



UNIVERSITY OF
KWAZULU-NATAL™
INYUVESI
YAKWAZULU-NATALI

COLLEGE OF AGRICULTURE,
ENGINEERING AND SCIENCE

A Guide to Navigating Online **TEACHING and LEARNING**



INSPIRING GREATNESS

Navigating Online Teaching and Learning

Table 1. Platforms & Tools for Online Teaching

	Moodle	Google Classroom	Zoom	Skype	Microsoft PowerPoint	Handbrake	Kaltura
Lecture (live interactions)	✓	✓	✓	✓			
Notes & Lectures (recorded)	✓	✓					
Record lectures			✓	✓	✓		
Assessments	✓	✓					
Compress files						✓	✓



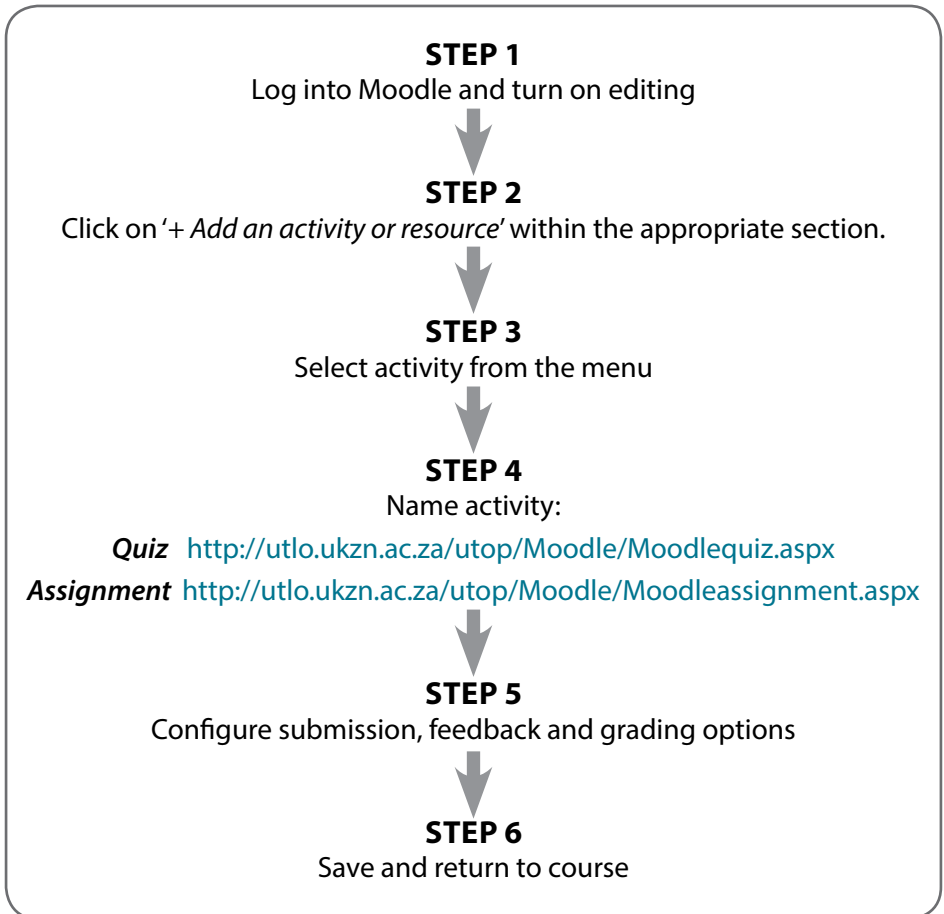
Moodle Notes, Assignments & Quizzes

<http://utlo.ukzn.ac.za/utop/Moodle.aspx>

<https://youtu.be/g2suguyDuF8>

https://www.youtube.com/watch?time_continue=11&v=GalVxoxiAbQ&feature=emb_title

https://www.youtube.com/watch?time_continue=3&v=mOVcFBaaSxw&feature=emb_title



PowerPoint Recording

<https://www.youtube.com/watch?v=UdeRJplxCF0>

STEP 1

Prepare lecture notes on Microsoft PowerPoint with all animations etc.



STEP 2

Start recording narration by going to the 'Slide Show' tab under which you will find 'Record Slide Show'



STEP 3

Once complete, go to 'File' ⇒ 'Save As' ⇒ choose a destination ⇒ name the file
⇒ choose MPEG-4 Video as file type



STEP 4

Share your video by uploading on chosen learning platform.

<https://youtu.be/1Z8tyVNA7pE>





Zoom

STEP 1

Sign up with UKZN e-mail to access Educational package features
<http://utlo.ukzn.ac.za/utop/Zoom.aspx>



STEP 2

Once you have successfully completed registration you can start a meeting immediately or schedule one.



STEP 3

Invite participants by either sending a meeting invitation, the URL or via OUTLOOK as an appointment.



STEP 4

Start meeting/webinar with waiting room enabled for enhanced security
<https://zoom.us/docs/en-us/privacy-and-security.html>



STEP 5

Disable all video and audio for participants upon entry to reduce bandwidth.



