



What is the PNB Group?

The Northeast Big Data Innovation Hub (NEBDHub) invites undergraduate and graduate students from around the world with an interest in data science to join the [Student Portfolio & Network Building \(PNB\) Group](#)! Together, we explore collaboration opportunities for future data science projects and learn how to build our professional portfolios.

PNB hosts five types of meetings in rotation throughout the academic year: Peer Networking sessions, Resume Review & Interview Prep sessions, Professional Communications sessions, Digital Portfolio sessions, and Leadership Styles sessions. Students are invited to join the PNB at any point in the cycle to build their professional network and interview skills.

This packet is for individuals or organizations, such as National Student Data Corps (NSDC) Chapters, who want to organize a workshop in the style of the PNB's Leadership Style sessions. You will find in this digital packet:

- [A copy of the PNB Workshop - Leadership Styles Session powerpoint](#)
- [A copy of the Identifying Your Leadership Style Quiz](#)

Please review this packet in its entirety. If you have any questions about these materials, email the NEBDHub team at contact@nebigdatahub.org.

NOTE: If you use any NEBDHub graphics or logos (including the COVID Information Commons, or CIC, and the National Student Data Corps, or NSDC) in any advertising materials, you must send a copy of those advertisements to contact@nebigdatahub.org for pre-approval. You may not misrepresent the NEBDHub and its programs in any way or misrepresent yourself as a NEBDHub staff member or leader by using these materials.

Workshop Organization/Preparation Recommendations:

This workshop was designed for 1 to 3 organizers who wish to host a virtual or in-person event for approximately 10-50 participants. The event is planned for 60 minutes, including a Q&A session. The materials provided in this packet are appropriate for high school students through

recent college graduate students who are interested in data science or related disciplines and/or are seeking advice on how to build a data science portfolio.

For a virtual event/webinar, we recommend that you have enough organizers on the back end of the event that one person can lead the conversation while at least one other person manages questions that come up in the chat. One person should be responsible for ensuring that all participants' behavior is appropriate (see sample Code of Conduct below).

By the end of this workshop, participants should have a better understanding of what a digital portfolio is and how it supports their career exploration. Participants will also learn about where they can find introductory projects for their portfolios and how to customize their research for a job application.

To Do's for Workshop Organizers:

1. Review this packet and all of the materials provided. You should feel free to edit and revise the powerpoint and below script as appropriate for your group.
2. Schedule your event/webinar and create a Zoom meeting with a registration page.
 - a. When designing the registration page for your event, make sure to ask each participant to share their full name and email address.
3. Three days prior to the webinar, send registrants an email reminder about the event.
4. Review and edit the enclosed PNB Workshop Powerpoint, adjusting the presentation slides as necessary. We encourage you to revise this powerpoint to include materials relevant to your specific organization.
 - a. Please also review the below presentation notes, tweaking the materials shared here to suit your particular goals.
5. As you build your event, do share updates, questions, and event details with other PNB members via our shared [LinkedIn group](#)!
6. After the workshop, make sure to reshare the worksheets and powerpoint with all attendees.
7. Finally, if you have any comments, questions, or suggestions about these materials, please share your thoughts with the NEBDHub team via email (contact@nebigdatahub.org). We welcome your feedback and ideas!

Presentation Notes:

Slide 1 - Introduction - 1 minute

- Brief Introductions - make sure to mention all the key organizers on the call.
- You may wish to ask people to share their names and schools or organizations in the chat - whatever ice breaker you think is best.
- *Clarify that you are not a representative of the NEBDHub, but are using the organization's free materials for organizing digital workshops. Share information about your own organization here!*

- Encourage people to introduce themselves in the chat.

Slide 2 - Code of Conduct - 1 minute

- Share your Code of Conduct and ask people if they have any questions.
- *Please note that the NEBDHub is not responsible for any Code of Conduct violations at events not hosted by NEBDHub staff.*
- At this point, you may wish to share a copy of the PowerPoint in the chat.

