

Faculty Attitudes towards the Implementation of High Impact Practices (HIPs): Survey Results

About respondents

- 225 participants completed the survey, out of which 81 were contract instructors and 134 faculty members. Additional 10 respondents were adjunct research professors, lab coordinators, visiting scholars and retired instructors (the survey response rate is 12%).
- The majority of respondents – 62 per cent of them - are seasoned instructors who have been teaching in higher education more than ten years.
- Out of 219 respondents who indicated their faculty, 154 of them (or 70 per cent) are in the Faculty of Arts and Social Sciences and Faculty of Public Affairs. The lowest number of respondents belong to Sprott School of Business (19 respondents or nine per cent).

General attitudes about high impact practices (HIPs)

1. Instructors who have incorporated HIPs into their teaching

- 75 per cent of respondents has incorporated at least one high impact practice (as defined by George Kuh) into courses they teach.¹
- When asked about elements that helped them in incorporating HIPs², 59% of respondents selected 'small class size'; 42% felt that workshops and support provided by Teaching and Learning Services was helpful, while 33 percent selected 'collegial support'. The respondents also had an opportunity to elaborate on other elements that they found useful for the implementation:
 - "Community Engaged Pedagogy group at Carleton"
 - "Availability of appropriate teaching materials, i.e., cases"
 - "The availability of TAs to assist with course administration"
 - "Contacts with industry"
 - "Adjustment to teaching assignment"
- We wanted to learn about **what motivates**³ instructors to incorporate HIPs in their courses. A few themes emerged:
 - 1. To create courses that are more relevant to students' future careers**
 - "It makes the course material more interesting and practical. It prepares the students for working in their field of interest."
 - "My main motivation for HIPs is that these activities more closely model the activities of a practicing engineer. Engineers in industry have to write reports, work in teams, solve open-ended problems, and keep a portfolio of their work for performance appraisals. More standard lecture/class formats do not provide

¹ Q5: Have you incorporated any of the high impact practices (HIPs) into the course(s) you teach?

² Q22: Which of the following helped you (if any) in incorporating HIPs in your courses?

³ Q19: What motivates you to incorporate Hips in your course(s)?

students with such a deep background. Standard formats also tend to lead engineering students astray in that some students start to view engineering as simply applying the right equations to reach an answer. This view misses the complexity and creativity inherent in the field.”

- “To make the courses more relevant to the students in terms of career directions and goals and to make the courses more interesting and relevant”
- “So many of my former grad students obtained paid employment as a direct consequence of their training in industry-related research projects”

2. To engage students with learning process and build their skills

- “Students find these methods interesting, engaging and relevant, as they allow learning in real-life context. These methods build critical thinking skills, minimizing the need for traditional lecture style and just memorization.”
- “I value the process as well as the content of learning, and want to see my students gain skills and become engaged in and make decisions in their own education. They gain confidence and look and sound smarter and better-educated, and this makes me feel good about what I am doing.”
- “Hands on learning provides excellent motivation and opportunity for much deeper understanding of underlying mathematical concepts. Also provides a good indicator for aptitude and success in graduate studies.”
- “Enhancing the student learning experience; recognizing the skills that will benefit students no matter what career they choose to pursue after their undergraduate degree (i.e., critical thinking, writing, reading and producing research).
- “Students attention span & expectations for their educational experience have changed dramatically over the past 10 years due many fractures such as technology (smart phones, etc) and social media. If I did not change my approach to teaching only about 50% of the students enjoyed the learning experience. The old expression: ‘one has to change with the times’. Lastly I love the challenge of finding new ways to engage students”

3. To experiment with their own teaching practices and belief that they are efficient

- “One colleague encourage me, but the result was not good.”
- “I learn and grow with my students.”
- “Innovation, change, difference, keeping students engaged with learning, assists in incorporation of Indigenous pedagogy into teaching.”
- “Experiential learning is at the centre of teaching entrepreneurship”
- “The desire to be the most effective educator that I can be and an acknowledgment of many traditional ways of teaching are no longer as effective as they used to be. HIPs are key to engaging students and to feeling much more creative and passionate as a teacher. The impact of HIPs is quickly evident and they can bring tremendous energy to a classroom.”
- “I believe that learning by incorporating theory into concrete experiences is a much better approach than lecturing in helping students increase their understanding of a subject matter, promoting creativity, and developing a sense of accomplishment and confidence in the subject area”

