COVID-19

CLTD Team

FACULTY REMOTE TEACHING E-BOOK

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Introduction



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Wits Learning and Teaching Plan 2020 -2024

- Increasing flexible and life-long learning opportunities
- Enhancing academics as university teachers
- Strengthening institutional capacity for curriculum development and renewal
- 4. Diversifying assessment methods
- Expanding postgraduate education
- Expanding innovative formal and informal learning spaces
- Using data analytics to promote student success.

Introduction

In the midst of the COVID-19 pandemic, many academic institutions around the world responded to the sudden need to move learning online, with what might be considered emergency measures. We at CLTD, similarly, created resources and worked with academics across the university to mitigate against the loss of learning opportunities our students were faced with.

To gauge the effects this move had on students, the Learning and Teaching Team engaged in a series of COVID-19 dialogues with faculty student advisers, faculty student council reps, and academics (see Resources, below). We suggest that while the initial move to online learning was necessitated by the pandemic and executed under pressure of time, a revised response is required. This will allow us to deepen the pedagogical underpinning of our practices. The purpose of this eBook is to formulate a response as we approach the second semester. In doing this, we have asked a number of questions, including:

- What can we learn from the last three months?
- What has been gained and what lost?
- How do we view curriculum design in this continuing crisis?

A second-level question has been:

If academics have had to reduce the quantity of content and the number of learning tasks and assessments, how do we address the anxiety that this may have diminished students' opportunities to learn?

Without making a claim to final answers, we suggest:

- that curriculum design needs to focus even more thoughtfully than before on what matters in particular disciplines;
- that students need to be given opportunities to develop self-directed learning agency, so that their learning is not constrained to the contents and engagements of particular courses; and
- that academics need to design complex assessment tasks that address the full range of cognitive levels, bring student identity to assessment tasks and, consequently, decreases the risk of assessment fraud.

This document contains some of our thoughts and responses to these imperatives, while working with the writing and research of others.

Resources

COVID-19 Dialogue Series: Exploring barriers to student interaction and engagement online

<u>Delivering High-Quality Instruction Online in Response to COVID–19</u> Wits Learning and Teaching Plan 2020 -2024

1. Pedagogy and Methodology

Why does **pedagogy** matter? How does theory (and reflection thereon) inform **methodologies** of learning and teaching? How might we engage in learning interactions with one another, so that we disrupt and recreate our collective becoming and ways of being in this world (ontologies). These are just a few questions to help us weave together the pedagogies and methodologies we use. While **pedagogy** refers to the theoretical underpinnings and science/art/craft of learning, the **methodologies** speak to the 'how to" or procedures and practices.

For example, while Socio-constructivist theory posits that learning happens best when we collaborate with others, a method that aligns with this theory is **dialogic learning** (students engaging in dialogue/debate/discussion with one another). Essentially, what we argue for in this faculty eBook is that as university teachers, thinking deeply about how learning happens, can inform the methodologies we routinely use (whether it be learner-, teacher-, learning-centred or other).



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2. Significant Learning

Very often academics spend valuable time preparing for their teaching and while good teaching fosters good learning, not all teaching translates into learning. It is important to give careful consideration to what students need to learn and how best to facilitate the learning process. It would be important then to focus on the course aims and objectives, the intended learning outcomes, the teaching and learning activities and the activities that need to be designed and aligned for a coherent and holistic learning experience.

Dee Fink (2003) offers a learning taxonomy that calls for learners to have a significant learning experience.

The Taxonomy of significant learning offers us 6 interactive categories of learning. The interactive nature of each kind of learning means that each kind of learning can stimulate other kinds of learning. The more you include each kind of learning, the more significant and valuable learning opportunities you will be creating for your students.

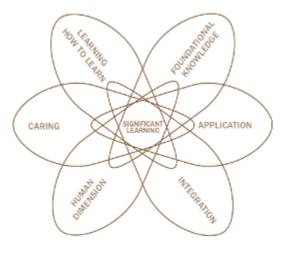


Figure 1 The Taxonomy of Significant Learning

Watch this video on Fink's Taxonomy

Significant Learning

Foundational Knowledge

 What key information (e.g., facts, terms, formulae, concepts, principles, relationships, etc.) is/are important for students to understand and remember in the future?

