

Teaching at SUTD: Engaging the Learners



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Learning Sciences Lab© 2018

Teaching at SUTD: Engaging the Learners



For any queries regarding the course,
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Have you done the pre-course Teaching Experience Survey?



Pre-class activity 1 : Teaching Experience Survey

This survey is to evaluate and understand your teaching and learning experiences before SUTD, and understand what you aim to achieve out of this course.

This is a pre-class survey.

Agenda for the Day

Parts	Content
I	Introduction About this Course
II	Getting to Know SUTD
III	Knowing Yourself as a Teacher
III	Role of GTAs at SUTD

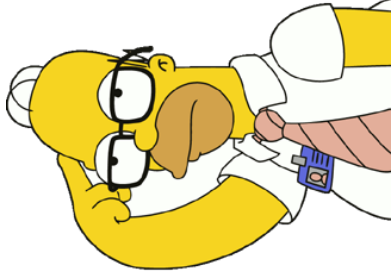
About Learning Sciences Lab





I. Introduction to this Course

Are you thinking...



- ☐ Do I really need to attend the course? Teaching is natural- I don't need to attend a course.
- ☐ I am not ever going to teach. Why do I need to attend this course?
- ☐ I could use the time to do my research. This is wasting my time
- ☐ I would prefer to be elsewhere.

