

Promoting active learning in the spanned classroom



Spanned classroom



Definition: The simultaneous delivery of a lesson across two or more physical classrooms.

Technology: Fitted out with presenter and audience microphones, room cameras and computer monitors.

Opportunities: To enhance reach and student engagement.

Where appropriate: Use Cases and Best Practices for Spanned Classroom Delivery <u>Tip Sheet</u>.



Learning outcomes

By engaging with this set of resources, you will be able to:

- Determine how the spanned classroom is positioned within the week's learning cycle
- Adopt a simple framework to organise learning and teaching experiences for the spanned classroom
- Employ strategies that promote student engagement and learning in the spanned classroom
- Implement management procedures to ensure a high-quality student experience within the spanned classroom

Learning Outcome 1:



Determine how the spanned classroom is positioned within the week's learning cycle

5Es

Engage

 How will you capture student attention and enable connection with prior learning and experiences?

For example,

Explore

 How will you guide students to investigate and think more deeply about the week's focus? **Canvas LMS**

Explain

 What are the key concepts and skills that students need to achieve learning outcomes?

Elaborate

 How will students share and apply their knowledge and skills? **On-site classroom**

- Spanned lecture;
 and/or
- Spanned workshop or tutorial

Evaluate

 How will students provide evidence of and feedback on their learning?

Canvas LMS

View template and exemplar of practice



Engage

Explore

Engage

How will you guide

students to

Blackboard

Explain

Elaborate

Evaluate

Discipline context: Unit context: Learning context: Week's learning outcomes Students will be able to: Learning and teaching experiences Learning and teaching experiences Learning phase Learning outcomes and technologies May divide into 2 columns: What is the teacher doing? What are students doing?	
Blackboard	1

Access Weekly learning cycle

Template (under Templates tab)

Learning resources

Exemplar (PDF)

Unit context: In this unit, students analyse the social and business impacts and applications of collective intelligence in a rapidly changing digital world. Students **Unit context:** In this unit, students analyse the social and pushless impacts and applications of collective intelligence in a rapidly changing digital world. Studence examine how creative problem solvers can take advantage of a global collective intelligence through enhanced information sharing and online collaboration. examine now creative problem solvers can take advantage of a global collective intelligence through enhanced information sharing and online collaboration.

Students explore the start-up lifecycle and related technologies, with a focus on entrepreneurship, e-marketing and human resource management. Students gain skills and experience using emerging crowd platforms to pitch ideas, increase profit, manage well-being, enable business processes and functions, and explore new Learning context: Week 2 of unit's delivery (13-week calendar; spanned session is double lecture)

Week's learning outcomes

Students will be able to:

- Define key concepts relating to collective intelligence and social networking Apply technological skills and conceptual understanding to collaboratively generate glossary of terms in a Wiki Propose ways by which organisations can build global collective intelligence