- “being aware that they have impact!”
- “These “HIPs” have been at the core of sound pedagogy for decades, if not centuries. It seems to me that research and conversations around things like “HIPs” need not be oriented so much toward “development” (of e.g. best practices, or programs for educating faculty, or re-configuring curricula to demand incorporation of HIPs using standardized language), but instead might be oriented toward recognizing and learning about just how many of them are already being used by faculty and instructors, even if they use different language and offer a diversity of approaches.”
- “I just do it as I believe that it provides a good base of learning and experience”
- “this is a new technique so may be it is productive as well.”
- “it takes more time, but the end result is so much more satisfying!”
- 4. Because some of the HIPs are mandated**
 - “It is part of program accreditation requirements in engineering and design.”
 - “Most of the time, there are actually prescribed by the department. That said, I would make every follow the FSYM model if I could, and I am definitely a strong believer in the efficacy of assigning a number of smaller, formative assessments and of the benefits of collaborative writing processes such as peer reviews.”
- 5. One of the respondents listed the prevention of plagiarism as one of the reasons for incorporating HIPs**
 - “i) Negatively - I wish to avoid plagiarism and complex, creative assignments help insure that only students actually taking the course could complete the work ii) Positively - HIPs improve both the teaching and the marking experience, leading to more student buy-in and meaningful variety. ii) Wishfully - I would like to incorporate many more HIPs, such as the ones listed above, but my capacities as a contact instructor are limited in terms of structural change.”
- In terms of **challenges** that our respondents faced when incorporating HIPs in their teaching, ‘time for planning’ was selected by 58 per cent of them, followed by ‘large class sizes’ – 43 percent. What is encouraging is that 25 per cent of our respondents did not encounter any barriers. Some other interesting observations are as follows:
 - “Certain HIPs (e.g. Common Intellectual Experiences, Learning Communities) require careful coordination among faculty and contract instructors for which there are barriers. As a contract instructor at Carleton I have experienced a reactive teaching culture in which discussions with faculty about pedagogy occur mostly in response to student course evaluations, which are an unhelpful tool for identifying issues or planning proactive strategies for course improvements.”
 - “Student resistance has been an issue. Students become familiar with the more typical format so deviations from that format cause upset and uncooperative attitudes.”
 - “Barriers sometimes are the students themselves...they want the receptive type classroom so that they do not have to engage or expend energy. It is hard to get beyond the students”
 - “Lack of recognition by the administration that this is meaningful teaching; there is no career incentive to teach HIP.”

- “Additional workload for instructors to offer HIPs is not recognized in distribution of teaching and administrative roles.”
- “there is no incentive for me to do anything risky or different. In fact, there are powerful
- disincentives *not* to: a poor teaching evaluation can endanger my teaching career at Carleton (and research shows that students respond negatively to innovative teaching approaches simply because they're different). Financially, there is no incentive either: the time it takes to create a course new or to rebuild an older course is not rewarded or taken into consideration in the teaching contract. Telling me that it 'will improve student learning' is all fine and good, and I want the best for my students, but as a CI, I am offered no incentives and face powerful disincentives.”

II. Instructors who have NOT incorporated HIPs into their teaching

- Out of 51 respondents who have **NOT incorporated**⁴ any HIPs in their courses, the majority (41 of them) were either not familiar with HIP; they did not know how to incorporate them into their teaching, or their first implementation attempt was unsuccessful. Other reasons include:
 - the lack of time for planning
 - the lack of support (from colleagues, department, institution)
 - belief that HIPs are not applicable to instructor’s discipline and unimportant for student learning⁵
- Instructors were asked to elaborate on their **reasons for not incorporating HIPs** in their teaching. Some of their responses are:
 - Challenging to incorporate in large courses (“We have a massive and ever-growing enrollment and fewer and fewer competent TAs”)
 - Skepticism that they ‘work’ (“I am skeptical of research on teaching methods”; “This stuff is fad driven”), and the resistance to change one’s teaching approach (“There is a resistance to moving from lecture model. Programs need to be given the resources as incentives to change.”)
 - Instructor’s time commitment (“As a contract instructors we are not paid enough to spend time on these issues”; “As a contract instructor, it would involve a massive amount of unpaid labor. As the employment is precarious, there is no point in investing time in developing material for one course when I may not teach it again.”)
- Instructors **who have never tried** to incorporate HIPs into their courses, feel that **best support** for them⁶ (if they decide to try any of the HIPs) would be provided via website resources (26 respondents), workshops (27 respondents), and examples and

⁴ Q6: Why haven’t you incorporated any Hips in your course(s)?

⁵ Respondents could choose more than one option

⁶ Q7: Are there any resources that you feel would best support the incorporation of HIPs into your course?

testimonials from their colleagues (18 respondents). When elaborating on support they would need, themes from the previous question came up again:

- “Small enough class size”
- “Research and statistics to prove that these practices support pedagogy; Evidence that supports their use in content-based courses.”
- “Proper job. Longer-term contracts. More money. More TA time.

The ways in which Carleton instructors implement HIPs into their teaching

For each of the high impact practices we asked instructors to tell us whether they have implemented it. Respondents could choose more than one high impact practices that they have experience with. Our respondents most frequently use(d) *collaborative* assignments and projects, *undergraduate research*, and *capstone courses* and projects. Learning communities and ePortfolios are the rarest high impact practices implemented into our respondents’ teaching.

