



USING SIMSCHOOL TO ENHANCE SIMEQUITY FOR PRESERVICE AND INSERVICE TEACHERS

Innovative Playground for SITE Interactive 2021

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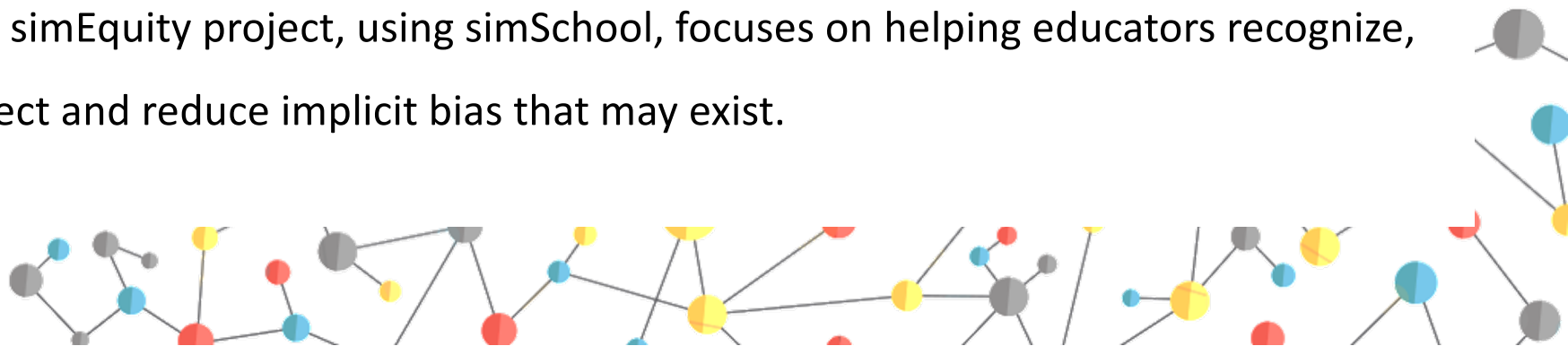
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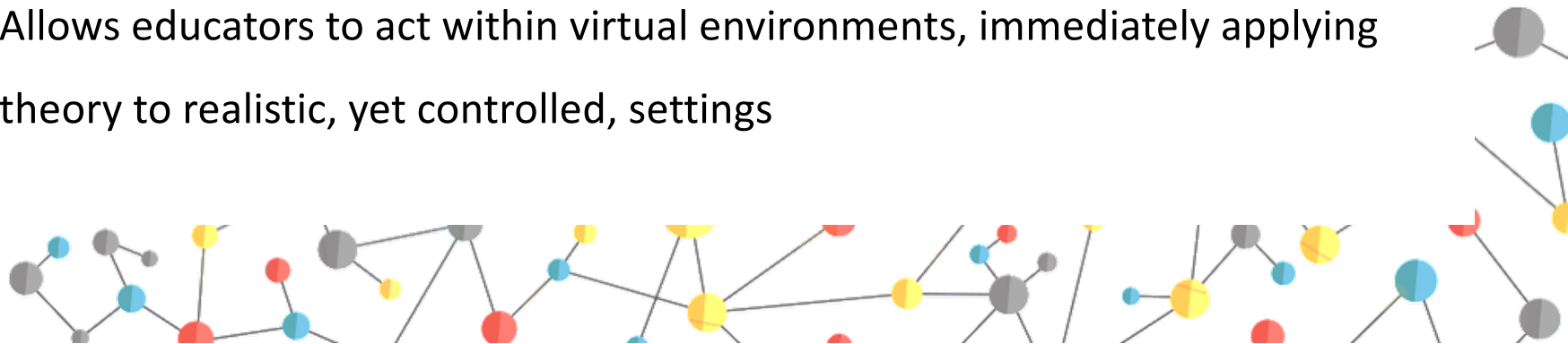
PURPOSE OF PROJECT

- Implicit bias impacts teaching and learning.
- A typical teacher makes up to 3,000 important decisions during a day of instruction (Danielson, 1996)
- Being a culturally responsive educator first requires recognition of existing or potential bias, a metacognitive skill of teaching
- Digital simulations in education can support teaching and learning.
- The simEquity project, using simSchool, focuses on helping educators recognize, reflect and reduce implicit bias that may exist.



