Division I conference considering intercollegiate athletics as a fit for a next-generation HIP; and (3) utilizing a survey with the quality indicators of HIPs as a way to assess the athletic experience by student-athletes. In total, these perspectives indicated that the eight key quality elements of HIPs are part of a student’s athletics experience. Additional discussion includes the importance of integrating intentional feedback, reflection, and connection to real-world application to further align and deepen the athlete experience with quality measures of HIPs.

*Keywords:* Student engagement, high-impact practices, athlete experience

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### **Intercollegiate Athletics as a High-Impact Practice**

Over the past several decades, higher education researchers have been interested in student engagement as it relates to deepening the learning experience, as well as student retention, particularly how engaging experiences and meaningful relationships throughout their college career foster positive outcomes and transferable skills (Felten & Lambert, 2020; Kinzie, 2012; National Survey of Student Engagement, 2020). This has led institutions to build opportunities and

programming that encourages students to have a holistic and deep learning experience and supports positive student outcomes including increased involvement, engagement, and sense of belonging on campus (Felten et al., 2016; Husser, Lambert, & Felten, 2020; McCabe, 2016; Pascarella & Blaich, 2013; Pascarella & Terenzini, 1991; Wolf-Wendel et al., 2009). Holistic and engaging curricular and co-curricular college experiences have become central to student recruitment, retention, and post-graduate outcomes (Johnson & Stage, 2018; Kuh, 2008; Pascarella & Blaich, 2013; Stage & Hossler, 2000). Practical experiences outside the classroom are more often recognized as a significant part of the holistic learning experience and promote high-quality student engagement inviting institutions to support and continually improve these experiences as well as increase opportunities for access and participation (Kahu, 2013; Kuh, 2008; Zepke & Leach, 2010).

In 2008, a named a set of experiences, now called high-impact practices (HIPs), were identified as leading to student success and providing opportunities for hands-on, experiential learning (Kuh, 2008; Kinzie, 2012, Kuh et al., 2017). The most recent list of HIPs includes: first year seminars and experiences, common intellectual experiences, learning communities, writing and inquiry interactive courses, collaborative assignments and projects, undergraduate research, diversity/study abroad/global learning, service-learning/community based learning, internships and field experiences, capstone courses and projects, and ePortfolios (Kuh et al., 2017). Of particular interest is the impact of HIPs on student engagement and retention in historically marginalized or underrepresented populations. While these student populations tend to have lower participation rates, there continues to be substantial evidence that these experiences positively impact engagement and retention for students including minoritized students, underserved populations, first-generation students, low income students, and student-athletes (e.g. Gaston-Gayles & Hu, 2009; Ishaq & Bass, 2019; Swaner & Brownwell, 2008; Sweat et al., 2013). Furthermore, there is evidence that engaging in multiple HIPs has cumulative effects on learning, particularly gains in self-reported learning and development as the number of HIPs in which a student participates increases. This increase is magnified for students who come from traditionally underserved groups (Finley & McNair, 2013; O'Donnell et al., 2015).

One group of students who falls into these underrepresented and underserved categories and have traditionally lower participation rates in HIPs is intercollegiate student-athletes (Ishaq & Bass, 2019). Similar to underrepresented populations, intercollegiate athletes balance multiple academic and athletic commitments including managing a full course load along with athletic commitments such as practices, strength and conditioning workouts, games, travel, team meetings, and study hall requirements, all while navigating the social scene of a college environment (National Collegiate Athletic Association, 2020a, 2020b, 2020c). These athletic responsibilities may pull students away from other campus activities and limit their ability to engage in co-curricular experiences like their non-athlete peers (Gayles, et al., 2015; Gayles & Baker, 2015; Umbach et al., 2006; National Collegiate Athletic Association, 2020a, 2020b). Furthermore, for intercollegiate student-athletes who are members of additional underrepresented identity groups, there is concern that both their strengths and their needs in terms of navigating campus are neither understood nor supported (Bimper, 2017; Parks-Yancy, 2012; Smith et al, 2006; Solorzano & Yosso, 2006; Wiggins, 2011).

It is important to highlight that employers and graduate programs are looking for candidates with the qualities, skills, and attributes that collegiate athletes gain as part of their athletic

experience including time management, strong work ethic, teamwork, integrating critical feedback, working with diverse populations and more (August, 2020; Park et al., 2013; Sandstedt et al., 2016). Institutions of higher education have an opportunity to support intercollegiate athletes in amplifying and building upon the attributes gained through significant commitment to their sport (August, 2020; Comeaux & Harrison, 2011).

