

Chapter 14

Continuing Challenges and Resistance

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Introduction

In this chapter, the continuing challenges and resistance to problem based learning (PBL) and TELL are problematized in a case called “continuing challenges.” This case, of all our cases, is probably the most important. Through an examination of the case issues, the reader is invited to engage in critical reflection about the TELL through PBL cohort. It would be ideal if a Socratic dialogue could take place between all of our key stakeholders – preservice teachers, tutors, faculty, school advisors, librarians, practicum placement officers, and director of teacher education. However, as we plan for the coming year this case and its issues will provide a starting point for our critical dialogue and advocacy.

We have tackled this case in the time-honored way of problem based learning. That is, we have followed as far as possible the problem based learning inquiry cycle: we first identified the primary issues in our case, created a list of resources in the form of a bibliography¹ which can be found at the end of this chapter, and finished by offering three syntheses, each of which offers the perspective of a PBL member (student, coordinator, and tutor). These syntheses serve a two-fold purpose. They are meant to illustrate the variety of ways preservice teachers’ understandings

¹The bibliography comes at the end of the chapter and was developed by the contributors to this text.

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and syntheses of a case may be represented; and for us they synthesize and explicate the upcoming issues and challenges that face our TELL through PBL cohort in our teacher education program. It is our hope that when you, the reader, connect with an issue embedded in this case, it may be possible for you to contextualize it to your institution, program, students, and community.

Case 13: Continuing Challenges

You have been working with PBL cohorts for over a decade, and it has now been 2 years since the cohort was linked with the teaching English language learners cohort. This has been a period of transition. All the cases and case cycle procedures were reexamined to ensure there is a consistent, meaningful engagement with the concerns of English as an additional language (EAL) education.

The merging of the two cohorts has been reinvigorating in some ways and challenging in others. You have found that attitudes about EAL as not being the work of regular teachers persist, among both preservice teachers and some instructors. The continual work of making language visible often seems to compete with the desire for a more content-based focus. And, as the team has discovered, as “elastic” and adaptable as the case method is, there is a limit to how many issues preservice teachers can meaningfully take up within each 2-week cycle.

Since many preservice teachers enter the program with “commonsense” ideas about language learning, your continual questioning of their assumptions is necessary. Sometimes you question your effectiveness, especially since for many preservice teachers, the belief in monolingualism within the school system, for example, stubbornly persists. Just the other day in tutorial, a preservice teacher said she didn’t want students writing in other languages because she wouldn’t be able to evaluate their work.

In terms of the PBL program itself, many of the institutional challenges remain – not the least of which is operating on a 2-week schedule when the rest of the faculty operates on a 1-week schedule. In a program that employs a range of people as instructors – PhD candidates, seconded teachers, sessional instructors, tenured faculty members – the turnover rate for subject area resource specialists and tutors can be frustrating. For a person new to PBL, often not of their own choosing, the method can be daunting, and it definitely requires pedagogical “buy-in.”

This year in particular, you’ve really been heartened by the work the preservice teachers have been producing, by the insightful questions they have been raising, and by the high level of respectful debate occurring in the tutorials. But this wonderful culture of inquiry seems misunderstood by many of your colleagues. Questions persist – how are the preservice teachers being

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assessed? How do you know they have met the requirements of each course syllabus? Where is the rigor? Frustrating as these questions are, you know that you need to find new ways to articulate and celebrate the value of the PBL approach with the wider institution.

Your belief in the value of PBL as more than a pedagogical approach has been reinforced year after year as you see preservice teachers leave the program with true dispositions toward inquiry and agency as emerging professionals. You continue to draw your inspiration from them.

Primary Issues and Questions within “Case 13: Continuing Challenges”

After examining the case, several primary issues and questions were identified that could be clustered around four major themes. The first theme included content issues concerning curricular content, subject-specific knowledge, and the need for preservice teachers to be well versed in language, literacy, and pedagogy. The second theme focused on problem based learning issues about the very nature of problem based learning itself, key characteristics of this pedagogy, and essentials for implementation. The third theme considered institutional issues, those matters that revolved around institutional realities of implementing a PBL program – number of instructors, timetabling, etc. The fourth theme related to school and university partnership issues such as clear communication, use of meaningful terminology, and shared goals and vision for a successful practica. The primary issues and questions are summarized below:

1. *Content issues*

- Developing robust cases that reflect core content and processes
 - Can enough background knowledge be learned through investigating issues in a single case?
 - Will preservice teachers find “wrong information” that could distort their understandings?
 - Do tutors have enough specialized knowledge for each case to contribute to building background knowledge of the preservice teachers?

