

Recruiting Students for Research in Postsecondary Education: A Guide

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Introduction

Recruitment of participants is a challenging and very important aspect of research on postsecondary education. Many studies founder when students are not interested in participating, when students drop out before finishing a study, or when the students who respond do not represent the diversity of the student population. Recruitment is complex: students must know about the study, want to participate, be able to participate and, finally, log in or show up. Researchers can improve recruitment by being flexible, explaining how the research is relevant to a diverse student body, devoting extra resources to recruiting students who are less likely to participate, and practicing patience and persistence.

This guide is intended to help researchers better understand the recruitment of student participants in postsecondary education research. It supplements a previous Higher Education Quality Council of Ontario (HEQCO) publication, *Researching Teaching and Student Outcomes in Postsecondary Education: A Guide* (2012).

What follows is a discussion of student participation in research, including how students make decisions about participating in research, standard practices used by researchers to recruit students, and common requirements set by research ethics boards (REBs) for recruitment of students. This guide investigates students' motivations and behaviours and highlights practical recruitment strategies that take into account students' decision-making processes. The guide was developed based on a comprehensive environmental scan of the participant recruitment literature, a content analysis of past and present HEQCO projects, interviews with representatives from McMaster University's Centre for Leadership in Learning (CLL) and REB, and the recent experiences of researchers at Ontario colleges and universities.

The intended audience for this document includes:

- faculty members and educational developers investigating innovative approaches or technologies designed to enhance learning in postsecondary contexts;
- faculty members and administrators leading initiatives for students enrolled in programs or courses;
- student service providers at postsecondary institutions; and
- students and student associations focusing on effective teaching and student success.

Recruitment failure has serious implications. It can prolong a study, raise questions about the generalizability of findings, or even close a study (Brown, Long, Gould, Weitz & Milliken, 2000). Whether a researcher is considering a research project to measure educational outcomes, attitudes or experiences in the classroom, department, or on campus, recruitment strategies to encourage student participation require careful planning.

Chapter 1: Perspectives on Student Participation in Research

The Many Ways of Saying Yes and No – A Theoretical Starting Point

What causes a student in postsecondary education to participate in research? If we can better understand the answer to this question, we may be able to develop innovative recruitment strategies. Porter and Umbach (2006) outline two dominant theoretical approaches used to explain why some people respond to surveys and some do not: one from social psychology and one based in social exchange theory.

The social-psychological approach theorizes that survey response decisions reflect personal characteristics and social context. In other words, the research participation decision-making process may be influenced by a student's intuitive judgments and social environment (Porter et al., 2006).

In contrast, Blau's (1964) social exchange theory posits that people make decisions about the costs and benefits of survey participation. In short, if students perceive that the benefits of participation in research projects exceed the costs, they will likely agree to participate in and remain part of the research project. This theory is particularly useful for understanding how certain aspects of research design and administration affect response rates (Porter et al., 2006).

Both of these approaches can help researchers understand the complex negotiation process between researchers soliciting participation and prospective participants. An effective recruitment design should not only take into account the motivating factors associated with participation but also allow for modifications in strategy to better target specific student groups.

Imagine You're a Student...

Let's take the student's viewpoint for a moment. Students on many campuses are feeling bombarded with invitations to participate in research (Sax, Gilmartin & Bryant, 2003). Whether it is by an email, a poster on campus or a class announcement, it is a common practice for researchers to contact prospective participants with invitations to take part in their projects. The problem is that, with the many competing demands on students' time, non-participation and study dropout remain huge challenges for postsecondary researchers. Participation rates of 33%, with attrition of 20% from that, are not uncommon (Elgie, Childs, Fenton, Levy, Lopes, Szala-Meneok & Wiggers, 2012, p. 27).

Knowing Your Audience: Why Do Some Students Participate While Others Do Not?

Researchers soliciting participation may want to think of ways to appeal to the lived experiences of the prospective participants. Sax et al. (2003) documented that the willingness of college students to complete a questionnaire was linked to the questionnaire's perceived relevance to the individual. In addition, willingness to participate in surveys is affected by whether or not students perceive

their feedback to be valued (by the researcher and institution) and acted upon (Nair et al., 2008). Consideration should be given to studying research questions that are relevant not only to the researcher or the institution, but to the student participants as well.

Singer and Bossarte (2006) propose that student motivations to participate in surveys are rooted in altruistic (i.e., the study is intrinsically meaningful), project-related (i.e., interest in the study or researcher) or self-centred reasons (i.e., motivational incentives). Readers should consider how these motivational factors carry different weights for different students and that each may move a student toward or away from cooperation with a project (Singer, Groves & Corning, 1999; Singer & Bossarte, 2006). For instance, Brown et al. (2000) suggest that women's participation in research is based on the interplay of three factors: awareness, acceptability and access. Female participants are more likely to join and remain part of a research study when they perceive the benefit of the project positively, receive approval from their peers and feel that the research is easily accessible and rewarding. A cross-cultural perspective on research participation found that establishing trust and overcoming fear is necessary for the successful recruitment of minority participants (Baratta, Gucciardi, Ahmad & Stewart, 2006). While these studies suggest that students' decisions about participating in research can vary based on gender, race/ethnicity and other attributes, they more importantly provide examples of the complex relationships among motivating factors. Motives for participation relate to both social-psychological and social exchange theory.