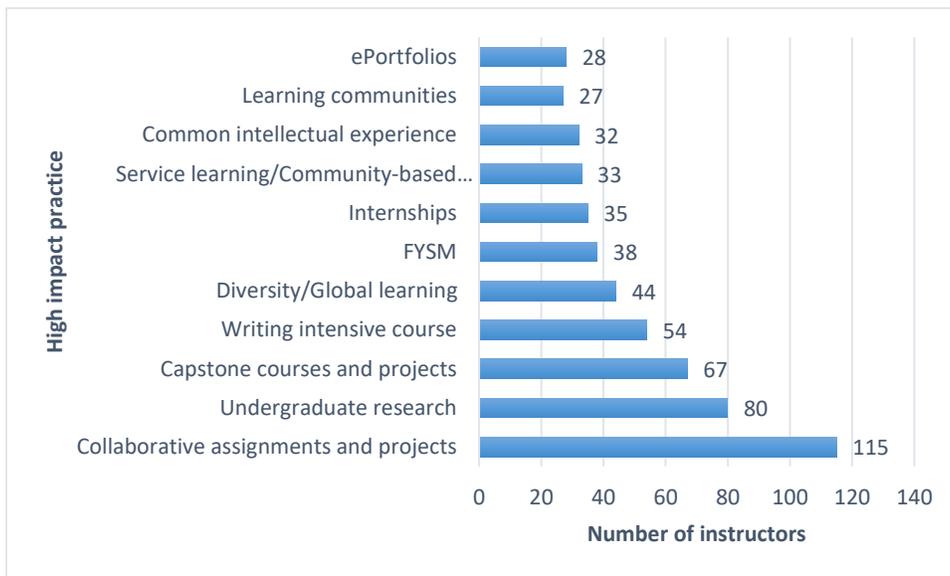


Table 1: Implementation of high impact practices

We also asked instructors to describe activities they used if they incorporated a particular HIP. These are some of the responses:

1. **First year seminars** – Instructors (38 respondents have taught first year seminars) took the advantage of a small enrolment and included activities such as:
 - writing exercises
 - reflective writing
 - learning how to conduct a research
 - small group discussion
 - a scaffolding assignments
 - collaborative projects and group work
 - guest speakers.

2. Common intellectual experiences – Many instructors in our sample were not sure about the definition and the meaning of this high impact practice (“What on earth is this?”; “Not sure what I understand the definition”; “Not sure what this is supposed to include”). Respondents who did not have difficulties with the definition (32 of them), provided the following examples:

- First-year engineers do a project that is followed and assessed by fourth-year environmental students
- All honours students in my department are required to do research in their senior year.
- I teach field courses, where the whole class goes away for five days and conduct exercises in data collection and analysis.
- Part of the process of my fourth-year seminar course is to encourage students to reflect on their shared learning experiences in their courses of study and to debate each other over such areas of shared intellectual experience.
- My colleague and I founded the Medieval and Early Modern Studies minor program specifically to create a pathway for students to take an advantage of the strength at Carleton in this time period, even though the faculty members are divided between many different disciplines. We designed two core courses as well as preparing students to adopt an interdisciplinary awareness (allowing them to have a background to take courses in History, or English, or French, or Art History, which have a basis in the medieval or early modern period).

3. Learning communities – 27 instructors provided examples for this HIP and they can be placed in two categories:

- *Program level learning communities*
 - “All the TSES courses deal with “big questions” that matter beyond the classroom. The three general “themes” of TSES are environment, technology and the future.”
 - “Common Indigenous issues reach across disciplines like MMIW, TRC, Residential Schools, health and environment, world view”
 - “I think this characterizes our master’s program in journalism”
- *Course level learning communities*
 - “For both fourth-year and masters courses I have taught, participating in weekly electronic discussion forums is a required and graded activity.”
 - “An example I can provide here is students taking mass production technology, sensory aspects of design, perception, marketing and human factors/ergonomics in their second year of studies. These courses then culminate in a third year studio project so that students can practice applying these sub-disciplines together in a field project working with real participants/stakeholders. This then gets further reinforced in the 4th year capstone complemented by other specialty courses from 3rd year.”
 - “While my experience did not include more than one course, I tried to build a learning community within a course, i.e. Stories North, the initiative that I undertook in the summer of 2017. Students applied an interdisciplinary approach to the question of what is reconciliation and what could it look like.

Their work included readings from a variety of authors, community interviewing and guest speakers from the Yukon.”

- “I would really like to do this. It reminds me of the mega-courses publicized more than a few years ago where a few professors from different disciplines taught a common course combining their students into one large class.”

