



Transforming Nurse Residency Skills Training Using Simulation: A Deliberate Practice Approach

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Disclosure



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Describe the impact of a well-developed deliberate practice-based nurse residency skill program on learner confidence and competence as a best practice for graduate nurses.

Interpret the evaluation of a deliberate practice-based nurse residency skill program on learner confidence and performance.



Conflict of interest: None



Employer: The University of Texas MD Anderson Cancer Center



Sponsorship/Commercial Support: None

Background

- Overview of MD Anderson Graduate Nurse Program
- Insufficient practice time for technical & clinical skills.
- Evaluations identified clinical skills GNs were least confident in.
- Infrequent exposure to skills & insufficient demonstration may have contributed to the responses.



Aim

Improve learner confidence in the performance of the selected skills measured by self report through the use of simulation education.

Identifying factors for deliberate practice simulation

- Literature
- National Council State Boards of Nursing (NCSBN) Simulation Study
- BSN program simulation hours/experiences
- Graduate Nurse Residency Program Surveys



Skills Development

Skill sessions designed into 2 four hour segments

Sessions provided during months two and three of residency

Beginner Skills	Advanced Skills:
Peripheral IV insertion	Tracheostomy care/Airway management
Foley catheter insertion	Chest tube management
NG tube insertion	Blood administration
CVC dressing changes	IV tubing set-up with manifolds