About this GTA Course

6 weeks: 4 lessons + 2 Microteaching sessions

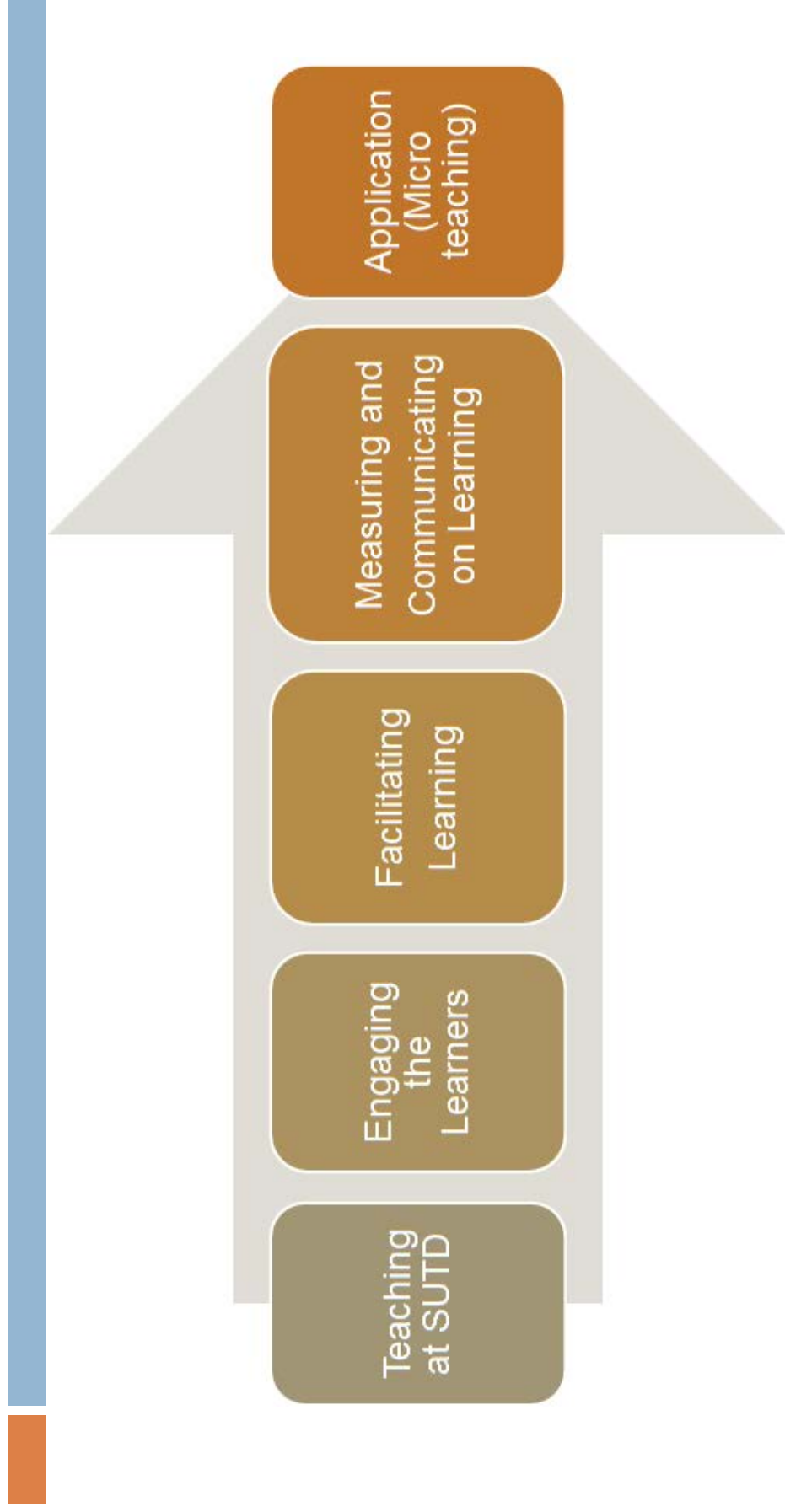
100% attendance, pass

- ☐ Be punctual
- ☐ Be active/participative
- ☐ Complete necessary activities

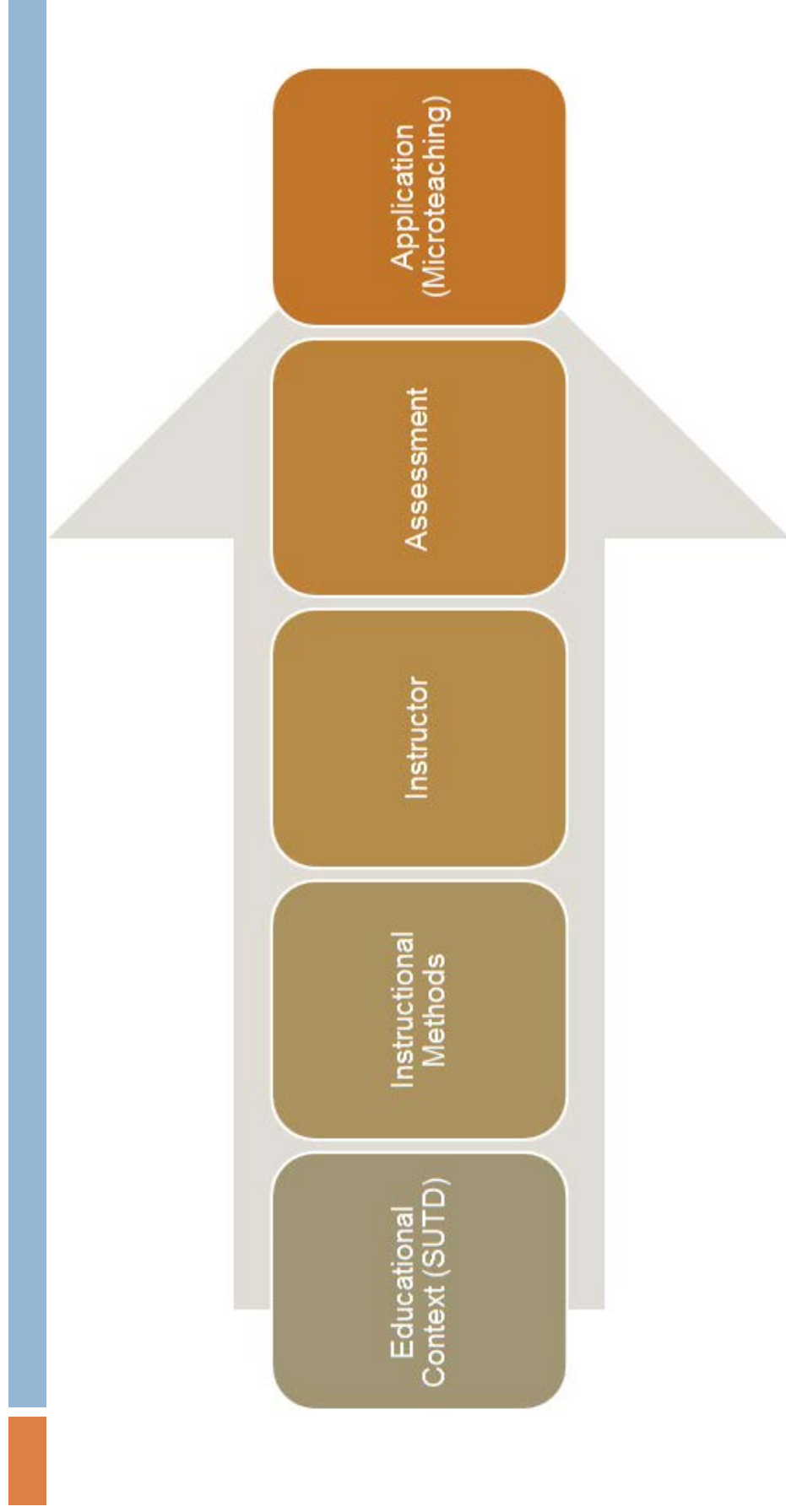
Have fun!