Given that high impact experiences have significant outcomes for students, yet collegiate athletes may be participating in such experiences at disproportionately lower levels, institutions have a responsibility to increase access and participation. This can be accomplished by creating paths to access by assessing current experiences and intentionally deepening them to meet the quality elements of HIPs. In addition to the significant work that has been ongoing on ways to implement strategies to increase intercollegiate athlete access and participation in the traditional HIPs, (Buckmaster et al., 2019; Hall et al., 2020; Hall, Ketcham, & Weaver, 2018; Ishaq & Bass, 2019; Leupold, Weaver & Hall, 2019; Weaver et al., 2019; Williams et al., 2019). In recent years, it has been suggested that the list of HIPs expand beyond academic experiences to a ‘next-generation’ list including co-curricular experiences such as student employment and college athletics; experiences that reach a significant level of immersion (Kuh et al., 2017; Kuh & O’Donnell, 2013). Athletics is an experience with structures and practices in place to support a high-quality, high-impact experience. It also goes beyond simply participating in athletics as it is deep immersion and intentional mentoring that results in student success (Felten & Lambert, 2020; Hall et al., 2020). To achieve the greatest outcomes in HIPs, including when envisioning intercollegiate athletics as a HIP, determining ways to assess quality is of great importance. In an effort to determine the quality of experience, a set of quality indicators (*QI*) or key elements have been identified (Kuh & O’Donnell, 2013).

These Quality Indicators (*QI*) include:

- (a) Performance expectations set at appropriately high levels
- (b) Significant investment of concentrated effort by students over an extended period of time
- (c) Interactions with faculty and peers about substantive matters
- (d) Experiences with diversity
- (e) Frequent, timely and constructive feedback
- (f) Opportunities to discover relevance of learning through real world applications
- (g) Periodic, structured opportunities to reflect and integrate learning
- (h) Public demonstration of competence

Despite the naming of these quality indicators (Kuh & O’Donnell, 2013), the authors are not aware of any study that has applied these key elements of high impact practices to determine quality of experience for *any* HIP. The current study seeks to address this gap as a way to present the case of intercollegiate athletics as an additional HIP.

The purpose of this paper is to address the research question: Should intercollegiate athletics be considered a HIP? To address this question, we provide evidence that varsity athletics, as part of the college experience, affords opportunities to deepen student engagement and improve retention. Additionally, we were interested in the perceptions held by higher education stakeholders (i.e., student-athletes, academic and athletic administrators), on the collegiate athletic experience as a HIP. In order to do this, we present data in three phases: (1) survey data from NCAA studies and the National Survey of Student Engagement (NSSE); (2) perceptions from

interview and survey data of academic personnel in a mid-major Division I conference on whether collegiate athletics can be considered a HIP; and (3) a survey with the quality indicators of HIPs as a way to assess the athletic experience in a sample of student-athletes across three institutions.

### **Phase 1 Methodology and Findings**

#### **Intercollegiate Athletics as a Next-Generation High-Impact Practice: NCAA and NSSE Survey Data**

In 2017, intercollegiate athletics was included in the list of “next-generation HIPs” (Kuh & O’Donnell, 2017). When comparing student-athletes to their non-athlete peers, both in college and post-graduation, recent data show some interesting differences that may point to the athletics experience as having conferred lasting benefits on student participants (Gallup, 2020). For example, a 2020 study that juxtaposed the life outcomes of former NCAA student-athlete alumni to their non-athlete alumni peers, found that former student-athletes were thriving in four out of five areas of well-being at significantly higher rates than their non-athlete peers—community, physical, purpose, and social well-being (Gallup, 2020). Similarly, using data from 2017 and 2018 from the NSSE report builder (National Survey of Student Engagement, 2020), we find that intercollegiate student-athletes are more likely to hold leadership positions, engage with faculty in a meaningful way and collaborate with peers than their non-athlete, full-time undergraduate peers at NCAA institutions. These significant differences between intercollegiate student-athletes and their non-athlete peers (both current college students and alumni), prompts us to further explore whether participating in college athletics could be a high-impact practice. Using the eight key elements of a HIP (Kuh & O’Donnell, 2013) as our framework, current data help us better understand which elements are integral components of collegiate athletics, and which elements are only present with intentionality on the part of the program.