Gaining participants is not the only goal of student recruitment. Just as important for most research studies is how well the participants represent the student population. A researcher's decisions concerning recruitment methods can affect which students decide to participate as well as the nature of their responses in terms of timeliness, completion and other factors (Goldenberg, Owens & Pickar, 2007; Porter et al., 2006). Bias in student recruitment can take two forms: nonresponse bias refers to differences between participants and non-participants in terms of demographic and attitudinal characteristics, while response bias indicates that participants may vary in the quality of their participation. For example, some participants may answer in socially desirable ways, expend little to no effort, omit specific questions or exaggerate their responses (Sax et al., 2003).

Even the best-designed recruitment message will probably appeal more to some students than to others. Researchers may, without realizing it, create recruitment messages with a subset of students in mind – influenced perhaps by the students they know the best from classes or office hours, or by memories from their own student days. It is important to scrutinize recruitment methods. Is there a valid rationale for participating in the study that is likely to appeal to male as well as female students? If some students are more likely to respond to messages from institutional officials, while others are more likely to respond to social media, can messages be sent through both sources? If students use different kinds of devices to access the Internet, can an online survey be provided in formats that work on all of these devices? Bias in the choice of participants lowers the quality of research.

Chapter 2: Research Design Choices that Affect Student Participation

A Model of Student Participation

The model of student participation presented on the following page incorporates perspectives from the social-psychological and social exchange theoretical approaches as well as the research literature. The model illustrates both how prospective student participants might arrive at their decision to accept or decline an invitation to participate in research, and the effects of choices about research design on student participation.

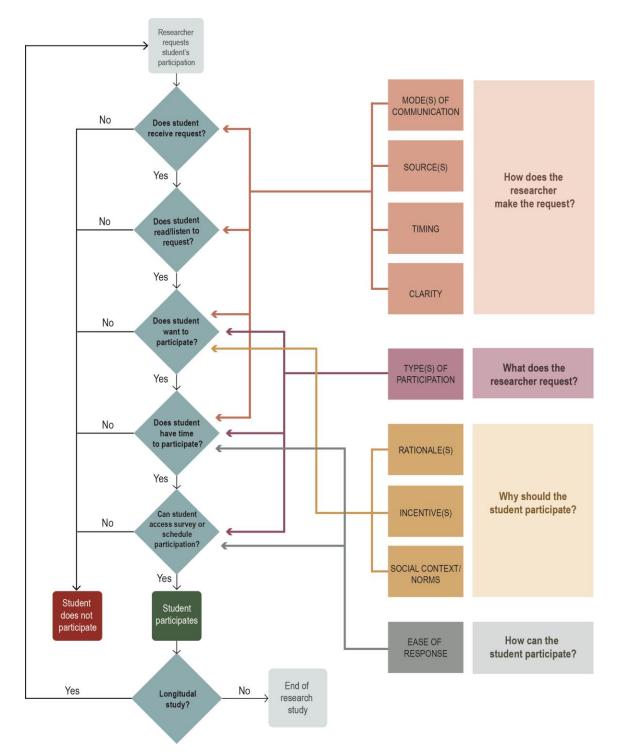
To become a participant, students must have a positive outcome at each of the following steps. They must:

- receive the participation request,
- read or listen to the request,
- want to participate,
- have the time to participate, and
- be able to access the survey or schedule participation.

Each step is critical: a negative at any one step leads to recruitment failure. In longitudinal studies, some or all of these steps may be repeated for each data collection cycle.

Researchers' choices about the research design may affect successful outcomes at the five steps. There are four main aspects of the research design about which the researcher must make choices:

- how the researcher makes the request
 - mode of communication
 - source
 - timing and scheduling
 - clarity
 - type of participation requested
- attractiveness of the research
 - rationale
 - incentives
 - social context
- ease of response





The model of student participation includes research design choices that can affect how students make decisions about participating in research. As the arrows in the model show, what the researcher decides, for example, about how to make the request can affect several aspects of the student's decision about whether to participate.

In the next section, we discuss the parts of the model in more detail, summarize standard practices and suggest practical recruitment strategies

How the Researcher Makes the Request

Mode(s) of Communication

A good place to begin thinking about recruitment is to consider a practical mode of communication to initially request participation. Bear in mind that it is typically this step that determines whether the "right" student receives the request and whether that student reads or listens to it.

A review of the literature identifies a wide range of communication strategies used to attract student interest, including speaking about the research in a class, sending targeted emails that can easily be accessed at the student's leisure, hanging signs and posters around the school publicizing the study and how to participate, and setting up information sessions aimed at sharing important project details, responding to questions and circulating contact information. Other approaches, such as embedding contact information and consent forms inside social media (e.g., Facebook and Twitter), are also used.