NEVER STOP
LEARNING,
BECAUSE LIFE
NEVER STOPS
TEACHING

About this GTA course



About this GTA Course



About this GTA Course

New
14 May
21 May
4 June
11 June
18 June (Microteaching)
2 July(Microteaching)

About this GTA Course



- ☐ Pre class – readings/survey
- ☐ In class - activities/lesson
- ☐ Post class – reflection + quiz
- ☐ eDimension- Folders arranged in weeks

About this GTA Course

Assessments - (Pass/Fail)*

Quiz	Pre and Post	70%
Reflection Writing	Weekly	
Microteaching	Final	30%

About this GTA Course- Course Evaluation

The content of the course has met my expectations

The course structure is helpful to fulfill my learning objectives

The course has stimulated my interests to learn more about the subject.

The course has improved my knowledge in the subject

The course is well organized and structured

The course work load is manageable

About this GTA Course- Course Evaluation

The content of the course has met my expectations

(The expectations set out by the course)

The course structure is helpful to fulfill my learning objectives

(The objectives set by the course)

The course has stimulated my interests to learn more about the subject.

(To apply in your teaching- to reflect on others teaching- read more)

The course has improved my knowledge in the subject

(I learnt something more than what I came with)

The course is well organized and structured

(Think about how the overall lessons are structured and why)

The course work load is manageable

(Well balanced between within class and out of class activities)

About this GTA Course- Instructor Evaluation

The instructor(s) are available when I need them.

The instructor is knowledgeable about the subject.

The instructor shows inspiration and commitment to teaching and cares about the students.

The instructor encourages participation and discussion.

About this GTA Course- Instructor Evaluation

The instructor(s) are available when I need them.

(In class or out of class- if you did not contact- please do not mark as less than 3)

The instructor is knowledgeable about the subject.

