





International Webinar PGSD Series 1: SimLab Technology in Education 5.0

Learning environments, Learning processes and Reflective practice

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SimLabTM Virtual Classroom

- Murdoch is proud to be the first university in Australia to offer SimLab[™] technology
- Immersive platform giving pre-service teachers the opportunity to experience, practice and improve their teaching techniques in a safe learning environment
- Safe, targeted practice space
- SimLab is powered by Mursion







SimLabTM ITE Program

Focusing on 4 areas of graduate areas for improvement



• Education SimLab Entry Screening



• Introductions & Lesson Planning



• Teaching Area Focus Lesson & Feedback



 Classroom Management & Effective Teaching Strategies



• Parent Teacher Interviews & Feedback



SimLabTM Process

SimLab Interactor



Interactor controls the actions and responses of the avatars

Avatars



Avatars interact and respond to the student undertaking SimLab

Student



Student interacts and responds to the avatars

Clinical Practitioner



SimLab Clinical Practitioner provides feedback and moderates assessed components



Academic or Tutor can watch the SimLab interaction remotely

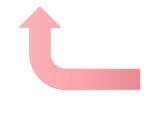




Reflective Practice



Practice, Coaching & Reflection Cycle







Meet the students:





Ethan Mullen-Hardy

Ethan is an adventurous learner, willing to step out of his comfort zone and to understand new perspectives. He tends to respond best to short, direct instructions, with a mix of small group work and solo study, and may struggle with detail-orientated work.

Personally, Ethan is an extrovert, who loves to make others laugh and approaches most anything with a high level of energy. His favourite subject is language arts and he loves playing soccer and video games in his spare time.



Jasmine Walker

Jasmine is an intuitive learning who likes to look at big ideas and patterns and understand relationships. She tends to engage in topics based on her interest or passion level. Small group work is generally successful for Jasmine, but she may struggle with criticism or conflict.

Personally, Jasmine is an empathetic introvert, who prefers the familiar. Her favourite subjects are science and history and she is passionate about animal rights.



Dev Kapoor

Dev is a rule-follower, who is self driven with high standards. He tends to love patterns and approaches learning with enthusiasm and an open-mind. In the classroom, he prefers solo projects and may struggle with a loud environment.

Personally, Dev is usually relaxed and friendly, but can at times be unknowingly insensitive to others' feelings. His favourite subject is math and he loves building models and doing brain teasers when not at school.



Ava Russo

Ava is quick-thinking and decisive and likes to be challenged with new ideas and concepts. She works well in a group, and understands better when shown how to do something. Ava can be impatient with others when she feels the pace is too slow and can struggle with a more rule-based, structured environment.

Personally, Ava is extroverted and loves taking the lead but can at times be too sarcastic or insensitive to others. Her favourite subject is history and she loves anything related to dance.



Harrison Reed

Harrison has above average intelligence, but struggles with language based learning challenges, which can manifest in his auditory/verbal communication, word recognition, and short term memory. He responds well to slow, clear visual instruction, as well as patience and discretion.

Harrison will struggle when being asked to read aloud, being put on the spot or made to feel like a nuisance. He is friendly and social, as long as his challenges are not the focal point, and works well in groups. He likes video games, and drawing, and his favourite subjects are Maths



Nate Pittman

Nate has been diagnosed with high functioning Autism Spectrum Disorder. He is very intelligent, and a strong visual learner. He can struggle with broad concepts, figurative or abstract language, and connecting with classmates due to difficulty interpreting and demonstrating social rules. If classmates are not following rules he may become upset/respond negatively. When anxious or excited Nate may use repetitive behaviours such as hand

flapping or finger clicking.

He responds well to clear, literal language, and opportunities to showcase his knowledge and skills; Nate is an avid fan of space and will try to bring the conversation around to space wherever possible. His favourite subjects are Science and Music, and he enjoys Star Wars and Lego/dioramas. These are his narrow range of interests. Nate occasionally displays delayed echolalia and repeats memorized.



Davy Keo

Davy has just moved to Australia from Cambodia, three months previously. She comprehends English well but can struggle with spoken and written communication. She comes from a culture where academic participation is not encouraged, and often has trouble connecting with others - she will struggle when being spoken loudly to force comprehension and sometimes during group activities.

She responds well to clarity, working at her own pace, and visual aids. Her favourite subject is STEAM, and she plays clarinet and volleyball, and knows Savannah from there.



Savannah Boyd

Savannah has a strong mind for details and has excellent analytical ability. She tends to work best on solo projects with clear directions in a quiet environment and may struggle with content if she does not see the practical apolications.

Personally, she tends to be introverted and may struggle to connect socially with her classmates, but she is layal and kind. Her favourite subject is PDE, and she loves playing volleyball. Her ability for recall makes her a favourite team member at trivia night.







Meet the parents:





Linda (Jasmine's mother)

- · Has a positive and talkative nature.
- Generally approaches situations with great enthusiasm. Not always great with details. Can be impulsive and tends to value people over tasks.
- A creative problem-solver and considers the feelings of others.