4. Writing-intensive courses – Respondents (there were 54 responses) noticed that developing student writing skills is an important part of all disciplines and that all of the courses, especially the upper years ones have a strong writing component. Instructors also use multiple writing assignments, which require reflection and go through the peer-review process.

- “Although the primary focus of our program is not writing, students get writing experience in every studio class (reporting their work in written reports), electives, and are required to write and practice oral presentations, the latter being a very common deliverable in our program.”
- “To a certain extent, TSES courses require quite a bit of writing compared to some other programs. By the end of the course, each student will have written (in my classes) about 50 pages of well researched and written material.”
- “Laboratory reports are writing-intensive. Some of my courses are 100% labs.”
- “Since I teach in journalism, this is relatively common, however, I have students write multiple versions of their stories. I provide feedback and direction on a first version, they do a re-write, then I provide final feedback and direction for a final version.”
- “I have been teaching writing-intensive courses for a number of years, from 2nd year to 4th year levels. Usually students have to write weekly blogs that encourage reflective learning and/or problem-solving and acquiring specific research skills, as well as one or two major research assignments.”
- “When I taught SREE 4001, the students had to write a number of reports describing their design process and results. The objective of the reports was to cultivate professional skills in engineering and effective communication.”
- “I earn my writing bones as a speech writer and then a communications specialist initially with the federal government and then as a private consultant. Given that, it is not surprising that strong writing is important to me. However, I find that it is more effective to walk students through a single or two writing assignments with detailed assessment and feedback than many short assignments. This is, however, just my opinion.”
- “A course I've developed called Political Opinion Writing. Students are required to write 3 op-eds plus a pitch. Two of three op-eds are to be submitted for pre-reads, including extensive comments/edits and revision suggestions provided by the instructor or TA. These assignments are hybrid assignments: they are op-ed form but require extensive footnotes indicating additional research, data, context, scholarly literature, etc.”
- “I teach in an ESLA or English as a second language academic class. All of our courses are writing intensive as that is one of the key abilities we are trying to

support. One aspect of my writing assignments is a continual focus on reflection.”

- “My class has 10 blogs, drafts before every written assignment, revision/reflection assignment after the major essay, and written assignments in several different genres.”
- “The course I teach is focused on writing technical documents for a variety of audiences,
- particularly non-technical audiences. Students wrote drafts and get peer feedback in class on their drafts.”
- “I use short assignments that incorporate the self and their engagement with Indigenous community in Ottawa, essay writing, use of CUPortfolio to communicate research, writing that centres student in Indigenous perspective through creation of wampum agreement and design of wampum belt to communicate relationship”
- “I have taught 4th year seminars with assignments and essays that entail peer feedback. I've also taught a 3rd year course where students were tasked with picking a topic related to the course (addiction), pick a medium (poster, facebook page, etc.) and an audience (parent, grade-schooler, etc.) and to "teach" them about addiction.”
- “In courses where I have assigned term papers, I regularly used class time for workshops on reading and writing, so that the assigned paper topics could be more complex and more students would be motivated to tackle the material. These workshops included both general tips and text/assignment specific scaffolding tasks. They often used a 'Puzzle' format which required the students to work in pairs or groups, depending on class size, and then bring their findings together in various ways. Closer to the deadline, I would also often hold a peer editing session in which students would use the assignment rubric to provide feedback on one another's papers.”

5. Collaborative assignments and projects – many of Carleton instructors (115 of our respondents) have incorporated a variety of collaborative tasks in their courses. Some of the examples are:

- “I always have group assignments in all my courses. The ability to function within and be a part of, a group is paramount to being successful in my discipline.”
- “In both fourth-year and masters courses I have taught, the two written reports required are completed in groups.”
- “I designed and taught a course on motivation and emotion specifically for a small group where students would work together to solve specific problems that built up over time in complexity related to motivation. For example, designing a motivational program in an advanced digital course I have students work in teams of 4, with each student being responsible for a different aspect of a story, for example, a 'reporter', a 'photographer', an 'interactive producer', etc. Students rotate through the different jobs so that everybody experiences each job at least once.”

