# HARNESSING TECHNOLOGY AS A TOOL FOR COLLABORATIVE LEARNING AND ASSESSMENT

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*In this workshop, the presenters will share their experiences on the use of educational technology to deliver the lesson unit package and assessments comprising the collaborative learning principles. Participants will have a hands-on experience at collaborative learning and assessment design through the use of ICT.*
*Participants are required to bring their own laptops for this workshop.*

*At the end of the workshop, participants will be able to:*
*(1)   Appreciate the use of the flipped classroom model to increase student-student interactions.*
*(2)   Learn strategies to develop students' collaborative learning capabilities through engaging themselves in the use of ICT.*
*(3)   Design appropriate assessments, based on Bloom's Taxonomy, to deepen students' mastery and developing 21st century competencies.*

| Planned timeline | Topic | Material / Working format / presenter |
|---|---|---|
| 10 min | Introduction among workshop participants and getting to know one another's understanding of the use of technology in education. | Mindmeister/padlet /popplets |
| 10 min | Sharing by 1st presenter | Lye Wai Leng |
| 10 min | Sharing by 2nd presenter (including flipped classroom). | Karen Low |
| 15 min | Hands-on session for participants on exploring current IT math tools (E.g. Desmos, Grapher & GeoGebra).<br><br>Rationale: To equip participant with relevant skills so that they can be better equipped to design appropriate assessments to deepen students' mastery and developing 21st century competencies. | Presenters to facilitate |
| 15 min | Participants to work in groups of 3, to discuss and design a lesson package or assessment, based on Bloom's Taxonomy, harnessing the use of technology to either<br>1) develop students' collaborative learning or/and<br>2) deepen students' mastery and developing 21st century competencies. | Presenters to facilitate |

| 10 min | Sharing by participants on products. | Participants |
|--------|--------------------------------------|--------------|
| 20 min | Discussion amongst participants on "What are the strengths and limitations of technology in pedagogy?" Rationale: To see from multiple perspectives, share and learn from one another. | Participants |

## References

Jonathan Bergmann and Aaron Sams (2004). *How the Flipped Classroom Is Radically Transforming Learning.*

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Totten, S., Sills, T., Digby, A., & Russ, P. (1991). *Cooperative learning: A guide to research. New York: Garland.*

Anderson, L.W., Krathwohl, D.R., Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J., Wittrock, M.C. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives*. New York: Pearson, Allyn & Bacon.