# DPSST Use of Force Presentation for the 2020 Joint Committee on Transparent Policing and Use of Force Reform

# Overview of Basic Police Training in Oregon

The Basic Police Training Academy is a 16-week, 640 hour, full-time, residential program serving all newly hired public safety officers in the state. All officers hired by a public safety agency come to the same basic training, whether it is Portland Police Bureau, the Malheur County Sheriff's Office, or the Oregon State Police. Following basic training, officers must complete a subsequent field training process with their agency before becoming certified.

Both a high-level overview of the program and the complete student material is available for review on the DPSST website. If you review the student material, you will see how the topics are integrated throughout the 16-weeks and not simply stand-alone concepts.

https://www.oregon.gov/dpsst/CPE/Pages/curriculum-facilitator-development.aspx#curriculum\_overviews

DPSST began a complete revision of our 16-week Basic Police training program in 2017. Due to the large scope of this project, the revision has been divided into four phases over the course of four years. A series of workgroups consisting of public safety, community members, community partners, research partners, and subject matter experts identifies and develops the topics to be included in training. The revision process has begun to scale back the number of topics provided to new recruits in an effort to focus more attention on the "need to have" topics. As we have increased focus on skills training, we have also increased focus on interpersonal skills and how these all function together.

The revised training program is designed and delivered based on academic research in addition to legal standards established through state and federal law. The program strives to provide training in a way to best develop a new officer's problem-solving and critical-thinking skills. The revision has leaned heavily on the 2015 President's Task Force on 21st Century Policing Final Report, as well as the subsequent Evidence-Assessment. An incomplete list of these sources is provided at the end of this document.

Lum, C., Koper, C. S., Gill, C., Hibdon, J., Telep, C. & Robinson, L. (2016). *An evidence-assessment of the recommendations of the President's Task Force on 21st Century Policing-Implementation and research priorities*. Center for Evidence-Based Crime Policy, George Mason University. International Association of Chiefs of Police.

http://cebcp.org/wp-content/evidence-based-policing/IACP-GMU-Evidence-Assessment-Task-Force-FINAL.pdf

President's Task Force on 21st Century Policing. (2015). *Final Report of the President's Task Force on 21st Century Policing*. Office of Community Oriented Policing Services. Retrieved from <a href="https://cops.usdoj.gov/pdf/taskforce/taskforce\_finalreport.pdf">https://cops.usdoj.gov/pdf/taskforce/taskforce\_finalreport.pdf</a>

Phase 1 was implemented in February 2018 and focused on developing an officer's sense of self and engaging in basic interactions with the public. This included the addition of new courses including Emotional Intelligence, Implicit Bias, Legitimacy and Procedural Justice, and Community Competency. Phase 1 also included a greater focus on developing effective communication skills. Communication is a key element in all aspects of policing and sets the foundation for de-escalation and "anti-escalation". The program is designed around research on officer behaviors (metrics) that are likely to lead to a positive outcome in a given encounter.

Vila, B., James, S., & James, L. (2018). How police officers perform in encounters with the Public. *Policing: An International Journal*, *41* (2), 215-232.

Vila, B., James, S., & James, L. (2016). Novel process for developing metrics that measure what police do. Interservice/Industry Training, Simulation, and Education Conference.

https://www.researchgate.net/profile/Stephen\_James8/publication/311584015\_Novel\_Process for Developing Metrics That Measure What Police Do/links/584f1a0208aecb6bd8do26e7.pdf

Phase 2 was implemented in February 2019 and built on the foundation officers built in phase 1. Threads established in phase 1 (empathy, legitimacy, resiliency) were pulled through legal and skills training. Phase 2 enhanced the focus on constitutional rights, behavioral health and other critical foundational topics. Additionally, phase 2 included a complete revision of application training. Recruits now participate in weekly scenarios where they get to practice applying the knowledge and skills they have learned in the classroom. Previously, this type of training did not begin until halfway through the academy. Beginning application training in week one, provides recruits opportunity to improve foundational skills before moving on to more complex problem-solving.

Phase 3 is under development and will be implemented in 2020. The phase 3 focus is on conducting criminal investigations. This includes specialized investigations such as child or elder abuse, sexual assault, and domestic violence. New topics will include human trafficking and threat assessment. Investigation topics also include trauma informed approaches, supporting victims of crime, and interviewing skills.

Phase 4 will include a revision of the Field Training Manual, to ensure it aligns with the training provided during the basic academy.

# **Use of Force Training at the Basic Police Academy**

The Oregon Department of Public Safety Standards and Training's Use of Force program is a comprehensive, evidence-based program that integrates classroom instruction, "live" force-on-force scenarios, and interactive video scenarios. Our evidence is drawn from the most current constitutional case law rulings, peer-reviewed research, and governmental statistical data. At the center of the program are the concepts of Objective Reasonableness, based on the Totality of the Circumstances, and officer decision making.