Slide 3 - Introduction to the PNB - 2 minutes

- What is the PNB? The Portfolio and Network Building Group was created by the NEBDHub after several members of the [CIC Student Working Group](#) requested additional opportunities to meet other students and build their professional network. Some students wanted to learn about various data science projects available to them through the NEBDHub as well as methods for showcasing professional certificates in a digital portfolio.
 - Learn more on the PNB Website: <https://nebigdatahub.org/pnb-group/>
- The PNB Group represents the NEBDHub's reply to those requests. These workshops can help students build their professional data science portfolios, get ready for job interviews, polish their professional communications styles, and build their professional portfolio.
- The PNB Group hosts five sessions per year, each focusing on a different aspect of professional development, which you can leverage locally. The first session is for peer networking where attendees have the opportunity to meet one another and identify potential data science and professional collaboration opportunities in various domain areas from public health to environmental science. In the second session, we discuss job interviews and review resumes. In the third session, we review professional communication styles and best practices for presentations and cover letters. Today, we'll focus on building digital portfolios and the certificates students can earn from working on NEBDHub data science projects with real world data. Finally, we'll discuss Leadership Styles and how you can confidently lead teams in the workplace. The NEBDHub encourages students to participate in all sessions that may be helpful to their professional development. This cycle repeats each year.
 - We encourage you to host your own session using a downloadable toolkit available from the PNB website.
- Between meetings, you may join the PNB [LinkedIn group](#) where students share resources and career opportunities with one another.
 - We also use the LinkedIn channel to host our mentorship conversations. Each week, PNB Leaders share a new prompt that poses a new question to the community, such as: "How can I differentiate myself in a tough job market?" or "How do I effectively discuss my research in an interview?". Our team of mentors who are professionals in academia and industry will weigh in, sharing their experiences.
 - Definitely join the LinkedIn Group if you haven't already done so!

Learn more on the PNB Website: <https://nebigdatahub.org/pnb-group/>

Join the PNB LinkedIn: <https://www.linkedin.com/groups/13009480/>

Slide 5 - Today's agenda - 1 minute

- But let's get going with today's PNB Session on Leadership. There are three parts to this workshop.
- We'll begin with a review of what Leadership is and some common styles or types of Leadership.
- Second, we'll talk about how Leadership styles change and should be adapted to different situations in the workplace.
- Next, we'll address what makes for a good leader and take a personality quiz to identify our unique leadership strengths and style
- Then, we'll talk about the emotional intelligence skills you'll want to cultivate to broaden your leadership profile and map out your leadership growth plan.
- Finally, we'll do a group Q&A and wrap up for the day.
- So let's dive in!

Slide 6 - What is Leadership? - 3 minutes

- Let's begin with a conversation about what Leadership is. This is such an ambiguous term, so let's break it down.
- For our purposes, "Leadership is a set of mindsets and behaviors that align people in a collective direction, enables them to collaborate and accomplish shared goals, and helps them adjust to changing environments." What this means is that leadership isn't about *you* or *your specific goals*, it's about a way of bringing people together in a collective direction. It's using a specific set of skills to bring a group of people into coordination. We're using Leadership as a concept to direct attention and focus.
 - You'll notice that there's nothing in this definition that says Leadership is limited to the workplace. Leadership can be useful in any context, from a class assignment to organizing a book club, to managing a group trip.
 - As students, you can begin practicing your Leadership skills now, before you begin working full time. Leadership is one of those core skills like communication, critical thinking, and organization that will help you excel when you land your first job. Also, depending on the type of work you do, it's very possible that you'll be asked about your leadership style in a job interview!
 - So our job today is to think about what leadership is, how you prefer to lead, and how your unique style of leadership can help your future employer retain the best employees and provide direction.

Slide 7 - Growth Mindset - 2 minutes

- Now, at this point, you might be feeling nervous. You might feel like you're not a Leader. I want to emphasize to the group that Leadership, just like communication, critical thinking or organization, is a skill set that you can grow and evolve over time. When we talk about

Leadership and our unique Leadership style, we have to center ourselves in a Growth Mindset.