(If not sure, please verify with external resources on such teaching courses)

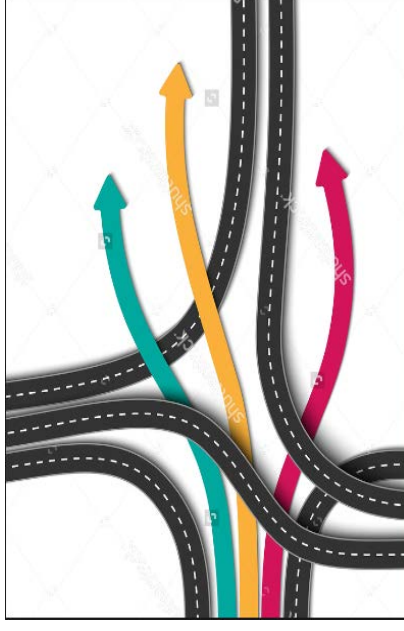
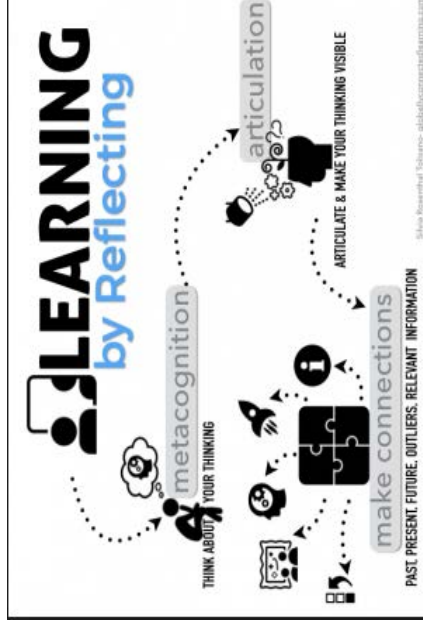
The instructor shows inspiration and commitment to teaching and cares about the students.

(Not just about teaching- and is concerned about students in general)

The instructor encourages participation and discussion.

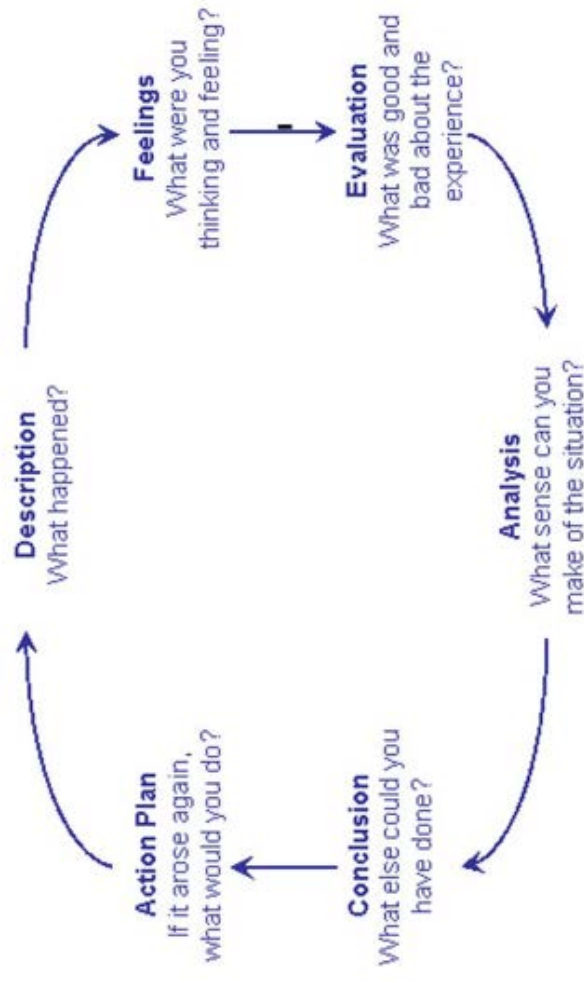
(Did you get opportunities to share and participate)

Reflection Writing



Reflection Writing

Gibbs' model of reflection (1988)



Reflection Writing Rubric

- ☐ Demonstrates understanding of student centric teaching concepts
- ☐ Includes personal experiences
- ☐ Relates personal experiences to conceptual understanding
- ☐ Analyses critically

Measured on three levels: (1) Exceptional, (2) Satisfactory, (3) Not satisfactory.