BACKGROUND

- Baidee (2012) identified four advantages to simulation based learning
 - Classroom decision-making
 - Practice through repeating, receiving feedback and advice
 - Self-efficacy in classroom teaching
 - Collaborations and social interactions
- Fischler (2006) identified
 - Allows educators to act within virtual environments, immediately applying theory to realistic, yet controlled, settings

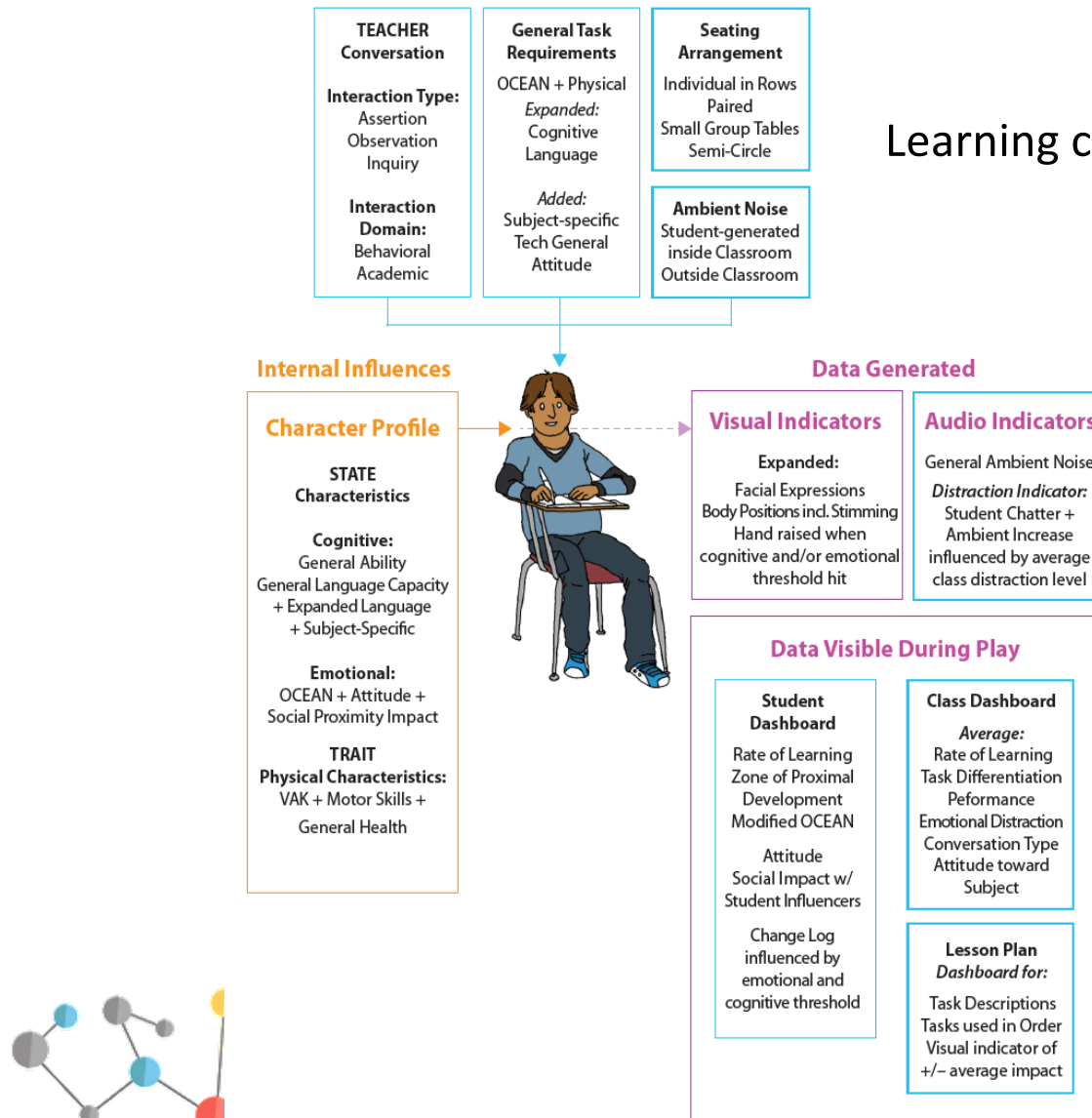





- A dynamic, online classroom simulation program that allows preservice and inservice teachers the opportunity to practice teaching
- Promotes pedagogical expertise by re-creating the complexities of classroom decisions through mathematical representations of how people learn and what teachers do when teaching.
- Computational Model (COVE)
 - Cognitive science models
 - OCEAN model of psychology (extroversion, agreeableness, persistence, emotional stability and intellectual openness)
 - Viseral layer of Visual-Auditory-Kinesthetic perception
 - Environment (social and physical expectations) for learning




Learning characteristics in simSchool






Catalog of Modules for Various Topics and Grade Levels

 = Grade Level of Students

 = Contains Additional Resources

 = Estimated Time to Complete

	Module Name	Description		
K-5	Mastering Inclusionary Practices Elementary	Practices Explore classroom management and accommodations	x	1.5 HRS
K-5	Strategies, Accommodations, and Learning Tools	Working with a Variety of Student Learning Devices	x	2 HRS
9-12	Differentiated Instruction Secondary	Practice teaching students who learn best through different modalities	x	2 HRS
9-12	Differentiated Instruction Secondary	Practice teaching students who learn best through different modalities	x	2 HRS
9-12	Exceptionalities and Student Success, Part 3	Experience instructing students with challenges in math processing	x	1.5 HRS