The Use of Force program is structured around federal constitutional legal rulings. This is due to the fact that the United States Supreme Court and the Ninth Circuit Court of Appeals have created a large body of law that tells officers what is, and, what is not considered reasonable force. More importantly, these rulings tell us *why* they ruled one way or another. Constitutionally protected rights are at the heart of the Use of Force program.

The foundational United States Supreme Court Case Graham v Connor (1989) illustrates the case specific and objective factors that determine the "reasonableness" of an officer's actions.

Because "the test of reasonableness under the Fourth Amendment is not capable of precise definition or mechanical application,"...however, its proper application requires careful attention to the facts and circumstances of each particular case, including the severity of the crime at issue, whether the suspect poses an immediate threat to the safety of the officers or others, and whether he is actively resisting arrest or attempting to evade arrest by flight.

Graham v Connor, US Supreme Court - 1989

Objective factors, such as *why* an officer is attempting to arrest a person or if that person is threating to harm to the officer or others, are the observable facts that the courts have asked officers to think about when making decision to arrest a person or use force during that arrest.

The court also acknowledged the confusing and chaotic nature of some of these police encounters, understanding that officers may not always make the "best" decisions, as long as they are reasonable based on the totality of the circumstances.

The "reasonableness" of a particular use of force must be judged from the perspective of a reasonable officer on the scene, rather than with the 20/20 vision of hindsight.

The Fourth Amendment is not violated by an arrest based on probable cause, even though the wrong person is arrested, nor by the mistaken execution of a valid search warrant on the wrong premises.

With respect to a claim of excessive force, the same standard of reasonableness at the moment applies: "Not every push or shove, even if it may later seem unnecessary in the peace of a judge's chambers," Johnson v. Glick, 481 F.2d, at 1033, violates the Fourth Amendment. The calculus of reasonableness must embody allowance for the fact that police officers are often forced to make split-second judgments - in circumstances that are tense, uncertain, and rapidly evolving - about the amount of force that is necessary in a particular situation.

Graham v Connor, US Supreme Court – 1989

This does not mean that the DPSST Use of Force program is satisfied with, or only trains to the "minimum standard". The Objective Reasonableness standard *is* the baseline that the rest of the training program is built upon. A significant amount of the training time, especially the reality-based scenario program, is spent on developing the decision-making skills of the recruits.

This decision-making training is developed and evaluated throughout the 16-week training process. In the Use of Force program, it begins with new officers watching and breaking down videos of actual, real-world, use of force situations. It then continues as we have officers participate in "live" scenarios as both the suspect/subject, and as the officer. This gives students an opportunity to participate and evaluate situations from both perspectives. New officers also participate in video simulator training.

This allows instructors to pause scenarios in real time to give the student immediate feedback and correct mistakes as they occur. It also allows for the students to watch a frame by frame breakdown of the event after it occurred so they can better evaluate points where they could have made different or better decisions.

However, this desire to have officers always make optimal decisions and use the least amount of force is not the actual goal of the Program. The goal of the program is to teach the students the techniques, principals and procedures that are *more likely* to lead to desirable outcomes (*See: Vila, B., James, S., & James, L. How police officers perform in encounters with the Public*). The distinction is important because a misunderstanding of the goals of "good" decision making versus the standard of objective reasonableness can cause confusion when discussing Use of Force constitutional law, and decision-making training.

Requiring officers to find and choose the least intrusive alternative would require them to exercise superhuman judgment. In the heat of battle with lives potentially in the balance, an officer would not be able to rely on training and common sense to decide what would best accomplish his mission. Instead, he would need to ascertain the least intrusive alternative (an inherently subjective determination) and choose that option and that option only. Imposing such a requirement would inevitably induce tentativeness by officers, and thus deter police from protecting the public and themselves. It would also entangle the courts in endless second-guessing of police decisions made under stress and subject to the exigencies of the moment.

Officers thus need not avail themselves of the least intrusive means of responding to an exigent situation; they need only act within that range of conduct we identify as reasonable. The officers here clearly did: It's hardly unreasonable for officers to take arms, knock on the door of an apartment and identify themselves as police when an armed man who, they are told, recently fired shots and is acting "crazy" lurks inside.

Scott v Henrich, Ninth Circuit Court of Appeals - 1992

The question of what is reasonable or unreasonable is an objective one, based on the best information an officer has available. This is where the importance of understanding how the specific facts and circumstances of a situation can change the outcome of what would normally seem like an easy decision.

Specificity is especially important in the Fourth Amendment context, where the Court has recognized that it is sometimes difficult for an officer to determine how the relevant legal doctrine, here excessive force, will apply to the factual situation the officer confronts." Use of excessive force is an area of the law "in which the result depends very much on the facts of each case,"...

Kisela v Hughes, US Supreme Court – 2018

For these reasons, The Oregon Department of Public Safety Standards and Training does not use a Use of Force Continuum or Matrix. These types of documents or graphics overly simplify what are incredible complicated situations. The legal standards outlined in hundreds of case rulings establish the boundaries of reasonableness, the specific requirements expected within the rules of constitutional law, and the objective facts that court will always consider pertinent in a use of force event.