Theoretical Foundation

Deliberate Practice

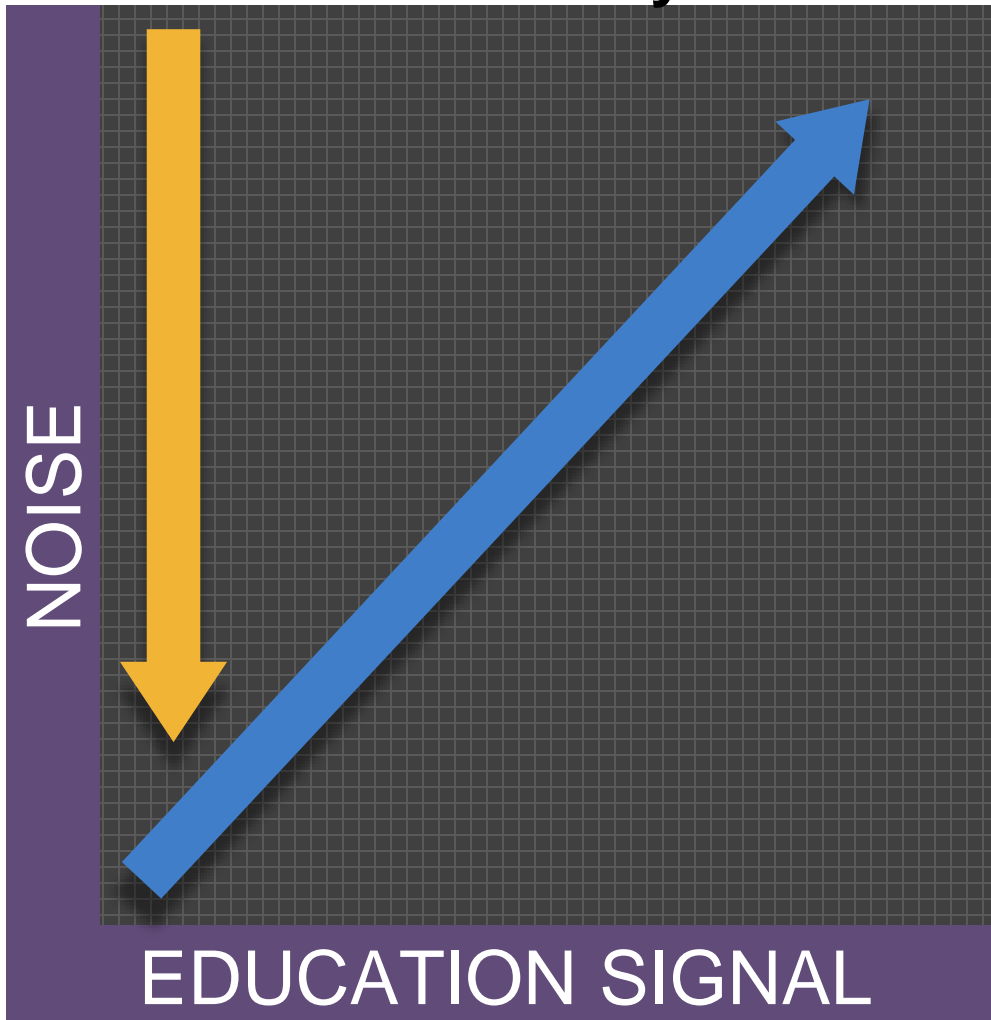


Deliberate practice encourages learner-centered and paced educational approaches where learners are provided supervised practice until mastery in a skill is achieved.

(Ericsson, Krampe, Tesch-Romer, 1993; Ericsson, 2008)