9-12	Exceptionalities and Student Success, Part 5	Experience instructing students on the Spectrum	x	1.5 HRS
9-12	Mastering Inclusionary Practices Secondary	Explore classroom management and accommodations	x	1.5 HRS
9-12	Study Skills Intervention	Teach a high school class where all students have IEPs 4 • 60 min	x	2 HRS



Overview & Instructions

Reflection Questions

Resources

Teaching Sims

✓

Class 1: Class 1

—

Class 2: Class 2

—

Class 3: Class 3

—

Class 4: Class 4

—

Class 5: Class 5

Observations

Teaching Sims

Instructions: You must review your observation report for each class taught for the next class to unlock. You must also review your report for each class before you can answer reflection questions if they are present.

✓

Class 1

Class 1

Class 1

Review simClass

Class 2

Class 2

Class 2

Start Teaching!

Class 3

Class 3

Class 3

LOCKED

Class 4

Class 4

Class 4

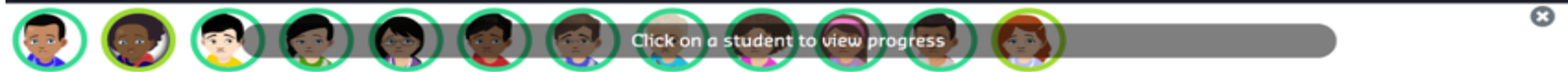
LOCKED

Class 5

Class 5

Class 5

LOCKED



Robert Blackwell
 He is working on...
 Now is your chance to share. You may speak with other students at

Start Done

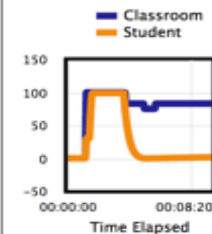
Robert's Strengths

Reading	Moderate
Writing	Low
Listening	Moderate
Speaking	Moderate
Math	Moderate
Technology	Moderate
PE	Low
Art	Moderate

Key Personality Details

Preferred pronoun:	He
Has an IEP Plan:	No
Has a 504 Plan:	Yes
Social Traits:	Does fine working with people or alone [see more]
Work Habits:	Usually open to and motivated by working with others [see more]
Learning Environment:	Either working alone or with others [see more]

Academic Performance



RESTART

00:09:41

PAUSE

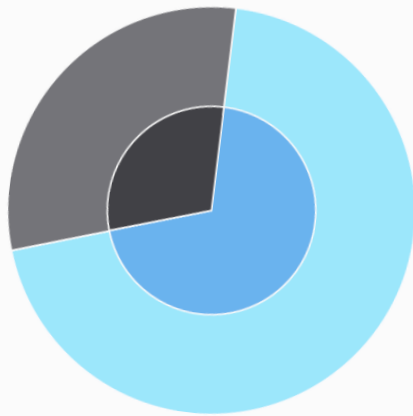
SUBMIT



Graphic Feedback

Student Attention By Gender

'Attention' determined by speaking to a student, looking at a student's profile, assigning a differentiated task, applying a differentiated strategy, or zooming in on a student.

