

Applying Inquiry- Based Learning Across Disciplines in Higher Education

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Edited by

Beth Archer-Kuhn, Stacey L. MacKinnon
and Natalie Beltrano

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There are so many people to acknowledge in this journey of inquiry-based learning (IBL). Students, instructors and colleagues alike. Yet, this book comes from the deep learning that grew out of our collegial working conference held in the fall of 2018. We brought together faculty members and students from across Canada for 3 days of IBL presentations, experiential learning, and fabulous conversations. We also made a commitment to creating this book to illustrate the great work that is happening across disciplines using IBL in higher education. To this end, we want to dedicate this book to all those who engaged with us, laughed with us, and encouraged us to bring our vision of this book to reality. May your curiosity always propel you forward!



Through inquiry-based learning, curiosity becomes the compass that guides higher education, bridging disciplines and fostering a deeper understanding across the boundaries of knowledge.



TABLE OF CONTENTS

List of Illustrations	x
List of Tables	xi
Foreword	xii
<i>Peter Felton and Josh Caulkins</i>	
Preface	xvii
<i>Stacey MacKinnon</i>	
Prologue.....	xxiii
<i>Beth Archer-Kuhn</i>	
Acknowledgements	xxix
Introduction	xxx
Section 1 IBL-HE Curriculum Development, Community of Practice and Assessments	
Chapter 1	2
Choosing and Supporting IBL as a Self-Directed Method	
<i>Erika Kustra</i>	
Chapter 2	22
Creating an IBL Community of Practice	
<i>Robin Mueller</i>	
Chapter 3	37
Assessment in IBL-HE: Peer and Self Assessment	
<i>Beth Archer-Kuhn</i>	

Section 2 IBL-HE In Professional Programs

Chapter 4	64
Is There a Role for AI In IBL	
<i>Sahar Esmaeili, Oluwakemi Adebayo, Noor Fatima, Cari Gulbrandsen and Justine Wheeler</i>	
Chapter 5	74
Leading AI Adoption and Digital Literacy Competency Development through IBL and EL Methods in HE Courses	
<i>Nadia Delanoy and Mohammad Keyhani</i>	
Chapter 6	94
Love It or Hate It: IBL in Graduate School Education	
<i>Natalie Beltrano</i>	
Chapter 7	118
Supporting the Development of Society Just Social Workers: Modelling The Social Work Code of Ethics Through the Application of the FP of IBL	
<i>Natalie Beltrano and Beth Archer-Kuhn</i>	
Chapter 8	126
Taking it Outside IBL in Public Spaces	
<i>Rosemary Polegato</i>	
Appendix A	148
A Description of Change Your Work Project	
<i>Rosemary Polegato</i>	
Appendix B.....	151
Selected Student Quotes	

Section 3 IBL in The Arts, Social Sciences and Humanities

Chapter 9	156
Knowledge Transfer: Speedbumps and Roadblocks on the Road to IBL	
<i>Stacey MacKinnon</i>	

Chapter 10	168
Integrating Music Education and IBL	
<i>Ryan Drew</i>	
Chapter 11	189
Experiences with IBL in Science Education: Adopting an IBL	
Pedagogy in Nambian HE	
<i>Tomas Shivolo</i>	
Chapter 12	212
Reflections for Instructors, Facilitators and Students in IBL.	
<i>Charlene Vanleeuwen</i>	
Chapter 13	232
Curios Synchronicity: Religious Studies as IBL In HE	
<i>Brenton Dickieson</i>	
Section 4 IBL in Community and Wrapping It Up	
Chapter 14	250
Cultural Understandings	
<i>Lavender Xin Huang</i>	
Chapter 15	268
Taking it Back to the Streets: Former IBL HE Learner on Using Their	
Experience in the Workplace	
<i>Lavender Xin Huang</i>	
Chapter 16	290
Bringing it All Together	
<i>Beth Archer-Kuhn, Natalie Beltrano and Stacey MacKinnon</i>	
Glossary	302
Bibliography	307
List of Contributors	344