Simulation Technique

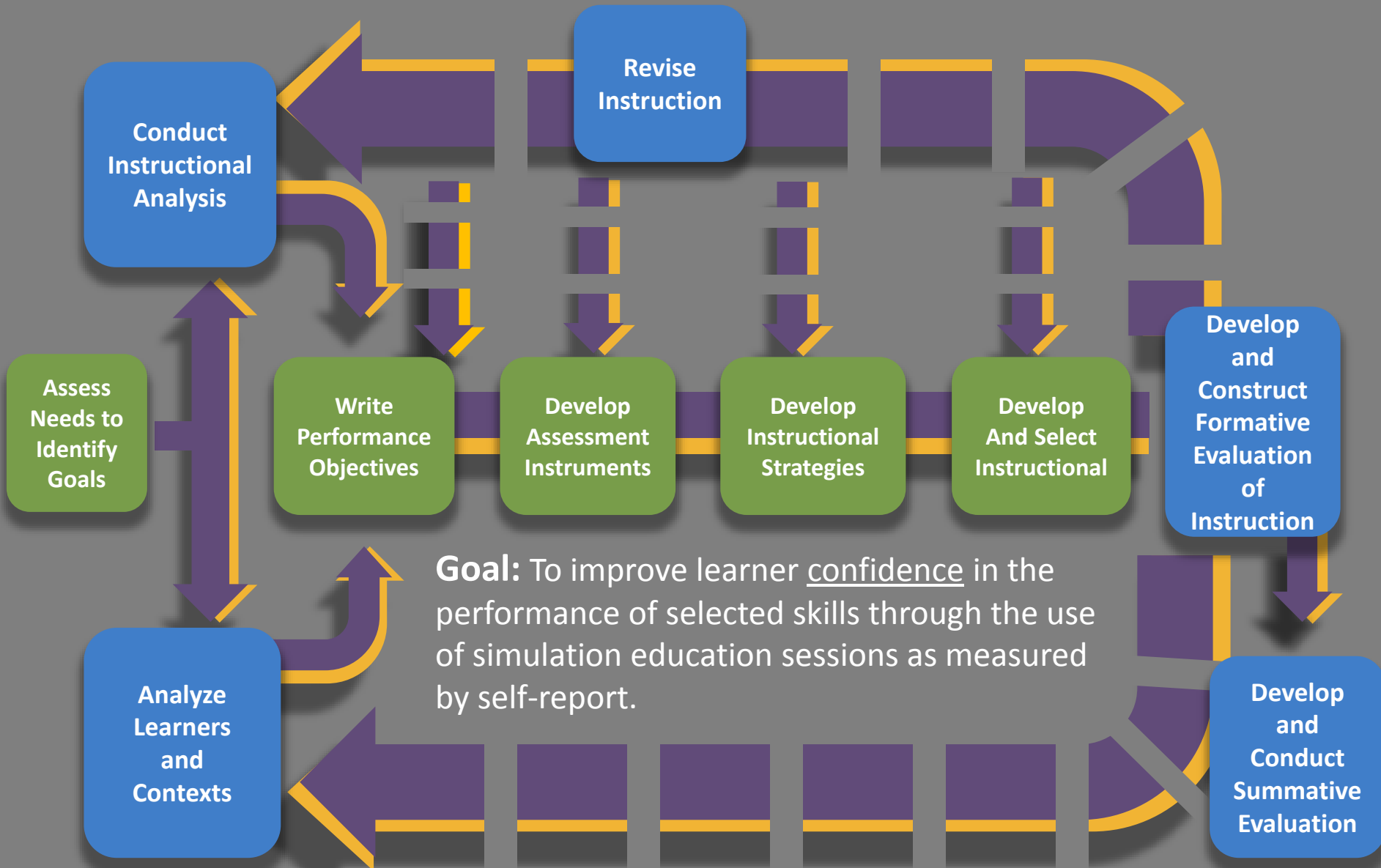
Low-fidelity



Partial Task Trainers



Implementation



Outcomes

Beginning of Residency Program

List the top three (3) skills/procedures you are UNCOMFORTABLE performing independently at this time.

	Blood Admin	Trach Care	CVC Line Care	NGT Placement	Urinary Catheter Placement	Chest Tube Mgmt.	IV Starts
Feb 13	8	3	0	0	4	5	15
Jun 13	9	10	3	7	3	3	11
Jul 13	20	3	4	2	3	2	8
Oct 13	34	6	4	2	4	0	9
Jan 14	18	3	9	7	9	5	14
Feb 14	24	11	4	7	1	0	7
n=	52	13	12	14	12	6	28
Total	113	36	24	25	24	15	64
Mean	2.17	2.77	2.00	1.79	2.00	2.50	2.29
SD	1.17	1.76	1.00	0.78	1.00	1.50	1.28

Outcomes

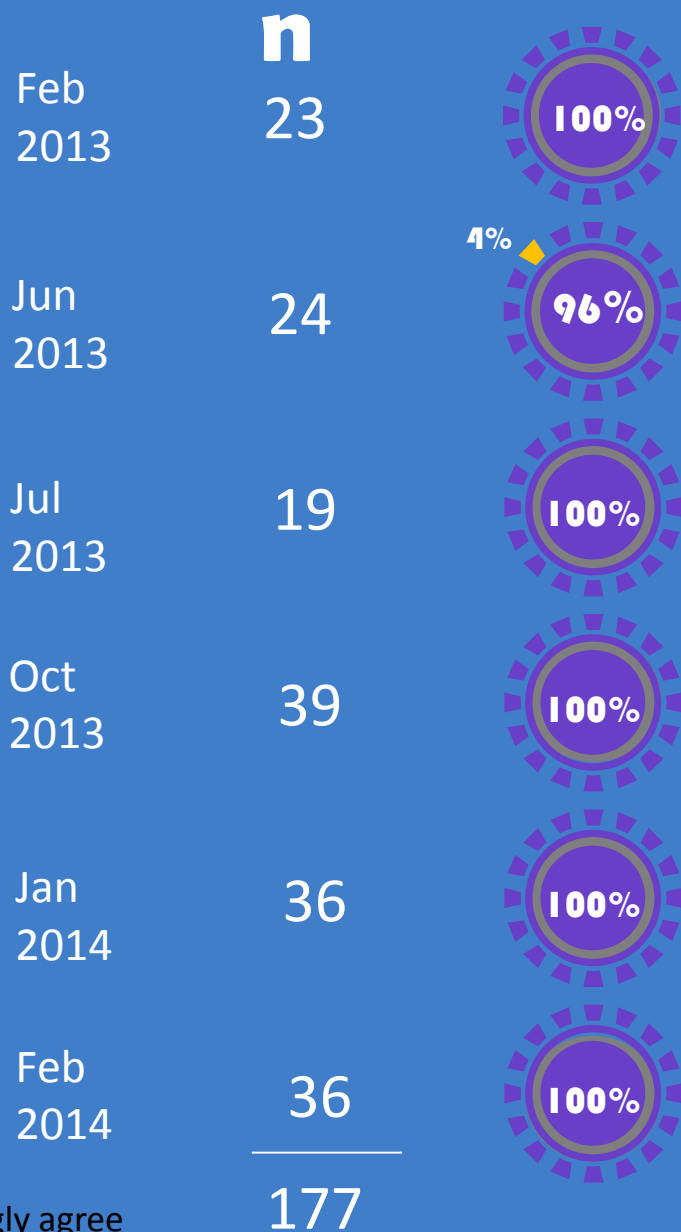
End of Residency Program

List the top three (3) skills/procedures you are UNCOMFORTABLE performing independently at this time.