## **Conclusion**

This summary is a only a small segment of the basic police training developed and delivered at the Oregon Department of Public Safety Standards and Training. As this is an incomplete overview of the training program, we are providing many of the resources we have used to develop this, and many more of our training programs. We welcome further conversations and questions about these complex topics and look forward to speaking with the committee in the future.

For additional information, we recently completed a series of live webinars on basic police training and use of force training, and the recordings are available on the DPSST website.

https://www.oregon.gov/dpsst/cj/pages/informationalfiles.aspx

Thank you,

Staci Heintzman-Yutzie, DPSST Program Development Coordinator Scott Willadsen, DPSST Use of Force Coordinator

#### Resources

Lum, C., & Koper, C. S. (2017). *Evidence-based policing: Translating research into practice*. Oxford University Press.

Lum, C., Koper, C. S., Gill, C., Hibdon, J., Telep, C. & Robinson, L. (2016). *An evidence-assessment of the recommendations of the President's Task Force on 21st Century Policing-Implementation and research priorities*. Center for Evidence-Based Crime Policy, George Mason University. International Association of Chiefs of Police.

 $\underline{http://cebcp.org/wp\text{-}content/evidence\text{-}based\text{-}policing/IACP\text{-}GMU\text{-}Evidence\text{-}Assessment\text{-}Task\text{-}}Force\text{-}FINAL.pdf}$ 

President's Task Force on 21st Century Policing. (2015). *Final Report of the President's Task Force on 21st Century Policing*. Office of Community Oriented Policing Services. Retrieved from <a href="https://cops.usdoj.gov/pdf/taskforce/taskforce">https://cops.usdoj.gov/pdf/taskforce/taskforce</a> finalreport.pdf

Reaves, B. (2016, July). State and Local Law Enforcement Training Academies, 2013. Bureau of Justice Bulletin.

https://www.bjs.gov/content/pub/pdf/slleta13.pdf

Vila, B., James, S., & James, L. (2018). How police officers perform in encounters with the Public. *Policing: An International Journal*, *41* (2), 215-232.

Vila, B., James, S., & James, L. (2016). Novel process for developing metrics that measure what police do. Interservice/Industry Training, Simulation, and Education Conference.

https://www.researchgate.net/profile/Stephen\_James8/publication/311584015\_Novel\_Process\_for\_Developing Metrics That Measure What Police Do/links/584f1a0208aecb6bd8d026e7.pdf

## **Use of Force**

Barnard v. Theobald, #11-16655, 721 F.3d 1069 (9th Cir. 2013)

Bayer v. City of Simi Valley, #01-55736, 43 Fed. Appx. 36, 2002 U.S. App. Lexis 15796 (Unpub. 9th Cir.)

Bayer v. City of Simi Valley, No. 01-55736, 43 Fed. Appx. 36 (9th Cir. 2002)

Beaver v. City of Federal Way, No. Co5-1938, 2007 U.S. Dist. Lexis 64665 (W.D. Wash.)

Bell v. Wolfish, 441 U.S. 520, 559, 99 S.Ct. 1861 (1979)

Brooks v. City of Seattle, #08-35526. The opinion was issued on October 17, 2011

Brooks v. Gaenzle, 614 F.3d 1213 (2010)

Bryan v. McPherson, 590 F.3d 767; rehearing en banc denied, 630 F.3d 805 (2009)

Chew v. Gates, #91-55718, 27 F.3d 1432, 1440 (9th Cir. 1994), citing Graham, 490 U.S. at 396

City of Los Angeles v. Lyons, #81-1064, 461 U.S. 95 (1983)

County of Los Angeles v. Mendez, #16-369, 137 S. Ct. 1539, 198 L. Ed. 2d 52, 2017 U.S. Lexis 3396

Curiel v. County of Contra Costa, #07-17233, 2010 U.S. App. Lexis 1358 (Unpub. 9th Cir.)

Deorle v. Rutherford, 272 F.3d 1272 (9th Cir. 2001)

Federman v. County of Kern, #01-16691, 2003 U.S. App. Lexis 7180 (Unpub. 9th Cir.)

Forrester v. City of San Diego, 25 F.3d 804, 814 (9th Cir. 1994)

Forrett v. Richardson, 112 F. 3d 416, citing Brower v. County of Inyo, 884 F.2d 1316, 1318 (9th Cir.1989)

Glenn v. Washington County, #10-35636, 661 F.3d 460, 2011 U.S. App. Lexis 22300 (9th Cir. 2011), rehearing denied, 673 F.3d 864 (9th Cir. 2011)

Graham v. Connor, 490 U.S. 386, 394 (1989)

Headwaters Forest Defense v. County of Humboldt, 276 F.3d 1125 (9th Cir. 2002)

Hooper v. Cty. of San Diego, #09-55954, 629 F.3rd 1127 (9th Cir. 2011)

Horne v. Rutledge, #09-17378, 2010 U.S. App. Lexis 20564 (Unpub. 9th Cir.)