Two primary sets of data were used for this phase. The NCAA GOALS survey is a quadrennial survey of the intercollegiate student-athlete experience, most recently conducted in 2019. Participants are active NCAA student-athletes across championship sports and divisions and the survey explores issues including the collegiate athletic and academic experience, the recruiting and college choice process, career expectations and educational aspirations, health and well-being, youth sport participation, time demands, and financial well-being. The 2019 dataset includes a stratified sample of over 20,000 intercollegiate student-athletes at more than 550 NCAA member institutions and across 24 NCAA sanctioned sports (11 men’s sports and 13 Women’s sports). The data were cleaned using a range of validity checks and Item Response Theory techniques (Yang and Kao, 2014). Additionally, the data have been weighted in comparison to national participation rates within the sampled sports. For the NSSE data, the NSSE Report Builder allows for public queries of unweighted NSSE survey data. For the purposes of this study, the report builder allowed us to parse out responses from the 2017 and 2018 iterations of the survey and the query was limited to undergraduate seniors from NCAA-member institutions. We further disaggregated item responses based on self-reported varsity athlete status. We used this process to focus on the responses from undergraduate seniors as they were at the end of their collegiate careers and thus were basing answers on their entire college experience.

Three key HIP elements are integral components of the athletics experience—public demonstration of competency (*QI-h*), extensive investment of time and effort (*QI-b*), and frequent

feedback (*QI-e*). Depending on the sport, while in season the over 500,000 NCAA student-athletes across 24 sports engage in competition in front of the general public weekly or multiple times each week (National Collegiate Athletic Association, 2021a). Whether the audience is 50 or a crowd of 70,000 with millions watching on a screen from afar, intercollegiate student-athletes across sports and divisions consistently demonstrate their talents publicly. The investment of time in their sport is irrefutable. In the most recent NCAA GOALS Study, which examines the experiences and well-being of current NCAA student-athletes, the median time a representative sample of student-athletes reported spending on their sport in-season was 28 (Division III) to 33 hours (Division I) per week (National Collegiate Athletic Association, 2020a).

Regarding their sport performance, a component of the athletics experience is receiving frequent feedback from one's coaches. Through current technology, this feedback has become increasingly specific—beyond coaches' verbal praise and criticism (likely both constructive and negative), athletes are increasingly expected to review game footage and take into account individual performance metrics and biometric data. The NCAA Social Environments study also found that many intercollegiate student-athletes seek out public feedback, with 47% reporting that they pay attention to what is said about them and their team on social media (National Collegiate Athletic Association, 2017).

College athletics also incorporates high expectations for performance (*QI-a*)—both on and off the field or court. The 2019 GOALS Study found that in addition to the expectation to win games or place highest among competitors, 94% of student-athletes report that their family expects that they will earn their college degree, and 87% agree that their coaches care about degree attainment (National Collegiate Athletic Association, 2020a). Outside of external expectations, over 85% of NCAA student-athletes self-report that they both consider themselves a dedicated student and have “many personal goals” related to their academics. Intercollegiate student-athletes also face high expectations that they will contribute to their community, as 60% reported that their coaches require that they engage in community service, and while 88% reported in engaging in service at least annually, 49% reported engaging in service monthly or more frequently (National Collegiate Athletic Association, 2020a). These high academic expectations—both self-imposed and those imposed by academic benchmarks for eligibility requirements at the institutional or divisional level—may in part explain why NCAA student-athletes have higher college graduation rates than their non-athlete peers in all three divisions (National Collegiate Athletic Association, 2020b, 2020c, 2020d).

In terms of engaging with diverse populations (*QI-d*), 81% of NCAA student-athletes reported that participation in college athletics had increased their understanding of those from different races and backgrounds (National Collegiate Athletic Association, 2020a). While 38% of student-athletes are identified as non-White in the 2021 NCAA Demographics Database, racial diversity varies by division (e.g. 44% non-White in Division I, 42% in Division II and 26% in Division III) and sport (National Collegiate Athletic Association, 2021b). Recent trend reports also show an increase in the internationalization of the NCAA student-athlete population in Divisions I and II, with the top three nations of origin in some sports spanning three continents (e.g. in Division I men's basketball the top three non-US countries of origin are Canada, Australia and Nigeria, (National Collegiate Athletic Associations, 2020e). NSSE data also show intercollegiate student-athletes to report engaging with racially diverse peers at a greater rate than their non-athlete counterparts (Bell, Ribera, & Gonyea, 2018). While encountering diversity may enhance the

student experience, a team culture where coaches and teammates foster and demonstrate inclusivity is positively and significantly related to both the *frequency* of cross-racial interactions and also *positive feelings* about such interactions, independent of campus racial heterogeneity deepen the quality of the diversity element (Jones, Liu, & Bell, 2017). Thus, we posit that supporting inclusive team culture is an area where intentionality on behalf of an athletics department or specific coach may be crucial in meeting this key element of high impact practices.