Students will be able to.	onts relating to colle	ctive intend	hal collective intelligenerate glossary of terms who	Learning resources
1. Define key cond	which organisation	is can build gio	bal collective intelligents Inding to collaboratively generate glossary of termous Learning and teaching experiences Learning and teaching experiences What is the teacher doing? What are students doing? What is the teacher doing? What are students doing?	and technologies
2. Propose ways b	rical skills and conce		Learning and teaching experiences Learning and teaching experiences May divide into 2 columns: What is the teacher doing? What are students doing? May divide into 2 columns: What is the teacher doing what are students doing?	Sourced TED talk linked
 Apply technolo 	igical skills	uning	What is the teacher doing.	in Blackboard
3.		Learning	May divide into 2 columns: What is the teacher doing? What are stated to the teacher doing? What are stated	In Blackba
Learning phase	environment	outcomes	secretarity view TED talk delivered by	ien
Learning P		Outcome 1	Students social media platforms enable social change networks	Blackboard Discussion
	Blackboard	Outcom	different social on actual events, and create reflecting on:	Board
Engage		1	students view TED talk delivered by different social media platforms enable citizens in repressive top different social media platforms enable citizens in repressive top different social media platforms enable citizens in repressive top different social media platforms on consorts, report on actual events, and create social change networks.	J.
How will you			condents answer questions via	
canture student		1	why the theorist claims that, "humais as" why the theorist claims that, "humais as" increase in expressive capability in history"; and increase in experiences to consider any downsides to this phenomenon. their own experiences to consider any downsides to this phenomenon.	. Indto
thention and		1	increase in expressive capability any downsides to this pricing	Uploaded to
able connection		\	their own experiences to consider sintroducing week's focus and learning	Blackboard
with prior learning			increase in expressive capability their own experiences to consider any downsides to this press. their own experiences to consider any downsides to this press. Students view brief video of lecturer introducing week's focus and learning.	Generated video
and experiences?			Students view brief	delies
	Blackboard		outcomes.	Selected reading
Explore		1	Students view brief video on testing outcomes. Students read theoretical paper and answer questions, organised according to students read theoretical paper and answer questions, organised according to 3-level reading guide, wherein they: 3-level reading guide, wherein they: 4 provide the definition of collective intelligence from the text (literal level); 5 provide the definition of collective intelligence from the text (literal level); 6 provide the definition of collective intelligence from the text (literal level);	Generated response
How will you guide		\	Students read theoretical per- 3-level reading guide, wherein they: 3-level reading g	sheet in Word
etudents to			3-level reading guide, wherein they. 9 revolve the definition of collective intelligence from the text (Internative Provide the definition of collective intelligence from the text (Internative Provide Internative Internat	sheet in West
stigate and		Outcome :	1 • provide the author proposes that or be a provided the provided t	d L
shink more deeply		Outcome	2 explain not expl	
about the week's		Outcome	 provide the definition of proposes that organized explain how the author proposes that organized intelligence (interpretive level); and reflect on the author's view of future economies within which competition and collaboration, and value and values, are reconciled (applied level). 	
focus?		1	reflect of the and value and values, are resident to the resident and value and values, are resident to the resident to t	
1			Collaboration	

Learning Outcome 2:



Adopt a simple framework to organise learning and teaching experiences for the spanned classroom

Tuning in

- Engage students' interest
- Connect to prior learning and experiences

Teaching explicitly

- Present learning outcomes
- Develop knowledge and skills

Active learning

- Facilitate application of knowledge and skills
- Provide feedback

Checks for understanding

- Assess student achievement of learning outcomes
- Prompt student reflection and feedback



View template and exemplar of practice



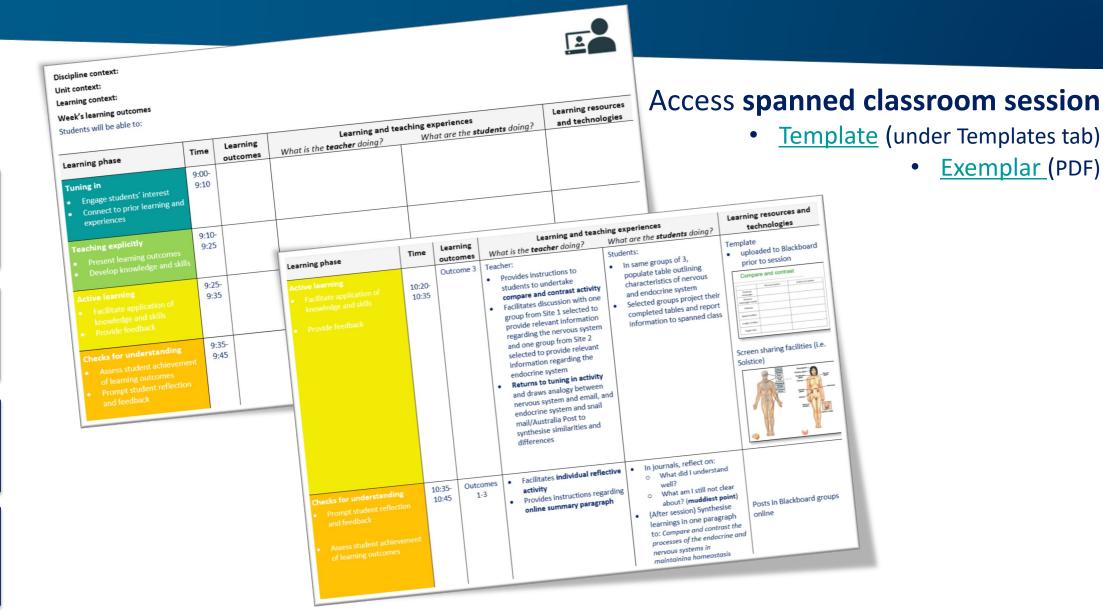
Exemplar (PDF)