Johnson v. Glick, 481 F.2d 1028 (1973)

L.A. County v. Rettele, #06-605, 501 U.S. 609 (2007)

Lifton v. City of Vacaville, No. 02-15450, 72 Fed. Appx. 647, 2003 U.S. App. Lexis 16286 (9th Cir.

Unpub. 2003)

Marquez v. City of Phoenix, #10-17156, 2012 U.S. App. Lexis 19048 (9th Cir.)

Mattos v. Agarano, #08-15567, 2011 U.S. App. Lexis 20957, 2011 WL 4908374

McClish v. Evans, 2009 U.S. Dist. Lexis 80666 (E.D. Cal. Aug. 21, 2009)

Mendoza v. Block, #92-56225, 27 F.3d 1357 (9th Cir.1994)

Miller v. Clark County, #02-35558, 340 F.3d 959 (9th Cir. 2003)

Moss v. United States Secret Service, #10-3615, 572 F.3d 962 (9th Cir. 2009)

Motley v. Parks, #02-56648. 432 F.3d 1072 (9th Cir. 2005)

Muehler v. Mena, #03-1423, 544 U.S. 93 (2005)

Nava v. City of Dublin, #95-16209, 121 F.3d 453 (9th Cir. 1997)

Porter v. Osborn, #07-35974, 547 F.3d 1131 (9th Cir. 2008)

Porter v. Osborn, #07-35974, 547 F.3d 1131 (9th Cir. 2008)

Ridgeway v. City of Woolwich, 924 F.Supp. 653 (1996)

Robinson v. Solano County, #99-15225, 278 F.3d 1007 (9th Cir. 2002)

Rochin v. California, 342 U.S. 165, 172 (1952)

Saucier v. Katz, #99-1997, 533 U.S. 194, 201 (2001)

Scott v. Harris, 433 F. 3d 807 (2007)

Scott v. Harris, No. 05-1631, 2007 U.S. Lexis 4748

Sheehan v. City and County of San Francisco, #11-16401, 743 F.3d 1211 (9th Cir. 2014).

Smith v. City of Hemet, #03-56445, 394 F.3d 689, (9th Cir. 2005)

Tekle v. U.S., #04-55026, 457 F.3d 1088 (9th Cir. 2006)

Tennessee v. Garner, 471 U.S. 1, 7 (1985)

Vera Cruz v. City of Escondido, #95-56782, 139 F.3d 659 (9th Cir. 1998)

Viehmeyer v. City of Santa Ana, #02-56157, 67 Fed. Appx. 470 (Unpub. 9th Cir. 2003)

Watkins v. City of Oakland, Cal., #96-17239, 145 F.3d 1087 (9th Cir. 1998)

National consensus Policy and Discussion Paper on Use of Force (2017).

https://www.nccpsafety.org/assets/files/library/National Consensus Policy on Use of Force.pdf

U.S. Commission on Civil Rights (2019). Police use of force: *An examination of modern policing practices*.

https://www.usccr.gov/pubs/2018/11-15-Police-Force.pdf

Vila, B., James, L., James, S., Waggoner, L. (2014). Final Report: Developing a common metric for evaluating police performance in deadly force situations. For the National Institute of Justice. https://www.ncjrs.gov/pdffiles1/nij/grants/247985.pdf

Klotter, J., Kanovitz, M., "Constitutional Law (8th edit., Anderson Pub. Co, 1999)

The Effectiveness and Safety of Pepper Spray (April 2003). National Institute of Justice (NIJ), NCJ 195739

Evaluation of Pepper Spray, National Institute of Justice (NIJ), NCJ 162358 (Feb. 1997)

Oleoresin Capsicum: Pepper Spray as a Force Alternative, National Institute of Justice (NIJ) (Mar. 1994)

Officer-Involved Shooting Guidelines – Ratified by the IACP Psychological Services Section, Los Angeles, California, 2004

"Perceptual Factors in Police Shootings of Unarmed Suspects, by Marc Green, Ph.D. Improving Police Response to Persons with Mental Illness, T. Jurkanin, L. Hoover & V. Sergevnin, Charles C. Thomas, Publisher, ISBN 978-0-398-07778-5 (2007). http://www.ccthomas.com/ebooks/9780398077785.pdf

People with Mental Illness, Gary Cordner, COPS Problem-Oriented Guide for Police No. 40 (2006). http://www.popcenter.org/problems/pdfs/MentalIllness.pdf

Police Handling of People with Mental Illness, A. Lurigio, J. Snowden & A. Watson, 6 (3) Law Enf. Executive Forum 87-110 (2006)

National Institute of Justice Standard for Metallic Handcuffs, NIJ Standard 0307.01. March 1982

"Tight Handcuffs. A Fourth Amendment Violation?" by Laura L. Scarry, Law Officer, Volume 3, Issue 12 (December 1, 2007).

