**Course Design Intensive (CDI)**

**Workbook**

This workbook has been created for participants taking the Course Design Intensive (CDI) through the Centre for Teaching, Learning & Technology (CTLT) at UBC. The purpose of this workbook is to support your analytic thinking in the process of building, refining and iterating your course design. This guide includes background information on each phase of the course design process, which mirrors the sequence of the workshop. This guide is largely based on the work of Wiggins & McTighe (2005).

This is a “working document” – as you build out your course design, this document (the template charts and tables) will grow (that is, if you are using a digital copy). We encourage you to adapt the templates to your own needs. You might prefer to change the orientation of the document to “landscape” (which gives you more space) or you might prefer a printed copy. In this case, we suggest going through the document first, adding white space within the sections to allow you space to write and draft as your ideas emerge.

In addition to the templates and examples in this guide, we’d like to share two of the strategies built into the CDI which support your learning:

**CDI Participant Website**

The CDI uses a website to share resources for participants and facilitators. You will see the CDI schedule, the pre-CDI work, plus learning plans for each day where we share out our facilitation plans. This includes all of the resources used throughout the day (including presentation slides) and discussion activities. You can find the CDI participant website here: <http://cdi.ctlt.ubc.ca/participants-guide/>

**Peer Feedback**

During the CDI, some of the learning will take place in the large group, some in small group activities and discussion, and others in paired or small feedback groups. In this smaller group, you will share your course designs in progress, receive input on your ideas, and respond to your peers’ course plans. In this peer learning context, you will learn from other people’s strategies and decision processes which may spark your own ideas/creativity, and others will learn from you.

**Pre-work**

(preparatory work to be completed prior to the CDI)

**1. Please read the following article:**

* Allen, D. & Tanner, K (2007). [Putting the Horse Back in Front of the Cart: Using Visions and Decisions about High-Quality Learning Experiences to Drive Course Design](https://www.lifescied.org/doi/pdf/10.1187/cbe.07-03-0017). *CBE-Life Sciences Education, 6,* p.85-89.

**2. Please watch the following video:** [Backwards Design Video](https://www.youtube.com/watch?v=QbKx_tG99ho) - Time: approx. 6 mins.

**3. Complete this exercise:** [Instructions for Empathy mapping](https://wiki.ubc.ca/Documentation:Course_Design_Intensive/Facilitators_Guidebook/Empathy_Mapping) **-** Time: approx. 45 mins.

Please review the introduction and instructions for the mapping exercise first. You will need to **print a copy of the one-page map** (or recreate it on paper) before you begin. *Be sure you bring a hard copy of your completed map to the workshop.*

**4. Complete the One-Sentence Challenge**: You are speaking with a niece or nephew who has expressed some interest in your work as an instructor. They have asked you about your course (the one you have selected to focus on during the CDI).  How would you describe it in a way that is clear, captures purpose, and could elicit interest or curiousity in your relative? Remember that this person is not in your field/disciplinary area and may not have any prior experience with post-secondary environments. [You’ll have the opportunity to come back to this during Day 2 and 3, and this will inform your revised course description.]

Delete and add your response

**5. Complete Part A of this guide**. Please reflect on the course you are re/designing and complete questions 1-4 (below).

***Bring all of your completed pre-work to Day 1 of the CDI***

**Part A: Learning Context & Situational Factors**

# *Key Question: What factors influence the design of your course?*

Effective course designacknowledges the context in which it is embedded. Context includes considerations about the learners (who they are and how they learn) and about the broader goals and outcomes defined at the departmental, faculty or societal level (professional bodies).

*Below are four questions for you to consider and document before Day 1 of the CDI.*

1. **What are you hoping to achieve with this re/design?** What are your goals during the CDI?