Goldenberg et al. (2007) suggest that researchers should consider more direct approaches to providing project details and recruitment information to their subject pool. This may involve obtaining permission from a course instructor to present information about the study and the informed consent process in class, or recruiting potential participants directly through targeted emails or course management systems that students check regularly (e.g. Smollett, Arakawa & Keefer, 2012; Duncan & Varcoe, 2013). Goldenberg et al. (2007) suggest that recruitment goals are reached more quickly through direct approaches rather than more indirect (or passive) methods, such as posting signs or flyers.

A common trend is for researchers to employ complementary modes of communication to attract potential participants. Researchers may decide to send requests through different modes of communication if they find that some students are responding to messages from one mode, while others are more likely to respond to another. The student demographic in higher education is extremely diverse and campuses are large. Accordingly, researchers need to consider how their promotional material reaches the subject pool and whether it cuts through the "noise" to attract attention. To avoid simply flooding students with promotional material on campus and potentially causing survey fatigue, researchers may want to coordinate their requests centrally with their institution beforehand.

Table 1. Mode(s) of Communication

| May Determine |
|---|
| If the student receives the request |
| If the student reads or listens to the request |
| Common Approaches |
| Email (personalized, targeted or mass email) |
| Advertising posters |
| Telephone |
| Social media |
| Information kiosk |
| Information sessions |
| Classroom visits |
| Online course management systems |
| Considerations |
| Reaching intended participants |
| Attracting attention, cutting through the "noise" |
| Selecting complementary modes to raise awareness, provide additional information, send reminders |
| Research Suggests |
| Direct contact, such as classroom presentations or information kiosks, is especially effective (Goldenberg et al., 2007). |

Source(s)

The source from which the request is received may determine whether a student reads/listens to the request, but also whether he or she wants to participate. It is clear from the literature that researchers often work with faculty, administrators and student groups to gain access to their participant pool. The request for participation may come through the program's facilitator, an ally inside a student group, or other students who endorse and support the researcher in the recruitment process (e.g., Tsagris & Muirhead, 2012). These sources may not only encourage student participation, but also provide access to meetings or mailing lists of specific student networks (Hedge, 2012; Elgie et al., 2012).

Whoever the source, it should be authentic, informative and not "pushy" when approaching potential participants. The main ethical concern is to avoid coercing or manipulating a student into participating in a research project (Elgie et al., 2012). For example, students who receive a request through a course instructor may feel obligated to participate simply because they believe that their grade might otherwise suffer (Goldenberg et al., 2007). This may be even more of a concern for students when an instructor is studying his or her own course; students may worry that their instructor (or teaching assistant) will know whether or not they participated or the content of their responses. Many researchers find it beneficial to have a research collaborator or assistant who is not an instructor in the course be responsible for informing students about the study, assisting with recruitment, and ensuring that students understand the informed consent process and that accepting or declining to participate will not affect their education in any way. This person should have no prior connection at all with the course, program or study, and serves as the primary source of contact between the research project and the subject pool (Elgie et al., 2012).

Table 2. Source(s)

| May Determine |
|---|
| If the student reads or listens to the request |
| If the student wants to participate |
| Common Approaches |
| Researcher |
| Course instructor |
| Office of institutional research |
| Student group |
| Student peer |
| Project mediators |
| Considerations |
| Making positive contact with the intended participants |
| Credibility |
| Prior relationships |
| Having the "right" person pitch the project and request participants |
| Research Suggests |
| • Use research mediators, not instructors. Students may feel obligated to participate if asked by instructors because they believe that their grade might otherwise suffer (Goldenberg et al., 2007). |
| Network with faculty, administrators and student groups to gain access to participant pools. |

Timing

Even if students are interested in participating in research, timing is important. It can affect whether the student receives the request, reads/listen to the request, and if he or she wants to participate. Given the many demands on students' time, participating in research projects may need to be coordinated with schoolwork, family responsibilities and other extracurricular commitments.

It is becoming standard practice for researchers and evaluators to start the recruitment phase of their research early in a study (e.g., Conway, 2010). New researchers may underestimate the time required to recruit participants. Extending the recruitment period also gives researchers time to send multiple waves of reminders to encourage potential participants (e.g., Miles, Polovina-Vukovic, Littlejohn & Marini, 2010; Angrist, Chambers, Oreopoulos & Williams, 2010). This also gives students time to become familiar with the study, arrange their personal schedules, talk to friends and even test whether they trust the researcher(s) (Hedge, 2012). Starting early also gives the researcher time to recover from any response delays, low response rates and scheduling conflicts.

Elgie et al. (2012) suggest that researchers should consider recruitment strategies that avoid the end of term and find time for project activities just before or after class to increase the willingness of students to participate. However, it is possible that, for some students, filling out a survey may be an attractive way to procrastinate during exam period or at other busy times of the year.

