

## **LESSONS IN THIS SERIES**

Overview of Project Based Learning
Getting Started
Balancing the Assessment
Teamwork Tips
Managing the PBL Experience
Wrapping Up

# GETTING STARTED

## **BEGIN WITH THE END IN MIND**

If you and/or your students are new to PBL, it is probably best if you keep it simple in the beginning. Students who are new to PBL can be slightly uncomfortable with being responsible for their own learning. After all, some of them may be too used to coming to school to watch <u>you</u> work!

A good PBL experience begins with advance planning to set you and your students up for success. Start with your <u>curriculum document</u> and choose two or three specific outcomes that get at the so what of the curriculum.

Next, review the NB Global Competencies. All PBL experiences in this model include assessment in <u>Collaboration</u>, but what other competency would you like to focus upon: <u>Communication</u>, <u>Critical Thinking and Problem-solving</u>, <u>Innovation</u>, <u>Creativity and Entrepreneurship</u>, <u>Self-awareness and Self-management</u>, or <u>Sustainability and Global Citizenship</u>? Which of these competencies is a best fit with your outcomes?

Finally, consider what real-world problems are being tackled right now in your community, New Brunswick, Canada and/or the entire world by professionals with subject matter expertise in the curricular area you have chosen.

This is a reiterative process that requires some thought. You may find yourself changing your mind frequently until you land on the right outcomes, competency and problem that fuse together.

#### **AVOID SCOPE CREEP!**

**Stick with two to three curricular outcomes.** it may be tempting to add in another curricular outcome or two, but that might overcomplicate the PBL.

**Do it by yourself at first.** If you're new to PBL, it's best to try it out by yourself first. Experienced PBL teachers can join forces with a colleague to meet outcomes from two or more subject areas which can be a scheduling challenge but very rewarding. Plus, you split the planning, prep, assessment, and management duties!

**Pad the schedule.** Most everything will take longer than you expect and there might be unforeseen delays. Add extra time before the scheduled presentations to make sure your students are ready.

## **PLAN BACKWARDS**

Next think about the instruction and assessment for this PBL experience.

- Who is the audience for the final presentation? Who are the professionals doing similar work?
- What real-world work product(s) will students create to show you that they meet the curricular outcomes?
- How will you assess the work? (see the next lesson in this series for more information on assessment)
- How should learning activities be organized?
- When will they be completed? What is the timeline for this PBL?

## CRAFT AND REFINE THE DRIVING QUESTION

The driving question is exactly that; it's the question that *drives* the learning experience. It is arguably the trickiest part of PBL planning. Often the question has to be refined so that it:

- requires more than a simple yes or no response so that there can be more than one solution,
- is concrete and challenging rather than abstract,
- is not too big but answerable,
- is written in compelling, student-friendly language, and/or
- draws the student in by evoking emotion and/or connects to their community

Students and teachers who are experienced with PBL can co-craft the driving question but, if you are a PBL newbie, it's easiest if you do it yourself.

For more information about crafting the driving question and examples, please see Buck Institute for Education's web page, <u>A Tricky Part of PBL:</u> <u>Writing a Driving Question</u>.

## PLAN THE ENTRY EVENT

An entry event is the *grabber* that kicks off the PBL and introduces the driving question. Some examples of entry events are:

- a field trip
- a guest speaker
- a video
- lively discussion
- a simulation or activity

The idea is to draw students into the learning and make them want to find a solution. Here's a tip: if you are going to have a professional in the field as a guest speaker, you will need to schedule that well in advance. Everyone has a packed schedule!

## PREPARE THE BRIEFCASE

After the driving question is introduced, it's time to explain to your students just how the PBL will work. Each student should be given a briefcase (you can do this electronically and save a tree) which contains:

- the project calendar with events and due dates indicated.
- rubrics.
- a resource list.
- the rehearsal, presentation and/or exhibition schedule.
- the teams list and team contract (more on this later).
- a checklist of tasks to keep them on track.
- and anything else they need to guide their learning and progress along the way.

## **RESOURCES**

NB Global Competencies Poster

<u>English</u>

<u>French Immersion</u>

Project calendar: Example

Letter to parents/guardians: **Example** 

## MAKE OTHER PREPARATIONS

**Give your PBL a title.** Choose something short and catchy, if possible. For example, a PBL on cybersecurity could be called *Somebody's Watching Me* and yes, that's the <u>80's song title</u>. Eerily prophetic!

You might want to **discuss your PBL plans with your principal** and possibly with your colleagues so that they are aware of what will be going on your classroom. Active, student-centred learning can be somewhat noisy and may appear to be chaotic!

If you are having a guest speaker, it's a good idea to have students **prepare interview questions in advance**. If a face-to-face visit is not possible, explore the possibility of a video conference. Test and retest your gear in advance!

Consider sending a **letter or email home** to let parents/guardians know about the PBL and extend an invitation for the final presentations, if appropriate.

**Invite the audience** for the presentations your students will create. Consider inviting back your expert guest speaker (and their colleagues, perhaps) along with parents, school staff, DEC members, school district members, other members of the community, press, etc. Note: the audience is a critical motivator for students to do their best learning throughout the PBL and their best work in preparing their presentations.