Application

- What key ideas (or perspectives) are important for students to understand in this course?
- What kinds of thinking are important for students to learn?
 - Critical thinking, in which students analyse and evaluate
 - Creative thinking, in which students imagine and create
 - Practical thinking, in which students solve problems and make decisions
- What important skills do students need to gain?
- Do students need to learn how to manage complex projects?

Integration

- What changes/values do you hope students will adopt?
 - Feelings?
 - Interests?
 - Ideas?

Human dimension

- What connections (similarities and interactions) should students recognize and make:
 - between ideas within this course?
 - between this course and other courses or areas?
 - between this course and the students' own personal, social, and/ or work life?

Caring

- What could or should students learn about themselves?
- What could or should students learn about understanding others and/or interacting with them?

Learning how to learn

- What would you like for students to learn about:
 - how to be good students in a course like this?
 - how to learn about this particular subject?
 - how to become a self-directed learner of this subject, i.e., having a learning agenda of what they need/want to learn, and a plan for learning it?

Useful Pedagogies and Methods

See Fink's guide for introductory comments, worksheets, and action questions in each of the three major phases of Integrated Course Design:

INITIAL DESIGN

PHASE: Build Strong Primary Components

INTERMEDIATE DESIGN

PHASE: Assemble the Components into a Coherent Whole

FINAL DESIGN PHASE:

Finish Important Remaining Tasks

When we teach we engage in two closely related, but distinct activities: We design the course and we engage in teacher-student interactions. In order to teach well, one must be competent in both course design and teacher-student interactions. However, of these two activities, our ability to design courses well is usually the most limiting factor. Most of us have had little or no training in how to design courses.

Dee Fink (2005)

Fink encourages us to reconsider a more powerful way of designing our courses, through an integrated course design that could encompass most or nearly all of the 6 categories of learning. He calls for a learning centred, systematic and integrated course design.



Figure 2 Model of Integrated Course Design

Resources

Dee Fink and Associates Guide to Course Design

3. Self-directed Learning



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Self-directed Learning

SDL involves a process characterised by autonomous, agentic students, who take responsibility for planning, initiating, and evaluating their own learning efforts. Dewey (1916, 1938) argued that humans have an unlimited potential for growth and as such, the facilitator (university teacher) should be the one who guides and facilitates the learning and not control the process of learning. That said, not all students exercise their agency or are self-directed. Nonetheless, students should be encouraged to actively address their learning needs and concerns and develop capacity for managing their own learning. As higher education teachers, we can develop students' capacity to be self-directed, rather than relying on an inherent (innate) self-directedness.

SDL encourages and actively supports student agency. Opportunities to become agentic learners can occur through scaffolding and skilful guidance.

Education, as Dewey puts it, is a moral craft. In this respect, then, discussion of self-directed learning has to consider well being—not just of the individual, but of the group as a whole.

Resources

Self-Directed Learning at Maastricht University
ResearchGate articles on self-directed learning
The Influence of Teaching Beyond Standardized Test Scores: Engagement, Mindsets, and Agency

Facilitation

Care: Being attentive and sensitive, yet not coddling in ways that undermine agency

Confer: Encouraging and respecting students' perspectives while remaining focused on learning goals

Captivate: Striving to make lessons stimulating and relevant to the development of agency

Consolidate: Summarizing lessons to remind students what they have learned

Clarity: Taking regular steps to detect and respond to confusion in class

Clarify: Developing clearer explanations of how skills taught are useful in the exercise of effective agency and in real life

Challenge: Pressing students to think deeply about their lessons with goals that require reasoning and agency in solving problems

Mediate learning...

...by demonstrating how to shift perspectives:

- between different points of view,
- between top-down and bottom-up views of knowledge domains,
- between anticipatory and reflexive views on learning (see Tversky, 2011).