Teaching explicitly

Active learning

Checks for understanding



- Engage students' interest
- Connect to prior learning and experiences

Learning Outcome 3: Employ strategies that promote student engagement and learning in the spanned classroom



Topical/controversial media

What is it?

Students view short video, image, cartoon, meme or read tweet, statement, or brief excerpt from article

Why is it used?

- To generate student interest
- To prompt students to reflect on own experiences and views

- Instruct students to write down their immediate thoughts and share with peer to their right in a think-pair-share, or peer sitting directly behind them in turn-and-talk; or
- Ask students whether they agree or disagree with perspective/s presented in media by show of hands or locating themselves on a physical continuum at front of room (turn camera auto-tracking off and provide wide-angle view of classroom to students at remote site)



Show of hands by those students in agreement with perspectives communicated in selected media

- Engage students' interest
- Connect to prior learning and experiences

Students share experiences and perspectives in small groups at respective sites



3 step interviews

What is it?

Students form groups of 4 (divided into 2 pairs: Students A-B and Students C-D)

- 1. Student A interviews Student B about **experiences and perspectives in relation to topic** by employing a teacher generated interview question/schedule of questions; Student C interviews Student D
- 2. Interviewer and interviewee roles within pairs are reversed
- 3. Students A and B summarise one another's responses and relay key insights to Students C and D; and vice versa

Why is it used?

- To promote sharing of diverse experiences and perspectives in small and supportive group settings
- To allow students to learn about their classmates, using listening and probing skills

- Form groups of 4 by providing clear and simple instructions (e.g. ask students to turn to their right and pair with their peer first, and then for two neighbouring pairs to join)
- Check with students at remote site that they have successfully formed groups (e.g. "Bunbury, is it OK to proceed?")
- Formulate interview questions that will prompt diverse responses
- Ensure schedule is displayed on shared screen for all students' ongoing reference
- Use visual and/or audio cues to indicate progression through interview steps

ECU EDITH COWAN

- Engage students' interest
- Connect to prior learning and experiences

Background Knowledge Probe (BKP)

What is it?

Students provide responses to yes-no, true-false, multiple choice and/or short answer questions

Why is it used?

- To ascertain students' background knowledge
- To determine effective starting points/appropriate levels of instruction
- To focus student attention

- Utilise software (e.g. Kahoot!) for students to respond to questions and display students' tabulated responses on shared screen; or
- Assign different questions to each site and select individual students by name and site to report back to whole class
- In either scenario, you may allow students to brainstorm responses/arrive at consensus



Utilise software to tabulate and display student responses

- Engage students' interest
- Connect to prior learning and experiences



Students discuss and compare lists



Focussed listing and list comparison

What is it?

Students recall what they know about a topic by generating a list of related terms or ideas (e.g. characteristics/attributes, advantages and/or disadvantages) and compare lists with a peer

Why is it used?

- To focus student attention and ascertain background knowledge
- To determine effective starting points/appropriate levels of instruction

- Impose a time limit for individual listing and inform students of allocated time
- Instruct students to share their lists with peer to their right and identify the most important points
- Check with all students, in particular at the remote site, that everyone has located a partner
- Select one pair from each site, with scribe displaying combined list and reporting back to whole class using computer screen sharing facilities (i.e. Solstice)

EDITH COWAN

- Present learning outcomes
- Develop knowledge and skills

Advance organiser

What is it?

