How ADL and emerging technologies supports military education and training?

ADL Conference 2012, May 8-10th
Training • Simulation • Education

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Dear Participant
Norwegian Defence University College is proud to welcome you to the 7th Norwegian Defence ADL Conference.

In the last couple of years it’s become pretty obvious that ADL and new technology in many cases will add cost-effectiveness and quality to training and education. A more important question is of course how ADL and emerging technologies can and should support military education and training to reach these goals. This question will be our main focus at this year.

As always our goal is to give you a great learning experience and a unique networking opportunity in the beautiful surroundings of Hallingdal. Once again the conference will be located at Per’s Resort and together we will do our very best to give you some great couple of days in Gol.

I am looking forward to welcome both previous and new participants in May.

Sincerely

Commander Geir Isaksen
Conference Chairman
NoD University College
CONFERENCE HIGHLIGHTS

DEP. DIRECTOR
HERBERT (DUKE) BOUTWELL
U.S. Naval Forces Europe

PROFESSOR
SARA de FREITAS
University of Coventry, UK

PROFESSOR
XIANGEN HU
Department of Psychology at
The University of Memphis, USA

ASSOCIATE PROFESSOR
EKATERINA PRASOLOVA-FØRLAND
NTNU
KONGSBERG Simulation & Training is the main sponsor for this year's ADL Conference at Gol, Norway.

KONGSBERG Simulation & Training has been a supplier of simulators and trainers in the international market for the last three decades. The company has accumulated a unique experience across the complete spectrum of training systems, ranging from small simulators to complex military team trainers.

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Join the Norwegian ADL partnership lab on facebook.
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December 3-6, 2012

Orlando, Florida
1030-1200  |  E-LEARNING DEVELOPMENT SESSION

The goal of the session is to present different e-learning development tools, and show how easy e-learning could be developed in-house with these tools.

E-learning courses used by the Norwegian Armed Forces are mostly developed by vendors, but in the last couple of years some courses have been developed in-house. In order to meet the demand for more diverse training, departments need to be able to develop their own rapid e-learning programs.

We hope this session will highlight how your organisation can develop cost-effective in-house courses with good quality.

The session will contain 2 parts:

Lumesse will present their e-learning tool Coursebuilder, and the use of interactive PDF export module within Coursebuilder. This authoring tool is already in use within the Norwegian Defence.

Sven Ove Sjølyst is Head of Product, CourseBuilder (content authoring tool) at Lumesse with over 19 years experience in the e-learning industry. Sven specializes in learning technology, authoring tools and e-learning standards as well as having a wealth of knowledge in the development of bespoke e-learning. Sven has spoken at many conferences and events during his time in the learning industry, including the Norwegian MoD’s ADL conference. One key achievement to date is the ongoing development to the leading SaaS-based collaborative authoring tool, CourseBuilder.

Mobile, Flexible eLearning, Live and on Demand
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Dan Lidholm, Product Specialist, Wezupport Solutions Europe, part of Connect Innovation
1330-1400 | POSSIBILITIES AND CHALLENGES RELATED TO ADL SEEN FROM THE GROUND IN AFGHANISTAN

Possibilities and challenges related to ADL seen from the perspective of my latest two positions, as Chief Management Division in the Army Staff and as a contingent Commander for Norwegian forces in Afghanistan

EDUCATION
1985 | Officer Candidate School
1989 | Military Academy
1997 | Army Staff College I
2006 | Army Staff College II
2011 | NATO Defence College

