

Your abstract submission has been received[Print this page](#)

You have submitted the following abstract to Sigma's 30th International Nursing Research Congress. Receipt of this notice does not guarantee that your submission was complete or free of errors.

Sigma's 30th International Nursing Research Congress**Literature Review: Using Time-On-Task to Enhance Teaching Effectiveness and Student Outcomes****Shelley Ann Johnson, EdD, MSN, RN, CNE***Nursing, Academic Partnerships, Mansfield, TX, USA*

Mary Ann S. McLaughlin, EdD, MSN, RN

Frances M. Maguire School of Nursing and Health Professions, Gwynedd Mercy University, Gwynedd Valley, PA, USA

Kerrie Downing, MSN

Academic Partnerships, Dallas, TX, USA

Jaretta L Day, MS, CDD

Academic Services, Academic Partnerships, Dallas, TX, USA

The desire and goal of nurse educators is to teach students the information and skills that they need to safely practice nursing. As science and technology has advanced, the content in nursing curricula has increased to the point of saturation. Educators are now responsible for incorporating new content, which frequently occurs without other content being removed. Cognitive and physical overload is an issue that affect student education and ultimately patient care. This is a system level issue that requires system-level supports be developed to assist educators and students. This presentation will highlight the findings in current literature that not only discuss the problem of overload, but identifies proactive solutions based on the establishment of time-on-task metrics.

Methodology for the Literature Review

The databases ProQuest, Cinahl Complete, Sage Premier, PubMed, and the Cochrane library were searched with the key words: Time-on-Task, credit load, instructional design, cognitive load, student workload, curriculum, and content overload. The search was limited to the English language, the last five years, higher education, and peer reviewer content.

Results/Findings

Nursing education is typically structured around credit hours. Student learning in class, online or face-to-face, is calculated as 1 credit hour = 1 faculty directed hour per 15 weeks + 2 student directed hours or 45 hours of work per week and 6.4 hours for a 7-week accelerated course. Failing to pay attention to the amount of work students will have to complete in and out of class can lead to overloading students and set them up for failure. Even when students complete the work given, cognitive and physical overload inhibits their ability to reflect, retain the information and apply the information to clinical thinking and problem-solving.

Principles of instructional design state that instructional activities directly influence students' learning. Students' brains must be able to accept information, translate it to understand and then move it to memory for later application. Typical strategies emphasize use of short-term memory, which prohibits students getting to deep learning, automation and muscle memory.

Time-on-task is the measure of the amount of time that students spend on learning exercises. Strategic use of measuring time-on-task in courses can assist faculty and program leaders in improving teaching and learning effectiveness. Educators must consider factors such as content readability, preparation time, motivation towards engagement and task difficulty. Faculty members can be supported by having set

benchmarks to guide learning activity creation and approved metrics, based on scholarly evidence, to assess adherence.

Evaluation of Methodology and Data

Metric setting using time-to-task is limited in nursing literature. A literature review is needed to confirm usefulness of practices of today's educators. Instead of overwhelming our students with tasks and information, we, as educators, must find a way to make the learning manageable, meaningful and engaging. Going to the literature for time-on-task will be helpful for educating our future nurses.

Implications for Nursing Education

The goal of nursing education is to develop professional nurses of tomorrow. It becomes difficult to accomplish this task when the learners of today are so varied and different from those that came before them. Educators must be cognizant of the realities of barriers to nursing education. If educators can facilitate learning that is manageable and engaging the learner will be interested and successful in learning. Educators need to consider not just the tasks on hand, but the time it takes to complete the tasks. Learners today desire a more meaningful, time cognizant format to learning.

Title:

Literature Review: Using Time-On-Task to Enhance Teaching Effectiveness and Student Outcomes

Submitter's E-mail Address:

saj816@aol.com

Abstract Describes:

Completed Work/Project

Preferred Presentation Format:

Oral

Applicable category:

Academic

Keywords:

Cognitive load, Time-On-Task and Workload

References:

References

Barre, E. A. & Esarey, J. (2018). Course Workload Estimator. RICE Center for teaching Excellence. Retrieved from: <http://cte.rice.edu/workload>

Â

Debue, N. & Van De Leemput, C. (2014). What does germane load mean? An empirical contribution to the cognitive load theory. *Frontiers in Psychology*, 5, 1-12. doi: 10.3389/fpsyg.2014.01099

Â

Elliot, S. H. (2015). Measuring opportunity to learn and achievement growth: Key Research Issues with implications for the effective education of all students. *Remedial and Special Education*, 36(1), 58-64.