Resources

Reflection Writing

1. [Ellis, Shmuel, Carette, B., Anseel, F., & Lievens, F. \(2014\). Systematic reflection: implications for learning from failures and successes. Current Directions in Psychological Science, 23\(1\), 67–72.](#)
1. [Student Reflection : MUD cards from MIT](#)
1. [Formative Assessment and Syntheses in Reflection Journals](#)
1. [Reflection Writing](#)

Learning Outcomes

By the end of the session, participants will be able to

- Identify the **unique teaching context** and academic structure, pedagogy at SUTD
- Have **self awareness** about own teaching beliefs
- Explain the **role of a GTA in SUTD**
- Identify **resources** available for GTAs to support them in their teaching



Have you attempted the pre-class
survey?

Getting to Know your Peers



- Your name
- Something interesting about yourself



II. Getting to Know SUTD

Do you know SUTD well enough?



1. How many lectures theatres are there in SUTD?

☐ 30

☐ 20

☐ 10

☐ 5

Do you know SUTD well enough?



2. What are the undergraduate degree programmes offered by SUTD?

Do you know SUTD well enough?



3. What is the typical student number in a cohort classroom?

☐ 30

☐ 50

☐ 100

☐ 400



Compare SUTD to your own UG university

In your teams: Draw a comparison table
Share with the rest of the class some key
points of distinction

Getting to know SUTD

Vision:

SUTD will educate technically-grounded leaders steeped in the fundamentals of mathematics, science, and technology; are creative and entrepreneurial; have broad perspectives informed by the humanities, arts and social sciences; and are engaged with the world.

SUTD will embrace the best of the East and West and drive knowledge creation and innovation, as well as innovative curriculum and teaching approaches.

Getting to know SUTD

Mission:

The Singapore University of Technology and Design is established in collaboration with MIT to advance knowledge and nurture technically-grounded leaders and innovators to serve societal needs, with a focus on Design, through an integrated multi-disciplinary curriculum and multi-disciplinary research.

Getting to know SUTD



Values

- ☐ Leadership
- ☐ Integrity
- ☐ Passion
- ☐ Collaboration
- ☐ Creativity

Teaching and Learning at SUTD



ARCHITECTURE AND SUSTAINABLE DESIGN (ASD) PILLAR

Environmental changes, rapid urbanisation and constraints on the world's resources are challenges faced by the modern architect. The ASD pillar focuses on the future needs of architecture in a digital era.



ENGINEERING SYSTEMS AND DESIGN (ESD) PILLAR

ESD focuses on the design, analysis and management of large-scale complex systems such as financial services, supply chain and logistics, healthcare delivery, transportation and aviation, and many more.



ENGINEERING PRODUCT DEVELOPMENT (EPD) PILLAR

EPD focuses on the conception, design, implementation and operation of innovative technology-intensive products, with emphasis on products and systems whose development cuts across traditional disciplinary boundaries.



INFORMATION SYSTEMS TECHNOLOGY AND DESIGN (ISTD) PILLAR

ISTD integrates the traditional disciplines of Computer Science, Computer Engineering and Information Systems - focusing on the design of systems that interact with both humans and machines.



OFFICE OF EDUCATION

Teaching and Learning at SUTD



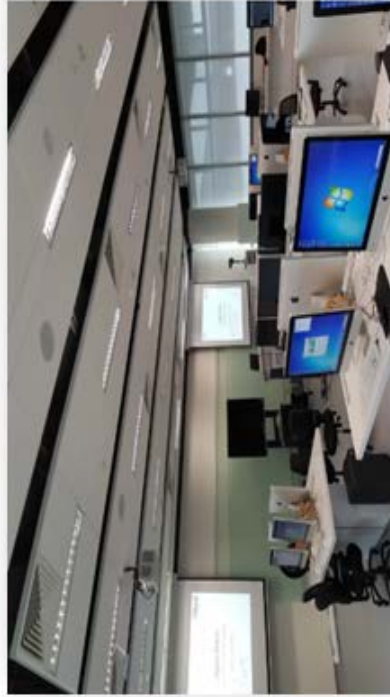
HUMANITIES, ARTS AND SOCIAL SCIENCES (HASS) ◊

HASS complement the technical subjects to provide students with a grounding in the practice of inquiry, analysis, interpretation and presentation.