LIST OF ILLUSTRATIONS

1.1 Teacher to Learner-Centered Methods of Continuum	5
1.2 Greif Curve: Response to Change in Teaching and Learning	16
1.3 Sample Slide: To Explain Response to IBL and Other SDL Methods.....	17
2.1 Elements and Structural Possibilities for Inquiry-Based Learning	23
2.2 Notes About Group Purpose.....	28
5.1 Kolb's Experiential Learning Cycle	77
6.1 Pedaste's Overview of IBL.....	98
6.2 The Grief Curve.....	102
8.1 Three Samples of Reflection	133
8.2 Venne Diagram of Independent, Dependent, and Interdependent Relationship.....	135
8.3 Original Song Composed by Students for the Empty Fridge Project.....	138
11.1 Bybee's Modified SE Instructional Learning Cycle	196
14.1 Teacher Vs Learner-Centred Pedagogy	251
14.2 My Starting Point in 2019	253
14.3 Where Am I Now	254
14.4 Fundamental Principles of IBL.....	256
15.1 Before and After Reading Group FP Map	276
15.2 Structured Controversy Group Presentations.....	278
15.3 Group Facilitation Model	279
15.4 Brain's Superhighways	282
15.5 How to Learn.....	286

LIST OF TABLES

P.1 Trauma Informed Pedagogy with Linkages to IBL	xxvi
1.1 Comparison of Four Different SDL Methods.....	7
3.1 Comparison of Self-Assessment on Skills in the Two SOWK IBL Sections Combined, 2019 (01.03) and 2020 (01, 03) with SW Non-IBL, and Well 300 IBL.....	45
3.2 Comparison of Peer-Assessment on Skills in the Two SOWK IBL Sections Combined, 2019 (01.03) and 2020 (01, 03) with SW Non- IBL, and Well 300 IBL	48
3.3 Comparison of Self-Assessment 1 and Peer Assessment 1 on Skills in the Two SOWK IBL Sections Combined (2019 and 2020), SW Non-IBL, and Well 300 IBL	51
3.4 Comparison of Self-Assessment 2 and Peer Assessment 2 on Skills in the Two SOWK IBL Sections Combined (2019 and 2020), SW Non-IBL, and Well 300 IBL	53
4.1 SWOT Analysis Comparison of IBL Fundamental Principles with GEN-AI Strengths and Challenges	69
5.1 Assessment, Weight, and Description of Learning Management System Course	79
5.2 System Survey Results	86
5.3 Student Interview Themes about Learning Experiences in IBL Context	87
7.1 Comparing Fundamental Principles and SW Code of Ethics Principles and Values.....	119
8.1 Frequency of Responses and Open-Ended Comment from Post-Event Survey.....	132
8.2 Launch Event Program	136
8.3 Open-Ended Questions: Student 1 Word or Phase of The Empty Fridge Project.....	144
15.1 Role Based FP Application Scaling	269
15.2 Fundamental Principles (FP) in Different Roles.....	274
15.3 Facilitator vs. Participant Perspectives	280
15.4 Applying Fundamental Principles in Different Areas	284

FOREWORD

PETER FELTEN AND JOSH CAULKINS

The demands on higher education today – and on the professionals who teach in higher education – are immense. AI is perhaps the most recent and urgent, but long-term trends of increasing student needs, decreasing institutional and societal support, and numerous national and international crises all take their toll on the emotional and physical well-being of academics – and on our colleges and universities. How do we remain engaged and creative in our educational work despite the intensity of these challenges? What pedagogies and practices can inspire us to refocus on and reconnect with our students, our disciplines, ourselves, and our sense of professional purpose?

Applying Inquiry-Based Learning in Higher Education Across Disciplines, by Beth Archer-Kuhn, Stacey MacKinnon, and Natalie Beltrano, is one great tool for doing just that. This book offers a clear and inspiring way forward, and myriad paths to follow that will engage, provoke, and challenge us and our students.

Inquiry-Based Learning (IBL) is not new in higher education, yet this book makes a novel contribution. Archer-Kuhn, MacKinnon, and Beltrano present a collection of narratives and roadmaps for implementing IBL in any higher education course. The range of cases and the diversity of disciplines represented here provide an excellent entry for anyone interested in IBL, from the novice to the advanced practitioner. Indeed, *Applying Inquiry-Based Learning in Higher Education Across Disciplines* is relevant for anyone and everyone interested in cultivating authentic student learning.

This book is refreshingly forthright about how complicated, nonlinear, and even messy teaching and learning can be. After all, what real learning experience isn't complex? Many of the authors here highlight the intellectual, physical, and emotional spaces they co-create with their students that allow for learning to take place. In these spaces, faculty and students model vulnerability, practice trust moves, encourage each other to take risks, try new things, and develop meaningful skills and knowledge in

their disciplines. This requires dialogue, debate, and deliberation – unfortunately rare in contemporary culture – that cannot happen in the classroom without planning and finesse.