SERVICE
1985-86 | Serving Officer, Medical Troop/Medical Company/Brigade North Norway
1989-90 | Platoon Commander Engineer Troop/Engineer Battalion/Brigade North Norway
1990-91 | Staff Officer Operations/Engineer Battalion/Brigade North Norway
1991-92 | Operations Officer/Engineer Section/Division 6
1993-94 | Company Commander/Engineer Battalion/Brigade North Norway
1994-96 | Operations Officer, Operations Section/Division 6
1996-01 | Personnel Officer/Army Staff
2001-03 | Information Officer/Norwegian Defence Logistics Organisation
2001-04 | Aide-de-camp/His Majesty the King of Norway
2003-05 | Senior Staff Officer Personnel/Ministry of Defence
2006-08 | Senior Staff Officer Military Planning / Army Staff
2007 | Deputy Commander/CJ3 Branch/Regional Command North/ISAF/Afghanistan
2008-11 | Chief Management Division / Army Staff
2011 | National Contingent Commander Afghanistan
2012- | Director/Logistics and Resource Management Department/Staff College

PROMOTIONS
1986 | Second-Lieutenant
1989 | Lieutenant
1993 | Captain
1997 | Major
2003 | Lieutenant Colonel
2009 | Colonel

1400-1430 | FUTURE TRAINING OF NORWEGIAN F-35 PILOTS… …A MILLIONAIRE’S POOR MAN CONCEPT.”

Norways ambition with respect to airpower roles it intends to conduct with its future combat aircraft is set at a very high level. This level of ambition creates challenges when carving out an educating and training program for Norwegian F-35 fighter pilots. Amongst many, time constraints, funding available and unwanted release of classified information will be covered in this presentation;

As with any other project, keeping lifecycle cost at an acceptable level is a tenet throughout the Program. How can future training aids help us keep training cost down?

The military aspect requires certain types of operation and capabilities of the aircraft to remain classified. How can Norwegian F-35 pilots acquire the skills required to utilize the F-35 to its maximum potential without giving away classified information?

The Norwegian level of ambition requires pilots to train for more roles than ever, but time available remains a constant. How can future training become more effective?

The F-35 Continuation Training Program for Norway represents a training program that is constructed as a poor mans way to blend advanced simulation and real time training in such a manner that it hopefully should control the challenges mentioned. The content of the presentation will therefore focus on the environment in which Norwegian education and training of F-35 pilots will be conducted.

Lt Col Tord Askilen received his wings in 1993. He then flew the F-16 for the next 16 years, except when attending the War-academy in 1997-1999 and the Swedish National Defence College in 2006-2008. In the period 2002-2006, and 2008-2009 he worked at the Inspectorate of Air Operations in the fighter aircraft branch at the same time as he remained operational on the F-16. He joined the Norwegian F-35 – program in 2009 as a Project Manager for Training & Education.
1500-1530 | THE GAMIFICATION OF EVERYDAY LIFE: THE FUTURE OF SERIOUS GAMES