Â

Goldhammer, F., Naumann, J., Stelter, A., Toth, K., Rolke, H. & Kliene, E. (2014). The time on task effect in reading and problem solving is moderated by task difficulty and skill: Insights from a computer- based large-scale assessment. *Journal of Educational Psychology*, 106(3), 608-626.

Â

Hessler, K. L., & Henderson, A. M. (2013). Interactive learning research: Application of cognitive load theory to nursing education. *International Journal Of Nursing Education Scholarship*, 10(1), 1-10. DOI: 10.1515/ijnes-2012-0029

Â

Kalyuga, S. (2012). Interactive distance education: A cognitive load perspective. *Journal of Computing in Higher Education*, 24(3), 182-208. DOI: <http://dx.doi.org/10.1007/s12528-012-9060-4>

Â

Kolfschoten, G. L., Brazier, F. M., & T. (2013). Cognitive load in collaboration: Convergence. *Group Decision and Negotiation*, 22(5), 975-996. DOI: <http://dx.doi.org/10.1007/s10726-012-9322-6>

Â

Kozan, K. (2016). The incremental predictive validity of teaching, cognitive and social presence on cognitive load. *Internet and Higher Education*, 31, 11-19. DOI: <http://dx.doi.org/10.1016/j.iheduc.2016.05.003>

Â

Kuiper, A. Solomonides, I. & Hardy, L. (2015). Time on task in intensive modes of delivery. *Distance Education*, 36(2), 231-245.

Â

Parker, D. (2015). Faculty perceptions of developing student workload, learning activities, and rigor in undergraduate nursing courses (Doctoral dissertation). Retrieved from ProQuest, doi: 10044651

Â

Rawson, K. Stahovich, T. F. & Mayer, R. E. (2016). Homework and achievement: Using smartpen technology to find the connection. *Journal of Educational Psychology*, 109(2), 208-219.

Â

Ricker, T. J., Vergauwe, E., Hinrichs, G. A., Blume, C. L., & Cowan, N. (2015). No recovery of memory when cognitive load is decreased. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 41(3), 872-880.

Â

Sanghoon, P. (2017). Analysis of Time-on-Task, behavior experiences, and performance in two online courses with different authentic learning tasks. *International Review of Research and Distributed Learning*, 18(2), 213-233.

Â

Seery, M. K., & Donnelly, R. (2012). The implementation of pre-lecture resources to reduce in-class cognitive load: A case study for higher education chemistry. *British Journal of Educational Technology*, 43(4), 667-677. DOI:10.1111/j.1467- 8535.2011.01237.x

Â

Stevens, R. J., Lu, X., Baker, D. P., Ray, M. N., Eckert, S. A., & Gamson, D. A. (June, 2015). Assessing the cognitive demands of a century of reading curricula: An analysis of reading text and comprehension tasks from 1910-2000. *American Educational Research Journal*, 52(3), 582-617.

Â

Â

Abstract Summary:

Nurse educators strive to teach students information and skills necessary to practice safely. With advances in science and technology, nursing curricula content has reached saturation. Cognitive and physical overload affects student education and patient care. This presentation highlights findings on overload and identifies proactive solutions based on time-on-task metrics.

Content Outline:

1. **Introduction**
2. **Methodology for the Literature Review**

III. Results/Findings

1. Credit Hour
 - a. Credit hour and Learning Time
 - b. Planning Courses
2. Principles of Instructional Design
 - a. Learning process
 - b. Learner needs
 - c. Curriculum Design to facilitate
3. Workload
 - a. Cognitive
 - b. Physical
4. Time-On-Task
 - a. Readability, Writing, Motivation, Engagement, Preparation, etc.
 - b. Measurement
 - c. Bench-marking
6. Evaluation of Methodology and Data
7. Implications for Nursing Education

Topic Selection:

Advances in Education

First Primary Presenting Author

Primary Presenting Author

Shelley Ann Johnson, EdD, MSN, RN, CNE

Email: saj816@aol.com -- Will not be published

Alternate Email: shelley.johnson@academicpartnerships.com -- Will not be published

Academic Partnerships
Nursing
Senior Director of Nursing
107 Addison Drive
Mansfield TX 76063
USA

Professional Experience: Dr. Shelley Johnson holds a bachelor's and master's degree in nursing, and a doctorate in educational leadership. She also completed certificate programs from Harvard University in educational leadership and Diversity, Equity and Inclusion and a Community Participatory Research Fellowship at University of Pennsylvania. She is dedicated to life-long learning and will graduate from Northwestern, Kellogg's Executive MBA program in May of 2019.