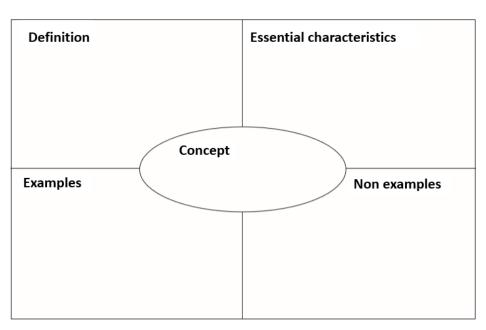
Students record **notes** or **bullet points**; complete **table** or **Frayer Model**; or graphically depict information (**draw** and/or **label figure** or **flow diagram**), within a teacher generated template

Why is it used?

- To encourage attentive listening and processing of information
- To support students to focus on the key points and organise information, according to relevant themes, categories, characteristics, criteria, processes etc.
- To allow students to build conceptual understanding, making connections between existing and new knowledge

How may you implement it in a spanned classroom?

- Upload template in *Canvas* prior to session
- Provide appropriately-timed **instructional pauses** for individual time on task, which may be signposted for students by blank PPT slide



Frayer Model

ECU EDITH COWAN

- Present learning outcomes
- Develop knowledge and skills

Quick write

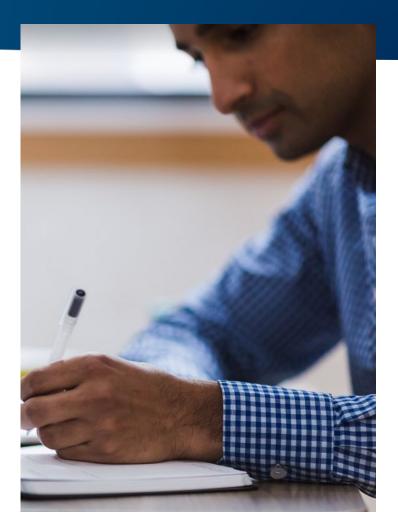
What is it?

Students are presented with a simple instruction immediately following a teacher explanation (e.g. *define* concept x in your own words; *explain* the difference between concept x and concept y; *discuss* the strengths of approach x)

Why is it used?

- To encourage attentive listening and processing of information
- To gauge students' understanding and/or identify misunderstandings
- To allow for discussion and clarification of important points

- Consider concepts and content that have previously caused confusion for students
- Select individual students by name and site to share responses with whole class (e.g. "Hi Mt Lawley, Sarah would you be happy to share your response with us? Thank you.")



Consider concepts that have previously caused confusion

ECU EDITH COWAN

- Present learning outcomes
- Develop knowledge and skills

Glossary of terms

What is it?

Students compile an alphabetical listing of key terms/concepts and their definitions associated with a topic

Why is it used?

- To focus students on key concepts
- To support students to consolidate understanding
- To serve as an ongoing reference for students when completing assessment tasks

How may you implement it in a spanned classroom?

- Upload template in *Canvas* prior to session and provide exemplar entries
- Signpost terms (in slideshow/materials) to be incorporated in glossary
- Provide class time for students to progressively build glossary and refine definitions

	for variable	
Confounding Variable	An unforeseen, and unaccounted-for variable that jeopardizes reliability and validity of an experiment's outcome.	
Construct Validity		
Content Validity	The extent to which a measurement to the specific intended domain of content (Carmines & Zeller, 1991, p.20).	
Context sensitivity	(Carmines & Zeller, 1777, Paragraph (Carmines & Zeller, 1777, Para	
Continuous Variable Control Group	A variable that may have fractional values, e.g., height, weight and time. A group in an experiment that receives not treatment in order to compare the treated group against a norm.	
	group agains	

An ongoing reference for students when completing assessment tasks

- Present learning outcomes
- Develop knowledge and skills

Mind or concept mapping

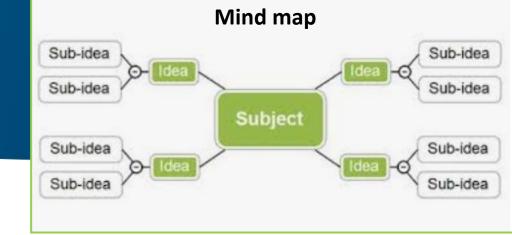
What is it?