PBL preservice teacher’s comment:

Our cases were good in the fact that they did present issues that were famous like bullying cases so they addressed the whole spectrum of issues from bullying to racism to homophobia. I think probably it was the curriculum courses that could – the teachers tried to cross over what they were teaching with the case but it just – what they were teaching really didn’t seem relevant or useful. So I think I would really make sure there is better communication between the tutorial groups and the subject teachers.

PBL preservice teacher's comment:

I think the whole case study process identify the issues, create a bibliography, present and synthesize – that whole case cycle is very good in the beginning but I don't know if it needs to be done for all ten cases. I think it needs to be adapted as we mature and get more adept at it. By the sixth case it became less about inquiry ... it became a pattern. I think role plays and all that sort of thing and or creating tangible products for our practicum is better. (2012)

- Understanding the language and literacy needs in multilingual/multicultural classrooms
 - What is the knowledge base needed for teachers working in complex multilingual/multicultural classrooms?
 - What do preservice teachers need to know about L1 and L2 learning that they cannot find out through interrogating cases?
 - What has been shown to be effective language and literacy teaching practice in multilingual/multicultural classrooms?
- Background knowledge of language and language acquisition
 - Is there a need for front-loading of knowledge regarding language and language acquisition before preservice teachers can engage with PBL cases?
 - Should a textbook be a required research resource?

PBL preservice teacher's comment:

I think in the beginning it [instruction] could be a little bit more concrete. I know there was a lot of questions about what are were doing. Begin to pull back as students get familiar with content and PBL. Certainly just being slightly more explicit at the beginning gradually allowing [pre- service teachers] more freedom to do the work.... (2012)

2. *Problem based learning (PBL) issues*

- Problem based learning and its pedagogical principles
 - What are the principles that underlie PBL?

PBL preservice teacher's comment:

... The PBL cohort is a bit confusing to people they can't really understand what it is about even some of us don't understand. (Preservice teacher 2012)

- Is there only one approach to PBL?
- Is a PBL approach suitable for all preservice teachers?

PBL subject area resource specialist's comment/question:

Is PBL for the quiet educator? What about students who do not gravitate to oral communication as their first choice? (2012)

- Resistance to PBL
 - What are the most common misconceptions about PBL?
 - How can we help new faculty learn about PBL?

3. *Institutional issues*

- How do you move forward and go beyond implementation especially after a PBL program has existed for many years?
- In what ways does a PBL approach disrupt instructional efficiency in a predominantly traditional teacher education program?
- How can organizational change be facilitated?
- In what ways does the notion of institutional/administration ownership impact the future longevity of the PBL cohort?
- How can there be flexibility in a PBL program, and have it still remain true to the principles of PBL and not experience curricular drift? Who ensures the integrity and content of the program?
- Is a PBL program cost-effective?

4. *School and university partnership issues*

- Shared understanding of the PBL program by school advisors, principals, specialist teachers, and school district administrators
 - Do school advisors understand how the PBL program works?
 - Will school principals recognize that preservice teachers in the PBL program will not be taking specific courses?
- The impact of a PBL model of teacher education on professional practice
 - What do the schools need to know about the affordances of PBL as an approach to teaching and learning in the K-12 classroom?

PBL preservice teacher's comments:

...But some of them [school advisors] I think weren't really sure how to take [problem based learning] into the classroom or even if that was what they were supposed to do. (2012)

PBL preservice teacher's comments:

I was lucky in Richmond [Richmond School District] in our school particularly they do believe in inquiry learning and teaching so my school advisor was really good with showing me techniques to start open ended questioning to put the onus back on the student for them to get that intrinsic motivation to want to find out more. (2012)

- Does PBL make any difference in the practicum experiences that the preservice teachers have?
 - Are they better able to teach or less able?
 - Are they better at job interviews and at taking on unusual teaching assignments?