# LYNN AND CHUCK'S EXCELLENT (PBL) ADVENTURE

Lynn and Chuck break out their curriculum documents to decide which outcomes they will choose to instruct and assess for their PBL. After some reflection, they make a decision based upon their initial PBL design ideas.

From her PDCP 9/10 curriculum, Lynn chooses:

SCO 3.3: Evaluate life/work information. Students will locate and effectively use career information resources such as:

- internet-based career information
- labour market information (LMI)
- classification systems (such as the National Occupational Classification)

SCO 3.4: Explore the realities and requirements of various education, training, and work settings.

From his <u>ELA curriculum</u> (note that the ELA curriculum does not differentiate between general and specific outcomes), Chuck chooses:

- 5. Students will be expected to interpret, select, and combine information, using a variety of strategies, resources, and technologies. Research, in systematic ways, specific information from a variety of sources; select appropriate information to meet the requirements of a learning task; analyse and evaluate the chosen information; and, integrate the chosen information, in a way that effectively meets the requirements of a learning task and/or solves personally defined problems.
- 9. Students will be expected to create texts collaboratively and independently, using a variety of forms for a range of audiences and purposes. Demonstrate skills in constructing a range of texts for a variety of audiences and purposes; create an organizing structure appropriate to the purpose, audience, and context of texts; select appropriate form, style, and content for specific audiences and purposes; use a range of appropriate strategies to engage the reader/viewer; and analyse and reflect on others' responses to their writing and audiovisual productions and consider those responses in creating new pieces.

They review the <u>NB Global Competencies</u>. While they can see connections to their PBL throughout all of the competencies (the competencies <u>are</u> global or cross-curricular after all), they decide that this criteria in <u>Innovation</u>, <u>Creativity and Entrepreneurship</u> is a best fit:

Learners turn ideas into value for others by enhancing ideas or products to provide new-to-the-world or improved solutions to complex social, ecological, and economic problems to meet a need in a community.

Lynn and Chuck then start the backwards planning by brainstorming how the outcomes will be instructed and assessed. After some back and forths (and more coffee), they decide that:

- The problem students will be asked to solve is why youth are leaving NB and what can be done about it. They will create a presentation of their solution ideas for their final work product.
- The audience for the presentation could include a representative from PETL since they
  hold the population growth strategy portfolio and student solutions could be of interest
  to them.
- Students will explore their own career interests and the related labour market information using myBlueprint and, in doing so, will see if there are valid reasons to leave NB for training/education and subsequent employment. They will present the findings of their career explorations individually and orally to Lynn during student-led conferences.
- Students will explore the Vision of New Brunswick in 2026 predictions in the <u>Be our future</u> doc to see how much came true and how much did not. They will write their opinions in a journal entry in their myBlueprint account.

- Students will journal their self-reflection on the "I" statements from the Innovation, Creativity and Entrepreneurship competency doc in their myBlueprint account.
- Students will prepare a set of interview questions to start a discussion with young people who have moved away from NB. Lynn and Chuck will reach out to former students to set up introductions if students do not know anyone within their friends or families to interview. Students will interview a minimum of two people each.
- This PBL will take two weeks to complete since students will be working on it during their two back-to-back periods every day for PDCP and ELA.

Lynn and Chuck move onto the driving question. They start with "What actions on the part of employers, community leaders, and other stakeholders will help our province compete with larger cities or provinces for young workers?" but decide it is too *teacher-y* to draw students in. After more back and forths (and yet more coffee), they decide on, "What can our province do to help stop our out-migration?"

As they are working on the driving question, Lynn has an idea for a title. "Why don't we call it the name of the doc that inspired it?, she asks Chuck. He thinks it's a great idea and so, the project title is **Be our Future!** It works on so many levels.

For the entry event, Lynn and Chuck decide to invite an LMI guest speaker from PETL to talk about the problem of out-migration of youth and its impact, and to debunk some of the prevailing myths that contribute to the problem. They decide on a start date and send off an invitation by email with an outline of their plan so that the guest speaker can prepare.

Then, our PBL adventurers move onto mapping everything out on a calendar. After some strategizing, they decide on this <u>PBL Calendar</u>. Then, they prepare the <u>email for parents/guardians</u>, and start getting the student briefcase ready.

Before they clink their coffee mugs together to toast their planning success so far, they make sure their PBL plan alians with the seven Cs.

## 1. Is the PBL based on provincial curriculum outcomes?

Absolutely! Key outcomes in both ELA and PDCP curricula will be instructed and assessed.

## 2. Does it include the NB Global Competencies?

For sure. Criteria in both Collaboration and Innovation, Creativity and Entrepreneurship will be assessed.

## 3. Will students need to work collaboratively to solve the problem?

Of course. They have to work collaboratively since the final task is way too big for one student to do alone in the time period allowed.

## 4. Is the problem current?

Oh, my goodness, yes!

## 5. Does the problem an have impact on our community?

Yes, and it impacts the entire province too.

## 6. Can we connect them with professionals who are also doing similar work?

Yes, the rep(s) from PETL and local employers who are recruiting are looking for solutions to the out-migration problem.

## 7. Is it cool?

We will make it so!

To be continued...