Because IBL is an iterative pedagogy and process, it allows for flexibility and creativity for instructors and students. Archer-Kuhn, MacKinnon, and Beltrano emphasize that there are lots of ways to do IBL right, which is reassuring. Within that wide range of practice, though, the book is rooted in eight “fundamental principles” that should guide IBL course design, teaching and assessment. These IBL principles include a mindset of curiosity, student-driven learning, collaborative learning, critical reflection, and embracing the discomfort of learning. Each chapter illustrates how these principles have been applied in discipline- and course-specific contexts to scaffold learning for students.

As we look across the sixteen chapters of this book, we see four core benefits of IBL:

1) IBL is good for students

IBL helps learners not only succeed in a particular course, but it also prepares them for life and work after higher education. Lavender Xin Huang makes this point well when she writes of her experiences of IBL in higher education as a student and utilization of IBL in the workplace as a professional, “Embracing IBL during my Master of Social Work journey...profoundly reshaped my understanding of education...By integrating these FPs into my personal and professional life, I have witnessed their transformative potential in fostering meaningful relationships, driving workplace innovation, and enriching community engagement” (p 173-74).

IBL does this by immersing students in environments where they learn to become comfortable with the discomfort of being uncertain (e.g., Principle 7). When students recognize that not-knowing is a necessary (if sometimes anxiety-inducing) part of learning, they are primed to be motivated and curious enough to dive into challenging experiences. Chapter 6, by Natalie Beltrano, is particularly insightful about this, describing a “grieving process” (p. 82) students often encounter in moments of academic difficulty. Helping students confidently navigate this is extraordinarily important in a time when easily available AI-generated answers and solutions can short-circuit the effort and discomfort that are required for real learning to occur.

Indeed, in IBL, students engage in the essential work of education – engaging as individuals and communities in inquiries about problems that draw on and deepen capacities for curiosity, empathy, resilience, and care. This book is an argument for and an illustration of this very human way of learning – revealing why and how IBL is good for students.

2) IBL is good for faculty

Teaching, just like learning, is hard to do. Educators need processes and exemplars that help us question our assumptions and make important decisions about pedagogy, assessment, and course design. IBL – and this book – provide just that, offering a flexible, scholarly, and curiosity-driven framework that we can use throughout our careers. For instance, in Chapter 2, Robin Mueller reminds us of the value of taking “pedagogical risks” to offer students the challenging yet supportive education they deserve – and to sustain ourselves as academic teachers.

For educators, this book is helpful in both practical and aspirational ways. The authors reinforce that we don’t need to be perfect in our teaching, and that the focus of IBL is on the process of learning, not the product. When we apply an IBL mindset – and the eight principles – to our teaching, like our students we will become more motivated and curious, and we too will learn to be more comfortable with complexity, uncertainty, and even failures as we develop as teachers and professionals.

3) IBL is good for educational developers

Those of us who support individuals and institutions to enhance teaching and learning, including educational developers and instructional designers, will find IBL a powerful and practical tool in our work. As noted in the text IBL is “more than a pedagogical strategy; it is a philosophy that places curiosity, critical thinking, and active exploration at the center of education” (p 12). An educational developer, Erika Kustra, explains further in Chapter 1, “Utilizing IBL as a teaching and learning strategy, I have observed the incredible rewards, resulting in surprising connections and outcomes that students create, and the joy I feel in teaching. These reactions are not just mine; I have heard them reflected in my conversations with other instructors” (p 23).

Effective educational development is rooted in something akin to that IBL philosophy, empowering teachers to critically inquire – alone and together – into the complexities and nuances of teaching and learning. This book

provides diverse examples and inspirations for how to put that philosophy into educational development practice. The book also can serve as the basis for workshops and reading groups, and the teaching vignettes and reflection prompts here can be adopted and adapted for use in many educational development activities.

4) IBL is good for higher education institutions and the communities they serve

IBL gives institutions one way to enact their educational missions and to serve their communities. As Tomas Shivolo demonstrates in Chapter 11, IBL courses and programs can be designed to address community needs – in Shivolo’s case, the twin goals of enhancing STEM education and scientific literacy in Namibia. That inspiring example illustrates “the transformative potential of IBL in raising the quality of science education in Namibia, preparing students to apply scientific knowledge to community challenges and contribute to national development” (p 139).