The lecture from Prof Sara de Freitas will focus upon outlining several grand challenges that face us as a result of global economic downturn, growing population and globalisation. These challenges are exacerbated by the development of interconnected systems which are vulnerable to systematic collapse. At the same time as these real world challenges new technologies and forms such as social networks and online games are becoming more and more pervasive and are now played by increasing numbers of people. This trend towards pervasive social game play is leading to a trend known as gamification, where the use of game elements and metaphors to solve real world problems, motivate learners and raise awareness, to provide therapy and to train hard-to-reach groups is leading to a new trend where games are increasingly used to solve problems and provide engaging education and training. This lecture focuses upon flagship projects in the area of emergency management training, informal education and curriculum based learning as illustration of the capability of games to solve problems, engage new learners and meet the significant global challenges we face.
The ADL Center for Intelligent Tutoring Systems Research & Development (ADL-CITSRD) is located in the FedEx Institute of Technology (FIT) on the campus of the University of Memphis. Researchers associated with the center include faculty members, post-doctoral fellows, and advanced graduate students in the Institute for Intelligent Systems (IIS). The Center’s researchers have extensive experience in research, development, and evaluation of advanced learning environments. There are five Research, Development, and Service Capabilities at the ADL-CITSRD. 1) Cognitive Studies of Learning Systems – tests a learning system’s ability to maximize the user’s cognitive capacities and thus improve the user’s learning experience. The randomized, controlled experiments allow researchers to determine if a learning technology system is effective and to suggest improvements based on current cognitive research. 2) Impact Study of Learning Technology in Applied Settings – conducts real-world tests of learning systems and learning science techniques using controlled randomized classroom studies. The end goal is to provide effective methods for learning that can stand up to the stress of real-world environments such as classrooms or e-learning course environments. 3) ITS Enhancement of Learning Content – develops dialogue-based intelligent tutoring systems. These systems tutor learners using natural language conversations led by a system that uses questions, hints, prompts and summaries in a simulation of a real tutor. These systems can be integrated into existing learning content to provide a just-in-time check for understanding of the material along with scaffolded learning if needed. 4) Usability Analysis for Learning Environments (UaLE) – conducts usability studies, using eye-tracking technologies and read-aloud protocols to evaluate learning environments online and offline. The primary goal of UaLE is to provide services to organizations such as include analyzing learning environments and offering recommendations for making those environments more user-friendly in order to enhance learning. Recommendations are based on cognitive theories of learning as well as principles of HCI specifically tailored to learning. and 5) Text Analysis Using Computational Linguistics Tools – helps organizations and researchers improve the readability and comprehension of written information. Services provided include analyzing written content such as Web pages, brochures or questionnaires and offering recommendations for making the content more comprehendible to the target audience. In this presentation, example ITS systems, selected text processing utilities, and current R&D projects will be introduced as examples of the ADL-CITSRD capabilities.
The Norwegian Defence Command and Staff College (NDCSC) established a new basic staff education late 2011. The education is modular based and consists of a peace time based module focusing on staff duties, staff studies, staff paper writing and presentations. The second module is focusing on Operational planning like OPP, COPD and branch concepts.

The NDCSC is responsible for the first module and the branches for the second.

Module 1 is a three week course, and is based on the LMS Its Learning to reduce costs and time away from unit and family. The first week is home study using E-learning and internet (online). Tests, questions, discussions, and hand in paperwork are all online. The use of internet, not a military network, gives a lower cost and enables the students to choose where to work from because all information is unclassified. The next two weeks is a gathering on different locations, based on main audience in order to reduce travel time for the students and expenses.

The NDCSC findings and experiences with this education will be presented and discussed in the briefing.
1700-1730 | ADL AND SECURITY SECTOR REFORM: THE CASE OF THE SERBIA MILITARY ACADEMY

In partnership with Norwegian Defense and the Jefferson Institute, the Serbia MOD has succeeded in implementing a customized Model platform, and will this year complete an aggressive schedule of course builds across multiple subject areas critical for international deployments.

As the military of Serbia reduces in size, modernizes, and refocuses on democratic control, their single most important scarce resource becomes the soldier. As educational systems increasingly go on-line, the ability to participate in and produce on-line education becomes a critical element of reinforcing legal and ethical norms, force interoperability, and regional integration. In addition, ADL creates opportunities for Serbia’s active participation in the multinational environment, achieving closer cooperation with other defense systems in the framework of Partnership for Peace and accelerating the integration processes in the region.

Col. Goran Shimic is Chef of the Center for Simulations and Distance Learning, University of Defense, Belgrade, Serbia. At the same time he is a professor of programming, expert systems, object-oriented programming and modeling, and business software applications at Defense University, Belgrade, Serbia. His current research interests are in the area of Web-based e-learning, interoperability between learning resources & systems, and integration of intelligent tutoring systems and learning management systems. He has authored/co-authored more than 20 research papers.

Col. Shimic received his B.S. degree in Electronic Warfare from the Military Academy, Belgrade, Serbia, M.S. degree in informatics from the Department of Information Systems, FON - School of Business Administration, University of Belgrade, Serbia, and PhD degree in Computer science, FIM – Faculty of Informatics and Management, Singidunum University Belgrade, Serbia.