Table 3. Timing

| May Determine |
|---|
| If the student receives the request |
| If the student reads or listens to the request |
| If the student wants to participate |
| Common Approaches |
| Time of year |
| Time of week |
| Sending reminders: multiple waves |
| Considerations |
| |
| Catching students at a "good" time |
| Individual, institutional and personal schedules |
| • Recognizing whether students are: (1) declining the invitation to participate or (2) simply not getting |
| around to participating |
| Research Suggests |
| Notifying students about research opportunities prior to the start of a course or semester |
| • Elgie et al. (2012) suggest that researchers should consider recruitment strategies that avoid the end |
| of term and find time for project activities just before or after class. |
| Other Ideas |
| Consider flexible recruitment strategies: Prolong the recruitment phase and schedule data collection |
| around participant, institutional and personal schedules well in advance. |
| • Try something new: Students might find a survey to be a great way to procrastinate and avoid studying |

Clarity

Researchers have a responsibility to communicate clearly about the study's goals and what they are asking students to do (e.g., Palameta & Voyer, 2010; Smollett et al., 2012). Students should always be aware of what they are "getting themselves into" by participating. It is best to describe what is expected of students very clearly in any promotion material and in the consent form, avoiding unnecessary specialized language and acronyms. Research suggests that being clear from the start about the study's rationale, level of commitment, incentives and ethical considerations can encourage interest and trust by potential participants. More detailed descriptions of the project should be provided in brochures, on websites that also contain additional contact information, or through question-and-answer sessions on campus or in the classroom.

The goal of the researcher should be to help students make an informed and educated decision to participate – even if that means that they decide to decline the invitation.

Table 4. Clarity

| Iay Determine | | | | |
|--|----|--|--|--|
| If the student reads or listens to the request | | | | |
| If the student wants to participate | | | | |
| Common Approaches | | | | |
| Avoid any unnecessary specialized language and acronyms that might cause confusion or be distracting. | | | | |
| Considerations | | | | |
| What does a student need to know to make an informed decision? | | | | |
| Some students may really not have the time to participate | | | | |
| Providing the right amount of detail in each mode (e.g., advertising) | | | | |
| Providing follow-up details and contact information | | | | |
| Being upfront from the start: no hidden agendas | | | | |
| Student rights and informed consent: "You can leave at any time" | | | | |
| Research Suggests | | | | |
| Be upfront from the start (rationale, level of commitment, incentives and rights (informed consent) |). | | | |
| Create a brochure or website that contains a detailed description of your project and contact information. | | | | |
| Provide information/Q&A sessions on campus or in the classroom. | | | | |

What the Researcher Requests

Type(s) of Participation

Participating in a study may involve completing a short online survey or it may require attending a focus group, completing an interview or taking a test. The time commitment may range from five minutes to several hours and involve one or several points in time. The amount of time asked of students will affect who is able and willing to participate.

A primary complaint from students is that researchers can be unrealistic about what and how much they are asking students to do. Researchers should consider carefully how frequently they will ask participants for input and whether or not they are being intrusive. If the study will require significant time, the students should be compensated, as they would be for work on a job. It is often worthwhile to find out if some of the information being sought is already available through other sources. School administrative offices already collect a great deal of data about students. It may be possible to conduct a study using data that are already available. If a study involves some new data and some administrative data, a researcher should ask students for their consent to connect the new data with data from their student records, thus minimizing the amount of time required of the students.

Web-based data collection (e.g., Survey Monkey, Skype, private chat rooms) is growing in popularity because of the flexibility it offers in when and where students participate. Even with such flexibility, it is important to provide realistic time estimates of how long it will take to participate. Some online survey instruments, for example, include a "progress bar" that provides participants with a sense of how many questions remain to be answered.

For longitudinal or multi-stage studies, researchers should ask participants at the end of each stage if they wish to be contacted in the future or continue in the study.

Table 5. Type(s) of Participation

| May Determine | | | | |
|--|--|--|--|--|
| If the student wants to participate | | | | |
| If the student has time to participate | | | | |
| If the student can access survey or schedule participation | | | | |
| Common Approaches | | | | |
| Survey: Hardcopy and/or online | | | | |
| Interviews | | | | |
| Focus groups | | | | |
| Experiments | | | | |
| Considerations | | | | |
| What and how much is the student being asked to do? | | | | |
| The amount of extra time it will take to participate (above school requirements) | | | | |
| • The length of the survey, and/or the length of time needed for interviews or focus groups | | | | |
| The amount of contact between the researcher(s) and participants | | | | |
| Research Suggests | | | | |
| Less is more: As level of commitment increases, so does attrition. | | | | |
| Use web-based tools for data: Survey Monkey, Skype, private chat rooms, etc. | | | | |
| Provide alternatives. | | | | |
| At the end of each stage, ask participants if they wish to: (1) be contacted in the future and/or (2) continue in the study. | | | | |

Why the Student Should Participate

Rationale(s)

Students often make decisions to participate based on how they perceive the importance of the research, how relevant it is to their lived experiences, and whether they believe their input will be acted upon (Sax et al., 2003; Nair et al., 2008).

Research supports the importance of a well-written rationale. For example, a researcher may explain that, the more student responses are received, the more useful the information will be for identifying areas of improvement on campus and for making changes toward a better educational and student experience for present and future students. This rationale has shown particular success in attracting female students (Goldenberg et al., 2007). Some researchers describe to students what was found in previous studies and how the institution acted on these findings.