Delete and add your response

**2. What are the known factors or constraints of your course?** *For example class size, teaching assistant support, technical support, administrative support, the role of technology and/or technological support, time, experience, space, etc.*

Delete and add your response

**3. What do you know about the broader goals & context of your course?** *How does this course fit into the larger curricular context? What place does your course have in the curriculum (foundational, elective, etc)? What are the recommended or required pre-requisites for your course, and why? How does this course fit into the department, the institution, the profession? In what ways is your field or discipline changing and how might this be important?*

Delete and add your response

# ***4.* Visioning Exercise** *Imagine it is two years from now and you've run into one of your students who took your class. They’re telling you that the most important thing they learned in your class was X. What do you hope the X is? Write it down.*

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Delete and add your response

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# **Day 1**

# **Part** **B: Considering your Learners**

**What do you know about the learners who might take your course?** *What do you know about their needs or what they bring with them? What insights about students can you take back to your course design?*

Delete and add your response

# **Part C: Big Ideas & Essential Questions**

# *Key Question: What core understandings guide the learning?*

Understanding happens when learners actively make sense of what they are learning through inquiry, application, and reflection. Big ideas and essential questions act as scaffolding for understanding - from which they build connections to support their thinking. Understanding leads to transfer - which refers to the ability to determine when and how to apply what has been learned in different contexts (the ultimate aim of meaningful learning).

# **Big ideas:** What are the *linchpin ideas* in your course (ie. they hold together the related content knowledge)? What big ideas provide a way for learners to *structure new learning and build connections*? What understandings will endure as *organizing ideas* for learners to refer to and relate to as they learn and experiment with new ideas?

Delete and add your responses

**Tips for uncovering your Big Ideas**

Ask yourself one or more of the following questions as you consider the intention of your course:

* *Why study... Why should we care about...?*
* *What makes the study of ..."universal"?*
* *If this course was a story, what's the moral of the story?*
* *What's the big idea underneath the skill or process of...?*
* *What larger issue, problem or concept underlies...?*
* *What couldn't we do if we didn't understand...?*
* *How is ... used and applied in the world?*
* *How would we be changed if we understood...?*

# **Essential Questions:** *What questions act as a guide to learning in the course and may even form the basis of ongoing inquiry? What questions can you ask your students on a recurring basis to help them gain an understanding of the Big Ideas?*

Delete and add your responses

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Example, from a research methods course (the full worked example and course plan are at the end of the workbook):

Big Ideas (draft)*:*

*Research questions guide methodological decisions.*

*Research questions and decisions inform one another.*

*Many factors guide the methodological decisions of the researcher.*

*Research approach guides research design*

Essential Questions (draft)*:*

*How does context inform which approach you choose?*

*What’s the purpose of a research question?*

*What is the role of the researcher?*

**Additional Resources**

* **Big ideas:** examples and criteria :<http://bit.ly/1lku7Ba>
* **Essential questions**: Examples and criteria: <http://bit.ly/1kHJ3Zt>

**Day 1 Homework**

# ***Key Question: How will I determine priorities?***

How do I translate big ideas and essential questions into priorities for learning? Given the context of my course (including constraints of time, the level of the course, the format, etc) what do I want my learners to be able to know, do, value **by the end of the course**? What should my learners also be familiar with (but perhaps not to the level of knowing, doing, or valuing)?

The creative process of course design often unleashes many more ideas about why, how and what students might learn than can reasonably be addressed in a 13-week course. For this reason, it is helpful to determine priorities for the course. This framework will help you keep the Big Ideas at the forefront of your design and (from there) consider what learners will need to know, do and be familiar with as they work toward an enduring understanding.

**Priorities chart**

1. **Review your course map in detail, and identify what you want learners to be able to know, do, value by the end of the course**. Use the chart below to record your ideas (delete and replace the example text). You can also detail what they need to be familiar with in column 3.

|  |  |  |
| --- | --- | --- |
| **Big Ideas:**  *Research questions guide methodological decisions.*  *Research questions and decisions inform one another.*  *Many factors guide the methodological decisions of the researcher.*  *Research approach guides research design*  **Essential Questions:**  *How does context inform which approach you choose?*  *What’s the purpose of a research question?*  *What is the role of the researcher?* | **Possible Priorities: In order to understand Big Idea(s)... learners will need to know, do, apply, value….**  *Know the differences between the ‘big 5’ qualitative approaches*  *Learn how to critically examine published research*  *Understand all stages of the research process.*  *Value an ethical approach to research*  *Craft your own meaningful research questions* | **It will be important for learners to be familiar with…**  *The epistemological and theoretical perspectives of research approaches*  *Ethical issues in research studies*  *Strategies for increasing trustworthiness of the research* |