Annotated Bibliography and Syntheses for Case 13

Within the problem-based inquiry cycle, the first stage is to create an annotated bibliography of the research literature that was consulted, and then it is shared with the tutorial group. For Case 13, our annotated bibliography can be found at the end of this chapter. When this bibliography is shared online, any omissions are duly noted, and a discussion occurs about the literature that was found. Many of these resources are used to create information packages for the primary issues in the case. For purposes of brevity, we have not included the information packages or presentations that are typical of the inquiry cycle.

The final stage of the inquiry cycle is that of creating an individual synthesis in response to the case. Three individual syntheses were prepared for Case 13. The first synthesis by a preservice teacher is written in the form of a news release entitled *Growing BC's Future Teachers – Case by Case*. The second synthesis is by the PBL Program Coordinator in the form of a journal entry. The third synthesis is that of a tutor in the PBL program and is written as a guide for tutors.

Synthesis 1: News Release

As a preservice teacher in the program I have chosen to write my synthesis as a news release.

Vancouver, British Columbia

Growing BC's Future Teachers – Case by Case

Overlooked and Underserved English Language Learners in BC Classrooms

Real-life classrooms or at least scenarios from them are being used to prepare teachers at the University of British Columbia. The success of “teaching English language learners through problem based learning” according to Filipenko, Talmy, and Early, professors in the Faculty of Education, hinges on addressing some current realities of BC classrooms.

According to the BC Ministry of Education, some 25 % of BC K-12 students speak a language other than English at home. In Vancouver, that number is greater than 50 % and includes some 150 different languages. Talmy and Early want all youngsters in our city’s public schools to experience success. For that to happen, they are adamant, “Classroom teachers really need to understand second language learners and become culturally responsive.” For them problem based learning offers all sorts of possibilities to do this well.

Problem based learning isn’t new. It has been used in fields such as medicine, nursing, dentistry, and engineering. Filipenko reports that at UBC,

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problem based learning in teacher education has been around since 1998. What has changed is that two cohorts, problem based learning is now linked with teaching English language learners. The merger, a one of a kind in Canada, makes certain that issues of English language learners will not only be added to the mix but will be central so that new teachers are equipped to meet the needs of many kids in BC classrooms.

In this program, no formal courses are taught. No course outlines or course texts are required. “Often, this comes as a bit of shock for new instructors in the program,” says Filipenko. “However, once new instructors and students get used to it, they love the fact that they learn on their own and find out for themselves. It means they use the UBC library and web resources a lot.”

In reality, the student teachers are not left totally to learn on their own. I saw them in their tutorial groups where they met with experienced teachers, their tutors. They examine cases and are guided through their discussions. They learn from one another and also from “resource specialists” – faculty experts in different teaching areas such as special education, mathematics, science, literacy, and social justice. One day a week, they visit their practice teaching schools in Vancouver and Richmond. What they learn is researched, talked about, shared, and sometimes debated. In the end, it comes back to “what do I do in the classroom?”

One tutor I spoke with who was a very experienced teacher and former school principal from North Vancouver was happy with the program. For him, they begin with a case that focuses on teaching practice and what are the issues teachers are struggling with. The inquiry seeks out the best ideas and concludes with what am I going to do?

The ultimate litmus test comes for these student teachers during their 3-month practice teaching and eventually will be played out on the job. The time is right to ask, “What kind of change is occurring in BC teacher education to ensure that all children succeed at school?”

It’s time to move away from traditional ways of preparing teachers. Problem based learning has been shown to be effective in the field of education. And, if Ipsos pollsters Darryl Bricker and John Wright* are correct, then added to the 6 million people who have come to Canada from another place already and given that immigrants to this country are needed on a continuing basis, our schools will only grow in linguistic diversity.

What Lies Ahead?

To find out, we asked six of our preservice teachers from different backgrounds to give us their take on PBL and teaching English language learners.

One young woman commented if you are a good student you sort of get shaken up. The process of continuously learning and having to synthesize means there is no way to cram. It’s a completely different way of learning and obviously more effective.

Another stated that she liked reflecting on the approaches she used with her students and thinking about how she could do better. When she reviewed what had gone well and what flopped, it made for her best learning. She valued those times when her sponsor teacher didn't just leave her to flounder, but she loved being left to roll with it as well.