This chapter, and more than a dozen others in this book, reveal the power of IBL as a flexible yet powerful educational practice. Indeed, IBL acts as both a tool and a metaphor for life-long and life-wide learning, something many of us seek to instill in our students (and ourselves) but which often seems elusive. The values at the heart of IBL, articulated in the eight fundamental principles, are an essential guide for all who care deeply about student learning and community change through higher education.

We hope you will find as much inspiration – and provocation – in this book as we have. Our students need the meaningful, transformational learning experiences afforded by IBL. We, our institutions, and our communities need students, faculty, and graduates who have the knowledge, skills, and capacities at the heart of IBL. Let’s get to work!

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Peter Felten is professor of history, executive director of the Center for Engaged Learning, and assistant provost for teaching and learning at Elon University. He has published seven books about teaching and learning in higher education. His next book, *The SoTL Guide: (Re)Orienting the Scholarship of Teaching and Learning*, is co-authored by Katarina Mårtensson and Nancy Chick, and will be published in late 2025. He is on the advisory board of the National Survey of Student Engagement (NSSE) and is a fellow of the Gardner Institute.

PREFACE

STACEY L. MACKINNON

Welcome to *Applying Inquiry-Based Learning in Higher Education Across Disciplines*! We are all aware that in recent years, the call for transforming higher education has grown increasingly urgent. Institutions around the world are tasked with preparing students not just to absorb information, but to navigate and contribute to a rapidly evolving world marked by complexity, uncertainty, and innovation. Amid this backdrop, inquiry-based learning (IBL) emerges as more than a pedagogical strategy; it is a philosophy that places curiosity, critical thinking, and active exploration at the center of education. But what does it truly mean to incorporate IBL across diverse disciplines in higher education? And how can educators do so in ways that are realistic, sustainable, and impactful?

This book was born out of those questions. It is not an abstract treatise or a theoretical ideal. Instead, it is a pragmatic guide for educators who want to embed the principles of inquiry into their teaching, regardless of their discipline or institutional context. It acknowledges the very real constraints of higher education—from limited resources and administrative demands to the varying preparedness of students. Yet it also celebrates the transformative potential of inquiry when implemented thoughtfully and adaptively.

The chapters ahead represent a tapestry of voices and experiences. Contributors include educators from diverse fields—science, humanities, arts, engineering, and beyond—who have navigated the challenges and reaped the rewards of IBL. They share case studies, strategies, and lessons learned, offering readers a rich and varied toolkit to draw from. They share with you not only their success but also their lessons learned along the way as they treat every course they teach as their own inquiry project. Not only will you gain great ideas you can try in your own classrooms but also the knowledge that you are not alone and that the greatest successes for an instructor are found through active learning and sharing their ideas in community.

What ties all of these chapters and discipline-specific courses together is a commitment to the eight principles of inquiry-based learning we introduced in our first book, *Reigniting Curiosity and Inquiry in Higher Education. A Realist's Guide to Getting Started with Inquiry-Based Learning* (MacKinnon and Archer-Kuhn 2022). One of the things that differentiated that book from many others was our focus on the key questions you need to ask yourself when designing IBL in higher education (IBL-HE) experiences rather than laying out a prescription for “how to.” This message that there are many correct ways and virtually no “wrong ways” to do IBL emphasizes our key message that IBL-HE is an iterative process for both students and instructors. We can model the curiosity mindsets and inquiry skills that we want to see in classes by being open to making changes as we go. This message is just as valid today as it was then.

For this volume we expanded our scope beyond our own practice and asked each author to reflect on their experiences using IBL and to highlight how the eight fundamental principles are exemplified in their discipline-based practice. By doing so, we hope to show how IBL-HE can be a part of any instructors’ toolbox and that these strategies can be adopted and adapted across disparate disciplines. What works in psychology certainly can work in social work, but an IBL practice in physics may be just as valuable in religious studies. How exciting!

While we strongly recommend reading our first book for an in-depth discussion of these principles and how we uncovered them over more than a decade of work, let’s start this volume by briefly answering the question “What are the eight fundamental principles (FP) of inquiry-based learning?”

We believe that inquiry-based learning in higher education (IBL-HE) involves:

Let’s look closer into what each of these entails.

FP1: IBL-HE is more than a Pedagogical Tool or a Set of Skills, it Must also Foster a Mindset of Curiosity

Modeling is key to making IBL-HE more than just a classroom exercise or a set of skills. Show students your natural curiosity, celebrate “I don’t know,” explore answers together, and model how to become curious. By encouraging a mindset of curiosity as a way of engaging with the world, you can inspire students to embrace lifelong and life-wide learning. Remember

a tool, no matter how effective, collects dust when the desire to use it is absent.