Interactions with faculty and peers about substantive matters (*QI-c*) is another key element that merits understanding the athletic experience. In the 2019 NCAA GOALS Study, 64% of NCAA student-athletes reported having developed a strong, personal relationship with at least one faculty member (National Collegiate Athletic Association, 2020a). NSSE data (see Table 1) also show that intercollegiate student-athletes in their senior year are more likely to engage with faculty than their non-athlete peers in a variety of ways (National Survey of Student Engagement, 2020), including discussing course topics outside of class or their career plans. Unsurprisingly, given their role on teams, athletes also report more frequent interactions with peers than their non-athlete counterparts. Seniors are more likely to ask a peer to help them understand course material (57% of intercollegiate student-athletes, versus 50% of non-athlete undergraduates), and are more likely to prepare for exams with their peers (62% versus 53%). However, while intercollegiate student-athletes frequently engage with peers, there is some concern about the extent to which they're engaging with students who are external to their teams. The NCAA Social Environments Survey found that while over 90% of student-athletes were comfortable with their teammates, only about three-quarters of student-athletes reported the same level of comfort with non-athlete peers (National Collegiate Athletic Association, 2017). Additionally, the 2019 NCAA GOALS Study found that just over half (58%) of all student-athletes reported that they "frequently socialize with non-athletes" at their college, and a third report that all of their closest friends are on their team (National Collegiate Athletic Association, 2020a). While these intercollegiate student-athletes are engaging with their peers in a substantive way, the homogeneity of their peer groups may lessen the impact of such engagement. Thus, institutions, athletics departments, and coaches should intentionally build in frequent opportunities for forging peer connections outside of the team setting around substantive matters.

**Table 1**

*Percentage of Seniors Who Frequently Engage with Faculty by Athletic Status*

	Non-athlete peers	Student-athletes
Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	31	38
Discussed your academic performance with a faculty member	35	42
Discussed course topics, ideas, or concepts with a faculty member outside of class	36	43
Talked about career plans with a faculty member	48	56

*Note:* Combined response options ‘Often’ and ‘Very Often’ responds frequently. Source: NSSE Report Builder (2017 & 2018), accessed 2020.

Another key element is the opportunity to intentionally connect learning to real-life applications (*QI-f*). In the most recent GOALS Study, NCAA student-athletes indicated that athletics had helped them hone a host of skills that would be transferable to the workforce (see Table 2) (National Collegiate Athletic Association, 2020a). However, researchers have shown that despite such recognition, many student-athletes struggle to translate these competencies into bullets on resumes or talking points in a job interview (Van Raalte et al., 2017). Thus, helping intercollegiate student-athletes come to the realization that many of the skills they sharpened in the years devoted to their sport will continue to serve them in their professional, personal, and civic endeavors would be critical for intercollegiate athletics as a high impact practice to be realized.

**Table 2**

*My College Athletics Experience Has Had a Positive Effect on the Following Skills/Qualities in Myself (Percentages reported)*

<b>Skill/Quality in Myself</b>	<b>Percentage</b>
Personal responsibility	93
Work ethic	93
Teamwork	91
Goal setting	90
Attention to detail	88
Leadership skills	87
Dealing with change	87
Time management	87
Understanding different races/backgrounds	81
Self-confidence	78
Commitment to community service	61

*Note:* Percent responding agree or strongly agree. Source NCAA GOALS Study, 2019.

The last key element of a high impact practice requires the greatest deal of intentionality. Outside of the athletics context, the NSSE engagement indicators used to measure student involvement in reflective and integrative learning practices (*QI-g*) may raise concern. While intercollegiate student-athletes significantly and positively outpace their non-athlete peers in many of the other engagement indicators, senior student-athletes report slightly slower levels of

engagement across nearly all items measuring reflective and integrative learning (see Table 3); (National Survey of Student Engagement, 2020). This lack of reflection and making broader connections across concepts, between issues and people, may be related to the time demands intercollegiate student-athletes face in terms of their athletics, academic and other extracurricular commitments, and their self-reported lack of time for socializing and relaxing, which is now only 15.5 hours per week in season (National Collegiate Athletic Association, 2020a). Little discretionary time may lead athletes to focus specifically on each task at hand, rather than leaving time to ruminate and make broader connections. Perhaps this could also be related to athletes' tendencies to focus on the present as opposed to the future (Krumer et al., 2011). While performance coaches may encourage athletes to apply mindfulness techniques that focus them on the present and dismiss failures of the past and stresses of the future, relying on this mindset outside of the athletics context in order to power through coursework may prove too limiting when it comes to engaging in reflective learning.