One male described problem based learning as a little bit mysterious like a big powerful energy. A lot of teachers who are not very independent or don't have some experience with it, he thought, would find it difficult.

Another commented about teachers often complaining about being alone. For her, what actually ended up happening is that she collaborated with the librarian, another teacher in her school, and with her sponsor teacher. "I started to branch out, and I don't think I would have done it if I had not been encouraged to collaborate so much with my peers in problem based learning."

As others looked ahead to teaching careers, they mentioned that successful educators have to always expand their knowledge. To achieve the BC Teacher Regulation Branch standard of engaging in career-long learning, you can't think you know everything – that's being closed-minded. There is really no substitute for a real-life case study where your students literally need something and you need to be able to fulfill it.

Quite possibly, UBC's teacher education program is a change in the right direction.²

Synthesis 2: Coordinator's Journal

As the Coordinator of the program, I have chosen to write my synthesis as a diary entry.

I keep a diary because it keeps my mind fresh and open. Once the details of being me are safely stored away every night, I can get on with what isn't just me...

~Gail Godwin³

I'm exhausted! Yet as the academic year draws to an end, I know that we have made progress in building a problem based learning community and revisioning our cases to not only reflect the complexity of our public school classrooms but also to engage our preservice teachers in issues that will face them in their teaching practice. Much of this was accomplished through strengthening the strands woven through our cases. I'm particularly proud of the way in which our cases have provided an educational space for discussion and reflection regarding the possibilities for non-indigenous peoples to transformatively learn from indigenous knowledges, perspectives, and pedagogies in a mainstream educational space through problem based learning. The social and ecological justice strand also continues to be an area of strength, and I have been blown away by the subject area resource specialists who this

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²Jutras, L. (2014, Jan 04). And now a word from Canada's future. *The Globe and Mail*

³From Gail Godwin (1991). A Diarist on Diarists. *Writers on Writing*, edited by Rober Pack and Joy Parini. University Proess of New England. Accessed at: <http://grammar.about.com/od/advicefromthepros/a/Twelve-Reasons-To-Keep-A-Writers-Diary.htm>

year seemed to have taken to the PBL model like ducks to water. Specifically, these subject area specialists have indicated how much they enjoy the interdisciplinary/integrated approach of our cohort. Several resource specialists got together to give integrated, hands-on workshops, and the physical education resource specialist integrated PE with both social justice issues (gender and bullying) and educational psychology (motivation). I am particularly heartened by feedback from all the resource specialists who have indicated they would like to return to teach with PBL next year.

Yet, while I take much satisfaction from the progress we have made this year, there is still much to be accomplished. Particularly worrying is how we can strengthen the TELL focus of our cohort. All students including ELL students are expected to meet the learning objectives of the BC curriculum. Yet, many teachers still lack key knowledge regarding language acquisition and teaching ELLs. There is so much to understand about the students we refer to as ELL. These students come to our classrooms with a wide range of language/literacy profiles (e.g., “ELL” is not one thing, it is a profile):

- Interrupted formal schooling
- Lack of L1 literacy
- Generation 1.5/Canadian-born ELLs⁴
- Refugees
- Survivors of trauma/war
- Poverty

There is obviously a need for us, as a cohort, to have a more explicit focus on the complex issues related to ELL academic success. To that end, I’m considering a weeklong TELL orientation for the PBL preservice teachers to introduce/front-load language content. I hope this might give the preservice teachers some background knowledge that they can bring to their research into case issues related to language and teaching ELLs.

Given the importance of meeting the needs of ELLs in our community, possibly against my better judgment, I’m also thinking about having Dr. Talmy and Dr. Early identify a textbook on language as a resource for the preservice teachers. I predict that since we have always been firm that preservice teachers identify their own resources rather than rely on course textbooks, this will be a very thorny issue particularly with the tutors and some of our long-term resource instructors ... thin edge of the wedge!