- “I have worked with students and external stakeholders in every course I have taught (2nd year studio, 4th year studio, research methods, directed studies courses, ergonomics/human factors). This may include other faculty at Carleton but most often involves community stakeholders. This is in fact the norm in my courses not the exception.”
- “50% of the final grade for BUSI2800 is based on team / collaborative projects 2. During the Entrepreneur Learning project the students reach out and interview founders. The apply lessons to a final group based New Venture 3. In BUSI3810 a team of students starts a business and acquires first customers 4. In BUSI3820 students in teams build a growth plan to scale a business. Building on knowledge from Carleton and personal business networks”
- “I often have the class do case studies or activities together (for marks or not). I find this breaks up the 3 hour lectures and gets them thinking about real world issues”
- “The SREE 4001 course organized the students into groups of four to complete a term long project involving the design and construction of a prototype power plant. The SREE program involves students from both the MAE department and DOE. The groups had a combination of students from both departments because the mechanical energy devices had to connect to electric generators.”
- “In my BUSI 3500 Applied Corporate Finance course, students pick a company listed on the Toronto Stock Exchange and analyze it in light of the topics we cover in the course. The assignment ends up as an eye opener for the students. This hand-on assignment allows them to acquire transferable skills and all they realize that in the real world things are a bit more complicated than they are made to believe in the classroom.”
- While the goals of collaborative work are noble, students generally do not like group projects. A important reason is that grades are still individually-owned on transcripts and, therefore, good students in particular do not want to work with other students. I try to incorporate group work while assessing the final work of students individually. For example, in my Honours field camp, the students work in the field together, gathering the data for specific laboratories. Then, the students complete the laboratories individually and these are graded.”
- “Laboratory experiments, conduct, data analysis and reporting require group work (typically 3 people)”
- “I get them to work together on small assignments, but I ALWAYS grade individually. My sense is students are very frustrated at group assessments.”
- “I have begun using the following in my courses. Students do an individual project, part of which is to generate "data" (types of data could include word clouds, photographs of locations to guerilla garden, sound recordings of soundscapes, video clips, entries for an annotated bibliography...or combinations of such things). This data is then shared within a group (usually 80+ students). The group then decides what one deliverable to create from the data; it assembles and organizes the data; and it presents the deliverable for assessment. Assessment is based on originality of the deliverable, the aesthetics

of the deliverable, quality of the data etc. All the students in the group, except for those who don't submit data to the group, receive the same grade. The groups are monitored, but there are no interventions except in the case of inappropriate behavior (hate behavior, bullying, etc.). The group is expected to work through any problems that might arise such as disagreement over the nature of the deliverable (only one deliverable is accepted from a group).”

- 6. Undergraduate research** – 80 of our respondents have incorporated research opportunities for undergraduate students into their teaching.
- “There are limited opportunities for classes with 150+ students. I have done diy science such as: to test solar water purification add soap to water (raises the pH) and then purify the water by solar evaporation. To test the pH change use red cabbage. Students did this at home and took pictures to document what they achieved.”
 - “students conduct secondary research (e.g. literature review), primary research (field work with participants, subject matter experts), and design development research (user testing/evaluation with participants, subject matter experts).”
 - “Supervised a number of summer research projects (NSERC USRA and DSRI) and ICUREUS projects.”
 - Students conduct literature reviews and focus groups, hired to be RAs, honours essays, theses, directed studies..
 - Some instructors described challenges:
 - “The idea of engaging more junior students comes up regularly and I oppose it for the simple reason that they are not sufficiently trained in the methods, skills and knowledge to do much. Couple this with [community] partners looking for almost professional level work, and you run into problems. Therefore, I leave this to the final degree year as a capstone activity.”
 - “Certainly, I have always encouraged this both in the more and less quantitative courses I teach. However, I have scaled this back in recent years because the "ethics" police and some of the more thuggish managers in the university have placed so many restrictions on this sort of activity . For interested students, I make sure they can develop contacts outside the university that will enable them to pursue this sort of thing without silly restrictions by the enemies of academic freedom.”
- 7. Diversity/Global learning** - 44 respondents answered this question and provided examples as follows:
- *Field courses, for example:*
 - “Especially true of what we did with Stories North in which students worked with Indigenous communities, youth, elders and scholars in the Yukon.”
 - “All courses in Religion are diversity global learning in some sense, I also take students to Israel on a travel course and regularly take students on field trips and welcome members of the community into the classroom”

- *Co-teaching and collaboration with international partners*
 - “co-taught + co-convened course WGST with universities in Sierra Leone and Tanzania”
- *Bringing global/diversity themes into course content (readings, discussions, assignments)*
 - “The case method I have used as a major teaching tool in both fourth-year and masters courses integrates a mix of cultural and global aspects in various cases.”
 - “I teach East Asian philosophy and religion, so every course requires an explicit discussion of how we are approaching the material, especially with regard to the history of Orientalism.”
 - “In my course, students must study at least one example of world culture as it relates to the main topic of the course (music and communication)”
 - “The readings chosen often emphasize intercultural communication, or diverse perspectives”
 - “It is part of material studied, of discussions, of term papers, and of lectures contextualizing material and situating it in broader world”
 - “Showing students how the deaf community lives differently than their hearing peers by showing a movie, answering questions and having them tell a well-known story, but where the characters are deaf. Also not allowing spoken communication in the classroom.”
 - “I included gender and diversity lenses in core curriculum course via in-class exercises, learning units, external speakers and student-led exercises.”
 - “Diversity in this course comes from the students. Diverse national, cultural, and educational backgrounds enrich the content of the course through a student's using the French language to communicate one's own identity and experiences.”
- Instructors also identified challenges and/or disagreement with the terminology
 - “I try to bring diverse literatures to whatever classes I teach; however, I would like to be more confident in my own pedagogical skills with regard to global learning as my own background and research are not strong in this area.”
 - “You should please be more careful about choice of language. "Diversity" is increasingly perceived by political moderates as a buzzword of the far left.”
 - “Diversity is an over used baloney buzz word. However, my main seminars all emphasis a big picture perspective on human pre-history, history and so forth.”
 - “No idea what this is”

