Teaching

Sequence, 5 sessions, 1 week
This sequence of sessions builds students' knowledge and skills in designing and facilitating learning.

Each student updates or develops a statement of their philosophy of education. Together, they learn about and discuss:

- Different teaching styles for large classes.
- Virtual, blended or in-person approaches.
- Designing courses and curricula.
- Using advanced technologies for teaching and learning.

By the end of this sequence of sessions, each student outlines a proposal:
How I can contribute to the teaching of research methods at my institution?

Download [the curriculum](#) for this sequence.

Sessions

Timetable
Use or adapt this timetable to hold these integrated sessions over one week.

Monday	Tuesday	Wednesday	Thursday	Friday
Teaching with Purpose/ Politics of Education (Session 1)	Curriculum Design	Teaching Large Classes (Session 4)	Tech Tools (Session 5)	Tech Tools
Curriculum: Backward Design (Session 2)	Learning Theories and Teaching		Tech Tools	Feedback and evaluation (Session 4)
	Strategies (Session 3)			

Session 1. Teaching with Purpose/Politics of Education | 3 hours

Encourage participants to think of teaching as part of the mission of social development. Teaching is never only about the transfer of disciplinary content.

This session introduces participants to the concept and teaching philosophy of the citizen Scholar. Emphasise that teaching helps to shape the citizens of tomorrow and that this fosters the core objective of universities: to develop thoughtful individuals capable of reason and care for community.

Outcomes
By the end of the session, students can:

- Translate the relevance of teaching to social, political, and economic development in their local context.
- Work in teams to develop an intervention at their university that encapsulates the development of Citizen Scholars.
- Describe the philosophical basis of Citizen Scholar.
- Identify disruptions facing university education.
- Describe the proficiencies and attributes that citizens of tomorrow need in order to contribute to society.

Preparation
Create or source a presentation to introduce the concept of the Citizen Scholar.
Read, share, and draw on:

> Arvanitakis, J., and Hornsby, D.J. (Eds). (2016). Universities, Citizen Scholars, and the Future of Higher Education. Critical University Studies Series. Palgrave MacMillan Publishers.

Assessment
Each group's 'intervention document', conceptualising how they can foster the Citizen Scholar within their own teaching environments. (Step 2.)

Steps

1. Present the concept of the Citizen Scholar and invite discussion.2. In small groups, students conceptualise and write up an intervention to foster the Citizen Scholar within their own teaching environments.
2. Back in plenary, engage students in discussing the philosophical bases of the Citizen Scholar.
3. What types of disruption do universities face, locally and globally? Discuss in plenary.

Session 2. Curriculum: Backwards Design | 6 hours

This session covers the process of using 'backwards design' to develop a lesson plan: by aligning performance goals, assessment, and learning objectives to lead to content and learning activities.

Participants discuss the elements of a curriculum and the relationship between them:
- Performance goal.
- Learning objectives.
- Content.
- Learning activities and assessment.

Students design their own lesson plan using the backwards design approach and, give and receive, feedback in pairs. They will be able to apply these same backwards design principles to develop a course or a full curriculum.

Outcomes
By the end of these steps, students can:
- Describe the backwards design curriculum development process.
- Write measurable learning objectives in relevant learning domains, using Bloom's taxonomy of educational objectives.
- Apply the alignment of backwards design elements.
- Create a lesson plan for a course they currently teach.
- Evaluate the lesson plan of a peer and give productive feedback.

Preparation
Line up this video to screen in the session: Backward Design Overview with Examples
Prepare or source a short presentation on productive feedback.
Source and share Bloom's taxonomy and the Backward Design template (annotated).
Prepare or source a short presentation on the use of rubrics and an example of a rubric to share with students (rubric to assess a lesson plan).

References:
Crocker, W. Backward Course Design. Center for teaching, Western University, Canada.
Stevens, D. D., & Levi, A. J. (2005). Introduction to Rubrics: An assessment tool to save grading time, convey effective feedback and promote student learning. Sterling, VA: Stylus Publishing; pp. 96-97.

Assessment
Complete lesson plan.

Steps

Time	Step	Who
As needed	1. Learn about backward design	Individuals
As needed	2. Identify a performance goal	Individuals
As needed	3. Describe assessment of learning objectives	Individuals, plenary
As needed	4. Apply Bloom's taxonomy	Plenary, individuals
As needed	5. Create a complete lesson plan	Individuals
As needed	6. Evaluate a peer's lesson plan	Plenary, pairs

Step 1: Learn about backward design
As needed

Students read the references and watch the [video](#).

Step 2: Identify a performance goal
As needed

As introduced in the video, learning priorities are established by long-term performance goals—what it is we want students, in the end, to be able to do with what they have learned. After discussing this idea as a group, each participant identifies a performance goal for a lesson that they teach in a current course.