2. Once you’ve completed the chart, **share up to 4 of your priorities** [**on this google spreadsheet**](https://docs.google.com/spreadsheets/d/13QgOYZeCpsLbtd-0PqUplaIh0NMoq8MEKEtpdFrO-uI/edit?usp=sharing)

3. **Review the following document and answer the questions below:** [**Taxonomies of Learning**](https://wiki.ubc.ca/images/e/e8/Taxonomies_Informing_Learning_Design_Decisions.pdf), which highlights 3 different taxonomies of learning

* Bloom’s Taxonomy of Educational Objectives
* Fink’s Taxonomy of Significant Learning
* Wiggins & McTighe’s Facets of Understanding

3a. **Which taxonomy of learning resonates for you in terms of your priorities and what you hope your students will demonstrate?** *(it might even be a different taxonomy for each priority you’ve identified)*

3b. **What particular level, facet or category within taxonomy best describes each of your priorities?** *(e.g. Analyze, Empathy, Application ….)*

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*Using the research methods example:* Priority *(Taxonomy & Category)*

Know the differences between the ‘big 5’ qualitative approaches (*Bloom*, *Analyze*)

Learn how to critically examine published research *(Fink, Learn how to learn)*

Understand all stages of the research process *(Fink, Integration)*

Value an ethical approach to research *(Fink, Caring)*

Craft your own meaningful research questions *(Bloom, Create)*

Delete and add space for your responses

4.  **Review your One-Sentence Challenge.** Would you revise this in any way based on how you are now thinking about your course?

Delete and add space for your responses

**Day 2**

# **Part D: Evidence, Learning Outcomes & Assessment**

# *Key Question: What counts as evidence of understanding?*

What evidence will convince you, and your learners, that they are developing an understanding and are able to know, do, apply and/or value what you intend?

**Evidence of understanding**

Given the course-level priorities for learning you identified earlier, what evidence do you and your students need in order to convince you of the students’ learning?

In order to begin to answer the above, you need to consider how the content in your course can best be understood. Is it by doing, thinking about, discussing, experimenting, iterating, analyzing, etc...?

**\*\*\***

Example

If your course-level priority is:

Know the differences between the 5 major approaches to qualitative research

Then the evidence you may be seeking that they have met this course-level learning objective might include:

* Explaining the different approaches
* Differentiating the different methods used in each approach
* Evaluating the use of different approaches

You may find it helpful to revisit Bloom’s Revised Taxonomy (or other) to check if the verb listed in your priority statements need to be modified or are still suitable.

Use this **EVIDENCE TABLE** to document the evidence you will look for within each priority you’ve identified.

|  |  |
| --- | --- |
| **Priority** | **Evidence** |
| Know the differences between the ‘big 5’ qualitative approaches | *Explain the different approaches*  *Differentiate the different methods used in each approach*  *Evaluate the use of different approaches* |
|  |  |
|  |  |
|  |  |

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# **Revise priorities into course-level Learning Outcomes**

In this section, you will revise the priorities and evidence you identified above and translate these into course-level learning outcomes.

Suggested steps for translating the information in your evidence chart into course-level learning outcomes:

1. Revisit the priorities you identified
2. Review the possible evidence you’ve identified.
3. Combine your priorities and evidence to begin crafting course-level learning outcomes. Work on completing this sentence:

***By the end of the course, learners will:***

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Extending the example from above:

*By the end of the course, learners will be able to explain the differences in 5 qualitative approaches, differentiating the different methods used in each approach.*

Delete and add your responses here

**Assessment of understanding**

Understanding develops as a result of on going inquiry, experiment, reflection and re-working over time. Evidence of understanding needs to be collected over time, using varied methods, rather than as a single event (Wiggins & McTighe, 2005, p.152). Learners need opportunities to demonstrate understanding in ways that require them to reflect on their thinking and decision-making processes - they “why” they did what they did as much as the “how”.

