MPHY108 Learning in Physical Education

ECTS Value: 3 ECTS
Self-Study Hours: 36

Contact Hours: 15
Assessment Hours: 24

Overall Objectives and Outcomes

Learning often happens in decontextualized settings and the learner repeats a task often not knowing why s/he is repeating it and why, when and how that task is required in the sport that they practice. This module will allow the course participant to produce movement, as a result of, the perception-action coupling. This will allow to present conditions that can enhance and produce better learning. It shifts the emphasis from teaching to learning.

By the end of this module, the learner will be able to:

Competences

a. Perform physical activities while using different practice types.
b. Devise activities and determine the effect of specific practice conditions.
c. Monitor the effect of learning under different specific learning conditions.

Knowledge

a. Systematically appreciate how different learning approaches lead to different outcomes in both short- and long-term learning.
b. Systematically recognise how an external focus of attention produces better learning and transfer.

Skills

Applying knowledge and understanding
The learner will be able to:

a. Demonstrate the application of teaching through a more external focus and through a constraints-based approach.
b. Display the progress of students who are practicing in specific conditions.
c. Establish practice conditions for different physical activities and lesson plans targeting the learning outcomes framework for physical education;
d. Realise strategies that enhance problem solving and decision making.

Assessment Methods

This module will be assessed through: Practical Assignment Task, Rationale and Practical.

Suggested Readings

Institute for Education, Martin Luther King Road, Pembroke PBK 1990. Tel: +35625982001 | Email: ife@ilearn.edu.mt

Core Reading List

1. Abdollahipour, R., Palomo Nieto, M., Psotta, R., & Wulf, G. (2017). External focus of attention and autonomy support have additive benefits for motor performance in children. *Psychology of Sport and Exercise, 32,* 17-24.Barreiros, J., Figueiredo, T., & Godinho, M. (2007) The contextual interference effect in applied settings. European Physical Education Review. 13, (2), 195-208.
2. Buszard, T., Reid, M., Farrow, D. & Masters, R.S.W. (2013) *Implicit motor learning: Designing practice for performance.* ITF Coaching and Sport Science Review, 60, 3 - 5. http://www.tms-tennis.de/inner-coaching/wp-content...
3. Colquitt, G & Pritchard, T., Johnson, C. & McCollum, S. (2017). Differentiating Instruction in Physical Education: Personalization of Learning. Journal of Physical Education, Recreation & Dance. 88. 44-50. 10.1080/07303084.2017.1340205.
4. Crotti, M., Rudd, J., Roberts, S., Fitton Davies, K., O'Callaghan, L., Utesch, T. & Foweather, L. (2022) Physical activity promoting teaching practices and children's physical activity within physical education lessons underpinned by motor learning theory (SAMPLE-PE). PLOS ONE. 17. e0272339. 10.1371/journal.pone.0272339.
5. https://doi.org/10.1371/journal.pone.0203591
6. Lee, M.C.Y., Chow J. Y., Komar, J., Tan C. W. K., Button, C . (2014) Nonlinear Pedagogy: An Effective Approach to Cater for Individual Differences in Learning a Sports Skill. PLoS ONE 9(8): e104744. https://doi.org/10.1371/journal.pone.0104744
7. Lee, T.D., Swanson, L.R., Hall, A.L. (1991) What Is Repeated in a Repetition? Effects of Practice Conditions on Motor Skill Acquisition. *Physical Therapy*, Volume 71, (2), 150–156.
8. Masters, R. S. W., & Maxwell, J. P. (2008). The theory of reinvestment. International Review of Sport and Exercise Psychology, 1, 160–183.
9. Moy, B., Renshaw, I., & Pavey, T. (2020) Impact of the constraints-led approach on students' motor performance. Journal of Physical Education and Sport, 20(6), Article number: 4533345-3353.
10. Schenck, J., & Cruickshank, J. (2015) Evolving Kolb: Experiential Education in the Age of Neuroscience. Journal of Experiential Education, 38(1), 73–95. https://doi.org/10.1177/1053825914547153
11. Sigmundsson, H. & Trana, L., Polman, R. & Haga, M. (2017). What is Trained Develops! Theoretical Perspective on Skill Learning. Sports. 5. 38. 10.3390/sports5020038
12. Wulf, G. (2007). Attention and motor skill learning. Champaign, IL: Human Kinematics.
13. Wulf, G., & Weigelt, C. (1997). Instructions about physical principles in learning a complex motor skill: to tell or not to tell. Research Quarterly for Exercise and Sport, 68, 362-367.

Supplementary Reading List

1. Bennet, D., Bennet, A. & Turner, R. (2015) Expanding the Self: The Intelligent Complex Adaptive Learning System (A New Theory of Adult Learning). Mountain Quest Institute.
2. Blomqvist, M., Vänttinen, T. & Luhtanen, P. (2014) Assessment of secondary school students' decision-making and game-play ability in soccer. Physical Education and Sport Pedagogy 10, (2), 107-119.
3. Lee, J. D. (2007) Affect, attention, and automation in A. F. Kramer, D. A. Wiegmann, A. Kirlik. (Eds.), Attention: from theory to practice, 73-89. Oxford ; New York : Oxford University Press
4. Williams, M.A. & Hodges, N.J. (2005). Practice, instruction and skill acquisition in soccer: Challenging tradition. Journal of sports sciences, 23, 637-50.

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5. Zull, J. (2002) The art of changing the brain. Sterling, VA: Stylus Publishing.
6. Poolton, J. M., Masters, R. S. W., & Maxwell, J. P. (2005). The relationship between initial errorless learning conditions and subsequent performance. Human Movement Science, 24, 362–378.
7. Kal E., Prosee R., Winters M., van der Kamp J. (2018) Does implicit motor learning lead to greater automatization of motor skills compared to explicit motor learning? A systematic review. PLoS ONE 13(9): e0203591.

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