## **De-Escalation**

Engel, R., McManus, H., & Herold, T. (2020). Does de-escalation training work? *Criminology & Public Policy*, 2020, 1-39.

Engel, R., McManus, H., & Herold, T. (2019). The Deafening Demand for De-escalation Training: A Systematic Review and Call for Evidence in Police Use of Force Reform, unpublished manuscript, IACP/UC Center for Police Research and Policy, Cincinnati, OH.

James, L. & James, S. (2017). Crisis intervention team (CIT) metrics: A novel method of measuring police performance during encounters with people in crisis. *Mental Health and Addiction Research*, 2(2), 1-4.

https://www.researchgate.net/profile/Stephen James8/publication/320235777 Crisis Intervention

Team CIT metrics a novel method of measuring police performance during encounters wi
th people in crisis/links/59d6656b458515db19c4f85c/Crisis-Intervention-Team-CIT-metrics-anovel-method-of-measuring-police-performance-during-encounters-with-people-in-crisis.pdf

Todak, N. & James, L. (2018). A systematic social observation study of police de-escalation tactics. *Police Quarterly*, *21* (4), 509-543.

# **Academy Development**

Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Wittrock, M. C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives* (abridged ed.). Addison Wesley Longman.

Agarwal, P. (2019). Retrieval practice & Bloom's Taxonomy: Do students need fact knowledge before higher order learning? *Journal of Educational Psychology*, 111 (2), 189-209.

Agarwal, P. K., & Bain, P. M. (2019). *Powerful teaching: unleash the science of learning*. Jossey-Bass.

Ambrose, S., Bridges, M., DiPietro, M., Lovett, M., & Norman, M. (2010). *How learning works:* 7 Research-based principles for smart teaching. Jossey-Bass.

Andersson, C., & Palm, T. (2018). Reasons for teachers successful development of a formative assessment practice through professional development - a motivation perspective. *Assessment in Education: Principles, Policy & Practice*, *25*(6), 576-597.

Atkins, V., & Norris, W. (2012). Innovative law enforcement training: Blended theory, technology, and research in Haberfield, M.R., Clarke, C., & Sheehan, D., Police *Organization and Training Innovations in Research and Practice*, (pp 45-65). Springer.

Azevedo R, & Aleven V. (2013) *International Handbook of Metacognition and Learning Technologies*. Springer.

Bandura, A. (1989). Regulation of cognitive processes through perceived self-efficacy. *Developmental Psychology*, *25*(5), 729-735.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review Psychology*, 52(1), 1-26.

Basham, B. (2014). Police instructor or police educator? Salus Journal, 2(1), 99-109.

Bickel, K. (2013, June). The COPS Office recruit training: Are we preparing officers for a community-oriented department? The e-newsletter of the COPS Office, 6(6).

Birzer, M. (2003). The theory of andragogy applied to police training. *Policing: An International Journal of Police Strategies & Management*, *26*(1), 29-42.

Bloom, B. S. (Ed.), Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *The taxonomy of educational objectives: The classification of educational goals (Handbook 1: Cognitive domain)*. David McKay Company.

Blumberg, D., Schlosser, M., Papazoglou, K., Creighton, S., & Kaye, C. (2019). New directions in police academy training: A call to action. *International Journal of Environmental Research and Public Health*, 16(24), 4941-4955.

Boutin, A., & Blandin, Y. (2010). On the cognitive processes underlying contextual interference: Contributions of practice schedule, task similarity and amount of practice. *Human Movement Science*, 29(6), 910-920.

Boutin, A., Panzer, S., & Blandin, Y. (2013). Retrieval practice in motor learning. *Human Movement Science*, *32*, 1201-1213.

Bray-Clark, N., & Bates, R. (2003). Self-efficacy beliefs and teacher effectiveness: Implications for professional development. *Professional Educator*, *26*(1), 13-22.

Brown, P., Roediger III, H., & McDaniel, M. (2014). *Make it stick: The science of successful learning*. Belknap Press of Harvard University Press.

Burke, W. (2018). Organizational change: Theory and practice (5th ed.). SAGE.

Burke, L. & Hutchins, H. (2007). Training transfer: An integrative literature review. *Human Resource Development Review*, *6*(3), 263-296.

Butler, A. C. (2010). Repeated testing produces superior transfer of learning relative to repeated studying. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *36*, 1118 –1133.

Bransford, J. D., Sherwood, R., Vye, N., & Rieser, J. (1986). Teaching thinking and problem solving: Research foundations. *American Psychologist*, *41*, 1078 –1089.

Bykov, O. (2014). Police academy training: An evaluation of the strengths and weaknesses of police academies. *Themis: Research Journal of Justice Studies and Forensic Science*, *2*, 142-159.