...by facilitating a process through which

- students update their mental models
- "accurately and responsibly diagnose the strengths and weaknesses in their own forms of cognition and work" (Cunliffe, 2007, p.10).

...by pointing to cognitive strategies and making them visible, so that self-directed learners can **internalize** them as part of their repertoires (Schön, 1987) of resources and strategies for learning.

The "teaching voice" in self-directed learning

(adapted from © Saide 2018)

In the same way that a lecturer (in contact mode) is required to mediate the learning/content/skills, self-directed learning resources need to take on the role of the lecturer and do the same. Rowntree (1994) highlights the importance of embedding two types of "voices" in the learning materials. One, the teaching voice that mediates learning and the second, the social voice that motivates learners. Lockwood (1998) talks about unpacking the content. In the absence of a mediator (lecturer), the text must take over the dialogic role of providing structured and systematic support to the learner as they move from familiar activity ("the known") to unfamiliar activity ("the unknown"). In materials prepared for self-directed learning, the lecturer has to anticipate what the learner is likely to do, think and say.



Photo by@tolu-bamwo from nappy.co

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4. Discussionbased Learning

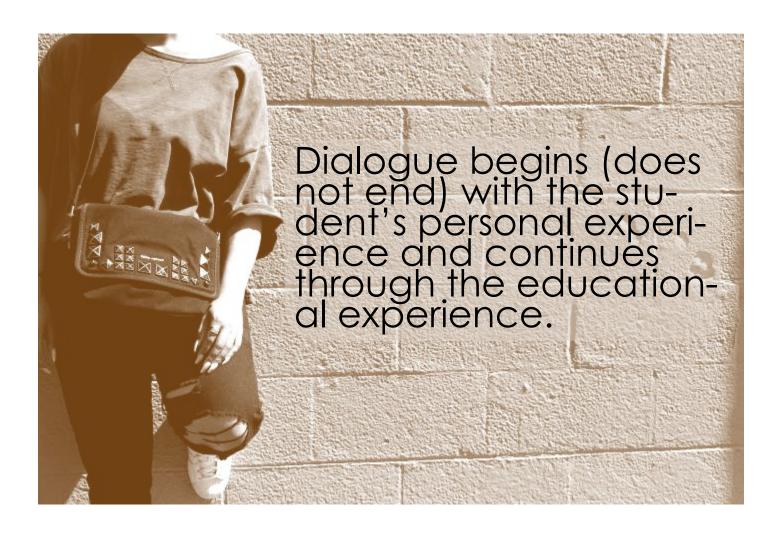


Figure 3 Dialogues begins with personal experience
Photo by @styleoncurve from nappy.co

Dialogues should be:

collective – if possible, all/groups of students should participate in classroom communication:

reciprocal – lecturers and students should listen to each other and share thoughts and ideas;

supportive – there should be freedom in the classroom to express one's own ideas without the fear of giving a wrong answer or being ridiculed;

cumulative – communication should be directed towards the gradual accumulation of knowledge;

purposeful – interaction should be subject to Intended Learning Outcomes (ILOs).

Discussion-Based Learning: Towards Dialogic Pedagogies

"Argumentation and dialogue are not simply alternative patterns of communication; they are principled approaches to pedagogy..." Sylvia Wolfe (2008).

Discussion methods present opportunities to make tacit knowledge explicit so that questioning, critique, persuasion and sense-making become a natural part of student being. Students develop their critical-thinking skills by interacting with other/multiple viewpoints or perspectives, in two-way conversation or dialogue. That is, knowledge is constructed in interaction.

Included is the exchange of open-ended, collaborative exchange of ideas among a teacher and students or among students for furthering students thinking, learning, problem solving, understanding, or literary appreciation. Participants present multiple points of view, respond to the ideas of others, and reflect on their own ideas in an effort to build their knowledge, understanding, or interpretation of the matter at hand.