Aaron Presnall (Ph.D. University of Virginia) is president of the Jefferson Institute. He is a political economist specializing in issues of banking and telecommunications regulatory transition, and the evolving world of information and participatory politics. In addition to scholarly works and popular opinion pieces, he has written on the business and political environment of Europe for the Economist Intelligence Unit, the United Nations Development Program (UNDP), and numerous private and governmental organizations in Europe and the United States. Before joining the Jefferson Institute, he served with the EastWest Institute for seven years in Prague, then in Belgrade for three years as EastWest’s Regional Director of Southeast Europe.
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Set up your presentation and operate it from the ActivBoard—with the tap of a pen or multitouch, move seamlessly between your presentations and applications to websites, documents and other media; you can integrate video, images and sound; you can even make notes, annotate and manipulate content. Resources and supporting materials can be accessed easily, enabling you to tailor your demonstration in real-time.

Check out the ActivBoard 500 Pro series

This presentation discusses the recent progress related to the next generation of SCORM and SCORM 2004 4th Edition. In 2011, ADL began an R&D effort focused on a new e-learning architecture to serve as the successor to SCORM. Requirements for the next generation of SCORM include frequently requested features such as support for multiple learners, out-of-browser content and centrally hosted content servers. In addition, ADL has made progress toward updating the SCoRM ISo standard to SCORM 2004 4th Edition, and with it, an updated certification process. In addition ADL continues to support the wide adoption of SCORM through the addition of a 3D environment toolkit and open source SCORM software investigations. This presentation highlights the past year’s efforts and discusses the roadmap for ADL’s 2012 technical activities.

Tom has been a member of the ADL Technical Team since 2004. During that time, he has worked on projects such as developing and maintaining the SCORM Test Suite and Sample RTE, supporting the ADL Help Desk, and serving as a technical reviewer of the SCORM Document Suite. Recently, Tom has been involved in researching ways to support a new learning platform, such as building mobile and server prototypes and reviewing new specifications and standards.

The main topics are:
- General usability challenges and technical challenges when converting.
- Inexpensive conversion of existing e-learning applications without significant performance- or quality loss and nearly identical content.
- Solutions for new Flash based applications which can be simultaneously deployed as: browser based applications (Flash: Bridging the time until HTML5 is ready), iOS apps, and Android apps for tablets with marginal additional production effort.

Converting existing Flash based e-learning to mobile platforms faces many challenges and has been regarded as laborious, inefficient, or impossible - until now. This presentation focuses on a new and effective way of deploying e-learning to tablets with marginal production effort.

Zooey Nordstrøm-Gilma is a senior multimedia designer and concept developer at Transform as - a Norwegian media company that develops interactive e-learning for mobile platforms. He has worked in e-learning for over 5 years and has been art director for Norway’s largest e-learning developer. He is a certified graphic designer and has a master degree in communication science from the University of Vienna. His primary field of expertise is Flash design and programming. He has developed concepts and content for over 50 e-learning applications; clients include many major international companies, as well as the Norwegian Armed Forces.
1000-1030 | THE USE OF VIDEO IN E-LEARNING COURSES

As an e-Learning producer, Mintra aim to create courses with a high learning effect. The use of film in interactive courses has proven effective in achieving user’s engagement. Film is a powerful media that provide credibility to the truthfulness of the content. There are many ways that film may be used in e-learning. Birgitte Remstad, project manager at Mintra, will talk about why film is a useful training tool, present different approaches used in film, and when it should be considered as part of an interactive training course.

Birgitte Remstad, Prosjektleder/manusforfatter hos Mintra, Skreddersam
MA Television production, University of Manchester
BA (hons) media and culture, London Institute, L.C.P.
2008 – Mintra
2000 – 2005 – diverse TV produksjoner
2006 – 2008 – reklamebyrå
1995 – 1998 – offshore (personal koordinator)

1030-1100 | THE USE OF INTERACTIVE PDF’S IN MILITARY EDUCATION

Primarily the PDF format has been considered a rather static electronic document format. Henrik Skafte will, however, introduce you to quite another way of seeing this very flexible file format – as an electronic container format. Extended use of templates, and the inclusion of generic document-driven JavaScript code makes it possible for students holding the free Adobe Reader to train their military skills in a variety of subjects via interactive multimedia and 3D enhanced PDF’s – even under circumstances where internet connection is not at hand.