Caro, C. (2011). Predicting state police officer performance in the field training officer program: What can we learn from the cadet's performance in the training academy? *American Journal of Criminal Justice*, *36*, 357-370.

Chappell, A. (2008). Police Academy Training: comparing across curricula. *Policing: An International Journal of Police Strategies and Management*, *31*(1), 36-56.

Chappell, A. T., & Lanza-Kaduce, L. (2010). Police academy socialization: Understanding the lessons learned in a paramilitary-bureaucratic organization. *Journal of Contemporary Ethnography*, 39(2), 187-214.

Chen, O., Castro-Alonso, J., Paas, F., & Sweller, J. (2018). Extending cognitive load theory to incorporate working memory resource depletion: Evidence from the spacing effect. *Educational Psychology Review*, *30*, 483-501.

Clarke, C., & Armstrong, K. (2012). Beyond reproach: The need for effective and responsive training in Haberfield, M.R., Clarke, C., & Sheehan, D., *Police Organization and Training Innovations in Research and Practice*, (pp 11-26). Springer.

Clark, R. E., & Estes, F. (2008). *Turning research into results: A guide to selecting the right performance solutions*. CEP Press.

Clark, R., Nguyen, F., & Sweller, J. (2006). *Efficiency in Learning: Evidence-Based Guidelines to Manage Cognitive Load*. Pfeiffer.

Colvin Clark, R. (2019). Evidence-Based training methods: A guide for training professionals (3rd ed.) ASTD Press.

Conley, A. (2011). Patterns of motivation belief: Combining achievement goal and expectancy-value perspectives. *Journal of Educational Psychology*, *104*(1), 32-47.

Conti, N. (2011). Weak links and warrior hearts: A framework for judging self and others in police training. *Police Practice and Research*, *12*(5), 410-423.

Conti, N., Doreian, P. (2014). From here on out, we're all blue: Interaction order, social infrastructure, and race in police socialization. *Police Quarterly*, 17(4), 414-447.

Cordner, G. (2017). Evidence-based police education and training in the United States. *European Law Enforcement Research Bulletin*, (3), 71-78.

Cordner, G. & Shain, C. (2011). The changing landscape of police education and training, *Police Practice and Research*, 12(4), 281-285.

Eccles, J. S. (2006). A motivational perspective on school achievement in *Optimizing student success* in schools with the other three Rs: reasoning, resilience, and responsibility. Information Age Publishing.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive developmental inquiry. *American Psychologist*, *34*, 906–911.

Ford, R. (2003). Saying one thing, meaning another: The role of parables in police training. Police Quarterly, 6(1), 84-110.

Gick, M. L., & Holyoak, K. J. (1980). Analogical problem solving. *Cognitive Psychology*, 12, 306 –355.

Gierl, M. J., Bulut, O., Guo, Q., & Zhang, X. (2017). Developing, analyzing, and using distractors for multiple-choice tests in education: A comprehensive review. *Review of Educational Research*, 87, 1082–1116.

Griffin, T., Wiley, J., & Salas, C. (2013). Supporting effective self-regulated learning: The critical role of monitoring in *International Handbook of Metacognition and Learning Technologies*. Springer.

Grossman, R. & Salas, E. (2011). The transfer of training: What really matters. *International Journal of Training and Development*, *15*(2), 103-120.

Hannum, W. (2009). Training myths: False beliefs that limit the efficiency and effectiveness of training solutions, part 1. *Performance Improvement*, 48(2), 26-30.

Hannum, W. (2009). Training myths: False beliefs that limit the efficiency and effectiveness of training solutions, part 2. *Performance Improvement*, 48(6), 25-29.

Helsdingen, A., van Gog, T., & van Merrienboer, J. (2011). The effects of practice schedule and critical thinking prompts on learning and transfer of a complex judgment task. *Journal of Educational Psychology*, 103(2), 383-398.

Holladay, C. & Quinones, M. (2003). Practice variability and transfer of training: The role of self-efficacy generality. *Journal of Applied Psychology*, 88(6), 1094-1103.

Huang G.C., Lindell D., Jaffe L.E., Sullivan A.M., & Huang G.C. (2016). A multi-site study of strategies to teach critical thinking: "why do you think that?". Medical Education, 50(2), 236-249.

Huet, M., Jacobs, D., Camachon, C., Missenard, O., Gray, R., & Montagne, G. (2011). The education of attention as explanation of variability of practice effects: Learning the final approach phase in a flight simulator. *Journal of Experimental Psychology: Human Perception and Performance*. *37*(6), 1841-1854.

Hur, Y. (2017). Does training matter in public organizations? Assessing training effects in the U.S. law enforcement agencies. *International Journal of Organization Theory and Behavior*, 20(4), 454-478.

Karpicke, J. & Blunt, J. (2011). Retrieval practice produces more learning than elaborative studying with concept mapping. *Science*, *331*, 772-775.

Kim, T., Chen, J., Verwey, W.B., & Wright, D.L. (2018). Improving novel motor learning through prior high contextual interference training. *Acta Psychologica*, *182*, 55-64.