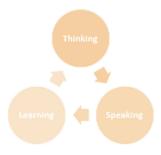


Figure 4 A close relationship exists between speaking, thinking and learning - Vygotsky (1978)

Resources

<u>Laurillard's Conversational Model Explained</u> <u>Discussion methods:</u>

5. Project-based Learning



Project-Based Learning

"Project-based learning (PBL) is a student-centred pedagogy that involves a dynamic class-room approach in which it is believed that students acquire a deeper knowledge through active exploration of real-world challenges and problems. There is evidence that PBL methods were being practiced in higher education in 16th century Europe (Hugg & Wurdinger, 2007). Four centuries later, PBL was a cornerstone of Dewey's (1900) progressive education theory in early 20th century America. Adderley's, (1975) description of project-based methodology is appropriate to meeting learning needs in our 21st century educational settings. PBL processes involve (a) identifying a problem and finding a solution; (b) taking initiative in a variety of educational activities either working individually or in a group; (c) producing an end product; (d) engaging in the work over an extended period of time; and (e) teaching shifts from lecturing to facilitating the learning process.

Talk to me... and I will forget
Show me...and I will remember
Involve me...and I will understand
Step back...and I will act
(Confucius quoted in de Graaf and Kolmos, 2009: 11)

PBL seems not to be integrated in higher education in a systematic manner. Its integration can mainly be found in the various fields like for example engineering, with which PBL has traditionally been identified (De Graaff and Kolmos, 2007) and in institutions and departments or centre's that have an interest in pedagogic innovation like the CLTD. PBL remains critically important in other disciplines where practical work in the laboratories, field trips, etc. may be integrated into the curriculum. This can be a challenge in the move to emergency remote learning and teaching.

In PBL, facilitators make learning come alive for students. The structural principles of the method reflect contemporary knowledge regarding the importance of autonomy, activity, and collaboration in learning, and harmonise well with the information age and its technologies. Students work on a project over an extended period of time that engages them in solving a real-world problem or answering a complex question. They demonstrate their knowledge and skills by creating a product or presentation for a real audience.

As a result, students develop deep content knowledge as well as critical thinking, collaboration, creativity, and communication skills. PBL unleashes a contagious, creative energy among students and facilitators, alike. Videos combined with a PBL setting can be a powerful tool to facilitate the shift from knowledge dissemination to knowledge appropriation. Besides, results show a high level of student's satisfaction and achievement during the course. The self-perceived competences obtained by the students during the course and those estimated qualitatively by the facilitator on the ground of the formative and summative evaluations reach far beyond those possible in a similar course with a traditional teaching approach.

Instructional videos in online learning

The identification of suitable educational tools can greatly encourage faculty members to rearrange their course design and implement such active teaching. In this discussion the combined use of videos, a flipped-classroom and project-based arrangements for successfully promoting such active learning setting is modelled.

Video has become an important part of higher education. It is integrated as part of traditional courses, serves as a cornerstone of many blended courses, and is often the main information delivery mechanism in MOOCs. Several meta-analyses have shown that technology can enhance learning (e.g., Schmid et al., 2014), and multiple studies have shown that video, specifically, can be a highly effective educational tool (e.g., Kay, 2012; Allen and Smith, 2012; Lloyd and Robertson, 2012; Rackaway, 2012; Hsin and Cigas, 2013). In order for video to serve as a productive part of a learning experience, however, it is important for the facilitator to consider cognitive load, engagement (affective domain) and active learning.

By no means do videos serve as the answer to PBL but they may be one way of engaging in PBL. However, one has to be wary when thinking about how to facilitate videos in online learning and teaching.

Resources

<u>Instructional videos and Cognitive Load Theory</u>

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Effective educational video

- Cognitive Load
- Engagement (affective domain)
- Active Learning

6. Assessment Strategies for Online Learning



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Assessment guidelines:

- •Activities: What do I want my learners to do and what will learners be doing as they accomplish the outcomes? The emphasis here must be on doing.
- Content: What concepts or understandings do I want my learners to know and how will they show me that they know them? The emphasis is on understanding.
- Processes: What processes do I want learners to develop and how will they show me that they are developing these processes? The emphasis here is on experiencing, practising and applying cognitive processes.
- Dispositions: What habits to I want my leaners to develop and how can I help them in their development? How can they show me that they are developing appropriately?