Step 3: Describe assessment of learning objectives
As needed

Use slides to present on productive/ constructive feedback. Each student will go on to include a formative assessment task in their lesson plan.

Step 4: Apply Bloom's taxonomy
As needed

Share links to a graphic and verb lists, as you introduce the three domains of Bloom's taxonomy and discuss the structure of a learning objective. Each student will go on to define the learning objectives of their lesson in relevant learning domains.

Step 5: Create a complete lesson plan
As needed

Each student creates a lesson plan for a course they currently teach, applying everything they have learned in this session, to align curriculum elements and complete the backward design planning template.

Step 6: Evaluate a peer's lesson plan
As needed

Introduce the use of rubrics with an example. In pairs, students use the rubric to evaluate each other's lesson plans.

Session 3. Learning Theories and Teaching Strategies | 8 hours

Introduce students to learning theories. Emphasise the constructivist learning theory as a paradigm for teaching and learning, and discuss its implications for teaching in higher education.

Students differentiate between different teaching strategies and assess their value and applicability.

Outcomes

By the end of the session, students can:

- Identify and explain their educational philosophies.
- Analyse how educational philosophies influence the choice of teaching strategies.
- Distinguish between constructivist learning theory and other learning theories.
- Explain learner-centred teaching strategies.
- Select and justify learner-centred teaching strategies to deliver the lesson plan they developed in the previous session.

Preparation

As facilitator

Print copies or share links:

- Cohen, L.M. (1999). Educational Philosophies [Self-Assessment](#).
- [Educational Philosophies Self-Assessment Scoring Guide](#).
- [28 Student-Centered Instructional Strategies](#).

Prepare or source a presentation on constructivist and other learning theories. (Step 5).

Students
Pre-reading:

- Mukhalalati, B.A., and Taylor, A. (2019). [Adult learning theories in context](#): a quick guide for healthcare professional educators. Journal of medical education and curricular development, 6, p.2382120519840332.
- Stefaniak, Jill E., and Monica W. Tracey. [An exploration of student experiences with learner-centered instructional strategies](#). Contemporary Educational Technology 6, no. 2. (2015): 95-112.

Additional reading

- Shah, R.K. [Effective constructivist teaching learning in the classroom](#). Shanlax International Journal of Education 7, no. 4. (2019): 1-13.
- Howles, Les. [How Instructional Designers Work and Think in Online Higher Education](#): A Review of The Learner-Centered Instructional Designer: Purposes, Processes, and Practicalities edited by Jerod Quinn. eLearn 2021, no. 10. (2021).

Assessment
Tables highlighting the differences between constructivist learning theory and, for example, behaviourism, and cognitivism. (Groups).
A revised lesson plan that describes and justifies instructional methods. (Individuals).
What they discovered about themselves as educators. (Self-assessment).

Steps

Time	Step	Who
As needed	1. Identify one's own educational philosophy	Individuals
As needed	2. Relate philosophy to teaching strategies	Groups, plenary
As needed	3. Distinguish between learning theories	Facilitator, groups
As needed	4. Explain learner-centred teaching strategies	Groups by institution
As needed	5. Select method/s to deliver the lesson plan	Individuals

Step 1. Identify one's own educational philosophy
As needed

To identify and explain their educational philosophies, each student completes the [self-assessment](#) and then uses the [guide](#) to score themselves.

Step 2. Relate philosophy to teaching strategies
As needed

Within groups, pairs of students report to each other what they learned about themselves as educators.

Then the full group analyses how individual educational philosophies, influence the choice of teaching strategies.

Step 3. Distinguish between learning theories
As needed

Give a presentation to introduce constructivist learning theory.

In groups, and with reference to their reading of [Mukhalalati, B.A., and Taylor, A., 2019,](#) students create a table of the differences between constructivist learning theory and others such as behaviourism and cognitivism.

> ### *Step 4. Explain learner-centred teaching*
> *As needed*
>
> If your workshop includes participants from different institutions, group them by institution for this step.
>
> In groups, and with reference to [28 Student-Centered Instructional Strategies](), students identify the teaching strategies that are most common in their institutions.
>
> ### *Step 5. Select method/s to deliver the lesson plan*
> *As needed*
>
> Using Mia Macmikeen's summary of [28 learner-centered instructional methods](), each participant selects the learner-centred instructional methods they will use in the delivery of the lesson plan they developed previously. They justify their choice of method/s in the revised lesson plan that they submit for assessment.

Session 4. Teaching Large Classes | 3 hours

This session introduces participants to the challenges and opportunities of large-class teaching. For teaching and learning with adults – known as andragogy – many methods, based on empirical research, exist. Once the instructor engages with appropriate teaching and assessment strategies, a large class can become an opportunity.

Outcomes

By the end of the session, students can:

- Analyse challenges of large class teaching.
- Evaluate opportunities of large class environments.
- Demonstrate importance of andragogical delivery strategies such as active learning.
- Evaluate the importance of continuous assessment opportunities.