Table 6. Rationale(s)

| May Determine |
|---|
| If the student wants to participate |
| Common Approaches |
| Highlighting the purpose of the research |
| Identify how the research can improve education or enhance the student experience. |
| Considerations |
| What reason is given for the request? |
| Does the rationale match students' interests? |
| Research Suggests |
| Appeal to students' lived experiences (Sax et al., 2003): Do not underestimate the relevance to students of improving education and the student experience (Goldenberg et al., 2007). Acknowledge why student participation is important and how it will be acted upon (Nair et al., 2008). Acknowledge if the project is meant to affect current and/or future students. |
| Attract students by making participation a learning/educational experience |

Attract students by making participation a learning/educational experience.

Incentive(s)

Offering incentives fits the social exchange theory of attracting participants. However, the practice may introduce ethical issues. Institutional research ethics boards (REBs) may be concerned that offering incentives to participants constitutes coercion or distorts the judgement of potential research subjects. Researchers have used a variety of types of incentives (e.g., financial, material, or grade-related) to recruit students (Dickert & Grady, 1999; Singer & Bossarte, 2006). Incentives can be particularly important when the rationale for participation is weak or when students lack other motives to participate. Incentives may take the form of food, a small education-related item, a small course grade adjustment, monetary reimbursement, or a lottery draw for one or more larger prizes. However, there is no standard practice for selecting the incentives to be offered for participation.

Studies suggest that "money is more effective than noncash incentives, and that prepayment is more effective than a promised incentive" (Singer et al., 2006, p. 412). Researchers should be aware, however, that higher monetary payments may unduly influence students to participate in research or may blind them to the risks. Such payments may also cause students to conceal information that might otherwise disqualify them from being eligible to participate. Research by Goldenberg et al. (2007) suggests that males are more motivated by financial compensation than females, while females are more motivated by "the good of the cause."

A rule of thumb when choosing financial incentives is to calculate and justify payment similar to a working wage for the required time and effort (Dickert & Grady, 1999; Grady, 2001).

Researchers should remain realistic about their budget when choosing an incentive. If the budget does not support incentives for every participant, a researcher may choose to use a draw or a lottery system to offer participants the chance to win one of a number of smaller prizes (e.g., a Tim Hortons or Starbucks coffee card, parking vouchers or tickets to a campus event) or larger prizes (e.g., small electronics).

For research that is associated with courses, a small amount of course credit is sometimes offered for participation. If course credit is used as an incentive, students who do not want to participate should be offered an alternative way to earn the same amount of credit.

Offering participants the opportunity to request an accessible summary of the research findings can also serve as an incentive for some students. This approach may also help to make participation in research an educational experience.

Table 7. Incentive(s)

| May Determine |
|--|
| If the student wants to participate |
| Common Approaches |
| There is no standardized approach about how to select the incentive to offer for participation. |
| • Food |
| Draw/lottery for prizes |
| Gift certificate |
| Financial |
| Making research a learning experience |
| Considerations |
| Is an incentive required to attract students? If so, what kind? |
| How does the student benefit? |
| Are incentives coercive (or blinding)? Ethical? Will the incentive affect the quality of responses? |
| Research Suggests |
| Consider the project's funding: Is an incentive needed? Is an incentive doable? |
| • Studies suggest that "money is more effective than noncash incentives, and that prepayment is more |
| effective than a promised incentive" (Singer et al., 2006, p. 412). Males are more often motivated by |
| financial compensation (Goldenberg et al., 2007). |
| • An ethical rule of thumb: Calculate and justify payment similar to a working wage that is based on time and effort (Dickert & Grady, 1999; Grady, 2001). |
| • Use a draw or lottery to offer participants an item they might not purchase for themselves (e.g., small electronics). |
| Offer to provide an accessible summary of the findings. |
| electronics). |

Social Context/Norms

The attractiveness of the research to the participant pool may also depend on the social context and campus culture. Student responses and participation rates have been found to vary between institutions, faculties and programs of study (Porter & Umbach, 2006). Before beginning recruitment, researchers should assess their campus culture and how common it is for students to participate in similar research.

For decades, psychology programs have expected students to participate in research as part of their course degree requirements. As a result, psychology students view research participation as a normal part of their education. Students in other programs may have less experience with and exposure to research studies, but even with those students, researchers may find it helpful to emphasize that research studies are an important and common part of the higher education experience.

Table 8. Social Context/ Norms

| May Determine |
|---|
| If the student wants to participate |
| Common Approaches |
| • Normalizing research (make it part of course and program requirements), reducing stigma, eliminating fear |
| Considerations |
| Do the students know others who have participated in this or similar research? Has the student participated in similar research before? What is the culture of the institution? |
| Research Suggests |
| Teach about research and normalize participation by making it a learning experience. |

How the Student Can Participate

Ease of Response

Wanting to participate is not enough; a student must be able to access the resources or people involved in the study. If a website crashes or the research team does not return phone calls, students may give up. Students may vary in their access to and comfort with technology, so researchers should ensure that their materials or surveys are available across a variety of platforms and formats. In some contexts, it may be important to make materials available in multiple languages. Scheduling and location flexibility can make it possible for more students to participate. When designing a research study, it is important to include time to thoroughly test any technology, as well as other parts of the data collection protocol.