**Table 3**

*Percentage of Seniors Who Frequently Engage in Reflective and Integrative Learning Activities*

	Non-Athlete Peers	Student-Athletes
Connected ideas from courses to prior experiences and knowledge	85	82
Combined ideas from different courses when doing assignments	73	73
Learned something that changed understanding of an issue or concept	73	72
Tried to better understand someone's views by examining from their perspective	74	71
Examined the strengths and weaknesses of personal views on a topic or issue	67	64
Connected learning to societal problems or issues	63	61
Included diverse perspectives (race, gender, religion, etc.) in class discussions or assignments	55	52

*Note:* Combined response options 'Often' and 'Very Often' represents frequently. Data source is NSSE Report Builder (2017 & 2018).

Reflecting on the national aggregate data gathered by both the NCAA and NSSE, it seems that eight key elements of high impact practices are present within a student's athletics experience. But while a few of these elements may be integral aspects of sport participation, intentionality is necessary to ensure that these eight key elements are woven into the experience. When we examine the long-term outcomes for former student-athletes, what might explain their enhanced levels of well-being and their higher levels of engagement in the workplace? While perhaps their



intercollegiate athletics experience was high impact, NSSE data also demonstrate that student-athletes are more likely than their non-athlete peers to engage in a range of curriculum imbedded experiences considered high impact (National Survey of Student Engagement, 2020). For example, by senior year, NSSE finds that 70% of NCAA student-athletes engaged in a course with a community-based component as compared to 63% of their non-athlete peers. Similarly, 60% had taken part in a culminating senior experience such as a capstone project or thesis as compared to 51% of their non-athlete peers. With forethought and invested staff and coaches, intercollegiate athletics has the ingredients to be a high impact practice that can reach all student-athletes. Furthermore, if we are aware of the benefits this can confer to graduates post-college, it seems a wise investment to help athletics departments better understand its potential.

## Phase 2 Methodology and Findings

### **Athletic Performance as a Next-Generation High-Impact Practice: Perceptions of University Leaders through Interview and Survey Data**

While quantitative data from existing datasets helps to make the case that intercollegiate athletics is a HIP, qualitative data from institutional stakeholders can further demonstrate and strengthen the case. An initial set of interview questions approved by the IRB was sent to all provost's offices in a mid-major Division I athletic conference (10 institutions). Nine institutions responded to our request for information in the initial email or follow-up inquiries. One institution did not respond to the initial email or any follow-up correspondences. Six of the nine participating institutions answered questions about the overall institutional philosophy and implementation of HIPs on their campus, as well as specific efforts for improving access for intercollegiate student-athletes. Additional questions asked about any future changes to the institution's current commitment toward prioritizing HIPs. Finally, each provost office was asked to discuss if they considered the intercollegiate student-athlete experience to qualify as a HIP. Further as part of their response they identified components of the experience that needed to be strengthened or deepened to qualify for a HIP. The responses were initially analyzed by one investigator and verified by two additional investigators. Discussion and reevaluation with the three investigators occurred if all were not in agreement. Answers to these questions were of interest and helped us in the design of the follow-up survey sent to a broader set of university leaders.

All Provost respondents reported that the intercollegiate student-athlete experience *could* qualify as an HIP, however schools would have to make a commitment to infuse the characteristics of a high-quality experience, specifically integration of feedback and reflection. Some campuses have, or are currently establishing, criteria for HIPs on their campus. Most respondents across schools felt that based on their standards, the intercollegiate student-athlete experience would meet these criteria. For instance, one school already considers the student-athlete experience as an appropriate route for impactful education:

“There is little doubt in our mind that the student-athlete experience qualifies as a High Impact Practice and we have recently instituted [a leadership program] which inherently incorporates many of the experiences that are defined as High Impact Practices, and in a number of ways begins to define what it meant to not only be a student-athlete at [school name] but the expectations we have of our athletes and

the expectations the athlete should have of themselves as they grow academically, socially, and athletically.” (Participant #3)

While some participants shared their philosophical view of the intercollegiate student-athlete experience, others provided specific characteristics often associated with the student-athlete experiences:

“Student athletics can be viewed as a HIP especially in the context of team building / learning community which is naturally created for this student cohort. In this structure, student-athletes become peer mentors for one another, share common experiences and challenges, and encourage one another towards academic and sports success.” (Participant #5)

“There would seem to be ample opportunities to enhance that academic experience of student-athletes through collaborative projects, service/community-based learning, and more focused learning communities.” (Participant #2)