Author Summary: Dr. Shelley Johnson holds a bachelor's and master's degree in nursing, and a doctorate in educational leadership. She also completed certificate programs from Harvard University in educational leadership and Diversity, Equity and Inclusion and a Community Participatory Research Fellowship at University of Pennsylvania. She is dedicated to life-long learning and will graduate from Northwestern, Kellogg's Executive MBA program in May of 2019.

Any relevant financial relationships? No

Signed on 11/20/2018 by *Shelley A. Johnson*

Second Secondary Presenting Author

Corresponding Secondary Presenting Author

Mary Ann S. McLaughlin, EdD, MSN, RN

Email: rn.educator@yahoo.com -- Will not be published

Alternate Email: mclaughlin.m1@gmercyu.edu -- Will not be published

Gwynedd Mercy University
Frances M. Maguire School of Nursing and Health Professions
Director, ABSN Program
1325 Sumneytown Pike
Gwynedd Valley PA 19437
USA

Professional Experience: I studied ethics for my dissertation at Teachers College. I also taught classes on ethics and professionalism at a couple of different universities. At this point, I have about five years of experience related to ethics in nursing.

Author Summary: Mary Ann Siciliano McLaughlin Ed.D, RN has been a nurse for 28 years. She graduated from the University of Pennsylvania with her BSN and MSN, and her Doctorate in Education in Nursing Leadership and Organization from Teachers College, Columbia University. Dr. McLaughlin's specialties include cardiac nursing, education, disease management, telehealth, ethics, and NCLEX. Her research interest is in ethical decision making in nursing which led to the development of two models on professionalism and ethics.

Any relevant financial relationships? No

Signed on 11/20/2018 by *Mary Ann Siciliano McLaughlin EdD, MSN, RN*

Third Secondary Presenting Author

Corresponding Secondary Presenting Author

Kerrie Downing, MSN, RN

Email: Kerrie.downing@academicpartnerships.com -- Will not be published

Alternate Email: kerriejg@gmail.com -- Will not be published

Academic Partnerships
Director of Nursing and Healthcare Initiatives
600 N Pearl St
Suite 900
Dallas TX 75201
USA

Professional Experience: I have worked as a nurse educator in multiple countries and at multiple universities over the last 10 years. My experiences also include a number of years as an assistant dean overseeing the nursing curriculum and now I currently work with over 35 universities around the country on over 85 nursing programs

Author Summary: Kerrie Downing has worked as a nurse educator in multiple countries and at multiple universities over the last 10 years. She has worked as a clinical faculty member, full time faculty, and as an assistant dean overseeing the nursing curriculum at a large university in Arizona. She is currently working with academic partnerships where she is engaged with over 35 universities around the country on over 85 nursing programs.

Any relevant financial relationships? No

Signed on 11/20/2018 by *Kerrie Downing*

Fourth Secondary Presenting Author

Corresponding Secondary Presenting Author

Jaretta L Day, MS, CDD

Email: jaretta.day@academicpartnerships.com -- Will not be published

Alternate Email: jaretta.day@academicpartnerships.com -- Will not be published

Academic Partnerships
Academic Services
Senior Instructional Designer
600 N. South Tower
Dallas TX 75201
USA

Professional Experience: Serves as an instructional designer for nursing curricula for non-profit colleges and universities. Collaborates with faculty to ensure strong learning design, quality, and rigor and methods to promote student engagement in online learning.

Author Summary: Serves as an instructional designer for nursing curricula for non-profit colleges and universities. Collaborates with faculty to ensure strong learning design, quality, and rigor and methods to promote student engagement in online learning.

Any relevant financial relationships? No

Signed on 11/20/2018 by *Jaretta Day*

If necessary, you can make changes to your abstract submission

- To access your submission in the future, use the direct link to your abstract submission from one of the automatic confirmation emails that were sent to you during the submission.
- Or point your browser to </stti/reminder.cgi> to have that URL mailed to you again. Your username/password are 97835/854951.

Any changes that you make will be reflected instantly in what is seen by the reviewers. You DO NOT need to go through all of the submission steps in order to change one thing. If you want to change the title, for example, just click "Title" in the abstract control panel and submit the new title.

When you have completed your submission, you may close this browser window.

[Tell us what you think of the abstract submission process](#)

[Home Page](#)