8. Service Learning/Community-based Learning - 33 instructors said they have incorporated this HIP into their teaching.

- “I have had students work with a wide variety of community partners in my studio and design research courses (healthcare, wellness, aviation, high risk

work, product manufacturers, prisons, etc.). This is an important experience for students as they get exposed to complex issues in their community, issues that may be served by a product or service.”

- “Sometimes the students work on projects for clients or on projects that propose ideas for improvement to particular groups at the University.”
- “Five students attend 1 event in Indigenous community of Ottawa per term and write reflective piece on it incorporating two researched materials to explore the issue of the event.”
- “I taught a practicum course in psychology which required students in psychology to seek out practicum opportunities within the community which required a supervisor with a graduate degree in Psychology as well as course instructor (me). Students had to learn how to present themselves and do work in a professional setting and had to write a paper and give an oral presentation on what they had learned from the experience. As the instructor I occasionally had to resolve conflicts between students and supervisor. Students could choose from a variety of settings, including hospitals, schools, government agencies, NGOs, etc.”
- “Some modules in a specific class are co-led by practitioners from the Federal Government. In other cases, students go to the department itself to run an exercise.”
- “Digital ethnographies, field trips, students must attend a technology meetup.”
- “We interviewed representatives of agencies dealing with poverty and rural homelessness and students produced reports on their findings.”
- “Students collaborate with an NGO to produce a professional product presenting analysis and recommendations to the NGO.”
- “Assigning students to “shadow” a member of Parliament for a day.”
- “A little. I offer bonus marks for reaching out to into the community for new experiences and contacts with professionals and serious amateurs.”
- “I have a few bonus assignments that get them into the community, but none of the core assignments.”
- “I’ve done service learning assignments in 1st year, 3rd year, 4th year undergrad and graduate courses. In first year, the experience might just be a few hours, followed by a reflective assignment. In upper years, it typically involved a community-based research project.”
- “I prefer to leave these activities to the senior undergraduate level.”
- Some challenges are identified as well:
 - “I have tried this in the past. I found it difficult to find community partners...many see the students as a burden that stretches their already overstretched time.”
 - “I have scaled this back in recent years because of the [university’s] micro-managers and the restrictions they impose. However, I have so many contacts in government and the private sector, I am able to point people in the right direction for further experiences should they choose them on their own. I still suggest how community related problem solving

research in class, but we wouldn't want to traumatize the students by actually involving them in it under university auspices (sarcasm).”

- “I am interested in such learning, but can't quite get my mind around how to do this with an English course, particularly as I don't have experience so I feel a little out of my comfort zone.”

9. Internship – 35 respondents have some experience with it.

- Some programs have a mandatory internship:
 - “Social work makes it mandatory for students to participate in internships. I have often over the years run seminars with students who are participants in internships. Students are a requirement to attend 6 such seminars throughout the term.”
 - “Required for degree. Students must complete 370 hours in an eligible practicum placement.”
 - “All accredited engineering degrees do have co-op options which is a form of internship lasting 16 months.”
- Other programs try to provide internship opportunities because they believe they are beneficial to students, even though the internship is not mandatory:
 - “I have a graduate training program that has internships at its core.”
 - “In the Master programs in Northern Studies I arrange a 2-month internship for each student in a northern agency.”
 - “I have matched good students with paid internships.”
 - “Together with the Jacob Lowy Collection of Judaica at Library and Archives Canada we are seeking to develop one.”
 - “I have created Co-op student work programs for students in our program, since I work in the government and can provide real-life opportunities in my department.”
 - My program does not have a formal internship
- Challenges that are identified:
 - “I would if they were paid!”
 - “While the program does have internships, I have not formally integrated these into my courses. In addition internship programs are in a state of confusion following government policy changes that discourage their use.”
 - “Overworked word driven by misguided motivations. I see that students get jobs if they are able and willing.”
 - “I would be happy to supervise a student in the new summer internship program, but would like to have better information re. expectations for those applications.”

10. Capstone courses and projects – 67 instructors in our sample indicated that they have been involved in capstone courses and projects.