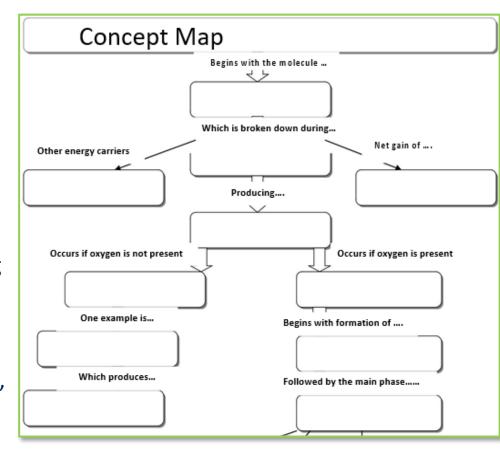
Students organise key concepts hierarchically and depict relationships between concepts by using connecting lines, linking words, colour and selected formatting

Why is it used?

To allow students to build conceptual understanding and make connections between existing and new knowledge

- Present exemplars (i.e. based on other topics) and clear steps for mapping
- Require students to download appropriate software and commence map as a pre-class activity, or access a skeleton map in *Canvas*, which you have generated for students to build upon
- Provide class time for map building, as students' knowledge base deepens, and map sharing, via Solstice affordances





EDITH COWAN

- Facilitate application of knowledge and skills
- Provide feedback

Identifying similarities and differences

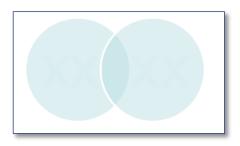
What is it?

Students synthesise content to establish the similarities and differences between two or more concepts/processes

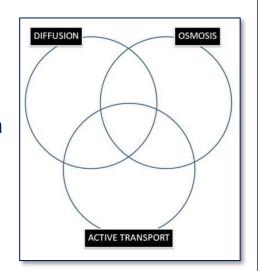
Why is it used?

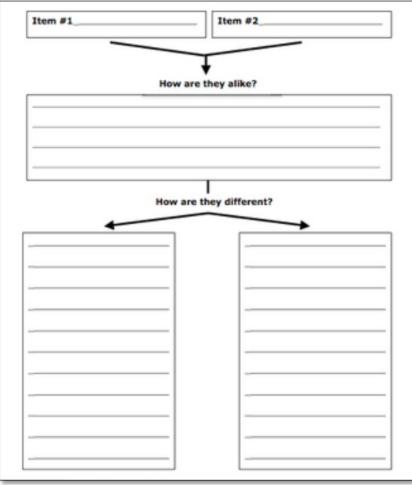
To consolidate student understanding through identifying patterns

- Upload template in Canvas prior to session
- Select students by name and site to share responses via Solstice (e.g. "Matt, from Joondalup, can you display your computer screen and outline the similarities that you have listed for the class; Sonia from Bunbury, can you display your screen and report back on the differences? Thank-you.")
- Provide feedback and facilitate structured discussion