(Conrad and Openo, 2018)

Assessment Strategies for Online Learning

Assessment touches on every aspect of teaching and learning (Medland, 2016) and offers "the most powerful lever the lecturer has to influence the way students respond to the course (Gibbs, 1999). It affects all aspects of teaching and learning and frames what students do (Boud, 2007). Assessment signposts what the institution gives priority to in ways that are clearer and more persuasive than a syllabus or course outline. In the current move to remote learning, lecturers have to reconceptualise their assessment methods for online learning. This is especially important since designing online assessment requires lecturers to consider issues such as validity, reliability, authenticity, accessibility, legality, security and academic integrity. In the light of the COVID-19 pandemic, two questions worth asking are:

- What does assessment look like when most students are no longer on campuses?
- What are the opportunities and threats associated with such assessments?"

To design for constructive alignment (Biggs, 2011) between course outcomes and assessment tasks, lecturers should ensure that assessment and intended learning goals influence what and how students learn.

Take-home assessment is an assessment that the students can do at any location of their choice, it is **non-proctored** and the time limit is extended to days rather than hours as is the typical time limit for an in-class assessment.

Resources

Alternative Assessments

Take-home Assessments

Disadvantages

- Compromised by unethical student behaviour
- Students only hunt for answers
- Writing and marking are time-consuming
- Undermines long-term learning
- Generates long answers
- Affects students' study habits
- Not suitable to assess recall-type of questions

Advantages

- Reduces student anxiety
- Can be designed to test higher-order thinking
- Provides good learning experiences
- Promotes self-directed learning
- Encourages students to consult one another
- Shifts perspective from teaching to learning
- Permits testing content not covered in class
- Greater rigor can be expected from student answers.

Bengtsson (2019) offers the following solutions for some of the challenges identified.

- Ask proof and justifications for all answers
- Give students clear instructions
- Incorporate graduate attributes in your assessments.
- Ask questions that assess relevant skills for successful job performance.
- Ensure that items are highly contextualized.
- Include items that promote problemsolving.
- Grade-down for copying without references.

- Students still need to prepare for the exam even though it is a THA.
- Assign questions randomly.
- Ask for handwritten answers.
- Narrow the time frame to complete the assessment.
- Create worthwhile tasks (project-based tasks).
- Use proctored, timed tests to assess recalltype questions.
- Ask proof and justifications for all answers.

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7. What matters in curriculum design and assessment?

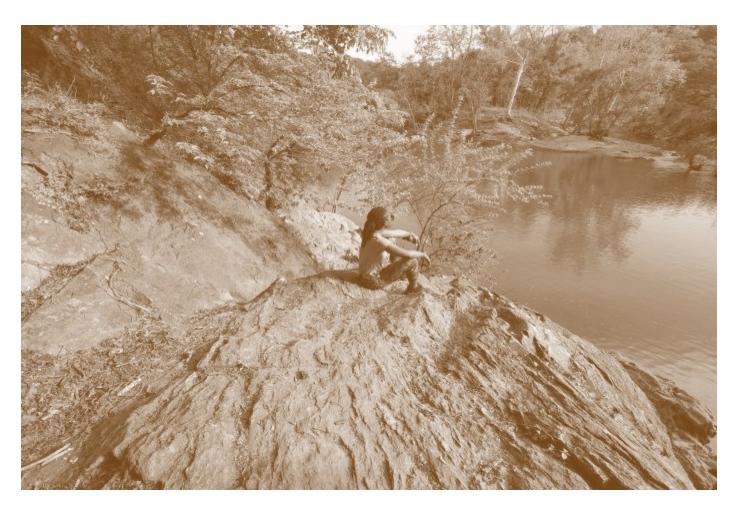


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What knowledge matters?