- “In three years of teaching capstone projects, my students have had the opportunity to experience the various phases required to complete a comprehensive design research project. This is done in collaboration with community partners and design are developed and evaluated with participants and subject matter experts.”

- “Psychology offers 2 capstone courses, one for students planning to become professional psychologists or researchers, and the other for careers in related fields.”
- “SICS as part of Indigenous studies program offers capstone course on the land.”
- “One of my courses is solely a capstone course, in which four groups of roughly four students work independently with and on behalf of a federal government department or agency, on a large, predetermined puzzle or question. Partners join us in class at least twice; students get to present their final projects at the partner's HQ, usually downtown Ottawa.”
- “I co-taught the SREE 4907 capstone design project with faculty from MAE, DOE, and CEE. The capstone project was a year long and involved industrial clients such as Windmill's Zibi project. The project involved 50 to 60 students, organized into multi-disciplinary teams to design buildings that effectively incorporated energy conservation, low carbon footprints, and met all safety regulations.”
- “Mergers & Acquisition: Capstone final project that integrates and applies material students have learned over the various finance courses - presented to 8 representatives from industry. If I teach this course again, I plan to make this a much larger event. It is platform where students can illustrate the analytical, strategic & communication skills to potential employers who are looking for candidates with these skills.”
- “All engineering programs have a significant 8-month capstone design project completed in groups.”

11. ePortfolio – Only 28 respondents have incorporated ePortfolio into their teaching. This is not surprising because Carleton University implemented ePortfolio centrally in 2017.

- “Students in my 4th year capstone projects have used e-portfolios to communicate their work with community partners and the larger design community.”
- “The SREE 4907 course used ePortfolios where each student had to document their work in four categories. The ePortfolios were used during performance appraisals where each student was interviewed by three professors for 10 to 15 minutes.”
- “Using in my 3rd year design course, trying to capture their improvements in the document cycle of their project (i.e. reflection), and to provide an alternative way of communicating engineering. Goal is to use it in my capstone course next year.”
- “I have utilized e portfolio for a number of years. I generally utilize it as a site for student reflection. They have posted written and oral reflections on their writing, presentations, and videos.”
- “I have students create a portfolio and post their research blogs (assigned reflections on what they're reading for their essays). They also give peer feedback on the blogs. Expanding the portfolio is available as a bonus assignment.”
- “The Archaeological Fieldwork courses that my program runs incorporate blogs on ePortfolio as part of the academic requirements for students enrolled in

these courses. The purpose is to begin to teach students of archaeology how to present the findings of their research to the general public and to begin community outreach for the discipline, while maintaining the confidentiality of new finds before their full scholarly publication.”

Moving forward (preferred support and final thoughts)

- When asked about what HIPs they would like to learn more about, the majority of respondents (120 responses) identified ‘common intellectual experience’ (39 per cent), ‘learning communities’ (35 per cent), and ‘service learning and community-based learning’ (31 per cent).
- Our respondents (129 responses) felt that resources that could best support the incorporation of HIPs into their courses are workshops (48 per cent), examples and testimonials from colleagues (46 per cent), and website with resources (44 per cent). The least helpful resources for our sample are video materials, journal articles, and (somewhat surprisingly) mentorship program on Hips.
- We also asked our instructors to provide any additional comments they might have. Some of themes are as follows:
 - *Time commitment* –
 - “You have to find an instructor who is willing to take on the extra work and time required, and genuinely likes this type of experiential learning and interacting closely with your students. I do, but many colleagues prefer to teach courses that are focused on rapid acquisition of detailed knowledge and not on skills and experiential learning.”
 - “Students LOVE them. Community Loves them. I love them in principal, but the workload and the stress of making sure that the students deliver high quality product is high.”
 - *Skepticism about benefits to students:*
 - “I’m not convinced that HIPs are not simply a marketing tool for programs. I suspect that real outcomes are unaffected by HIPs. We forget that we built the atomic bomb, went to the moon, and completed the Empire State Building in one year without all this HIPs stuff. I doubt undergraduates today are any more capable than undergraduates from 100 years ago and if we’re honest, maybe less so.”
 - “This is the first I have heard about this, I would like to learn it and then determine if it can be useful to me and if not what problems exist.”
 - *Teaching not valued as much as research in tenures and promotions*
 - “I would be more proactive in implementing HIPs into my teaching if that mattered for my career. My administration has made it clear that to me that teaching well should be my lowest priority and the effort I put into teaching well has actually counted AGAINST me in promotion and tenure situations.”