Finally, other representatives expanded on what it would take to turn the intercollegiate student-athlete experience into a high impact educational practice:

“I think there would need to be a lot of work to be done and a lot of scaffolding around it to be a high impact educational practice that focuses that experience on specific learning goals and high-quality indicators. And I think it could get there.” (Participant #6)

“Not as currently structured; the academic component especially relating to reflection is not strong enough. I think there are opportunities for athlete-specific HIPS to be developed that would integrate reflection on the academic connections to the student-athlete experience that might provide unique opportunities.” (Participant #1)

“Not in and of itself, especially because we are bound by....[specific institutional requirements for an experience to be considered an HIP] criteria. For us, it would be more useful to find ways to connect our athletes into meaningful research experiences that fulfill these [requirements] but I am hoping we can be creative in how we do this and in the experiences we can offer.” (Participant #4)

In part based on Provost responses, we engaged in a second phase of data collection also approved by the IRB. Faculty Athletic Representatives, Academic Advisors, Department Chairs and Faculty were identified by institutional point people and sent a Qualtrics survey. Most of our institutional point people were faculty athletic representatives which are faculty designated by their institution to serve as a liaison between the institution and the athletics department. Because of the nature of this recruitment strategy, we are unclear how many received the survey and how many opted out of completing it. In this survey, they were asked about how HIPs are implemented on their campuses and intercollegiate student-athlete access to those practices (data not included in this publication). Of the 61 total responses to the overall survey, 28 answered an open-ended question about whether they considered the intercollegiate student-athlete experience a HIP. Respondents were asked to expand on their answer. Respondents representing eight of the 10

institutions provided 28 open ended responses. These consisted of Department Chairs (n=11), Academic Advisors in Athletics (n=8), faculty (n=6), and Faculty Athletic Representatives (n=3).

Sixty-eight percent of the participants responded that the intercollegiate student-athlete experience can be considered as a HIP, following a similar pattern building a consensus of responses from University Leaders and Provost Office administrators. We did not see differences by role in the university. Those that supported the intercollegiate student-athlete experience as a HIP provided specific examples and characteristics for why they believe this to be the case. Specifically, some respondents highlighted leadership, time intensity, multi-year engagement (peer to peer, mentor/coach feedback, public performance), and in-depth skill development as key HIP qualities experienced by intercollegiate student-athletes. Even for those that did not agree, they reported that the intercollegiate student-athlete experience has potential to be considered a HIP. Most reported the need for a more definitive structure (objectives, reflection, and intentional mentorship) before considering the intercollegiate student-athlete experience as a HIP.

From the administrative level to the faculty and advisors who work directly with intercollegiate student-athletes, there is promise that the athletic experience could be considered a HIP with some work. Many believe more intentional reflection would deepen the athletic experience. As we continued to explore this question, it was not clear how the administrators interpreted the question. Some may have considered the whole student-athlete college experience, while others may have interpreted it as the athletic performance experience alone. The collective responses however point toward both interpretations still mostly meeting the bar to be considered a HIP with appropriate reflection and intentionality. As we moved forward asking intercollegiate student-athletes, we clarified this question to specifically address their athletic performance experience as being of most interest.

### **Phase 3 Methodology and Findings**

#### **Survey of HIP Quality Indicators Applied to Intercollegiate Athletes' Athletic Experience**

A short-survey was distributed to a subset of intercollegiate student-athletes from three institutions in one mid-major Division I conference to get a pulse if you will on their athletic performance experience against the measures of high-quality for high-impact practices (Kuh & O'Donnell, 2013). We used this snapshot/pilot data to help inform researchers on the utility of doing a more wide-spread and comprehensive study. We only include the means as the sample was not large enough to complete robust statistical analyses. Sixty-nine intercollegiate athletes completed the survey (21 males, 47 females; 42 seniors, 14 juniors, 13 sophomores).

Participants were asked 'Considering your *sport/team/athletic experience* as a Student-Athlete, please indicate your level of agreement or disagreement with the following statements (6 point Likert scale with 1-strongly disagree; 2-disagree; 3-somewhat disagree; 4-somewhat agree; 5-agree; 6-strongly agree).' (See Table 4)