With a declining number of students applying to the teacher education program, there have been and continue to be cuts in the cohorts offered to those applying to our B.Ed. program. The threat to the TELL through PBL cohort is

⁴The term *Generation 1.5* refers to immigrants who arrive in the new country in their teens and bring with them language and culture from the home country but continue with assimilation in the new country. Thus, they are referred to as halfway between the first generation and second generation of immigrant communities.

real. This makes me very anxious. We know that in the twenty-first century the emphasis should be on knowing how to find and evaluate pertinent information in collaboration with others in order to construct and communicate new understanding. The BC Ministry of Education writes in its BC Education Plan:

. . .for the future there will be more emphasis on key competencies like self-reliance, critical thinking, inquiry, creativity, problem solving, innovation, teamwork and collaboration, cross-cultural understanding, and technological literacy.⁵

This could be a description of problem based learning, yet I continue to struggle to convince administration of the relevance and robustness of PBL as a vehicle for twenty-first-century learning.

While we have a long way to go before a PBL model of teaching and learning is taken up in the school districts where our preservice teachers complete their practica, increasingly these schools are implementing an inquiry approach to learning. I was cheered by a preservice teacher who reported:

I was lucky in Richmond [Richmond School District] in our school particularly they do believe in inquiry learning and teaching so my school advisor was really good with showing me techniques to start open ended questioning to put the onus back on the student for them to get that intrinsic motivation to want to find out more. (2012)

So, dear diary, next year I have my work cut out for me:

- To strengthen, support, and build the ELL focus of our cohort
- To work toward administrative buy-in and understanding of and a sense of ownership of our cohort
- To build stronger bonds with the schools in which our preservice teachers complete their practica

While I find the above overwhelming, I take solace in the knowledge that I work with an extraordinary group of committed individuals who always give of their best. Our preservice teachers are among the best I have ever worked with – they embody the principles of PBL: they are curious and self-reliant yet collaborative; they challenge yet have the capacity to understand multiple perspectives; they are critical thinkers able to make sense of complicated real-world classroom contexts; and finally, PBL preservice teachers are motivated active learners able to discern their learning needs.

⁵ Accessed at http://www.bcedplan.ca/assets/pdf/bc_edu_plan.pdf

Synthesis 3: TELL Through PBL Tutor Guide

***As a tutor my synthesis for the case “continuing challenges,” I’ve chosen to write the introduction to an imaginary tutor guide for our PBL program.*

Welcome to our team! In this package you will find a brief introduction to the philosophy of problem based learning as well as important principles about the teaching of English language learners. In addition, there is a “Frequently Asked Questions” section based on questions posed by previous tutors. Finally, there is a glossary at the end of the guide where we have tried to explain the terms that may be exclusive to our cohort or used differently by us (e.g., triple jump, synthesis). Please note, like most things in our TELL through PBL program, this document is meant to be continually adapted to the changing needs of our teacher candidates and our instructor team. We hope that this guide is a helpful resource for your upcoming work as a tutor.

Problem Based Learning

PLB can be practiced in a variety of ways. In our program, we have developed the following core practices:

- Small group learning creates an environment of trust.
- Preservice teachers work with different partners over the course of the case cycles, cultivating a sense of interdependence and professional collegiality.
- Preservice teachers teach each other throughout the year, providing ongoing practice in presentation skills and learning through teaching.
- Assessment is continuous and based on multimodal expressions of understanding. It is a responsibility that is shared among the instructor team.
- All learning is based on inquiry – with tutors’ guidance, preservice teachers pose and refine the questions – putting the preservice teachers’ evolving needs at the center of the learning.
- Tutors are also faculty advisors, allowing for a continual integration of the weekly practicum experience with “on-campus” work.
- For all areas of inquiry, preservice teachers are asked to specifically consider issues of language and the needs of English language learners.

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Teaching English Language Learners

Teaching English language learners is a constant thread throughout the 11 cases. The following are some of the core principles about English language learning that are held by our team:

- Linguistic and cultural diversity is a resource within classrooms and school communities and should be explicitly treated as such.
- Teachers need to plan and implement ways to make language visible in all content areas.
- Teachers need to understand the significant individual differences within the category of “English language learner.”
- Identity and language are interwoven.
- First languages play a vital role in additional language learning.

Frequently Asked Questions

Can tutors answer preservice teachers’ questions?

There is no one way to answer this question. The tutor calls upon his/her educational experience and judgment. Within PBL, there is room for a tutor to direct discussion, pose questions, and provide “quick” answers to prevent misunderstandings. It may also be advisable to provide the group with some specific terms that may be helpful during their research about a particular topic. However, the focus of the tutorials remains on the preservice teachers’ inquiries, ideas, and overall agency.