FP2: IBL-HE is Student-Driven Learning

In IBL-HE, students are encouraged, supported and expected to pose their own questions and pursue their answers throughout the course supported by formative feedback from instructors and peers as the inquiry process unfolds. Students have ownership over their choices, with you helping them to reflect on what they have chosen and the outcomes. This process can improve their research skills and is a key part of being in a student-driven IBL-HE classroom. This does not preclude ensuring that important content is covered (particularly in professional programs with licensing requirements), it simply shifts the responsibility for exploration of that content to the student with guidance from the professor.

FP3: IBL-HE is Collaborative, Not Competitive Learning

In an IBL-HE course, the learning is not fully dependent (i.e., my learning is based on what we all do) nor is it fully independent (i.e., I alone am responsible for my learning) but is interdependent (i.e., individual learning is enhanced and strengthened by the contribution of others, contributions the individual has the option to utilize or ignore as they see fit). When we emphasize collaboration (even on individual projects) and put the focus on the quality of learning rather than standing in the class, students are significantly more open to offering their ideas, view the feedback of others as truly constructive, pose differing views, and engage in making the most of everyone's learning, not just their own. Team-based work is a key component of today's work world (even in its virtual sense) so IBL-HE prepares students to learn together in a meaningful way.

FP4: IBL-HE Balances Content and Process/Metacognition

IBL-HE not only encourages students to learn facts, but more importantly, to think critically and creatively about the content and the process of their own learning (i.e., metacognition). An important objective in an IBL-HE is to find the balance between content understanding and metacognition.

FP5: IBL-HE Requires Scaffolding, Involving Choice and Focused on Growth

Scaffolding of learning is a key component of IBL-HE, not only for the student but for the professor as well. There are many ways to include IBL in your practice (activity, course, program) and different levels of structure (structured, guided, open) you can choose from. IBL-HE is a marathon, not a 100m sprint. Go at your own pace with IBL-HE, take the time to reflect on what is working and what needs adjustment. Whether you start small with an activity in a course (structured) and scaffold your IBL-HE practice into something much larger, such as the whole course (structured and guided) as Beth has done, or you jump right in to open IBL as a major project and figure it out as you go as Stacey did, the key to good IBL practice is always reflecting, and always evolving. The same goes for students in the classroom. How can you provide support that will help them grow over the course of their IBL-HE experience? What kind of learning community will best support their learning? Are there skills they will need to develop and practice to have the best learning experience? Never assume students have everything they need to be successful...*ask them*.

FP6: IBL-HE requires Constant Personal and Critical Reflection

The key to scaffolding is to be engaged in regular critical reflection. This principle extends to students and professors as well. Make note of what works and do it again. Reflect on why things did not go according to expectations, make some changes, and try again. Learn from students' reflections on their experience and consult them on ideas you are considering. Allow students the same freedom for reflection and experimentation whenever possible in their own learning and watch how they grow and develop as inquiring learners. As long as students trust that you are there to support them, most will be willing to take intellectual risks with you during the learning process.

FP7: IBL-HE Encourages Students and Faculty to Embrace the Discomfort of New Learning, Manage Anxiety, Build Trusting Relationships, and Seek Out Support

Honest reflection and scaffolding require a conscious effort to build authentic, trusting relationships between students and professors and

between the students themselves. Taking intellectual risks is uncomfortable, sharing your personal thoughts is challenging if you fear judgment, and trying new things invites the possibility of failure. Building and maintaining trust in yourself, between you and students, between the students themselves, and each student's trust in themselves is worth spending time and energy on. Transparency and modeling are important traits for the professor. Let students know what to expect; that you are aware that this way of learning is new and different and will likely cause some initial anxiety. Model confidence in the process and trust in student's abilities to learn to ease their and your own anxiety. While this principle is important as you begin to introduce IBL-HE, maintaining those relationships throughout the semester is very important, especially as learners encounter bumps in the road that may have them doubting their abilities. Perhaps most importantly, how you manage your own and student's anxiety will determine how the students' progress, as Natalie shares in her chapter. Share your learning process with students, find support and mentors for yourself, and share what you are learning from them with students.