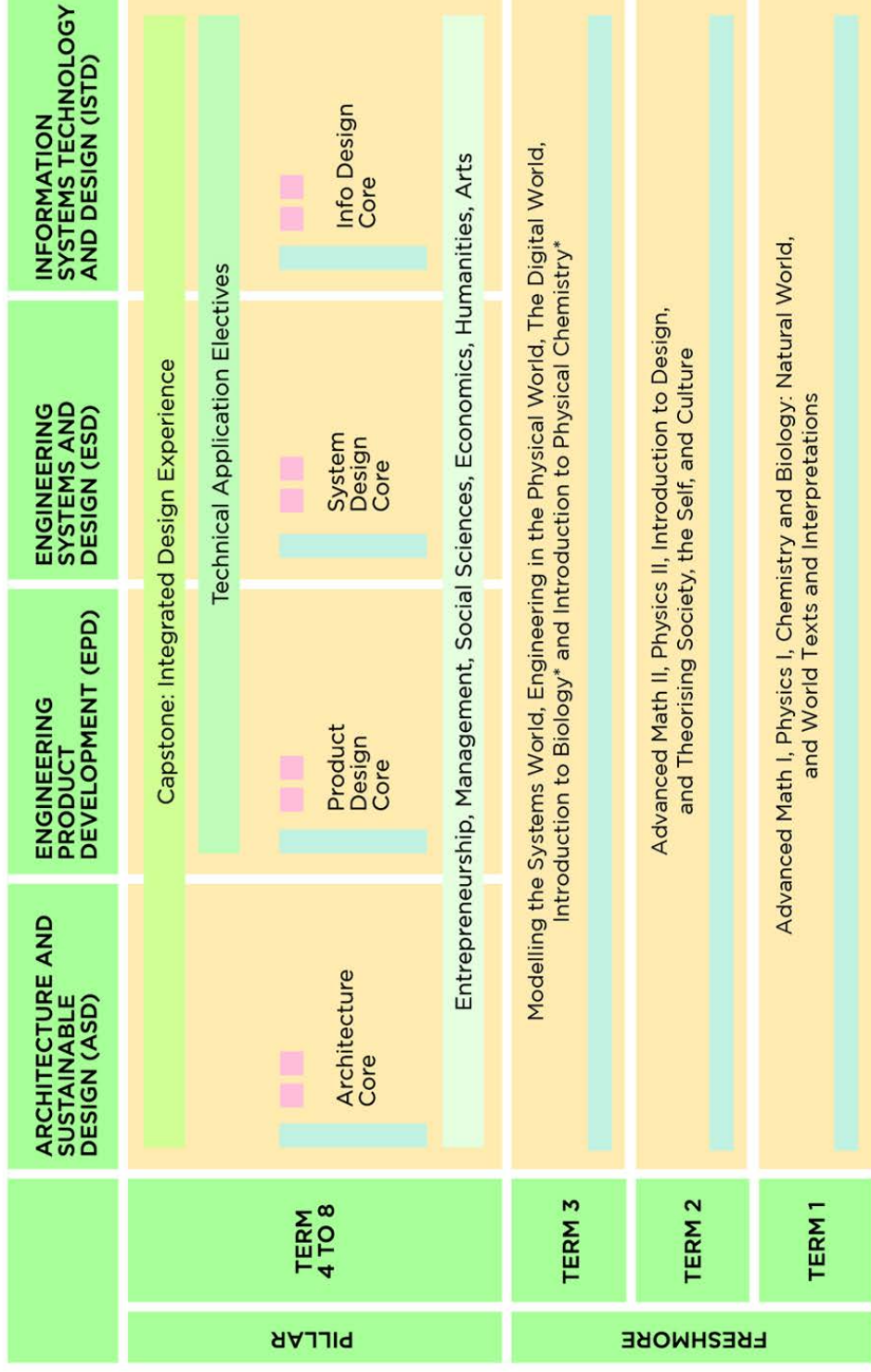


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Teaching and Learning at SUTD