**Table 4***Original Wording of Quality Measures and Athletic Experience Wording of Quality Measures*

Original Wording of Quality Measures	Athletic Experience Wording Quality Measures
<b>a</b> Performance expectations set at appropriately high levels	My athletic performance expectations were set at an appropriately high level
<b>b</b> Significant investment of time and effort by students over an extended period of time	I invested a significant amount of time and effort over an extended time period in my sport
<b>c</b> Interactions with faculty and peers about substantive matters	I had interactions with coaches and teammates about substantive matters
<b>d</b> Experiences with diversity, wherein students are exposed to and must contend with people and circumstances that differ from those with which students are familiar	I was exposed to, and had meaningful interactions with people and circumstances different from people I am most familiar with as part of my athletic experience
<b>e</b> Frequent, timely, and constructive feedback	I received frequent, timely, and constructive feedback related to my athletic performance
<b>f</b> Periodic, structured opportunities to reflect and integrate learning	I had periodic, structured opportunities to reflect and connect my athletic experience to learning
<b>g</b> Opportunities to discover relevance of learning through real-world applications	I had opportunities to discover relevance of learning through real-world applications as part of my sport
<b>h</b> Public demonstration of competence	I had to publicly demonstrate my athletic competence

The overall means for individual quality questions and total quality across the 8 quality measure questions tell a promising story of support. Of a total possible score of 48, 50% of respondents had a score of 38 or higher and all questions had an average score >4 (4.55; somewhat agree-strongly agree) (See Table 5).

**Table 5***Assessment of Key Elements of HIPs in student-athletes*

Quality Question	Mean $\pm$ SD
1 – High Expectations of athletic performance	4.76 $\pm$ 1.28
2 – Significant Time and Effort on sport over time	5.19 $\pm$ 1.52
3 – Substantive Interactions with Coaches/Team	4.37 $\pm$ 1.41
4 – Meaningful interactions with people different from what I am familiar	4.71 $\pm$ 1.42
5 – Frequent, timely, constructive feedback	4.15 $\pm$ 1.57
6 – Periodic structured reflection	4.24 $\pm$ 1.35
7 – Real-world applications	4.26 $\pm$ 1.36
8 – Public demonstration	4.71 $\pm$ 1.27
<b>Total Quality</b>	<b>35.86 <math>\pm</math> 9.43</b>

From a direct assessment of intercollegiate student-athletes asking about the quality of their athletic performance, the average of responses was a response of somewhat agree, agree, or strongly agree. The lowest scores were in response to items of constructive feedback, opportunity for reflection, and real-world application with mean scores still above the somewhat agree level. While this data is preliminary and not a comprehensive sample, it does point to a possibility that with targeted intentional framing, mentoring around transferable skills, and guided mentored reflection that the intercollegiate athletic experience may meet the quality indicators of a high-impact practice. Many athletics programs have leadership initiatives in place to help student-athletes build these types of skills, but not necessarily to specifically build a quality high-impact athletic experience for these intercollegiate student-athletes. The exploration of how athletic staff (e.g., academic support, leadership development and coaches) and faculty can be used to help enhance the intercollegiate student-athlete experience seems warranted to reach a level that might be considered a high impact educational experience.

### Discussion of Phases 1-3

#### Intercollegiate Athletic Performance as a Next-Generation High-Impact Practice: Next Steps

The goal of this study was to demonstrate that there is alignment from all levels including the NCAA, academic administrators, faculty, staff, and student-athletes themselves to consider the intercollegiate athletics as a high impact practice while leveraging ways to further deepen the experience. It is not just being part of an intercollegiate athletic team and competing that makes engaging in athletics a HIP. It is rather the deep immersion as an intercollegiate student-athlete

with high performance expectations, significant effort over time, meaningful and substantial interactions with mentors and peers, engagement with diversity, feedback, and public demonstration of learning that are part of the experience. Additionally, if the intercollegiate athletic experience is operationally quite separated from the academic learning experience, more intentionally linking these experiences through institutional culture and practice could prove to support more integration and reflection across experiences. This would positively impact the whole intercollegiate student-athlete experience.

All constituents agree that there are components that can and should be more salient to ensure the quality of the experience in a collegiate setting including integrating intentional feedback (*QI-e*), reflection (*QI-f*), and connection to real-world application (*QI-g*). Many athletic programs have instituted leadership and academic support programs to enhance the intercollegiate student-athlete experience; therefore, infrastructure is potentially in place for at least a subset of athletes. The question of whether the entirety of the intercollegiate student-athlete experience versus the intercollegiate athletic performance experience being a high-impact practice will likely be a non-issue for these programs as the focus is on individual development. One aspect to consider is whether these initiatives can impact all student-athletes or if they are primarily effective as opt-in or coach-selected opportunities. For example, many athletic programs support leadership seminar series where coaches identify athletes they would like to see participate, or athletes self-identify that they would like to participate. Should institutions have an expectation to support this learning for *all* their athletes and if so, what are creative ways to ensure all athletes are included? If we consider coaches as educators, mentors, and facilitators, there could be an opportunity to train and support them in more intentional framing, integration, and mentoring to help intercollegiate student-athletes reflect, integrate feedback and see how their athletic performance experience translates to real-world application. Coaches could engage their teams in conversations drawing meaningful connections, or it could be done in a more formalized setting, such as a career development workshop. There is no indication that the time and resource load of these connecting opportunities must be high, but rather it simply needs to be explicitly made. With more than 97% of NCAA student-athletes entering career or graduate opportunities post-graduation (National Collegiate Athletic Association, 2020f), this alignment might also help institutions move closer to the expectation that their intercollegiate athletic and intercollegiate student-athlete experience will be high-quality; positively impacting their personal and professional goals.