- “I wish this counted more for tenure and promotion!”
- “The university sends very mixed signals on the adoption of HIPs.”
- *Some respondents had concerns about HIPs definitions and descriptions*
 - “I think the term is too narrowly defined and risks being the worse kind of educational jargon.”
 - “The definition you are using is a bit too vague I think a more meaningful way to approach this is to think about what outcomes we are looking for and how to facilitate that - engineering and English literature would be very different.”
 - “I think that a clear definition of HIPS would be helpful in completing this survey - the interpretation of the labels can be ambiguous”

Definitions of HIPs provided in the survey

First-Year Seminars and Experiences

Many schools now build into the curriculum first-year seminars or other programs that bring small groups of students together with faculty or staff on a regular basis. The highest-quality first-year experiences place a strong emphasis on critical inquiry, frequent writing, information literacy, collaborative learning, and other skills that develop students' intellectual and practical competencies. First-year seminars can also involve students with cutting-edge questions in scholarship and with faculty members' own research.

Common Intellectual Experiences

The older idea of a "core" curriculum has evolved into a variety of modern forms, such as a set of required common courses or a vertically organized general education program that includes advanced integrative studies and/or required participation in a learning community. These programs often combine broad themes—e.g., technology and society, global interdependence—with a variety of curricular and cocurricular options for students.

Learning Communities

The key goals for learning communities are to encourage integration of learning across courses and to involve students with "big questions" that matter beyond the classroom. Students take two or more linked courses as a group and work closely with one another and with their professors. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines. Some deliberately link "liberal arts" and "professional courses"; others feature service learning.

Writing-Intensive Courses

These courses emphasize writing at all levels of instruction and across the curriculum, including final-year projects. Students are encouraged to produce and revise various forms of writing for different audiences in different disciplines. The effectiveness of this repeated practice "across the curriculum" has led to parallel efforts in such areas as quantitative reasoning, oral communication, information literacy, and, on some campuses, ethical inquiry.

Collaborative Assignments and Projects

Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one's own understanding by listening seriously to the insights of others, especially those with different backgrounds and life experiences. Approaches range from study groups within a course, to team-based assignments and writing, to cooperative projects and research.

Undergraduate Research

Many colleges and universities are now providing research experiences for students in all disciplines. Undergraduate research, however, has been most prominently used in science disciplines. With strong support from the National Science Foundation and the research community, scientists are reshaping their courses to connect key concepts and questions with

students' early and active involvement in systematic investigation and research. The goal is to involve students with actively contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions.

Diversity/Global Learning

Many colleges and universities now emphasize courses and programs that help students explore cultures, life experiences, and worldviews different from their own. These studies—which may address US diversity, world cultures, or both—often explore “difficult differences” such as racial, ethnic, and gender inequality, or continuing struggles around the globe for human rights, freedom, and power. Frequently, intercultural studies are augmented by experiential learning in the community and/or by study abroad.

Service Learning, Community-Based Learning

In these programs, field-based “experiential learning” with community partners is an instructional strategy—and often a required part of the course. The idea is to give students direct experience with issues they are studying in the curriculum and with ongoing efforts to analyze and solve problems in the community. A key element in these programs is the opportunity students have to both apply what they are learning in real-world settings and reflect in a classroom setting on their service experiences. These programs model the idea that giving something back to the community is an important college outcome, and that working with community partners is good preparation for citizenship, work, and life.

Internships

Internships are another increasingly common form of experiential learning. The idea is to provide students with direct experience in a work setting—usually related to their career interests—and to give them the benefit of supervision and coaching from professionals in the field. If the internship is taken for course credit, students complete a project or paper that is approved by a faculty member.

Capstone Courses and Projects

Whether they're called “senior capstones” or some other name, these culminating experiences require students nearing the end of their college years to create a project of some sort that integrates and applies what they've learned. The project might be a research paper, a performance, a portfolio of “best work,” or an exhibit of artwork. Capstones are offered both in departmental programs and, increasingly, in general education as well.

Survey Questions

1. What position do you hold at Carleton?
2. How many years have you been teaching in higher education?
3. What faculty do you belong to?

4. What is your department?
5. Have you incorporated any of the high-impact practices (HIPs) into the course(s) you teach? (*definition of practices provided*)
6. Why haven't you incorporated any HIPs in your course(s)?
7. Are there any resources that you feel would best support the incorporation of HIPs into your courses?
8. What motivates you to incorporate HIPs in your course(s)?
9. Which of the following helped you (if any) in incorporating HIPs into your course(s)? (*options: EDC support and workshops; collegial support; small class size; adjustment to teaching assignment; availability of resources; none; other – please specify*)
10. When planning to incorporate HIPs into your course(s), did you consult with a member of the Educational Development Centre (EDC)?
11. Are you aware that the Educational Development Centre (EDC) can provide resources and assistance with implementing HIPs?
12. Please identify any difficulties you may have experienced when incorporating a HIP into your course(s).
13. Going forward, not including the HIPs you are or have been involved with, which of the following would you be interested in learning more about?
14. Are there any resources that can best support the incorporation of HIPs into your courses/program?
15. Do you have any further comments regarding HIPs?