In 2022, the Air University Teaching and Learning Center (AUTLC) focused on expanding our accessibility for the entire Air University and Air Education and Training Command communities. The data shared in this report reflects our efforts to reach faculty and students at their point-of-need, no matter where in the world they are geographically located or where they currently are in their own learning progression.

One successful example of this is the 2022 launch of the fully online, self-paced Teaching Essentials Course (TEC). This foundational faculty development course enables learners to choose their own learning path based on 14 instructor competencies. Competencies focus on the foundations of adult learning, instructional design, student-centered instruction using active learning strategies in an inclusive manner, and evaluation and reflection. This year alone, we enrolled 103 students from across 61 different organizations, and we welcome new learners for 2023!

Additionally, we reached 39 different organizations through nearly 100 consultations on educational technology and its purposeful use in the military learning environment. As we begin the next year, we are prioritizing research into and faculty development efforts for immersive learning technologies.

The AUTLC’s research portfolio also includes analysis of effective instructional strategies such as problem-based learning. This year we partnered with scholars from National Defense University, Marine Corps University, the Department of State, and the U.S. Army War College to publish findings specific to developing officers’ communication skills in an edited volume with Air University Press (https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_177_Hennessey_Developing_Military_Leadership.pdf). A second volume is forthcoming, exploring similar topics for the enlisted force.

The AUTLC also has its finger on the pulse of conversations around wargaming. We stood up the Educational Wargaming Network this year, a comprehensive community of interest for military educators. Join us for quarterly discussions and resource sharing.

Finally, our Writing Lab continues to be at the fore of student support at Air University. Many thanks to our volunteer faculty tutors who, together with our Lead Writing Specialist Ms. Meg Varney, assisted an impressive 773 students in tutoring appointments this year.

In 2023, we’ll continue to prioritize direct support to faculty, students, and staff across all of Air University—it is our honor to serve you!

Megan J. Hennessey, Ph.D.
Director, Air University Teaching and Learning Center
FACULTY DEVELOPMENT

103 learners in the Teaching Essentials Course from 61 different organizations

Top 3 organizations represented:

1. U.S. Naval War College
2. Defense Language Institute English Language Center
3. Air Command and Staff College

20 different faculty and professional development workshops offered:

14 different facilitators representing the following organizations:

1. Air Force Institute of Technology
2. Air University Teaching and Learning Center
3. Air Command and Staff College
4. School of Advanced Air and Space Studies
5. Marine Corps University
6. Air University Academic Affairs
7. Center for Naval Analyses
8. Harvard Business School
9. Naval Postgraduate School
10. L’École Militaire

Topics ranged from “Gaming for Strategic and Military Learning” to “Neuromyths” and “Outcomes-based Curriculum Design”
EDUCATIONAL TECHNOLOGY

362 pieces of educational technology equipment reserved

Trends:
Most reserved equipment: Augmented and Virtual Reality equipment

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Virtual &amp; Augmented Reality</td>
<td>22</td>
<td>6%</td>
</tr>
<tr>
<td>Video &amp; Capture Devices</td>
<td>11</td>
<td>3%</td>
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<tr>
<td>Miscellaneous</td>
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<tr>
<td>Laptops</td>
<td>48</td>
<td>13%</td>
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<tr>
<td>Software</td>
<td>276</td>
<td>76%</td>
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</table>

97 consultations on implementing educational technology in the classroom

- 39 different organizations served
- Including consultation visit to US Air Force Special Operations School in support of language and culture training

Special projects:
- Supported enhanced classroom technology at International Officer School with 8 new mobile projection/touchscreen interfaces
- Supplied 360-degree cameras to the Eaker Center to produce videos for remote-only students in professional development programs
- Represented the AUTLC at:
  1. “Force Development Environment Assessment and Scenario 2030 Workshops” (San Antonio TX); Sponsored by Air Education and Training Command/A9
  2. “iFEST 2022: Premier Conference on Distributed Learning” (Alexandria VA); Sponsored by the National Training & Simulation Association
  3. “Interservice/Industry Training, Simulation and Education Conference (I/ITSEC)” (Orlando, FL); Sponsored by the National Training & Simulation Association
EDUCATIONAL SUPPORT

Social media highlights

- Total impressions on AUTLC content: Twitter – 61.1K, LinkedIn – 49.3K
- Most popular topics: Wargaming and the Military Scholarship of Teaching and Learning Forum

Top Twitter Post:

<table>
<thead>
<tr>
<th>Air University Teaching &amp; Learning Center @AirTeaching 29 NOV, 1130 CT. Join @TheKrilakCenter and our director @MegJHennessey in a free online #BruteCast about educational wargaming and all things #SOTL! Register at: <a href="https://www.eventbrite.com/e/brutecast-dr-megan-j-hennessy-the-science-behind-the-strategy-tickets-47350536207">https://www.eventbrite.com/e/brutecast-dr-megan-j-hennessy-the-science-behind-the-strategy-tickets-47350536207</a> ... @MarineCorpsU @HQAirUniversity @AETCommand @SebastianBae #PME pic.twitter.com/vOOGz1HcqMf</th>
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<td>Impressions 3,349</td>
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<td>Retweets 6</td>
</tr>
<tr>
<td>Replies 1</td>
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<tr>
<td>Hashtag clicks 1</td>
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</tbody>
</table>