Venn Diagrams





Similarities and differences template

- Facilitate application of knowledge and skills
- Provide feedback

Analysing errors

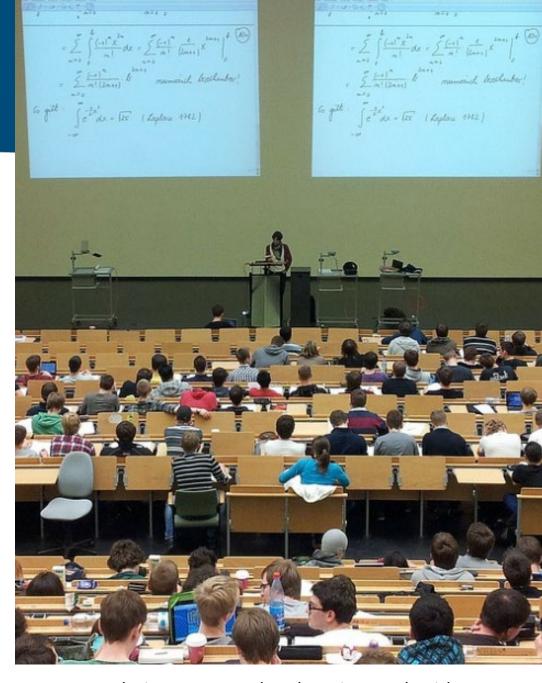
What is it?

Students identify errors in a worked example or excerpt of work

Why is it used?

- To promote students' analytical skills
- To provide clarification for students relating to common errors

- Provide worked example or excerpt of work on slide, as well as evaluative criteria, if relevant
- Instruct students to identify the errors made and rework/rewrite to produce a correct exemplar
- Check that students have completed the exemplar (e.g. "Bunbury, can I see a show of hands who has completed that activity"?)
- Instruct students to exchange and discuss exemplars with peers
- Present corrected worked example to students



Analysing errors and exchanging work with peers

- Facilitate application of knowledge and skills
- Provide feedback

ECU EDITH COWAN

SWOT analysis

What is it?

Students form groups and apply knowledge and skills to review an organisation, product or proposal (e.g. business plan, public health campaign) to identify its strengths, weaknesses, opportunities and threats (SWOT)

Why is it used?

- To promote students' critical and creative thinking skills
- To provide opportunity for collaborative learning

How may you implement it in a spanned classroom?

- Upload a template in *Canvas* prior to the session and present exemplar relating to another topic
- Select groups to report on work via Solstice one group per quadrant (e.g. "Hello
 Toby in Bunbury, can a reporter for your group share the strengths of the organisation.
 Thank you. Maddie, here in Mt Lawley, can your group report back on
 potential weaknesses of the organisation....")
- Provide feedback and promote structured discussion after each group's report

Internal environment		
Strengths	Weaknesses	
External environment		

Opportunities

SWOT Template

Threats

- Facilitate application of knowledge and skills
- Provide feedback



Students problem solving in groups



Case- or scenario-based problem solving

What is it?

Students form groups and apply knowledge and skills to solve real world problems (e.g. students analyse legal dilemma in order to decide the most appropriate way to advise a client; students work through infectious disease pandemic to identify patient zero and how that first individual became infected)

Why is it used?

- To promote students' critical and creative thinking skills
- To provide opportunity for collaborative learning

- Ensure case or scenario outline is accessible to all students throughout exercise
- Make explicit and model problem solving processes or approaches relevant to the disciplinary context for students
- Move around groups at your home site and check in with students at the remote site ("How are you progressing in Bunbury? Do I need to clarify any details of the case at this stage or are the parameters clear?")

- Assess student achievement of learning outcomes
- Prompt student reflection and feedback

EDITH COWAN

Muddiest point

What is it?

Students reflect on which aspect of the session's material was the most unclear or confusing

Why is it used?

- To allow students to reflect on learning and provide feedback
- To prompt consideration of new ways to explain points that multiple students find unclear

- Encourage students to be very specific in identifying the source of confusion (you may list concepts from that session's material in Kahoot! for students to select from)
- Follow-up with further explanation (time permitting); after the session via Announcements or the Discussion Board; or at commencement of next session



Prompt student reflection on learning

- Assess student achievement of learning outcomes
- Prompt student reflection and feedback



Students synthesise key points



Closing summary

What is it?

Students review content and synthesise the most important learnings of session

Why is it used?

To allow students to reflect on and consolidate learning

- Prompt review by asking:
 - 1. What were the 3 key points or 'take aways' from today's session?
 - 2. What did you find interesting?
 - 3. If you were to write 2 exam questions from today's session, what would they be and how would you answer them?
- Encourage students to post summaries in online cross-site groups (there may be a shared understanding that tutors provide feedback only if there are <u>mis</u>understandings)

- Assess student achievement of learning outcomes
- Prompt student reflection and feedback

EDITH COWAN

Fill-in-the-blanks summary

What is it?