Why are there no textbooks?

Knowledge and understanding is not presented as static or bound. Preservice teachers, through their inquiries, create and recreate their own knowledge and understanding. They are required to seek out answers from a variety of voices, including academic research, government documents, and publications by practicing teachers.

With so much emphasis on learning through discussion, what about quiet students?

Students who tend to be quiet in groups in fact may benefit greatly from the small group work and supportive environment of PBL tutorials. In addition, through biweekly presentations, quiet students gain valuable public speaking practice, which is of great benefit during their practicum. Tutors may choose

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to open tutorials with a round table or talking circle format where everyone is given a choice to speak and the responsibility to listen.

Are there any drawbacks to PBL?

No single pedagogy is perfect or perfectly suited for all learners. We believe that with its emphasis on learner agency, inquiry, and integrating content and process, PBL is suited for helping develop beginning teachers with dispositions toward inquiry, lifelong learning, and openness toward multiple perspectives.

Why the consistent emphasis on English language learners?

In British Columbia, a significant number of the students in any given classroom are English language learners (20 % in Kindergarten through Grade 4). This number is expected to rise. These learners are given additional support for only a maximum of 5 years. The extent of this support may vary, but it is very rarely “full time.” Thus, classroom teachers are professionally responsible for the vast majority of these students’ learning needs. As a profession, elementary teaching requires an explicit focus on the complex issues related to English language learning and on the diversity of these learners. Language is the means through which all content knowledge is constructed and shared. It is at the center of education.

How do you know that all preservice teachers have covered all the material for all of the courses in the B.Ed. program?

Our use of continuous assessment (criterion-referenced feedback for two individual assignments and two partner assignments every 2 weeks) and end-of-term oral exams provides both formative and summative assessments. The 11 cases have been planned out to include the key outcomes from all the relevant syllabi. All instructors are invited to provide input into the cases, which are revised each year in response to student need.

Tutor Mentorship

Becoming a TELL through PBL tutor can be a steep learning curve, requiring flexibility and curiosity. As we have all been “the novice” at one point, we know how necessary mentorship is for this role. Your fellow tutors will be interested in answering your questions and providing any guidance they can throughout this year. Being a tutor is an intense and exhilarating role. Enjoy your first year!

Conclusions

New teachers graduating from teacher education programs will “juggle many goals as they coordinate pedagogical actions with various kinds of knowledge, such as subject matter knowledge, pedagogical content knowledge, and knowledge of individual students. “For experts, teaching is a problem solving context ... ” (Hmelo-Silver and Barrows 2006, p. 21). A recent activity required of preservice teachers in our PBL teacher education program was to describe their school-based practicum classrooms. Their descriptions illustrate complex and diverse classroom contexts and point to the need for teachers to be problem solvers. The three descriptions below are typical of those classrooms detailed by many of our preservice teachers:

1. For my practicum placement, I am in a Grade 2 classroom. Even though it is a straight Grade 2 class, there are a wide range of abilities and talents. There are eight students that receive pullout support. The support includes aboriginal education, English language learning, numeracy, reading, and writing. This particular school district is fairly homogenous, but there are a high percentage of low-income families and single-parent families. In my placement, there is no in-class support, so it is important to have adaptations in each lesson. There is a table at the back of the room that is always available for students that would like some extra support. Because I have a lot of students who struggle with reading and writing, I try to plan as many collaborative and experiential activities as possible. I also try to incorporate different modalities into each lesson to play on each student’s strengths.
2. My class is composed of 9 girls and 12 boys, many of whom live with their extended family. There is a high level of English language learners (ELL) within the group, with over 80 % of the students speaking a language other than English at home. Three students visit a language support teacher (LST) on a regular basis in order to augment their conceptual underpinnings of the English language. As such, the unit has been adapted to address ELL needs throughout its entirety. In particular, I will provide language support and graphic organizers to accompany informational texts in order to scaffold students’ understanding of Canadian animals.
3. The class also contains one student who is on an Individual Education Plan (IEP). Another with attention-deficit/hyperactivity disorder (ADHD) diagnosis, this student often requires additional prompts regarding appropriate behavior during lessons. In response to his condition, I will ensure each lesson is organized in smaller chunks of time with scheduled “brain breaks” to maintain his attention. This adaptation also benefits other high-energy students in the class.