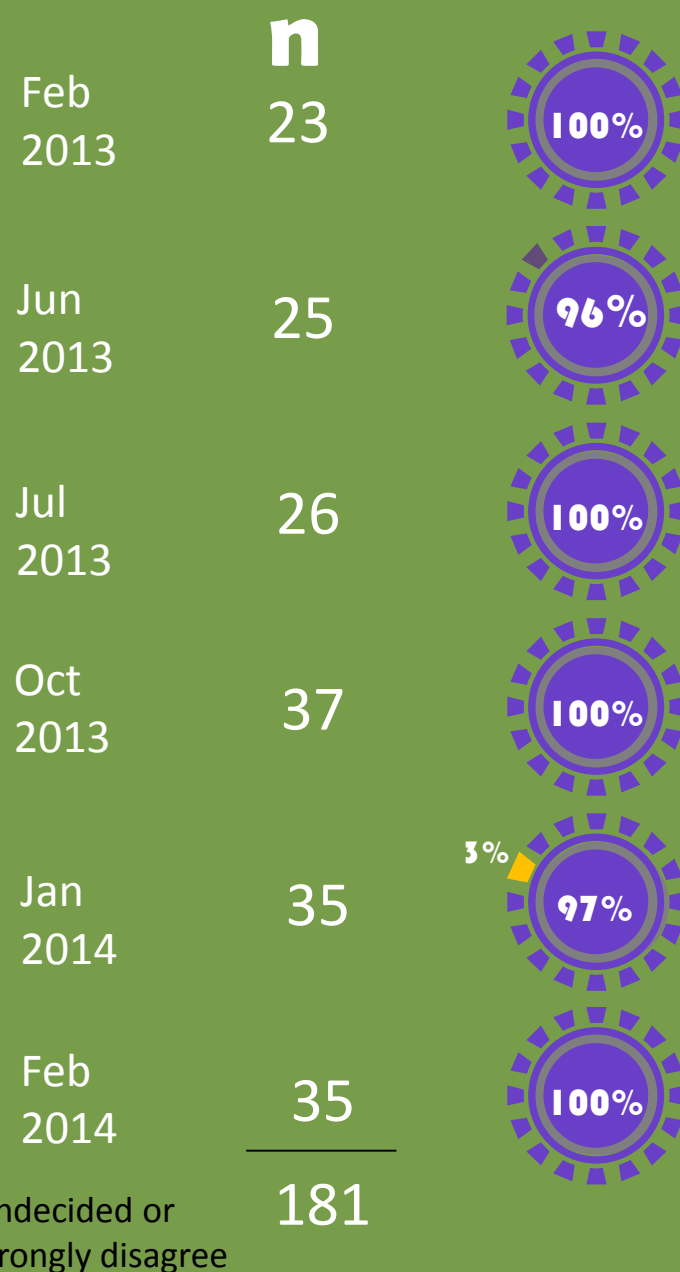
	Blood Admin	Trach Care	CVC Line Care	NGT Placement	Urinary Catheter Placement	Chest Tube Mgmt.	IV Starts
Feb 13	0	6	0	12	4	3	17
Jun 13	0	4	0	10	0	4	41
Jul 13	1	3	3	12	2	1	6
Oct 13	0	0	0	0	0	0	0
Jan 14	0	0	0	0	0	0	0
Feb 14	0	2	0	4	5	2	0
n=	1	7	1	17	6	6	25
Total	1	15	3	38	11	10	64
Mean	1.00	2.14	3.00	2.24	1.83	1.67	2.56
SD		1.14		1.23	0.83	0.66	1.56

Outcomes

FUNDAMENTAL SKILLS



ADVANCED SKILLS



Strongly agree
or agree

Undecided or
strongly disagree

Conclusions

Program updates

- Addition of Port-a-Cath accessing and de-accessing
- Created videos for didactic portions of chest tube, tracheostomy, and airway

Recommended next steps

- Include earlier as part of clinical nursing orientation

Questions

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