Kim, T., Rhee, J, & Wright, D. (2016). Allowing time to consolidate knowledge gained through random practice facilitates later novel motor sequence acquisition. *Acta Psychologica*, *163*, 153-166.

Kirkpatrick, D. L., & Kirkpatrick, J. D. (2005). *Transferring Learning to Behavior: Using the Four Levels to Improve Performance*. Berrett-Koehler Publishers.

Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation*. ATD Press.

Klassen, R., & Tze, V. (2014). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. *Educational Research Review*, 12, 59-76.

Klassen, R., Tze, V., Betts, S., & Gordon, K. (2011). Teacher efficacy research 1998-2009: Signs of progress or unfulfilled promise? *Educational Psychology Review*, *23*, 21-43.

Kluger, A. & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2), 254-284.

Knowles, M. (1980). The modern practice of adult education: From pedagogy to andragogy. Follett.

Krathwohl, D. (2002). A revision of Bloom's Taxonomy: An overview. *Theory Into Practice*, 41 (4), 212-218.

Kramarski, B. & Michalsky, T. (2013). Supporting effective self-regulated learning: The critical role of monitoring in *International Handbook of Metacognition and Learning Technologies*. Springer.

Little, J. L., & Bjork, E. L. (2015). Optimizing multiple-choice tests as tools for learning. *Memory & Cognition*, *43*, 14 –26.

Little, J. L., Bjork, E. L., Bjork, R. A., & Angello, G. (2012). Multiple choice tests exonerated, at least of some charges: Fostering test-induced learning and avoiding test-induced forgetting. *Psychological Science*, *23*, 1337–1344.

Lewinski, W. (2019). Do we train to assure officer success... or to "check the box?". https://www.forcescience.org/2019/01/police-officer-training

Makin, D.A. (2016). A descriptive analysis of a problem-based learning police academy. *Interdisciplinary Journal of Problem Based Learning*, 10(1).

Marsh, E. J., & Cantor, A. D. (2014). Learning from the test: Dos and don'ts for using multiple-choice tests. In M. A. McDaniel, R. F. Frey, S. M. Fitzpatrick, & H. L. Roediger (Eds.), *Integrating cognitive science with innovative teaching in STEM disciplines* (pp. 37–52). Washington University Libraries Marsh, H., Martin, A., Yueng, A., & Craven, R. (2017). Competence self-perceptions in theory and practice in *Handbook of Competence and Motivation* (2nd ed.) Guilford Press.

Mayer, R. (2011). *Applying the Science of Learning*. Pearson Education.

McCarty, W., & Lawrence, D. (2016). Coping, confidence, and change within the academy: A longitudinal look at police recruits. *Police Practice and Research*, *17*(3), 263-278.

McCoy, M. R. (2006). Teaching style and the application of adult learning principles by police instructors. *Policing: An International Journal of Police Strategies & Management*, 29(1), 77-91.

McEwan-Adkins, E. K., & McEwan, P. J. (2003). *Making sense of research whats good, whats not, and how to tell the difference*. Corwin.

Miles-Johnson, T. & Pickering, S. (2018). Police recruits and perceptions of trust in diverse groups. *Police Practice and Research: An International Journal*, 19(4), 311-328.

Mugford, R., Shevaun, Co., & Bennell, C. (2013). Improving police training through a cognitive load perspective. *Policing: An International Journal of Police Strategies and Management*, 36(2), 312-337.

National Research Council (2004). Fairness and effectiveness in policing: The evidence. The National Academies Press.

Newell, K., Mayar-Kress, G., Hong, S., Liu, Y. (2009). Adaptation and learning: Characteristic time scales of performance dynamics. *Human Movement Science*, *28*, 655-687.

O'Neil, J., O'Neil, D., Weed, K., Hartman, M., Spence, W., & Lewinski, W. (2019). Police academy training, performance, and learning. *Behavior Analysis in Practice*, 12(2), 353-372.

Ozturk, N. (2017). An analysis of teachers' self-reported competencies for teaching metacognition. *Educational Studies*, *43*(3), 247-264.

Paas, F., Renkl, A., & Sweller, J. (2003). Cognitive load theory and instructional design: Recent Developments. *Educational Psychologist*, *38* (1), 1-4.

Pan, S. C., & Rickard, T. C. (2018). Transfer of test-enhanced learning: Meta-analytic review and synthesis. *Psychological Bulletin*, *144*(7), 710–756.

Patterson, G. (2016). A brief exploratory report of coping strategies among police recruits during academy training. *Psychological Reports*, *119*(2), 557-567.

Rahr, S., & Rice, S. (2015, April). From warriors to guardians: Recommitting American police culture to democratic ideals. *New Perspectives in Policing*, US Department of Justice Bulletin.