Diverse classrooms like those described by our preservice teachers require them to be *constructive solution seekers* (Savery 2006, p. 18). From our perspective, problem based learning, which takes a learner-centered instructional approach that supports “higher level thinking skills, self-regulated learning habits, and problem-

solving skills” (p. 18), is the ideal model for educating preservice teachers to become *constructive solution seekers*. Yet, if our cohort is to remain viable and robust, we must tackle some real challenges including:

- Within a PBL model, how can we ensure preservice teachers develop a deep understanding of language acquisition and effective teaching strategies with ELLs?
- Those of us who work in the TELL through PBL cohort in teacher education recognize the challenges that the program raises for our administration: How can we work more closely with our administration to foster collegiality and commitment to a model that is not easily administered?
- How can we strengthen bonds with the school districts where our preservice teachers are engaged in their practica?

In conclusion, as a group of faculty, seconded teachers, resource specialists, and librarians knowledgeable about and dedicated to the PBL model, we will continue to problem-solve the issues that face us as a cohort in a teacher education program. We believe that the strength of our PBL cohort is its flexibility and its ability to adapt to the changing needs of our disciplines and the realities of current school contexts.

Annotated Bibliography

Content Knowledge Issues

Clouston, T. J., Westcott, L., Whitcombe, S. W., Riley, J., & Matheson, R. *Developing problem-based learning curricula* (pp. 35–50). Oxford: Wiley-Blackwell. Available at: <http://dx.doi.org/10.1002/9781444320541.ch4>

A focused discussion about curriculum design and PBL cases. Important considerations include subject matter; practice of educators; teacher regulation standards and so on. Scaffolding content in a manner that provokes deep thinking is essential.

Cummins, J. (2007). Rethinking monolingual instructional strategies in multilingual classrooms. *Canadian Journal of Applied Linguistics*, 10, 221–240.

Current research/theory, support the interdependence of literacy-related skills and knowledge across languages. Thus, teachers should reinforce effective learning strategies in a coordinated way across languages rather than following those assumptions that tend to dominate best practices in most second/foreign language classrooms.

Gibbons, P. (2002). *Scaffolding language, scaffolding learning: Teaching second language learners in the mainstream classroom*. Portsmouth: Heinemann.

English as Second language (ESL) students can no longer be thought of as a group apart from the mainstream – they are the mainstream. This book describes the ways to ensure that ESL learners become full members of the school community with the language and content skills they need for success. (<http://www.heinemann.com/products/E00366.aspx>)

Harper, C., & de Jong, E. (2004). Misconceptions about teaching English-language learners. *Journal of Adolescent & Adult Literacy*, 48, 152–162.

Four popular misconceptions regarding the teaching of English Language learners (ELL) outlined are: exposure and interaction will result in English language learning; All ELL's learn

English in the same way and at the same rate; good teaching for native speakers is good teaching for ELL's; effective instruction means nonverbal support. There is a need for explicit instruction that focuses on the genres, functions, and conventions of the language. Teachers must learn to look at language used in the classroom in order to understand the linguistic demands of their content areas and carefully structure learning tasks according to ELLs' needs.

Hung, W. (2011). Theory to reality: A few issues in implementing problem-based learning. *Educational Technology Research and Development*, 59(4), 529–552. Available at: <http://dx.doi.org/10.1007/s11423-011-9198-1>

A compelling discussion about the design of cases and includes some revealing statistics that demonstrate why problem based learning is successful in the field of education. They also demonstrate why it is so hard to who that cases uncover what could be considered traditional course content.

Problem Based Learning

Boud, D., & Feletti, G. (1997). *The challenge of problem based learning* (2nd ed.). London: Kogan Page.