FP8: Successful IBL-HE Means Always Learning from Your Students

One of the reasons we chose not to write a formulaic, “how to” guide to IBL-HE in our first book was because every discipline, every course, and indeed every cohort of students is different. This is part of what makes using IBL-HE so exciting! You don't know who or what you're going to get. The key then is to keep these fundamental principles at the forefront of your mind, and remind yourself regularly to ask questions, invite reflection and criticism, and work to adapt your IBL-HE practice to each new situation or group of learners. Let this journey be one of exploration— not just for students, but for you as well. In embracing inquiry, we become learners once more, discovering new possibilities for what education can be.

When you focus on these fundamental principles, you can see how IBL-HE can be incorporated into any discipline, program, or course. After reading this book we also hope you will be able to see how by building on these principles, any approach to IBL-HE has the potential to be successful across disciplines. This means we want you to read the whole book, not just the chapter closest to your own home discipline. Adopt and adapt your IBL-HE practice from across the spectrum of disciplines and you will find these mindsets and skills will become transferable not only for students but for yourself.

As you turn these pages, we invite you to reflect on your teaching practices and how they might evolve to center inquiry more deeply. We invite you to engage with the fundamental principles and examples presented not as prescriptive solutions but as sparks for your own innovation. And perhaps most importantly, we invite you to join a community of educators and scholars committed to fostering curiosity, agency, and deeper learning for all.

PROLOGUE

BETH ARCHER-KUHN

Welcome to our second book on inquiry-based learning (IBL) in higher education (HE)! In this book we take the reader beyond the Fundamental Principles of IBL that we first identified in *Reigniting Curiosity and Inquiry in Higher Education: Getting Started with Inquiry-based Learning*. We now move into how IBL is applied across multiple disciplines in HE. We see IBL offering flexibility in delivery, being accessible for all students, providing inclusiveness in the learning environment, and consistent with trauma-informed pedagogy. But you don't have to just take our word for it. In this book you will find a multitude of authors who have experienced IBL as instructors and some as students. The common experience of our authors engaged in IBL is that they are all learners. The chapter authors will share their learning experiences of IBL within their discipline and will explicitly identify the links that they have observed with the Fundamental Principles (FPs) of IBL. We hope that this approach will provide you with numerous examples of FP applications.

Flexible, Accessible, Inclusive and Trauma-Informed

One of the elements of IBL that I most appreciate is the flexibility that is afforded to both instructors and students, making it both inclusive and accessible. This flexibility allows instructors to apply the FPs of IBL within their own discipline and tailor the learning outcomes to fit their own disciplinary structures and formats. Instructors can use IBL while teaching face-to-face, online, or a hybrid mix of synchronous and asynchronous. They can use IBL in large classes and small class sizes. IBL allows for instructional preferences such as lectures, mini lectures, small and large group work, and independent work. Within large classrooms, the small group work that is built into an IBL environment provides the instructor with the knowledge that students are getting additional support from their peers, and they do not have to navigate the learning process alone. Instructors will be able to see the high level of student engagement in their learning and gain confidence in the students as co-creators of knowledge.

Students are afforded flexibility in multiple ways including the topic of inquiry, the choice of inquiry questions, the methods of discovery, and pursuit of their inquiry project (FP2). Students also have the option of utilizing peer and instructor feedback or not, having applied critical thinking to this feedback. Students are not left to their own devices within an IBL environment as constructive peer feedback is built into the structure with additional instructor constructive feedback. Students have multiple opportunities to try out their thinking in their small group of peers and receive critical peer reflections to help shape their thinking about their learning. Formal large group presentations also enhance student sense of agency as co-creators of knowledge. They can fit their work outside of the classroom into their busy schedules and work ahead on their project or keep pace with the course learning process. This flexibility supports a more accessible and inclusive classroom environment and can increase student agency with the flexibility and choice that is afforded and encouraged within an IBL environment.

Linking IBL Principles with Trauma Informed Pedagogy

I see IBL and trauma-informed pedagogy (TIP) linked in a number of ways including being accessible and inclusive, collective sharing, mental health support for students, and relational teaching. IBL sets the stage for collaborative learning. Helping students to develop these skills and to develop comfort while they step outside of the traditional competitive academic way of being can really enhance their own and their peers' learning. The development of collaborative skills is so critical in today's employment market and is what employers consistently say that they are looking for in employees. Collaborative learning can open learning opportunities through diverse perspectives; these diverse perspectives can be chewed on and digested using critical thinking skills. Alone, students can learn great things, and together, student learning opportunities are endless.