STEP 6

Slides and whiteboard can be shared with participants with 'screen share'
<https://support.zoom.us/hc/en-us/articles/201362153-How-Do-I-Share-My-Screen->



STEP 7

Sessions may be recorded, saved and shared on learning platforms.
Pre-recording a lecture is also possible.
<https://support.zoom.us/hc/en-us/articles/201362473-Local-recording>

<https://www.youtube.com/watch?v=GjhHsTmXCKg>

Google Classroom

STEP 1

Sign up for an account at classroom.google.com
<https://www.youtube.com/watch?v=M6L-nZGIUTE>



STEP 2

Once signed in select 'I am a teacher'



STEP 3

Create a class by clicking on the '+' sign



STEP 4

Name your class and generate a code which can be used to invite students to the class



STEP 5

Familiarize yourself with 'Stream' (allows you to communicate with your class), 'Classwork' (set assignments, topics, upload notes) and 'People' (manages teachers and students).



Video Compression

STEP 1

Download and install **Handbrake** video compression tool from <http://handbrake.fr/>



STEP 2

Once installed, open the application and select file for compression



STEP 3

Choose destination for new file by clicking 'Browse'



STEP 4

Name video and save



STEP 5

Under Output Settings ⇌ Container ⇌ choose MP4



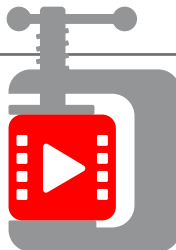
STEP 6

Adjust audio and picture before selecting 'Start Encode'



STEP 7

Once this is done, you can upload onto your chosen learning platform



Online Pedagogy

“Pedagogy is the art (and science) of teaching” (Bhowmik et al., 2013, p. 1). Positive learning outcomes are dependent, to a large extent, on appropriate pedagogical practices (Muller & Hoadley, 2019; Pollard, 2010). Within the context of the online environment, successful teaching and learning are dependent on the synergy of technology, pedagogy and content knowledge (TPACK) (Koehler & Mishra, 2009). To this end, Blewett (2017) proposes the Activated Teaching Classroom (ACT) model, which consists of five digital pedagogies. In contrast to the traditional consumption pedagogy (where students passively absorb large amounts of information), these digital pedagogies require varying levels of cognitive engagement by the student. The table below contains a brief description of these pedagogies, the platforms and tools that can be used to implement them:



Table 2. Taxonomy of pedagogies

Pedagogy		Description	Platforms & Tools
1	<i>Consumption</i>	Passive content consumption	<ul style="list-style-type: none"> • Books • Notes (Moodle & Google Classroom) • Videos (Moodle, Google Classroom & YouTube)
2	<i>Curation</i>	Content organisation	<ul style="list-style-type: none"> • YouTube • Pinterest • Instagram
3	<i>Conversation</i>	Student discussion (teacher-directed or open)	<ul style="list-style-type: none"> • Forums (Moodle & Google Classroom) • Facebook • Twitter • Zoom • Skype
4	<i>Correction</i>	Focus on learning process over product	<ul style="list-style-type: none"> • Wikis • Quizzes (Moodle and Google Classroom) • Incorporation of questions within recorded lectures
5	<i>Creation</i>	Content generation/innovation	<ul style="list-style-type: none"> • YouTube • Zoom • TikTok
6	<i>Chaos</i>	Relationship identification/meaning-making	<ul style="list-style-type: none"> • YouTube • Zoom • TikTok • Instagram • Facebook • Pinterest

Please note the following:

- Register for Activated Teaching Course by Craig Blewett for a more comprehensive explanation of online teaching and learning. Go to Moodle to register for the course <https://moodle.ukzn.ac.za>
- For instructional videos visit the UTLO page <http://utlo.ukzn.ac.za/utop.aspx> and the CAES T&L page https://caes.ukzn.ac.za/teaching_and_learning/
- The CAES Emergency Remote Teaching module is open for self-enrolment:

Module name: ERT Sandbox

<https://moodle.ukzn.ac.za/course/view.php?id=39693>

Enrolment key: Sandbox2020

This module was designed as a support platform for online teaching and learning. Within this module you are encouraged to experiment with various Moodle features. It also has a forum for sharing ideas, experiences and concerns.



References

- Bhowmik, M., Banerjee, B., & Banerjee, J. (2013). Role of pedagogy in effective teaching. *Basic Research Journal of Education Research and Review*, 2(1), 1-5.
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- Koehler, M., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary issues in technology and teacher education*, 9(1), 60-70.
- Muller, J., & Hoadley, U. (2019). Curriculum Reform and Learner Performance: An Obstinate Paradox in the Quest for Equality. In N. Spaul, J. D. Jansen (eds.), *South African schooling: The enigma of inequality* (pp. 109-125). Springer, Cham.
- Pollard, A. (2010). Professionalism and pedagogy: a contemporary opportunity: a commentary by the Teaching and Learning Research Programme and the General Teaching Council for England.



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