Assessments for understanding are best grounded in learning tasks that are close to the sorts of activities that someone would engage in if they had a professional role in the area of study.

* How will they be **assessed** and what will they **produce** in order to be assessed (ie. research paper, series of blog posts, collection of images, etc)?
* **What** do you assess?
* **Why** do you assess?
* **Who** else assesses?
  + learners themselves
  + Peers
  + TAs
  + other instructors
  + community (through ratings, etc).

*\*\*\**

*Possible Assessments (from the research methods example, first learning outcome):*

* informal checks for understanding (use multiple-choice clicker questions or quizzes; self & peer)
* compare different research methods, summarizing the differences amongst them (put together brief summaries of different research studies, highlighting the differences, and why a particular approach was used)—perhaps a written paper, maybe a presentation or in group
* maybe the summaries can build into a larger paper or project throughout the term
* group work, given a research scenario, ask them to choose a method that best fits (activity)

**4-Column Course Planning Table**

Use this table to connect your Big Ideas, Essential Questions, Evidence, Learning Outcomes, and Assessment plans. Bring all of the pieces you’ve been working on together—this will help you to check for alignment and encourages revisions to your big ideas, learning outcomes and assessment plans. **Course design is an iterative process so be prepared to revise.**

**Don’t worry about column 4 yet** *(although you may find there is an overlap between your assessment and learning activities, use the column to make notes for yourself).* Replace example text and add your own.

|  |  |  |  |
| --- | --- | --- | --- |
| **Big Idea(s):** | | | |
| **Essential Questions:** | | | |
| **Evidence** | **Course-level**  **Learning Outcomes** | **Assessment** | **Activities** |
| What is **acceptable evidence** for demonstrating learning?  *Evidence of students’ ability to:* | What will people **have learned or developed** as a result of participating in your course?  *By the end of the course, learners will be able to…* | What are the **possibilities** for assessing the learning outcomes? | What activities or opportunities will help learners **build the capacity** for demonstrating or applying this learning? |
| -Explain the different approaches  -Differentiate the different methods used in each approach  Evaluate the use of different approaches | Explain the differences in 5 qualitative approaches, differentiating the different methods used in each approach | -informal checks for understanding (maybe multiple-choice clicker questions or quizzes)  -compare different research methods, summarizing the differences amongst them (put together brief summaries of different research studies, highlighting the differences, and why a particular approach was used)  -maybe the summaries can build into a larger paper or project  -group work, given a research scenario, ask them to choose a method that best fits |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Day 2 homework**

Continue working within your 4-column course plan, aligning and revising your learning outcomes and assessment plans. You will also begin thinking about the learning activities/materials that will support your learners.

The homework from Day 2 is documented on the participant website. Here is the link to the homework, at the top of Day 3’s Learning Plan:

<http://cdi.ctlt.ubc.ca/day-3-learning-plan/>

# **Day 3**

# **Part E: Learning Activities and Instructional Strategies**

# *Key Question: What learning activities and resources support learners in constructing and developing their understanding?*

The activities that learners engage in help them make sense of what they are learning and provide an opportunity to integrate what they know with what they are learning. Authentic learning challenges can motivate learners to participate in “real world” contexts.

Careful selection of learning activities is essential in order to support the understandings articulated and prepare learners for the assessments.

**Aligning activities for learning with desired learning outcomes and assessment completes the 3-stage design process.**

* What activities will **equip** learners to produce their evidence of understanding the central themes of the course?
* How will learners **engage** in questioning, provoking thought, addressing a challenge or analyzing and solving a problem?
* What sort of **learning challenges** are relevant to learners and linked to the big ideas of the course?

*Add to the final column of your 4-Column Course Planning table.*

See the completed table for the Research Methods course under Additional Resources (Part E).