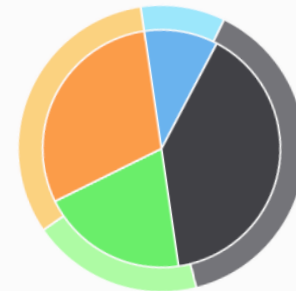


● attention received by female students
● female students in classroom

● attention received by male students
● male students in classroom

Student Attention By Ethnicity

'Attention' determined by speaking to a student, looking at a student's profile, assigning a differentiated task, applying a differentiated strategy, or zooming in on a student.



- attention received by black or african american students
- attention received by hispanic or latino or of spanish origin students
- attention received by unspecified students
- attention received by white students
- black or african american students in classroom
- hispanic or latino or of spanish origin students in classroom
- unspecified students in classroom
- white students in classroom

SIMSCHOOL REPORT

Class 1: Class 1					
Description	Recommended Practice	N/A	Needs Attention	Satisfactory	Good
Regularly assesses individual and group performance.	Checks the class progress tab at a regular interval.			✓	
Uses information of differing student strengths and needs to further each learner's development.	Clicks on each student's profile and views their traits or progress at least once throughout the simulation.		✓		
Designs, adapts, and delivers instructions to address each student's diverse learning strengths and needs and creates opportunities for students to demonstrate their learning in different ways.	User uses a variety of tasks during the simulation.			✓	

Description	Recommended Practice	N/A	Needs Attention	Satisfactory	Good
Makes appropriate and provisions for students with learning needs.	Assigns tasks in a way that maximizes students' performance (academic and behavioral).				
Chooses appropriate when students with learning needs are present.					✓
Provides appropriate 'break', before starting a new task.					
Changes task or makes a commitment when students become distressed.			✓		
					✓



RESEARCH USING SIMSCHOOL

- Research on the use of simSchool has shown improvement in
 - *teaching skills* (Christensen et al., 2011; Knezek et al., 2015)
 - *classroom management* (Christensen et al., 2007)
 - *motivation* (Tyler-Wood et al., 2017)
 - *multicultural awareness, literacy* (Collum, Christensen et al., 2019)
 - self-reported *educator bias* (Collum, Christensen, Delicath, & Knezek, 2020)
 - *instructional self-efficacy* (Knezek & Christensen, 2009).
- Many learning trials with simulated students increases teacher confidence and competence, which in turn improves student learning.
- Repetition of many trials is important in changing habit complexes such as implicit bias (Malone, 2016).

DEMONSTRATION – JOIN US

Click on the google sheet

https://docs.google.com/spreadsheets/d/1pgBBVSFGyrb0Dsgua4WE7_DPx392xUFRdreox_Jy7ss/edit#gid=0

Select an account and use that login at <https://www.simschool.org>

	A	B	C	D	E	F	G
1	simSchool Instructor Username	simSchool Password	simSchool Student Username	simSchool Password	Your first name	Your last name	Your institutional email address
2	SITE1@simschool.org	SITE2021	student.SITE1@simschool.org	simSchool			
3	SITE2@simschool.org	SITE2021	student.SITE2@simschool.org	simSchool			
4	SITE3@simschool.org	SITE2021	student.SITE3@simschool.org	simSchool			
5	SITE4@simschool.org						
6	SITE5@simschool.org						
7	SITE6@simschool.org						
8	SITE7@simschool.org						

10 Trillion Learner Profiles Available On Demand.

simSchool's research-backed engine can simulate diverse learners and classroom dynamics that help educators improve inclusive, responsive practices.

With hundreds of hours of sims covering topics in PK-12th grade teaching, educators can improve their strategies in an entirely risk-free way.

[Download Catalog](#)



THANK YOU FOR YOUR TIME

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