For more than a decade, Henrik B. Skafte has been a dedicated e-learning instructor and developer at the Royal Danish Defense College. Over this period he has been responsible for the development and training on the Adobe e-learning tools, and in particular he has taken the utilization of the interactive and multimedia components of the Acrobat/PDF products to the very limit. Henrik has lectured numerous courses, with national and international students, on the PDF – elearning subject, and a major part of the interactive training materials for the Danish military personnel has been developed by his hand.

Warrant Offiser Henrik Skafte, Royal Danish Defense College
1200-1230  |  INTERACTIVE BOARDS – NEW STANDARDS OF EDUCATION

The first digital / interactive boards were produced in 1992 and has since 2005 had an explosively expanding market in primary and secondary schools around the world, but been less used in a more conservatively higher education (such as in universities, university colleges and national defences). However the technological revolution of our time offers new standards to education facilities and no educational institution can avoid being measured also by this standard.

The interactive boards particularly offers the possibility of good class management, well-planned interactive learning situations and accuracy in modelling skills for students. Through Learner Response Systems (LRS) the boards can be used to assess students' knowledge and learning prior to, during and after lessons and to engage students in interactive, innovative and functional learning, which includes disclosing opinions, effective brainstorming and student feedback.

The lecture will give insight in how the interactive boards work, give perspectives of benefits defence educators can have from using boards in different levels of education and give examples on interactive lessons also challenging students through LRS (Learner Response Systems).

It will also look into communication with collaborative work on boards on different locations and look at the possibilities of using the boards for military operational planning.

Lars Persen, 42, works as head of department in a Bergen primary school. He is educated classroom teacher with 15 years of teaching experience from Norway and from Frankfurt International School and has recently studied Educational Management. Previous to his civil education he was trained as officer in the Norwegian Army, with rank of Second Lieutenant. Through 4 army years he worked in company and regiment staff positions. Lars is connected to Promethean, the producer of Activboards, being a member of their Nordic Expert team and also works part-time for the Norwegian importer, Scandec Systemer, representing them at events promoting educational technology, such as Norwegian NKUL and London Olympia’s BETT show. He has a passion for photography and in 2011 he held two successful photo exhibitions and are doing freelance photography for commercial ads. He has also held lectures on Education for Sustainable Development and written portrait articles for newspaper magazines.

1230-1300  |  MOBILE LEARNING WITHIN NOD UNIVERSITY COLLEGE AND ARMED FORCES

During the last two years, NoD University College, ADL office has been experimenting with tablets computers in an operational setting. The project has been testing different operating systems (OS) such as iOS, Android and Windows. In this lecture, Ramin will highlight the experiences from the project and give examples of how to use these tablets for educational purposes. Questions that have been asked during the experiments are to what degree tablets are useful for higher military education. Students and Instructors at NoD Staff College and the Army Weapons School, have participated in an array of experiments with the purpose of testing different functions, advantages and perks that come with Tablets and their OS.

Mr. Ramin Darisiro is working as project manager at the NoD University College, ADL Office. Ramin is responsible for several ADL projects within the Norwegian Armed Forces, focusing on pedagogical use of technology in teaching, training and collaboration. Mr. Darisiro is the project leader for Mobile Information platforms (Joint project in collaboration with NoD Research Establishment (FFI)) a study on the use of Mobile platforms in training and the operational environment.