Students fill-in-the-blanks in a summary of the session's content/material. The blanks represent key concepts, ideas and details

Why is it used?

To allow students to revise session's content/material and their own notes in order to consolidate learning

How may you implement it in a spanned classroom?

- Upload the document in *Canvas* prior to the session
- Provide sufficient time at the end of the session for students to complete the activity and compare answers with a peer
- Upload completed summary in *Canvas* post session

	absolvsis are added to pyruvate to make
Under anaerobic conditions, protons and electrons from (which end product). G. Under aerobic conditions pyruvate is metabolized to acid cycle. The citric acid cycle is located in the acid cycle. The citric acid cycle produces more protons and ele (which gas?). The citric acid cycle acid cycle produces more protons and ele	(which organelle?)
conditions. 8. The first pathway in fatty acid metabolism is (which organelle?) and only we the protons and electrons, along with the same substrate pyruvate is metabolized to be conditions).	. This pathway is located in bic conditions. It produces

Example from first year undergraduate health science

- Assess student achievement of learning outcomes
- Prompt student reflection and feedback





Students respond to Likert-scale and open-ended questions in online survey environment

Why is it used?

To allow students to reflect on the learning experience and anonymously provide the teacher with feedback

- Utilise user-friendly software (e.g. Kahoot!, Padlet, Qualtrics, SurveyMonkey) and brief set of questions to generate survey
- Allow 5 minutes of class time for students to complete survey online
- Consider how student feedback can shape future practice and 'close the loop' by communicating to students the actions that have been taken (e.g. Bunbury, several students seemed to indicate that; I have remedied this situation by.....)



- Assess student achievement of learning outcomes
- Prompt student reflection and feedback

ECU EDITH COWAN

Self-evaluation rubric

What is it?

Students assess own level of understanding or proficiency

Why is it used?

To promote self-regulation, ownership of learning, and evaluative skills

How may you implement it in a spanned classroom?

- Provide students with simple matrix (uploaded in *Canvas* prior to session)
- Encourage students to identify actions so that they can become **proficient** (i.e. what course material/learning activities need to be revisited)

4-Expert <i>Exceeds</i>	I understand completelyI can do it without making mistakes
3-Master <i>Proficient</i>	 I understand the important ideas Once in a while, I make a little or careless mistake
2-Apprentice <i>Developing</i>	 I'm getting there My mistakes show I understand most of the important ideas Sometimes I need help
1-Novice <i>Beginning</i>	 I don't understand yet I can't do it by myself My mistakes show that I don't yet understand the important ideas

Simple self assessment matrix

Learning Outcome 4:



Implement management procedures to ensure a high-quality student experience within the spanned classroom



EDITH COWAN UNIVERSITY Centre for Learning and Teaching

Spanned Classroom Management Procedures

Planning: Before your first class

- ▶ Become familiar with the room and spanned technology. Attend a drop-in training session (Staff
- ► View the instructional videos and support resources on the <u>ECU Learning Technologies Intranet</u>
 - ✓ Determine how the spanned classroom is positioned within the week's learning cycle so that you can make explicit links to students' prior learning, as well as highlight the view forward (see, for instance, one exemplar [PDF] and associated weekly planning template [under
 - ✓ Access the Spanned Classroom Session Planning Template [under Templates]. Consider using it in order to plan sessions that promote student engagement, active learning and

Access Spanned Classroom Management Procedures, under <u>Tip Sheets</u> tab)







Learning outcomes

Once you have reviewed all of the resources in the suite, you will be able to:

- Determine how the spanned classroom is positioned within the week's learning cycle
- Adopt a simple framework to organise learning and teaching experiences for the spanned classroom
- Employ strategies that promote student engagement and learning in the spanned classroom
- Implement management procedures to ensure a high-quality student experience within the spanned classroom