Preparation

Create or source a presentation to introduce:

- The challenges and opportunities of teaching large classes.
- Teaching strategies and assessment moments for large classes.

References

- Hornsby D.J., Osman, R., and De Matos Ala, J. (Eds). (2013) [Teaching Large Classes](): Interdisciplinary Perspectives for Quality Tertiary Education. Higher Education Series, SUN Press.

As for Session 1:

- Arvanitakis, J., and Hornsby, D.J. (Eds). (2016). [Universities, Citizen Scholars, and the Future of Higher Education](). Critical University Studies Series. Palgrave MacMillan Publishers.

Additional reading

- De Matos Ala, J., and Hornsby, D.J. (2015) [Introducing International Studies: Student Engagement in Large Classes](). International Studies Perspectives. 16(2):156-172. doi: 10.1111/insp.12036.

Assessment

Lists of active learning strategies and assessment strategies.

Steps

Time	Step	Who
As needed	1. Present large-class teaching	Facilitator, plenary
As needed	2. Evaluate methods and strategies	Small groups

Step 1. Present large-class teaching
As needed

Present on the challenges of large-class teaching and invite discussion and analysis, with reference to [Arvanitakis, J., and Hornsby, D.J. (Eds). (2016)](#).

Then present on the opportunities and invite discussion, with reference to [Hornsby D.J., Osman R., and De Matos Ala, J. (Eds). (2013)](#)

Step 2. Evaluate methods and strategies
As needed

In their groups, students list active learning strategies and discuss how to integrate active learning into their classrooms.

They go on to list assessment strategies and discuss how to integrate continuous assessment into their teaching.

Session 5. Presentation and Tech Tools | 12 hours

In this session, teach the basic principles involved in the presentation of scientific information, and of typography in writing reports, and scholarly papers.

As educators, your participants are expected to use best practices in digital technology for teaching and research communication. In this session, cover four main areas:

1. Graphic and information design. Design in visual communication is a requirement and not a cosmetic add-on. Work through the basics of typology, graphics, and color as well as the fundamentals of layout: arranging text and images on a page according to an aesthetic scheme and for the purpose of clarification.
2. Intermediate and advanced PowerPoint. This Microsoft presentation software is underutilised and is misused. Guide participants to become sophisticated users of PowerPoint.
3. Storytelling. This angle on communication is experiencing a renaissance in communication across all professions and disciplines. Encourage your participants, using storytelling concepts for a presentation as a whole, with different acts, a story arc, and where appropriate a touch of drama.
4. Typography. Good typography is part of good writing. As writers of scholarly works, your students must hold their documents to the same standards as professionally published material. There are no technical barriers to achieving the same results.

Outcomes

By the end of the session, students can:

- Distinguish good and poor informational and visual design.
- Produce graphics and animations, and construct tables based on best practices in design.
- Use best practices in scientific storytelling to organise and deliver presentations.

Preparation

Engage or involve a co-facilitator, resource person, or instructor with video experience to support students' hands-on activities.

Download a free 30-day trial of video capture and editing software, [Camtasia](#).

Prepare or source a short "how-to" presentation on recording, editing, and rendering video. (Step 2).

Prepare or source a presentation to introduce digital tools. (Step 3).

Additional reading and viewing

[NMC 2014 Horizon Report](#) or more recent versions of this annual resource, providing information on short, medium, and long-term trends in educational technology and instruction.

[Leading Voices in Higher Education: Jeff Selingo](#) YouTube video on the disruption of higher education and the use of technology.

[Write Like a Professor](#) video playlist on writing a research term paper, an example of what can be done with instructional video.

Assessment
1-minute video profiles.
30-second videos.

Steps

Time	Step	Who
As needed	1. Present large-class teaching	Facilitator
As needed	2. Evaluate methods and strategies	Students
As needed	3. Produce and critique presentations	Students

Step 1. Introduce digital tools
As needed

Introduce the goals of the session and present a concise overview of digital concepts, strategies, and tools in academic research and teaching.

Screen and discuss this 12 min video by J. R. Carey [15 digital ideas in teaching](#).

Step 2. Produce video profiles
As needed

Give a short "how to" lecture on recording, editing, and rendering video.

Screen the first four sets of [Camtasia tutorials](#). Share the link so that students can refer back for guidance.

With guidance from an instructor, students create a one-minute digital profile.

Step 3. Produce and critique presentations
As needed

Introduce digital tools and concepts in teaching including:
- The use of Learning Management Systems (LMS).
- Online, hybrid courses.
- MOOCs.
- The use of Skype in teaching.
- Producing video playlists.

Participants learn to produce better quality video by recording narration separate from screen capture, and then synching the two. With the support of an instructor, students record, edit, and render a 30-second video.

In plenary, and with reference to text and video resources, students view and critique each other's presentations.