Ramin Darisiro is an educated engineer and has a pedagogical degree. He has worked with ITC in the public sector since 2003, and has a lot of experience from the school system. As of 2008, Ramin has participated in the development of various ITC concepts within the Armed Forces. He is also a master-degree student at the Norwegian School of Business and Economy, BI.
The Mobile Learning Environment (MoLE) Project is a Coalition Warfare Program that aims to leverage the global cellular network infrastructure, mobile technologies and emerging mobile applications to build a learning capability that will mitigate the long-standing challenge of low-bandwidth, limited internet connectivity, and limited infrastructure. The MoLE Project Manager is Mr. Herbert (Duke) Boutwell, CNE-CNA-C6F Deputy Director for Training and Readiness (N7) is the Project Manager. There are 24 international participants in the MoLE Project, of which 13 are within the CNE-CNA-C6F Area of Responsibility.

Born May 15, 1948 in Pensacola, Florida, Mr. Boutwell is the oldest of seven siblings. To this day, his extended family enjoys a very close, loving association. He was educated through the public school system and graduated from Escambia High School, West Pensacola, in 1966. He proceeded to William Carey College for the Fine Arts in Hattiesburg, MS on scholarship. After completing two years of undergraduate study in vocal performance and dramatic arts he enlisted in the United States Army.

His military experiences were distinguished in both combat and garrison and he left active duty with the rank of Captain in 1973. His awards include medals for valor, meritorious service and wounds he received in combat. He retired from the Army Reserve in 1989 after attaining the permanent rank of Major. He became a Master Instructor while an active duty. These training and communication skills have been actively used in all his subsequent endeavors.

In 1974 the Florida State Police Academy accepted his application for law enforcement training and he served as a trooper and homicide investigator until he was appointed to the Federal Bureau of Investigation in 1979. During this time he completed his undergraduate and graduate education in criminal justice, public administration, pre-law, education and public policies at the University of Central Florida and Rollins College in Orlando, Florida.

After completing the National Academy for Federal Law Enforcement at Quantico, VA, Mr. Boutwell served as a Federal Agent in Los Angeles. He opted to move into private industry in 1981. He relocated to Pittsburgh, PA for employment with U. S. Steel Corporation as an Executive Protection Agent, then Oberg Industries, working in marketing and personnel management, before accepting employment as the General Manager for a new precision machining concern in Fort Walton Beach, Florida in 1985.

Mr. Boutwell accepted appointment as a DoD Civil Servant in 1988 and has served in positions as an Industrial Engineering Technician, Deputy Administrative Officer, Public Affairs Specialist, Master Instructor, Director of Navy Instructor Development and is currently the Deputy Director for Training and Readiness for United States Naval Forces Europe, Africa and the Sixth Fleet. He has been cited on numerous occasions for his contributions to military education and the professional development of Navy and Marine Corps personnel.

Mr. Boutwell is married to the former Brenda Jo Barnes of Pensacola enjoying four grown children and six grandchildren. They have together owned a consulting business, Creative Business Services, since 1985. Duke and Brenda are actively involved in family, friends, music, fraternity and community.
1400-1430 | UTILIZING GAMES TECHNOLOGY TO ACHIEVE A HIGHER LEVEL OF REALISM IN REAL-TIME IMMERSIVE SIMULATORS

Video games have become an important part of mainstream entertainment. Given that most simulator users also spend countless hours playing video games and are very much familiar with what the gaming community can offer in both visual and interactive realism, expectations to what a modern simulator should offer are raised considerably. We'll have a look at the differences and similarities between games and simulators as well as areas where games technology can be used to increase the realism and training effect.

Lars Ivar Haave, Kongsberg Defence & Aerospace
Software engineer graduating from Høyskolen i Gjøvik. 10 year experience with Penguin and NSM missile systems, and 3D visualization for simulators. Currently working with integration of Havok Game Engine in RWS simulator.

1430-1500 | LONAF – A LEARNING SPACE ON FACEBOOK.

Project Learning Online in the Nordic Armed Forces (LONAF) started out in 2009 as a co-operation between the Swedish, Finnish and Norwegian armed Forces, largely based on common pedagogical challenges in implementing online learning. Online learning and social media attracts considerable interest, but so far, very little has been written about how this could be related to military education and training. Our aim has been to remedy the situation.