Table 9. Ease of Response

| May Determine |
|---|
| If the student has time to participate |
| If the student can access survey or schedule participation |
| Common Approaches |
| Offering announcements/initiations, interviews and online surveys in multiple languages |
| Paper format with a return envelope or box for returns and offer of telephone assistance |
| Electronic format accessible via multiple modes of technology |
| Multi-stage general and targeted follow-ups: Provide students with an opportunity to participate. |
| Considerations |
| How are the students being asked to respond or participate? |
| How easy is it to access the survey or schedule participation? |
| How flexible is the scheduling and location of participation? |
| Research Suggests |
| Provide options of ways to participate: Using multiple formats, multiple languages |
| Do not be afraid to try innovative technologies. |
| Suggest times and locations based on participants' availability. |

Ethical Considerations

Ethical considerations inform every aspect of recruitment. To ensure that ethical procedures are followed, recruitment procedures, and especially the process of informed consent, require approval by a research ethics board (REB). Ethical implications that may arise during planning and implementation include: power differentials, participant vulnerability, participant burden, lost learning time, equitable distribution of research benefits, confidentiality of student consent, secondary use of student academic data, timing the researcher's access to and analysis of data, data security and roles in the research project (Elgie et al., 2012).

Though REBs vary in local requirements and processes, REBs at Canadian postsecondary institutions review each project with respect to three core Tri-Council ethics principles: respect for person, welfare for the participants, and justice (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences & Humanities Research Council of Canada, 2010). Researchers should familiarize themselves with the regulations and procedures of their institutional REB to understand how their intended research may impact not only the participants but also those who choose not to participate.

Chapter 3: Examples

Chapters 1 and 2 described how students make decisions to participate in research and detailed nine factors that affect participation and response rates. It is now time to apply this framework to some examples. This chapter provides suggestions for four scenarios – common situations that require student recruitment. Our hope is that researchers can adapt this guidance to their own research projects.

| | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--------------------------|--|---|--|---|
| | Your institution tried a new kind of Welcome Week this year and wants to find out if students think it should be repeated next year. | You want to know if a teaching innovation will help students in your courses learn. | Your institution is participating in the National Survey of Student Engagement (NSSE). | You want to start a new mentoring program for students and study how it works. |
| Mode of Communication | Information and feedback kiosks at Welcome Week events Brief information sessions in large first- year introductory courses Social media Targeted emails to first-year students <i>So students receive the request:</i> Select complementary modes of communication to raise awareness, provide additional information Contact students directly at Welcome Week events, in class, and/or via email Use social media to provide complementary and less intrusive messages <i>So students read or listen to the request:</i> Ask for student feedback about Welcome Week during the event – an information kiosk can be an easy way to learn about the event in "real time" Talk to large first-year classes Ask student and institutional groups to pass on your requests for feedback through social media (e.g., Twitter and Facebook) Send targeted emails to all students who attended Welcome Week immediately after the event | Brief classroom presentations by a project mediator (not the instructor) Targeted emails to students Reminders and consent documents via online course management systems So students receive the request: Select complementary modes of communication to raise awareness, provide additional information So students read or listen to the request: Use online course management systems and other materials to remind students of the study | Information kiosks in high-frequency locations on campus Mass emails to students Social media endorsements So students receive the request: Select complementary modes of communication to raise awareness, provide additional information Contact a large proportion of students directly via student email So students read or listen to the request: Create a fun atmosphere around information kiosks on campus Customize survey invitation messages | Targeted emails to students eligible to participate Posters in affiliated departments So students receive the request: Select complementary modes of communication to raise awareness, provide additional information So students read or listen to the request: Send targeted emails to eligible students advertising the new program |

| | Scenario 1 Your institution tried a new kind of Welcome Week this year and wants to find out if students think it should be repeated next year. | Scenario 2 You want to know if a teaching innovation will help students in your courses learn. | Scenario 3 Your institution is participating in the National Survey of Student Engagement (NSSE). | Scenario 4 You want to start a new mentoring program for students and study how it works. |
|--------|---|---|---|--|
| Source | Student ambassadors Student groups Welcome Week organizers So students read or listen to the request: Network with student groups and organizers who have an interest in the planning of Welcome Week Inquire about a possible referral and endorsement from each on social media (e.g., Twitter) So students want to participate: Use high-energy and personable student representatives in information sessions at Welcome Week or in the classroom, ensuring that students understand that their participation and responses will be confidential | Project mediators So students read or listen to the request: Have the project mediator explain the importance of this and past research in improving teaching So students want to participate: Explain the precautions taken so the course instructor will not know who chooses to participate until after all grades have been submitted | Institutional research office So students read or listen to the request: Seek and then advertise endorsement from student and organizational groups So students want to participate: Emphasize the opportunity to improve educational outcomes and the student experience | Researcher Department administrators So students read or listen to the request: Emphasize the opportunity to experience a new program Provide details about how the students can sign up for the program So students want to participate: Emphasize the opportunity not only to experience a new program but also to improve it by participating |

| | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--------|--|--|---|---|
| | Your institution tried a new kind of Welcome Week this year and wants to find out if students think it should be repeated next year. | You want to know if a teaching innovation will help students in your courses learn. | Your institution is participating in the National Survey of Student Engagement (NSSE). | You want to start a new mentoring program for students and study how it works. |
| Timing | Start recruiting participants during Welcome Week at various events Start information sessions in class the week directly following Welcome Week Keep recruitment phase open for entire semester or longer Reminders: Multiple waves – email and social media So students receive the request: Approach students during and immediately following Welcome Week Classes will often have the best attendance rates at the start of the year – contact instructors ahead of time to schedule select presentations Send regular reminders directly via email and indirectly via social media So students read or listen to the request: Get promotional material to students as soon as possible – take advantage of any residual student interest in and memories of Welcome Week Have information sessions at the start of class So students want to participate: Catch students at the start of the term when their memories from Welcome Week are fresh and school is less chaotic | Schedule brief class presentations by the project mediators in the first week of the course Reminders: Have project mediators provide updates and reminders to students in class or by email So students receive the request and read or listen to the request: Post information through the online course management system and provide information in class So students want to participate: From the start, attempt to familiarize the students with the project and its potential benefits If possible, plan the study so that students are asked only for permission to use information from activities that they did as part of the class, not to take part in additional activities | Start sooner rather than later – approximately the mid- point of the academic year <i>So students receive the</i> <i>request:</i> Email students directly: Send reminders once a month (unless students unsubscribe) <i>So students read or listen to</i> <i>the request:</i> Put the amount of time it will take to complete the survey in the subject line In the subject line of any reminder email highlight how students participation is STILL needed: "It's not too late to participate in NSSE – only 20 minutes" <i>So students want to</i> <i>participate:</i> Be persistent – attempt to contact students via email and social media several times over the course of a term | Start contacting eligible students about the new program well in advance Start data collection on the first day of the program, being careful to protect confidentiality of students' responses where needed So students receive the request: Start sending promotional emails to students well in advance, giving students time to plan ahead So students read or listen to the request: Send reminders during periods when students are planning their studies (e.g., December, January, April, July to September) So students want to participate: Identify potential benefits of the program for the current and future students |

| | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|---------|--|--|---|---|
| | Your institution tried a new kind of Welcome Week this year and wants to find out if students think it should be repeated next year. | You want to know if a teaching innovation will help students in your courses learn. | Your institution is participating in the National Survey of Student Engagement (NSSE). | You want to start a new mentoring program for students and study how it works. |
| Clarity | Briefly highlight the rationale for the project, level of commitment, incentives, and rights of participants in any Q&A sessions Provide a detailed project description online or in a brochure <i>So students read or listen to the request:</i> Be clear, brief and ready to answer questions openly about the project and why participation is important Come prepared with more detailed brochures <i>So students want to participate:</i> Develop trust and legitimacy through clarity Emphasize the low level of commitment for participation | Briefly highlight the rationale for the project, level of commitment, any incentives, and rights of participants in any information session or promotional material <i>So students read or listen to the</i> <i>request:</i> Be clear, brief and ready to answer questions openly about the project and why participation is required <i>So students want to participate:</i> Have project mediators serve as the primary source of contact with student participants for the duration of the project Inform students that all participation will be kept confidential and will not be available to the instructor until the course grades are submitted | Briefly highlight the rationale for the project, level of commitment, any incentives, and rights of participants in any information session or promotional material Provide link to NSSE website for further information <i>So students read or listen to the request:</i> Be clear, brief and ready to answer questions openly about the project and why participation is required Highlight how long the project will take and how student participation can help Remind students that participation is not mandatory – just helpful <i>So students want to participate:</i> Share the outcomes of past surveys and identify any changes that resulted from them | Briefly highlight how the study will support the future development of the program, stating clearly that participation in the program includes participation in the study Emphasize that students will be the first to participate – it's a learning experience So students read or listen to the request: Identify any unique characteristics of the program So students want to participate: Inform students that their participation can improve the success of the program for current and future students |

| | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|-----------------------------|---|---|--|---|
| | Your institution tried a new kind of Welcome Week this year and wants to find out if students think it should be repeated next year. | You want to know if a teaching innovation will help students in your courses learn. | Your institution is participating in the National Survey of Student Engagement (NSSE). | You want to start a new mentoring program for students and study how it works. |
| Type(s) of Participation | Online/Hardcopy survey So students want to participate: Less is more: If possible, use only one method of data collection So students have time to participate: Request a low level of commitment from participants Make hardcopy surveys available during classroom presentations (if time permits and with the permission of the instructor) Survey should take no more than 15-20 minutes (online, use a progress bar) Make survey available 24/7 online So students can access the survey or schedule participation: Provide the option to complete a hardcopy survey in class Make same survey available online Embed survey link to all email and social media communications | Clearly separate: Activities that are part of the course (e.g., pre-tests if used to guide instruction, other assessments, participation levels) – all students take part in these activities, so the request to students is only for permission to also use these data in research Activities that are in addition to normal course activities (e.g., focus groups, interviews, posttests if used only for the study) – students must be requested to take part in these activities So students want to participate: Minimize the number of additional activities So students can access the survey or schedule participation: For additional activities, provide maximum flexibility in scheduling and mode of participation (e.g., consider doing online focus groups) | Online survey So students want to participate: This is only one large survey with a low level of commitment So students have time to participate: This survey can be done online at the student's convenience Use a progress bar and allow participants to "save" current progress So students can access the survey or schedule participation: Provide a link in mass emails that will direct students to the survey in one or two clicks | Measures of targeted knowledge, skills, or attitudes at the beginning and end of the program Focus groups or interviews Program materials So students have time to participate: Consider using students' projects, records, or other materials that are generated from core program activities when possible, instead of asking for additional data So students can access the survey or schedule participation: Make participation user friendly, where students know what is expected of them and important times of the year well in advance |

| | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--------------|---|---|--|--|
| | Your institution tried a new kind of Welcome Week this year and wants to find out if students think it should be repeated next year. | You want to know if a teaching innovation will help students in your courses learn. | Your institution is participating in the National Survey of Student Engagement (NSSE). | You want to start a new mentoring program for students and study how it works. |
| Rationale(s) | Identify that the purpose of Welcome Week is to offer opportunities that will help first-year students make a good start Students can benefit from the outcome of this research project <i>So students want to participate:</i> Promote student participation to help the institution: enhance equality, offer more choices, celebrate diversity, respect diversity and privacy | Identify that the purpose of the study is to improve student learning Highlight different ways student feedback can help other students in the future So students want to participate: Emphasize how student feedback is valued and important for improving teaching | The goal of NSSE is to study five areas of engagement: academic challenge, learning with peers, experiences with faculty, campus environment, and high-impact practices <i>So students want to</i> <i>participate:</i> Make clear that more responses received will add to the reliability and credibility of the results | The study is part of participation in the program so that the program can be improved for current and future students So students want to participate: Emphasize that participation can improve the success of the program for current and future students |
| Incentives | Offer: A ballot for one or two large prizes available from the campus book store (such as small electronic devices), and/or \$5.00 credit for coffee or to the campus book store for initial participation So students want to participate: Do not underestimate the attractiveness of a simple credit for coffee, parking, the bookstore, etc. Highlight the estimated chance of winning and/or prize value on any promotional material | Provide a summary of the findings If offering small amounts of course credit for participation, be sure to offer students who do not want to participate other ways to earn the same credit <i>So students want to participate:</i> Students are often interested in research for altruistic reasons – students may find interest in participating if they are promised a summary of the findings | Small incentive or lottery So students want to participate: Include the estimated chance of winning and/or prize value on any promotional material | The mentoring provided in the program So students want to participate: Emphasize the benefits to them of receiving the mentoring |

| | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|-------------------------|--|---|---|--|
| | Your institution tried a new kind of Welcome Week this year and wants to find out if students think it should be repeated next year. | You want to know if a teaching innovation will help students in your courses learn. | Your institution is participating in the National Survey of Student Engagement (NSSE). | You want to start a new mentoring program for students and study how it works. |
| Social Context/Norms | First-year students are unlikely to have participated in any previous research projects and so may need some additional explanation about possible benefits to the student community So students want to participate: Build trust and educate first-year students that their participation is important Highlight the utility of this type of research for improving educational outcomes and the student experience | Teach about the benefits of research Normalize the research experience for students So students want to participate: "Teach about research" and address any concerns | Normalize the research – highlight how this survey is used across many schools across Canada So students want to participate: Identify how this research can be used to improve teaching, learning, and the student experience | Teach about research So students want to participate: Identify how this research can be used to improve the student experience |
| Ease of Response | Embed a link to the survey or a participation schedule in all promotional material Have mediators aid participants with hardcopy survey in class presentations <i>So students have time to participate:</i> Remind students throughout the semester that they can participate at any time (or until a pre-determined date) Make survey accessible online and allow participants to "save" current progress when needed <i>So students can access the survey or schedule participation:</i> Embed a link that directly takes the participant to the survey (one click) Make survey available online 24/7 | Minimize the number of activities that are in addition to normal course activities So students have time to participate: Request that students do additional activities only if really necessary for the study So students can access the survey or schedule participation: For additional activities, provide options for the timing and mode of participation | The NSSE is available online So students have time to participate: The survey is available at the participants' leisure Provide a progress bar and save option in the survey So students can access the survey or schedule participation: Provide a simple link in any mass email that will direct students to the survey in one or two clicks | Have participation take place on campus So students can access the survey or schedule participation: Have administrators help student participants enrol in the program, schedule participation and answer any questions |

Conclusion

Recruiting students to participate in research is no easy task! As the model in Chapter 2 highlighted, students follow a complex process when deciding whether or not to participate in a study. However, a researcher who is aware of the diversity of experiences, perspectives and priorities of the students at her or his institution should be able to create a successful recruitment plan by making decisions concerning the nine factors listed in Chapter 2.

This guide encourages researchers to question how their methodological decisions may affect the recruitment and informed consent process. The way in which the request is made, the type of participation required, the appeal of the research and ease of participation can all affect student participation. In addition to discussing these aspects, this guide provides practical recruitment strategies for researchers seeking to attract a range of students, including those less likely to participate.

Some parting thoughts:

- ensure that the data do not already exist elsewhere,
- use multiple recruitment strategies,
- keep the project simple,
- solicit support, and
- don't be afraid to try something new.

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