552 different AUTLC facilities reservations

- Top 3 AUTLC facilities users:
  1. Air Command and Staff College
  2. Air Force Culture and Language Center
  3. Defense Language Institute

- Most reserved AUTLC facilities:
  Auditorium and Idea Lab

EDUCATIONAL RESEARCH

Conducted studies on:

- Virtual Learning Environments’ Impact on Student Learning within Air Force Chaplain Corps College (with Dr. Andy Clayton, Dr. Linda Brent, & Ms. Erica Haglund)
- Competitive Strategy Formulation and Problem-based Learning (with Dr. Megan J. Hennessey, Dr. Celestino Perez, Dr. Linda Brent, & Ms. Erica Haglund)

Published/shared scholarship:

- Developing Military Learners’ Communication Skills Using the Scholarship of Teaching and Learning, edited volume with Air University Press. Edited by Dr. Megan J. Hennessy (https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_177_Hennessy_Developing_Military_Leadership.pdf)

- Podcasts:
EDUCATIONAL RESEARCH (CONTINUED)


The AUTLC hosted the Military Scholarship of Teaching and Learning Forum for a second time in 2022:

• 572 total attendees representing 220 different organizations, the largest and most diverse MSOTL Forum ever in its three-year history

• 42% of attendees from the Department of the Air Force

• Recorded presentations available at https://www.airuniversity.af.edu/TLC/MSOTL/

• Keynote speaker: Dr. Susan Hrach, author of Minding Bodies: How Physical Space, Sensation, and Movement Affect Learning (https://www.susanhrach.com/minding-bodies-blog/)

• Call for proposals for the 2023 MSOTL Forum will go live in April 2023

• 2022 MSOTL Forum presentations by AUTLC teammates:

  1. Meg Varney and Dr. Liz Woodworth, “Student Feelings of Preparedness for Writing in Graduate-level PME”

  2. Doug McCarty and Dr. Andy Clayton, “360 Video and Photogrammetry”

  3. Dr. Megan J. Hennessey, “Intellectual Humility and the Military Faculty Experience”


COMMUNICATION SUPPORT

Number of tutoring sessions (individual & group appointments and drop-ins)

Total: 773

1. Air Command and Staff College: 459
2. Air War College: 299
3. School of Advanced Air and Space Studies: 3
4. Squadron Officer School: 5
5. International Officer School Prep Course: 2
6. Air Force Senior Noncommissioned Officer Academy: 1
7. Other: 4
COMMUNICATION SUPPORT (CONTINUED)

- International student sessions (out of total): 113
- 41% of tutoring appointments are facilitated by volunteer tutors outside of the AUTLC
- 78% of tutees are repeat visitors to the Writing Lab:

![Number of Tutoring Sessions by First Writing Session Status](image)

Student satisfaction

- 99% of respondents strongly agree or agree that the Writing Lab helped strengthen their papers/assignments and that they can apply what they learned to their writing in the future

Other programming

- New in 2022: offered in-person and virtual drop-in hours for resident students
- Taught Communication Skills courses for 8 Air War College and 10 Air Command and Staff College international officers as part of the International Officer School Prep Course
- Briefed Air Command and Staff College academic advisors on Writing Lab observations and data from previous AY to inform advisors’ evaluations of start-of-term writing diagnostic
- Created and facilitated targeted workshops:
  1. “Professional Written Communication” and “Grammar & Style” for group of Community College of the Air Force staff
  2. “Academic Writing Overview” for Air Command and Staff College incoming students
  3. “Using Sources & Avoiding Plagiarism” for Air Force Culture and Language Center students
  4. “Timed Writing Strategies” for Air War College Army students preparing for Command Assessment Program
  5. “Adult Learning, English for Specific Purposes, and Outcomes-based Military Education: Alignments and Applications” for International Officer School Communication Skills faculty
COMMUNICATION SUPPORT (CONTINUED)

Noteworthy outreach efforts

- Provided consultations for The Centro Superior de Estudios de la Defensa Nacional (CESEDEN, a command and staff college in Spain) to support the school’s development of a new writing center
- Served as a panelist in two joint Professional Military Education presentations:
  1. “Ethics Sentinels: Social Justice and Defense Against Conflict in Military Writing Centers” during the Conference on College Composition & Communication Convention 2022
  2. “Augmenting the Traditional Graduate Experience: Adult-Learning Instructional Strategies from Professional Military Education Programs” during the National Communication Association 2022 Convention

The AUTLC Writing Lab held “Tutor Appreciation Days” in March

EDUCATIONAL WARGAMING

- 100 members from across the entire Department of Defense, other federal agencies, civilian higher education, and other organizations
- Focused on resource-sharing, collaboration, and networking specific to educational wargaming and game-based learning
- Quarterly meetings and special events, such as Mr. Sebastian Bae’s workshop on the fundamentals of wargaming (https://www.dvidshub.net/video/861314/sebastian-bae-gaming-workshop)
- Open to all stakeholders with direct connections to military education; join by emailing us at AUTLC@us.af.mil