Max (Ethan' father)

- Confident and direct
- Very task-focused. Gets results and makes quick decisions but can lose sight of the people involved when rushed.
- Straightforward and enjoys a challenge



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Student Feedback

Murdoch University provided us with the opportunity to attend a SimLab where we would have the chance to practice in a parent-teacher interview.

The experience was very useful! I am delighted that Murdoch University provided us with this opportunity to learn about our individual strengths and weaknesses, exposing where we need to develop in this area. Providing us with an opportunity to learn in a simulated experience enabled us to make mistakes and learn from them. I was unsure of how to respond in this situation, but feel as if I am now in a much better position to deal with an upset parent and finding appropriate solutions. The knowledge and skills I learned through this will be used in all my parent communication experiences, both positive and negative. I feel much more prepared to deal with these situations and understand what I need to do to successfully support my parents and their concerns.

I am very thankful to Murdoch University for providing me this with experience and feel I am in a much better position to deal with all types of parents.

Janelle Redman 2019 4th Year PST



Emergent Themes

Developing greater awareness of initial actions and reactions

I found it hard to think on the spot.
The parent was rude and I needed to take control of the situation, outline the actions in place.

In the first interview, I was unable to speak very much but I think that was a good thing. It allowed me to realise the importance of initially, letting parents say what they want and be heard. That way, when you try to work with them to come up with a solution, they are more likely to be calm and want to work with you.

I think I need more practice on handling difficult situations.

Because this was my first time and I did not know what to expect, I was really stressed. Although I had planned the way I was going to introduce myself and thank the parent for coming, I started the interview by trying to solve the problem straight away.



Emergent Themes

Building confidence within a safe environment

You are able to build your confidence with handling difficult situations and trial de-escalation strategies in a safe learning environment.

Building confidence in myself to ask questions and help parents.

It was very overwhelming at first, but toward the end I became more confident and managed the situation to the best of my abilities.



Emergent Themes

Trialling strategies

I had a debrief with [lecturer/tutor] and we discussed the Situation Action Outcome framework for my next attempt. I thought about Max's perspective as a parent and what information I could provide him about his child Ethan and how to reassure him that I am monitoring his child's academic and social development and will maintain communication with him in regards to this.

It was really noticeable to me how my responses differed between reactive initially and proactive when armed with some strategies to address yhe[sic] parenr[sic] character.

It allows you to trial your ability to respond in real life situations with parents and also helped me to compare the scenario when a more structured approach to the parent was used through implementing the istar model. Highly recommend this experience to all students.



Emergent Themes

Learning through the practice, coaching and reflection cycle.

This experience allowed me to make mistakes the first time, be coached and to practice again a second time to practice immediately what I just learned - it was great.

The initial interview was quite confronting, however on pausing to reflect on different strategies to use when engaging with irate parents/carers the second interview went a lot smoother.

I think its[sic] really wonderful to have [lecturer/tutor] there to provide some pointers for how to handle the situation. The advise[sic] she gave was really useful and then being able to implement it straight away was also really helpful.

[D]oing the simlab twice was really good for reflection and implementing new strategies that could assist the outcome of the meeting.



Conclusions

Supports practice

- PSTs value multiple opportunities to trial and practise different strategies in an environment free of real-world repercussions in order to build a knowledge bank of situation-specific strategies that would be of use to them in future.
- the human interactors support anthropomorphizing of avatars to enhance participants' social presence.



Conclusions

- Supports reflections on practice
 - PSTs were engaged in a meaning-making process about their actions and reactions (which
 over time become habitual practices) in parent-teacher interactions.
 - PSTs were provided with models they could use to engage in reflection systematically.
 - o PSTs' reflections were supported by their interactions with a more knowledgeable other.
 - PSTs acknowledged the professional growth they experienced from the SimLab™ experience.



Conclusions

- Strategic integration of a simulation within the learning process.
 - o Immediate follow-up in terms of feedback, coaching and reflection
 - Just-in-time information from a Knowledgeable Other
 - Immediate application of just-in-time learning



References

Ledger, S., & Fischetti, J. (2020). Micro-teaching 2.0: Technology as the classroom. *Australasian Journal of Educational Technology*, 36(1), 37-54. https://doi.org/10.14742/ajet.4561

Rappa, N. A. (2019). Understanding pre-service teachers' experiences of a mixed reality simulation environment: An analysis of pre-service teachers' perspectives on communicating with a simulated parent avatar. In Y. W. Chew, K. M. Chan, and A. Alphonso (Eds.), *Personalised Learning. Diverse Goals. One Heart. ASCILITE 2019 Singapore* (pp.535-539).



Thank you



- SimLab Website murdoch.edu.au/pages/simlab
- SimLab Screening Website <u>murdoch.edu.au/pages/simlab-screening</u>
- If you would like to visit SimLab, please email SimLab@Murdoch.edu.au