Teaching and Learning at SUTD



Uniqueness of SUTD

SUTD	Other IHLs in Singapore
Active, Hands-on Learning Design focused	> Lecture based
Cohort based; Smaller student to faculty ratio 11:1	non-cohort based; Larger student to faculty ratio
Curriculum tends to be industry focused	Curriculum tends to be discipline focused
Integrated, multi disciplinary curriculum	Curriculum is disciplinary

Teaching and Learning at SUTD

SUTD is very unique in its academic context and structure.

- <https://www.youtube.com/watch?v=bVOtWr8gQc4>
- <https://www.youtube.com/watch?v=CyQ-TaBgPiA>



III. Knowing Yourself as a Teacher

The Big Question is



“How does this unique academic
structure and context impact teaching
and learning *in general?*”

Teaching at SUTD



Complete the Teaching Inventory
Now on paper version – please indicate your
name- later pass back

Teaching at SUTD



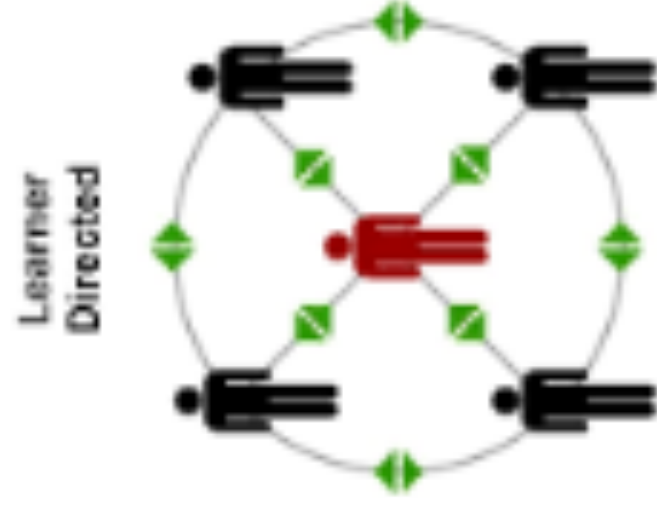
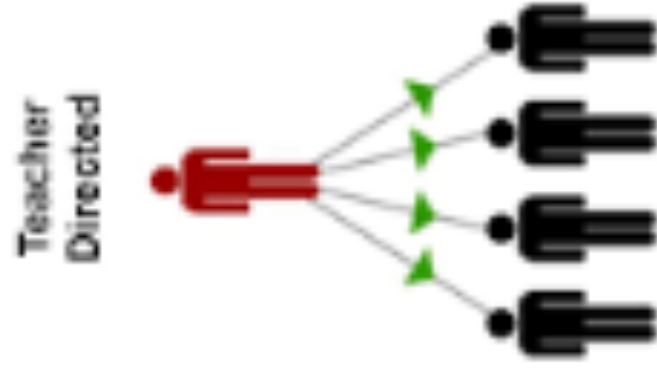
What does teaching mean to you?
Think of a metaphor to represent teaching to
you

- ☐ Write it down
- ☐ Think- share
- ☐ Share with the class- the one that you found most encompassing

Teaching at SUTD

- Lesson plan will be different- teacher will have more interactions with students
- Not so much on didactic teaching but more on facilitation
- Not just on teaching- assisting, helping, guiding...
- More collaboration
- More than one teacher-Team teaching
- Will be more project based

Teaching at SUTD



Teaching at SUTD



Take 10 minutes to read the article on [Seven Principles of Good Teaching](#) and
Note down examples of good practices of
teaching
Refer to the [handout](#)



IV. Role of GTAs at SUTD

The Big Question is



“How does this unique academic structure and context impact teaching and learning for you as a *GTA*?”