# **Post- Workshop Next Steps**

# **Syllabus Prep**

# *Why is this course important to learners? How might the big ideas at the heart of the course relate to their lives? What gets you excited about this course?*

**How would YOU describe your course in a way that inspires (or at least engages) curiosity/interest?** - not the calendar description. Attempt to draft your thinking so far...Why is this course important in the world? Review your One-Sentence Challenge and elaborate or revise it.

Resource: \* Bart, Mary (2015) [A Learner-Centered Syllabus Helps Set the Tone For Learning](http://www.facultyfocus.com/articles/effective-classroom-management/a-learner-centered-syllabus-helps-set-the-tone-for-learning/) - Faculty Focus

**Course Sequence Planning**

You can begin to sequence your course themes and draft your ideas for in-class and out-of-class learning and resources. Add additional rows on this table to match the number of weeks in your course. *Note: this table works best as a full page in landscape format.*

|  |  |  |  |
| --- | --- | --- | --- |
| Week’s Theme\* | Out-of-Class Learning | In-Class Learning | Reading /  Resources |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Examples & Additional Resources**

**Completed 4-column planning table (Research Methods example)**

The goal in backwards design is to ensure that the learning activities and teaching strategies support the outcomes that you have defined and align with the Big Ideas and essential questions that you have deemed important for your context.

***Please note:*** *this example is not intended to be a research methods course to be put directly into practice. It is an artificially-constructed simplified course, meant to help all participants in the CDI (from a wide range of backgrounds & fields) view the course design stages.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Big Ideas/Enduring Understandings:***Approach guides design*  **Essential Questions:**   * *How does context inform which approach you choose?* * *What’s the purpose of a research question?* * *What is the role of the researcher?* | | | |
| **Evidence** | **Course-level**  **Learning Outcomes** | **Assessment plans** | **Activities/Resources** |
| Explain the different approaches  Compare the different methods used in each approach. | 1. Differentiate between the 5 qualitative approaches and their methods. | **Informal checks for understanding** of different approaches (maybe multiple-choice clicker questions or quizzes).  Compare different research approach and their methods, summarizing the differences amongst them (put together brief summaries of different research studies, highlighting the differences, and why particular approach was used)  -maybe the summaries can build into a larger paper or project  **Assignment:**  Research summaries: Find 5 published research studies in our field, each using a different approach. Summarize the research from each study: outline the context of the study, what approach they chose, what methods they used and why. | Readings about the different approaches: from basic to including the epistemological and theoretical perspectives of research approaches/methodologies  Review examples of different types of studies (use group work (Corners activity), having different groups work on different approaches (then comparing them)  Formative quizzes:  Clicker questions (group) or quizzes -no grades but participation    Group work, give a research scenario, ask them to choose a method that best fits and why; compare amongst groups  \* \*The studies they draw on are to be added to our growing list of class resources (for whole class to review as possible examples to inform their projects), organized by method. |
| Compare the features of published research  Describe the stages of research  Evaluate methodological decisions and provide alternatives for consideration | 1. Critically examine published research and evaluate the effectiveness of methodological decisions made at all stages in the research. | **Assignment:** Choose a new study to analyze in greater detail at all stages of the study: describe what the researcher did, describe the contexts to support the methodological decisions they made. Provide an assessment of their approach, and evaluate the research claims. If necessary, provide suggestions for improving the study. (not sure yet if individual or group assignment)  \*shared in class (informally at table groups) facilitate discussion and feedback with peers before submitting the assignment. Peers help each other evaluate the methodological decisions and provide alternatives. | Readings (or video) showing different stages of research (homework)  Review elements of published research: discuss & compare  Examine different types of research: comparing peer review and grey literature.  Model (when lecturing, work out problems together) of methodological decisions (provide alternatives to consider)--share process document on how to critically examine |
| Contribute to discussions on ethical issues  Respond thoughtfully to ethical dilemmas  Recognize that research design may need to be adapted based on ethical considerations. | 1. Value an ethical approach to research and research design | **Complete the online tutorial** (TCPS: ethical conduct for research involving humans) and submit certificate of completion  **Provide a reflective addendum** (self-assessment) with their final paper, after reviewing their reflective writings. What insights have they learned about ethical research and the ethical role of the researcher? | Students and instructor bring in ethical dilemmas to discuss (or draw on previously examined literature)  Followed by quick writes in the class & discussion (think, pair, share or 1-minute paper), etc.  Analyze how ethical principles have been interpreted across different approaches  The practice of reflective writing throughout the course (Quick Writes), on the ethical dilemmas discussed in class, and how research can be adapted in light of ethics. They also form the basis of their final self-assessment. |
| Craft research questions in relation to research problems  Adapt research questions and design to fit the approach, context, and research setting | 1. Design research studies that   align with the research approach. | **Group Assignment**: “5 different ways”  In groups, students agree upon a research problem that they are interested in studying (a real problem in the field). They design research studies from the lens of the 5 different approaches--so 5 different ways. They highlight how the study would change at particular stages in relation to the different approach used, such as changes in the research question, changes in recruitment, changes in methods, analysis and ethical considerations. They decide which approach is most effective to their individual research goals (and why)--which may not all necessarily be the same for each individual student.  \*Students post their “5 different ways” to study the research problem on UBC wiki, and student groups compare and give feedback to each other. | In class practice process of moving from research problem to research question;  Practice adapting the research scenarios from one method to another: use case approach in class; one case (example) and have each table design it differently |