Built into the IBL environment through small group work are increased resources as students learn to support their peers' inquiry process, providing guidance, research sources, and critical reflections. Most students say that within an IBL environment, they not only look forward to attending classes, but they also look forward to sharing their new learnings with their peers and receiving critical reflections in return. Students recognize that these critical reflections enhance their learning and the quality of their work (FP4).

Little stresses students who are unfamiliar with IBL out more than not knowing how to proceed with their project. IBL affords a component of class time for students to work together in small groups where they can talk through their challenges and receive immediate support. This real time support can help to reduce students' feelings of anxiety and stress and enhance their confidence and well-being (FP3).

Unpacking difficult conversations comes naturally within an IBL environment. The instructor models a mindset of curiosity that can be applied when tensions arise, and conversations need to be had to allow the dismantling of misperceptions and misunderstandings. Using a curiosity mindset is at the core of IBL and helps students to view the unpacking of difficult conversations as a natural part of the course. It is a relationship builder that encourages authentic communication and constructive feedback to peers and instructors. This relational teaching allows the instructor to be more responsive to student needs within a safe, respectful and helpful learning environment (FP6).

To illustrate the IBL and TIP connections, I will use an example from a recent study on TIP. During the worldwide pandemic, social work educators in western, central and eastern Canada came together to talk about trauma informed pedagogy; what did we know, what was being done, and how were faculty and students doing with the online learning that we had all pivoted to during this time? Through our conversations, we drafted, submitted and were successful with funding (Desire To Learn) for a mixed methods study across three universities (Calgary, Manitoba, Waterloo) to explore TIP in an online environment.

We know that technology mediated practices for course design and delivery with practical strategies are relevant in online learning spaces, however, there is limited research on using online or hybrid course formats to teach trauma content (Elmhurst et al. 2019, Moss et al. 2021). We believe that social work education should promote student resilience in an online learning environment. Researchers noted the value of providing spaces to explore individual strengths, teach resilience, increase peer support, develop coping strategies, and increase instructor and field instructor modeling of leadership and work-life balance (Beddoe, Davys, and Adamson, as cited in Thomas 2016). Our quantitative survey was intended to help us to better understand how and what TIP strategies social work instructors were using, and how did students perceive their usage (Boynton et al, in press). We held three follow-up focus groups with Bachelor and Master of Social Work students to ask in-depth questions to better understand student perspectives.

The thematic analysis revealed two major themes, *Elements of a Trauma-Informed Learning Environment*, and *Pedagogical Practices*. The following Table 1 illustrates the fullness of the two themes of TIP. Each theme is composed of categories noted below the theme and the categories are then linked directly to the IBL fundamental principles.

Table P.1 Trauma Informed Pedagogy with Linkages to IBL

Elements of a Trauma-Informed Learning Environment	Pedagogical Practices	Linkages with IBL
<ul style="list-style-type: none"> • accessible and inclusive - allows for participation options 	<ul style="list-style-type: none"> • recognizes students as active participants • opportunities for formal and informal debriefing 	<ul style="list-style-type: none"> • Students develop their own inquiry question (FP2) • Small and large group opportunities for learning support (FP4)
<ul style="list-style-type: none"> • collective sharing 	<ul style="list-style-type: none"> • collaboration 	<ul style="list-style-type: none"> • Small and large group sharing allows learning across student projects and peers become a resources and source of constructive feedback (FP3)
<ul style="list-style-type: none"> • mental health supports for students 	<ul style="list-style-type: none"> • self-care strategies 	<ul style="list-style-type: none"> • Flexibility in methods allows students to work at their pace, on an area of interest, and when their schedule allows • In-class time for processing learning and working on inquiry projects can reduce stress (students look forward to sharing with peers what they have learned) (FP5)
<ul style="list-style-type: none"> • relational teaching - safe and trusting environment where difficult 	<ul style="list-style-type: none"> • responsive to student experiences 	<ul style="list-style-type: none"> • Students build relationships with each other where they develop supportive and constructive feedback to

conversations are unpacked		enhance peer learning (FP6) <ul style="list-style-type: none"> • Flexible pedagogy allows instructors to react to student needs (recording of presentations)
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How Is IBL Implemented across Disciplines in Higher Education?