This is a major work on PBL. It identifies resistances to PBL that often arise irrationally as reactions to evangelistic presentations associated with claims of PBL's benefits or by means of insufficient concern with staff induction and development. PBL is mistakenly considered an approach to curriculum design with the teaching of problem solving. PBL disrupts the habitual and comfortable patterns of work and PBL outcomes are criticized for not being tangible. PBL does attempt to “develop highly competent practitioners who will continue to learn effectively throughout their lives.” (p. 6)

Hung, W. (2011b). Theory to reality: A few issues in implementing problem-based learning. *Educational Technology Research and Development*, 59(4), 529–552. Available at: <http://dx.doi.org/10.1007/s11423-011-9198-1>

This is a review of PBL literature; what it takes to implement a PBL approach, its effectiveness and issues faced by institutions. Variable degrees of self-directedness and problem structuredness are factors and may vary by discipline and according to the cognitive readiness and self-directed learning skills of the students. Six representative models of PBL are described: pure PBL, Hybrid PBL, anchored instruction; project based learning; case based learning; and instruction with problem solving activities.

Johnassen, D. H., & Hung, W. (2008). All problems are not equal: Implications for problem-based learning. *Interdisciplinary Journal of Problem-Based Learning*, 2(2), 6–28. Available at: <http://dx.doi.org/10.7771/1541-5015.1080>.

McPhee, A. D. (2002). Problem-based learning in initial teacher education: Taking the agenda forward. *Journal of Educational Enquiry*, 3(1), 60–78.

Institutional Issues

Barrett, T. (2005). Understanding problem-based learning. (2005). In T. Barrett, I. Mac Labhrainn, & H. Fallon (Eds.), *Handbook of enquiry & problem based learning* (pp. 13–25). Galway: CELT. Available at: <http://www.nuigalway.ie/celt/pblbook/>

Dykes, F., Gilliam, B., Neel, J., & Everling, K. (2012). Peeking Inside Pandora's Box: One University's Journey into the Redesign of Teacher Educator Preparation. *Current Issues in Education*, 15(2), 1–8.

Teacher education reform at the University of Texas at Tyler integrated three instruction divisions (regular, special education and ESL) in order to dispel the idea that educators could excuse themselves from teaching all students. The restructuring was aided by key personnel, open communication, gradual phase in and feedback by student/faculty advisory groups throughout the process.

Savin Baden, M., & Howell, C. (2004). *Foundations of problem based learning*. Blacklick: McGraw-Hill.

An excellent read for faculty/tutors involved in PBL as it considers the nature of institutional cultures and resistance to change. A move to PBL involves complex disciplinary shifts and although higher education institutions embrace PBL, it enhances “employability and graduate-ness” and suggest it as a change from a traditional instructional paradigm to a learning paradigm, critical administrative oversight shows a lack of understanding, leads to curricula drift and “facilitator burnout”. PBL therefore remains challenging and misunderstood.

Yin, H. S. *Problem-based learning: An institutional perspective*. Available at: www.tp.edu.sg/files/centres/pbl/pbl_hee_soo_yin.pdf

While PBL is reported to have positive effects on student learning, many institutions remain hesitant about implementing a PBL approach. Impediments to change, are not educational but organizational. It is easier to continue with the status quo than to learn something new. Yin outlines strategies for developing understanding of PBL through capacity building and *buy-in*.

School University Partnership Issues

Barron, L., Clarksville, T., & Wells, L. (2013). Transitioning to the real world through problem-based learning: A collaborative approach to teacher preparation. *Learning in Higher Education*, 9, 13–18.

Research indicates that students in teacher education either did as well as or better than their lecture based counterparts. They tended do better when using a PBL approach in subject matter that was outside of medical education.

Delisle, R. (1997). *How to use problem-based learning in the classroom*. Alexandria: Association for Supervision & Curriculum Development (ASCD).

This is a practical guide for teachers about how to use problem-based learning in the classroom. PBL can replace passive listening and rote memorizing with active investigation, participation, and problem solving. It is a practical book that includes methods on how to engage students in independent learning.

Macdonald, D., & Isaacs, G. (2001). Developing a professional identity through problem-based learning. *Teaching Education*, 12(3), 315–333.

Hung, W., & Holen, J. (2011). Problem-based learning: Preparing pre-service teachers for real-world classroom challenges. *ERS Spectrum*, 29(3), 29–48.

Findings of this study show that pre-service teachers’ in a PBL program developed key abilities and dispositions vital to their success in teaching. Their perceptions of PBL were highly positive and they displayed resilient dispositions and problem solving skills when faced with authentic classroom situations and tasks.

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. New York: Routledge.

This book provides a very useful model for reflecting upon our PBL program. It is evident that our primary goal is to help our students become their own teachers.