In other words, what does this mean for a GTA at SUTD? What is the role of a GTA?

Teaching at SUTD



Take 10 minutes to read the article on [Tips and Strategies on Being a GTA at SUTD](#) and
Note down examples of good practices of
teaching

Refer to the [handout](#)

Task



Take some time to think about this

**Has this changed your metaphor?
Turn the card and write down your thoughts**

Role of GTA



At SUTD, Graduate Teaching Assistants (GTAs) are engaged to support faculty instructors in the delivery of teaching/teaching-related activities in undergraduate courses to help students learn.

Role of GTA

GTAs serve as the connectors between faculty instructor/s and students, supporting teachers in teaching and students in learning.



Instructor	GTA
Set expectations for course	Assist in meeting expectations of course
Curriculum development	Likely not to be involved in the planning of the curriculum (but you could check with your mentor)
Lead person for course delivery in class or labs	Assist instructor in course delivery- help in setting up Lab, eDimension etc.
Design assessments	Maybe involved in grading homework assignments Maybe asked to set homework questions GTAs in SUTD do not grade final exams
Determine structure of each lesson	Follow structure of each lesson

GTA Duties and Responsibilities

Typically, GTAs are involved in activities such as

- ☐ Preparing homework assignments
- ☐ Setting up classroom/lab/activities/simulations
- ☐ Demonstrating experiments/simulations/activities
- ☐ Teaching a small section of the lesson (when the instructor is present)
- ☐ Marking homework assignments
- ☐ Providing feedback on assignments
- ☐ Guiding students in their class/project/lab work
- ☐ Facilitating discussions online/face-to-face
- ☐ Assisting faculty instructor/s in taking attendance, managing classroom
- ☐ Proofreading slides/ instructional materials and uploading to eDimension for faculty instructor/s

Expectations

- ☐ Embrace SUTD values
- ☐ Have a positive work attitude
- ☐ Prepare well and be proactive
- ☐ Be punctual
- ☐ Be present and engaged
- ☐ Maintain professionalism
- ☐ Communicate effectively



Any Questions So Far?

Getting to Know our GTAs



1. Watch the video
2. Take note of the tips and suggestions and see if you can classify according to the seven principles.

Getting to Know our GTAs



What NOT to do as a GTA



Tips and Strategies

- ☐ Set clear and challenging expectations
- ☐ Connect with your students
- ☐ Encourage student-student interactions
- ☐ Respects diverse talents and ways of learning
- ☐ Encourage active learning in class
- ☐ Give prompt feedback
- ☐ Continue to learn and develop



What are your key takeaways?

Are you Able to



- Identify the unique teaching context and academic structure, pedagogy at SUTD
- Identify your own teaching beliefs
- Explain the role of a GTA in SUTD
- Identify resources available for GTAs to support you in your teaching

Homework: Reflection Question

What is your teaching philosophy?

(In less than 500 words).

This is individually graded.

Due Date: Thursday midnight

Next session



Engaging the Learners

Please read the pre-class reading materials.

Resources

1. Sockalingam, N., Koh D, Shaohui, F., Hendrik, H., Karrupusamy, S., and Chandramohandas, R. (2017). Tips and strategies for Graduate Teaching Assistants at SUTD: A Guide.
1. [Chickering, A. W., & Gamson, Z. F. \(1987\). Seven principles for good practice in undergraduate education. *AAHE bulletin*, 3, 7.](#)
1. [Trigwell, K., Prosser, M., & Waterhouse, F. \(1999\). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education*, 37, 57–70.](#)



Thank you :-)