We have organized this book in sections starting with topics that we think will be of interest across disciplinary fields. Section 1 begins with a look at curricular development, communities of practice and assessment. In Chapter 1, Dr. Erika Kustra provides an overview of IBL in comparison with other popular teaching and learning methods such as problem-based learning and case-based learning. Chapter 2 reveals reflections of the process taken by Dr. Robin Mueller in developing an IBL community of practice. In Chapter 3, Dr. Beth Archer-Kuhn illustrates one way in which assessment can be implemented in an IBL teaching and learning environment, revealing the findings of a study whereby students participated in both self and peer assessment in IBL courses.

Section 2 follows with 5 chapters written by faculty in professional education programs. Chapter 4 opens with Sahar Esmaeili, Oluwakemi Odebayo, Noor Fatima, Dr. Justine Wheeler and Dr. Cari Gulbrandson all sharing what they have learned through a systematic review about IBL and artificial intelligence (AI). This chapter nicely leads into Chapter 5 where we have Nadia Delanoy and Dr. Mohammad Keyhani sharing their IBL and AI experiences in their discipline of Business. In Chapter 6 we observe the experiences of Natalie Beltrano, PhD(c) as they transition from a student of IBL into the role of instructor. Natalie joins Dr. Beth Archer-Kuhn in Chapter 7 discussing the alignment of IBL and the FPs in professional programs such as social work. In Chapter 8, Dr. Rosemary Polegato shares their experiences of IBL in public spaces.

Section 3 of our book covers multiple disciplinary faculty from the Arts, Social Sciences and Humanities (5 chapters). Dr. Stacey MacKinnon starts off in Chapter 9 on the subject of Knowledge Transfer. In Chapter 10, Professor Ryan Drew applies IBL to his love of Music education. Chapter 11 gives us a look at IBL in Science education through the eyes of Dr.

Tomas Shivolo. In Chapter 12, Dr. Charlene Vanleeuwen takes us through their journey of reflection for instructors and students alike. Dr. Brenton Dickieson completes this section with Chapter 13 where they illustrate the application of IBL in religious studies.

Section 4 helps us to wrap up this book, but not before we look at Chapter 14 by Lavender Huang (MSW) as she describes the ways in which they along with their partner have applied IBL in practice. Chapter 15 follows with Lavender considering some of the potential cultural implications of IBL. Our last and final chapter of this book, Chapter 16, allows Natalie Beltrano, Dr. Stacey Mackinnon, and Dr. Beth Archer-Kuhn to bring it all together and reflect on the future of IBL-HE.

References

- Boynton, Heather, Colleen McMillan, Alice Hanbidge, Beth Archer-Kuhn, and Judith Hughes. 2025.
- “Trauma-informed Pedagogy and Online Social Work Education and Field Instruction.” In Lea Tufford and Arielle Dylan (EDS.). *Trauma-Informed Care in Social Work Education: Implications for Students, Educators, Pedagogy, and Field*. Ch 14, 248-281. New York: Routledge.

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INTRODUCTION

Welcome to our newest text on inquiry-based learning (IBL), ***Applying Inquiry-Based Learning in Higher Education Across Disciplines***. This is the book that we always wanted to write! And we are so pleased to bring together authors that truly reflect what this text is about: the application of IBL in whatever discipline you have joined within higher education. If you are new to IBL, you may want to take a look at our first text to help you get started (*Curiosity and Inquiry in Higher Education: A Realist's Guide to Getting Started with Inquiry-Based Learning*).

IBL for us is an ongoing project. We love to learn about the ways that we might adjust, tweak, or revamp ideas and activities. We believe that you are reading this book because perhaps this sounds interesting or familiar to you. If it does, please, let us know more! Tell us what you enjoyed reading in this book, and which Chapters were of most interest. Tell us what you would have liked to see more of, maybe something was missing or you just were not able to connect with some aspects of the text.

Our hope for you is that you find in this book authors in your discipline and others who are not in your discipline writing about ideas and experiences that you might want to try in your own classrooms. We hope that you connect with these people by going to the contributing authors section to learn more about them and how you can connect with them. We hope that your engagement with them about your own IBL experiences lead to more learnings than you can imagine.

We have organized this book in a way that we hope is easy for you to navigate starting with topics that we think will be of interest to all such as curriculum design, communities of practice, and assessment. We also organize sections by disciplinary categories for ease of locating topics that may be of interest to you. By all means, explore all of the sections, read each of the chapters. Reflect critically on your own practice and how you might be able to apply what others have done and found successful in engaging students in their learning.

In this book you will be treated to experiences and learnings from a vast array of disciplines including technology, business, curriculum design,