- In essence, a Growth Mindset is when we keep our current skill set and preferences in perspective. We are allowing ourselves to be open to the idea that we can grow and change. Most people develop confidence and leadership abilities over time. If you don't feel like a leader, try to recontextualize that idea into "I don't feel like a leader *yet*, and I look forward to growing my leadership skills!"
- This workshop will help get you started and give you a path forward to developing your own leadership style. We'll start by identifying where we are and chart a path forward to building the emotional skills you'll need to practice other styles of leadership.

Slide 8 - Leadership Styles - 5 minutes

- So let's break down the idea of leadership even further. There is no single way to Lead a group of people to success. In fact, there has been a ton of sociological research on the different kinds of leadership there are, and what approaches work best in which situations. One of the leading scholars in this space is Daniel Goleman, who identified 6 main leadership styles. We're going to talk through his framework today.
- As you can see, I've copy/pasted some definitions here. See if you recognize any of these leadership styles based on your previous experiences either at work or in school as you read through them. You can drop your impressions in the chat as we go.

(Read each)

- So as you can see, each style comes with its own positives and negatives.

Slide 9 - Adapting Styles - 5 minutes

- And because of this, not all leadership types are suitable for every situation. So what are the impacts of each of these styles?
- Here, Goleman is showing us the net positive and negative impacts of the six types of leadership. Depending on the challenge your team is facing, the relationships between team members, and your long-term or short-term goals, you'll want to pick a certain leadership style based on the situation and the team members.
- For example, if your team is struggling to launch a new product under a deadline, you're going to want to ramp up the responsibility and Commitment values on the left. So we'll want to look for a leadership style that emphasizes those qualities.
- The trick is to be able to recognize when a different style is needed, by project and by person. Different people might react best to different approaches. You can build and leverage your emotional intelligence to hone your ability to switch gears and adapt to the situation and to the team members. A move to a new office space, for example, would require a different kind of leadership.

Slide 10 - Identifying Styles - 9 minutes

- So next, we'll do a little exercise. We're going to practice identifying leadership styles. Here's that overview of the styles again. I'm going to give you a scenario and you tell me what kind of leadership style is being displayed.
- Joshua works at a car manufacturing plant in Detroit. He was recently promoted into a supervisory role in charge of a production line. Joshua was told during the interview process that the production line was too slow and that he would be expected to improve the workers' efficiency. He begins by telling his crew what changes he wants to have made to the workflow to speed up production. Some of the team make suggestions, but Joshua tells his crew he does not have time to consider them.
 - What style is this? Is it the right approach?
- Demi is a marketing manager whose team is developing a new campaign for a client. Their project is behind schedule. Demi is told by her supervisor that the project is due to the client at the end of the week. She calls a meeting to try to put the project back on track. During the meeting, Demi opens up the floor to everyone's suggestions about the initiative. The call takes two hours and ends with a team vote on next steps.
 - What style is this? Is it the right approach?
- Yusuf is a recent graduate who majored in data science. This week, he began a new job as an analyst at a pharmaceutical company. Yusuf's supervisor, Rebecca, understands that he doesn't know much about medicine despite his extensive knowledge of data science. Yusuf feels that he would develop better analytical reports if he knew more about pharmaceuticals. Rebecca recommends that Yusuf spend one day per week taking free, online classes which help him better understand their industry. She tells him that this additional effort will improve his chances of a promotion in a few years.
 - What style is this? Is it the right approach?