Renden, P., Landman, A., Geerts, S., Jansen, S., Faber, G., Savelsbergh, J.P., & Oudejans, R. (2014). Effects of anxiety on the execution of police arrest and self-defense skills. *Anxiety, Stress & Coping: An International Journal*, *27*(1), 100-112.

Renden, P., Landman, A., Savelsbergh, G., & Oudejans, R. (2015). Police arrest and self-defense skills: Performance under anxiety of officers with and without additional experience in martial arts. *Ergonomics*, *58*(9), 1496-506.

Rosenbaum, D., Lawrence, D. (2017). Teaching procedural justice and communication skills during police-community encounters: Results of a randomized control trial with police recruits. *Journal of Experiential Criminology*. 13, 293-319.

Rowland, C. (2014). The effect of testing versus restudy on retention: A meta-analytic review of the testing effect. *Psychological Bulletin*, *140*(6), 1432-1463.

Salas, E., Wilson, K., Priest, H., & Guthrie, J. (2006). Design, delivery, and evaluation of training systems in *Handbook of Human Factors and Ergonomics* (3rd ed.).

Sanli, E. & Carnahan, H. (2018). Long-term retention of skills in multi-day training contexts: A review of the literature. *International Journal of Industrial Ergonomics*, *66*, 10-17. Schafer, J. & Jarvis, J. (2017, October). The Landscape of Police Education and Training 2037. *The Police Chief*, 56–58.

Schmidt, R.A. (2003). Motor schema theory after 27 years: Reflections and implications for a new theory. *Research Quarterly for Exercise and Sport*, 74(4), 366-375.

Schmidt, R. A. (1975). A schema theory of discrete motor skill learning. *Psychological Review*, 82, 225-260.

Schuck, A. & Rabe-Hemp, C. (2017). Inequalities regimes in policing: Examining the connection between social exclusion and order maintenance strategies. Race and Justice, 1-23.

Sereni-Massinger, C., & Wood, N. (2016). Improving law enforcement cross-cultural competencies through continued education. Journal of Education and Learning, 5(2), 258-264

Shipton, B. (2009). Problem-based learning: Does it provide appropriate levels of guidance and flexibility for use in police recruit education? *Journal of Learning Design*, 3(1), 57-67.

Shute, V. (2008). Focus on formative feedback. Review of Educational Research, 78, 153-189

Soderstrom, N., & Bjork, R. (2015). Learning versus performance: An integrative review. Perspectives on Psychological Science, 10(2), 176-199.

Staller, M., and Zaiser, B. (2018). Developing problem solvers: New perspectives on pedagogical practices in police use of force training. Journal of Law Enforcement, 4(3).

Sternberg, R. (2017). Intelligence and competence in theory and practice in *Handbook of Competence* and Motivation (2nd ed.), Guilford Press.

Sweller, J., van Merrienboer, J., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. Educational Psychology Review, 31 (2), 261-292.

Vander Kooi, G., Bierlein Palmer, L (2014). Problem-based learning for police academy students: Comparison of those receiving such instruction with those in traditional programs. *Journal of* Criminal Justice Education, 25(2), 175-195.

Verhoeven, F.M., & Newlee, K. (2018). Unifying practice schedules in the timescales or motor learning and performance. Human Movement Science, 59, 153-169.

Vila, B., James, S., & James, L. (2018). How police officers perform in encounters with the Public. *Policing: An International Journal*, *41* (2), 215-232.

Vodde, R. (2012). Changing paradigms in police training: Transitioning from a traditional to a andragogical model in Haberfield, M.R., Clarke, C., & Sheehan, D., Police Organization and Training Innovations in Research and Practice, (pp 27-44). Springer.

Weinstein, Y., Madan, C., & Sumeracki, M. (2018). Teaching the science of learning. Cognitive Research: *Principles and Implications*, *3*(2), 1-17.

Werth, E. P. (2011). Scenario training in police academies: Developing students' higher-level thinking skills. *Police Practice and Research: An International Journal*, *12*(4), 325–340.

Wigfield, A. (1994). Expectancy-value theory of achievement motivation: A developmental perspective. *Educational Psychology Review*, *6*(1), 49-78.

Wigfield, A., Rosenzweig, E., Eccles, J. in Elliot, A. J., Dweck, C. S., & Yeager, D. S. (2017). *Handbook of competence and motivation: Theory and application*. Guilford Press.

Wright, D., Verwey, W., Buchanan, J., Chen, J., Rhee, J., & Immink, M. (2016). Consolidating behavioral and neurophysiologic findings to explain the influence of contextual interference during motor sequence learning. *Psychonomic Bulletin and Review*, *23*(1), 1-21.

Wu, W., Young, D., Schandler, S., Meir, G., Judy, R., Perez, J., & Cohen, M. (2011). Contextual interference and augmented feedback: Is there and additive effect for motor learning? *Human Movement Science*, *30*, 1092-1101.

Wulf, G., & Schmidt, R. (1997). Variability of practice and implicit motor learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 23(4), 987-1006.