While the focus of this paper has been on conceptualizing the intercollegiate athletics experience as a 'next-generation' HIP, there is still room to consider ways in which we can increase access and participation to the ten pre-existing HIPs (Kuh et al., 2017; Kuh, 2008; Kuh & O'Donnell, 2013). A recent study found that there are a number of barriers to the participation of high impact practices for intercollegiate student-athletes (Ishaq & Bass, 2019). The most identifiable are the time constraints of an intercollegiate student-athlete as well as a lack of resources. There is an underlying assumption that unless it is built into the normal academic degree requirements that intercollegiate student-athletes will not be able to engage in high impact practices such as internships, global engagement, undergraduate research, and service learning. In considering ways to increase access and participation for intercollegiate student-athletes in HIPs it may be important for universities to do an internal assessment of the HIPs that their student-athletes are participating in and the barriers that they are encountering (Hall, Ketcham, & Weaver, 2018; Ishaq & Bass, 2019). Additionally, universities are and should continue to consider creative ways to increase access and participation through shorter term global experiences, utilizing

summer for experiences that might not be possible during the academic year (e.g., global engagement and undergraduate research), and increasing academic partnerships with on-campus resources around service learning and internships (Buckmaster et al., 2019; Hall et al., 2020; Hall, Ketcham, & Weaver, 2018; Leupold, Weaver & Hall, 2019; Weaver et al., 2019; Williams et al., 2019). Finally, education around the benefits of HIPs for intercollegiate student-athletes should be conveyed to coaches and athletic administrators to demonstrate the importance of these experiences.

### **Limitations**

The data included in this research has both the strength and limitation of coming from multiple levels and perspectives. The NCAA and NSSE survey data are both large comprehensive data sets that give a clear picture across institution types and athletic divisions. The interview and survey data about perceptions of the intercollegiate athletic experience on their campus from university leaders provides a focused perspective across one Division I conference. The survey data about their experiences from a group of intercollegiate student-athletes was from a subset of these conference institutions. The triangulation of the data points to positively support, and evidence to include, the athletic experience as a HIP, however this is not a comprehensive picture of all athletic programs. Quality HIPs are not a passive experience and so as institutions consider the athletic experience, attention should be given to support intentional deepening at the team level. Additionally, we encourage researchers and institutions to continue to collect data, assess, and disseminate findings as higher education continues to strive toward high-quality experiences for all our students.

### **Concluding Remarks**

Our goal with this topic, data collection, and presentation is to implore institutions to look at both the intercollegiate student-athlete and the athletic experience on their campuses and engage the academic and athletic sides of administration in collaborative conversations to promote messaging, resources, and infrastructure to support the intercollegiate student-athlete experience. The first NCAA Academic-Athletic Summit held in January 2020 is an example of creating opportunities for these conversations within and across institutions. While we can agree that these collaborative initiatives can be beneficial for our athletes and our programs, this is also an important equity issue. A large percentage of athletes represent diverse demographic populations (National Collegiate Athletic Association, 2021b). Their athletic ability is often their access to a college education and we as educators have both a responsibility and opportunity to create experiences that support their time in our institutions, but more importantly their trajectories beyond the walls of our institutions. Athletics is a robust entity that often feels side-lined as part of the intercollegiate student-athlete experience. Institutions need to consider the power that this has in the education of these students and be more intentional with the opportunity to use this platform to elevate and integrate the athletic performance experience our intercollegiate student-athletes find transformative to who they are and who they become. Empowering intercollegiate student-athletes, coaches, and athletic programs as integral to the educational experience is good for all involved and will make significant impacts in helping student-athletes hold both their high-achieving student and high-performing athlete identities in balance. Some of our most influential graduates of institutions of higher education are intercollegiate student-athletes. We can create climates to support their success both on and off the athletic platform, making their experience,

contributions, and outcomes within and beyond our campuses and their collegiate years transformative.



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