**Completed course plan (Research Methods example)**—on following page

|  |  |
| --- | --- |
| **Qualitative Research Methods**  **Faculty of Education (500-level)** | |
| **BIG IDEA(S)**  Approach guides design | **LEARNING ACTIVITIES/RESOURCES**  Learning in this course will be supported by the following types of activities:   * Readings and work outside of class * Mini-lectures * Group work * Small and large group activities * Informal quizzes * Reflective writing activities * Feedback and sharing circles |
| **ESSENTIAL QUESTIONS**   * Does it matter which approach you choose? * What’s the purpose of a research question? * What is the role of the researcher? |
| **COURSE-LEVEL LEARNING OUTCOMES**   * Differentiate between the 5 qualitative approaches and their methods. * Critically examine published research and evaluate the effectiveness of methodological decisions made at all stages in the research * Value an ethical approach to research and research design * Design research studies that align with the research approach | |
| **ASSESSMENT PLANS**   * **Research summaries**: Find 5 published research studies in our field, each using one of the 5 different [qualitative] approaches we are investigating. Summarize the research from each study which includes outlining the approach, the context of the study, and what methods they used and why. The studies will be added to our class resources document for the whole class to review as possible examples to inform their projects. This will be organized by approach. * **Methodological Approach paper:** Choose a new study to analyze in greater detail, describing all stages of the study: describe what the researcher did, describe the contexts to support the methodological decisions they made. Provide an assessment of their approach, and evaluate the research claims. If necessary, provide suggestions for improving the study.   This assignment will first be shared in class informally at table groups to facilitate discussion and feedback with peers before submitting the assignment. Peers help each other evaluate the methodological decisions and provide alternatives.   * **Reflective Writing:** Submit a reflective writing with their final paper, on insights they’ve learned about the ethical response (role) of the researcher. * **Research “5 different ways” Assignment**: In groups, students agree upon a research problem that they are interested in studying (a real problem in the field). They design a research study from the lens of the 5 different approaches--so 5 different ways. They highlight how the study would change at particular stages in relation to the different approach used, such as changes in the research question, changes in recruitment, changes in methods, analysis and trustworthiness. They decide which approach is most effective to their individual research goals (and why)--which may not all necessarily be the same for each student.   Students post their “5 different ways” assignment on UBC wiki, and student groups compare and give feedback to each other. | |
| **LESSON PLAN OBJECTIVES**  *(once you’ve drafted your overall weekly plans for the course, begin working on your lesson plans)* | |
| **LEARNING ACTIVITIES** | |