Self-Awareness and Leadership - 2 minutes

- Good - you should now feel a bit more comfortable identifying different leadership styles. The next step is to identify our natural leadership style and establish a personal baseline. This next exercise will give us some personal self-awareness.
- We're going to take a leadership personality quiz! This quiz will help us understand how well we match up with these six leadership types. What is our natural strength and natural weakness from this set of six?
- I'm going to drop a document for you all in the chat. Take this quiz and learn more about yourself. As you do this, remember the Growth Mindset we discussed earlier. Don't get stuck thinking that these results are permanent. You can always grow and expand your portfolio of leadership styles - learn to play a different role when you need to. After the quiz, we'll create individualized plans for how you can grow more comfortable with even more styles
- The quiz is on pages 1-2 and the description of leadership styles is below. Let's take this quiz and see what kind of leader you naturally are. Come back in 5 minutes.

5 minutes Individual Work

5 minutes Open Discussion

- When you're done, drop in chat your top result (if more than one, which type resonated with you most).
- One volunteer to come off mic: Were you surprised with your results? Why or why not?
- What kinds of situations or jobs might work best for someone with your natural leadership style?
- What leadership style did you score the least in?

7 Minutes - Use the document as reference

- While we don't have time to talk about everyone's results today, I left space for you on page 5 of your worksheet to do some personal reflections on your result. This is a Post-Workshop Reflection and one of two take-home assignments for today. Use this space to note here what leadership style you want to cultivate next and why. Let's take a look at it together.
- Listed here are a couple of questions. Identify a style you want to grow, then tell yourself why you are motivated to grow that style. Maybe it's because it's a style that you think will come in handy in your personal life or in your preferred field of study. Just jot some motivations down here. The third question will prompt you to write down a goal for where / when you will practice this alternative style. Try to be as specific as possible here - this will help you commit.
- The fourth question gets to what we were talking about earlier - the importance of Emotional Intelligence in leaders. Strong EQ will help you transition more easily between styles. When you have time, read through this table and mark off all the EQ competencies you think you have.
 - Let's take a look at that graph together. As you can see, there are four main buckets: self-assessments, self-management, social awareness, and social navigation. The first two in pink are internal or intrapersonal, while the second two in yellow (social awareness and social skill) are external or interpersonal.

(Read table)

- Most of you will have several competencies on this list, but it's rare that someone can say they have all of these skills! Even if you think you can check off all the boxes here, consider how you can improve them. Identify which one you want to improve in question #5.
- Finally, in question #6, you should spend some time thinking about how you can specifically work on this EQ skill. The example I gave is that if you don't think you're very empathetic, try to deliberately listen more.

Self-Awareness and Leadership - 2 minutes - Use document as reference

- Now, I also gave you a second take-home assignment from this workshop. While you're working or at school this week, try to identify a leadership style you observe in real time.

The next time you're in class, working on a group project or internship assignment, or even among a group of friends, think about what leadership techniques you see. Build up your awareness of the leadership styles around you and make that a habit.

- I will say that this is a surprisingly helpful exercise! You'll start to notice behavioral patterns around you. Think like an anthropologist and get into the habit of observing what kinds of leadership motivate the people around you (or don't!). This may help you with Reflection #1 as well.

Recap - 2 minutes

- Recap: so we spent time today talking about the six main leadership styles. We practiced identifying the leadership styles that work best in a given situation and we talked through two real-life examples of leadership that we've experienced in real life. Then, we talked about the value of emotional intelligence as we identify our own leadership strengths. We used the first and central EQ value, self-awareness, to begin to identify what leadership style we were naturally good at, and which style we might need to work at to improve ourselves.
- Overall, our goal is to help you build up your leadership style toolkit. You have natural strengths, but you're going to build up your ability to switch into other modes. Flexibility will make us strong, flexible, and resilient leaders. Your team will be dynamic and more open to change in an ever changing environment.

Q&A - 5 minutes

- Ok, so this is a lot of information. Let's talk through your questions!

Slide 11 - Final Thoughts and Wrap Up - 2 minutes

- Ask participants how the breakout session went and what could have gone better.
- Remind everyone to stay in touch with the PNB Group over [LinkedIn](#) between meetings.
- Thank your colleagues who co-facilitated the event with you!
- Thank everyone for joining!