- Higher-level skills are more abstract and more transferable/ applicable across contexts. These are eminently human skills.
- Lower-level skills are more specific and detailed. They do not transfer across contexts. They can be replaced by computers.

The progression of knowledge:

- Concept
- Hypothesis
- Theory
- Accepted
- Out of date

The currency of knowledge can be affected by changes in the environment:

- Social
- Political
- Cultural
- Geographic
- Environmental

What matters in curriculum design and assessment?

Academics are under pressure to reduce the quantity of content, learning tasks and assessments as students shelter in place during the COVID-19 pandemic. This forces us to consider what really matters and what can be thought of as supplementary. While all knowledge has value, a student-centred approach requires us to ask whether the knowledge components we have in mind

- will transfer across contexts;
- will serve graduates over time; and
- will develop self-directed and self-regulated learning agency.

By drawing on 'topographical intelligence' (Wardley, 2018), it is possible to map the components of a course, with student-centeredness in mind. In contrast to 'mind-maps', topographical mapping requires that components be positioned relative to each other. This makes it possible to identify which components support course and qualification outcomes and in what order. Topographical thinking also allows us to consider movement across a terrain. This may prompt academics to consider how knowledge changes in currency and in its relation to a specific time and place.

Once course components have been arranged in relational ways, it is possible to identify assessment points that account for the components of knowledge as well as complex cognitive processes. What is more, these kinds of tasks allow students to bring their identities to the creation of assessment artefacts. This reduces problems with 'cheating' and gives students opportunities to imagine themselves in the particular ways that specific disciplines afford.

Resources

What matters in Curriculum and Assessment Design

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8. CLTD Courses



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Facilitating Online

Learning

Wits Moving Your Course Online

Curriculum Development suite (CD's)

CLTD Courses

Facilitating Online Learning

As a Wits academic, you have been requested to teach remotely. This accredited short course - based on a UCT open educational resource - has been reconceptualised for the Wits context. The course will assist you in this new role as an online facilitator and designer of online interactions and engagements. In this course, you will develop:

- the design skills required to create interactive online learning experiences (please bear in mind that this is not a course on using Wits-e, but on facilitating online learning)
- the facilitation skills required to enable meaningful online discussions (in collaboration with a partner, you will be expected to facilitate one online activity for your peers)
- and the technical skills to use tools (such as blogs, podcasts and synchronous communication software) to deepen student engagement.

Resources

Facilitating Online Learning Participant Guide

Wits Moving your Course Online

(Self-paced Course)



Curriculum Development Suite (CDs)

The rate of change in the world demands that we re-imagine and restructure the foundational learning relationships between student, knowledge, and teacher. New ways of thinking about curriculum are needed if we are to respond to the current challenges and future demands for excellence in Higher Education.

Curriculum lies at the heart of what Higher Education institutions do with and for their students and constitutes the main vehicle through which the aims of Higher Education can be achieved. It is thus vitally important for the design, development, implementation and ongoing renewal of curriculum to be underpinned by sound educational principles, guided by the values espoused by the institution offering the curriculum and fit for clearly articulated purposes.

While the fundamental questions around curriculum design and development remain the same, the contexts and challenges keep evolving and changing. It is therefore important to encourage and support academic staff to develop appropriately structured and deepened curricula that promote the Wits key graduate attributes.

This programme is structured for academics who wish to evaluate, revise or develop a curriculum at course or preferably programme level. The various aspects of the programme will address selected curricular issues, including selecting, sequencing and aligning the knowledge areas that underpin the discipline or profession and the creation of curricular 'spaces' to support and enhance student learning.

Academics can opt to enrol for all 5 workshops within the series or may enrol for only selected workshops as needed.

Series of workshops

CD0: Learning and Teaching Philosophy

CD1: Curriculum orientations and principles underpinning curriculum design

CD2: Open Pedagogies

CD3: Assessment for learning in Higher Education

CD4: Curriculum Development

CD5: Course Approval

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