The result of this co-operation is a learning space on Facebook. Here you can find educational videos that tries to explain the why’s and how’s about online learning and also case studies from each of the three countries. The users keep the learning space alive and growing by sharing their own learning material and discuss their experiences and ideas with others. This website, by providing good examples and practices of using online tools, wishes to encourage the use of online learning and social media in military training.

Gunhild von Porat Erichsen, Norwegian Defence University College
Gunhild started out her working career as an elementary school teacher, but the world of e-learning and multimedia seemed more tempting. So after studying computer and multimedia science for two years in 2000-2002 she started working as an ICT-pedagogue at the ADL-office in 2003. Here she has been working for over 9 years mainly supporting different e-learning projects, working with pedagogical standards and ADL methodology. In 2006-2008 she did a part time study on ICT in learning which changed her view to also include working with the use of modern technology and web 2.0 to support learning.

Soili Paananen studied adult and continuing education at the University of Helsinki, Finland. She spent the academic year 1999-2000 at the University of Surrey studying with Professor Peter Jarvis. She took her doctorate at the University of Lapland in 2006; her doctoral thesis dealt with biographical learning. She has taught several years adult and continuing education for the Finnish Open University. In 2003 she began her work as a researcher for Finnish National Defence University. She has published four reports on e-learning and participated in different developmental projects in pedagogy.

She is interested in all aspects of informal learning, workplace learning and e-learning. She has recently started two research projects, one on conscripts’ military training and another on the work practices in the military context.
Emotion Based Interactive Learning Management System is a Korean national R&D project that is sponsored from the government (appr. 3 million USD) for 3 years.

A learner can be changeable due to the environment and emotion status. This study has several modules and research results. First, we have researched the reaction against the change of brainwave and developed modules to convert analogue signals to digital signals. Second, with the research of e-learning content elements that can affect a learner’s emotion and the experiments of hundreds of learners based on the test content, we can classify the content elements affecting emotion according to the multi-intelligence and learner’s styles. Third, we have also developed a content resource management system enough to manage to an asset and a management system of learning model.

Finally, we have been experiencing the effect of study in a total system having recommend algorithm, learner analysis module that gets and comprehends information from other legacy modules.

We expect that this project is an initiative and a world leading system monitoring a learner’s emotion and improving learning values by using interactive learning modules.

We have experienced for undergraduate student for this project, but expect to expand the scope to the younger levels.

Alpha Juhyung, CEO, Learningwise Consulting, South Korea

Education
MS of e-Learning, Graduate School of Korea National Open University

Experience
1996/07~2000/02: Present, Konglish Education
2000/03~2004/12: CEO, AhEd Inc.
2005/01~2006/12: Chief Marketing & Consultant, DUNET Inc.
2007/01~Present: CEO, Learningwise Consulting Inc.

Expertise
Expert council member of Korea ADL Partnership Lab(KAP) since 2007
Council member of e-Learning Certificate in 2009
Steering member of e-Learning Asia Community since 2009
Council member of e-Learning Industry Standardization Technical Committee since 2009
Expert member of ISO/IEC JTC1/SC36 (e-Learning Department) in 2011

Publication
Analysis of e-Learning Content Element Affecting Learner Concentration, 2010, the Society of e-learning
A Study on the Content Element Preference Based on Learner’s Characteristics, 2011, the Society of e-learning
A Study on Multimedia Elements Affecting the Degree of Learning Concentration, 2010 Korea National Open University

He is a professional e-learning consultant who has experienced for research and development such as e-learning certificate, research of SCORM adaptation, e-training business model and adaptation, e-learning company registration process, e-learning marketing and vitalization, and so on.

He has taught e-learning trainees who came from other 20 countries for 4 years with alliance of KOICA.

He is:
a council member of e-learning industry standardization committee,
a council member of Korean ADL committee,
an expert member of ISO/IEC JTC1 SC36,
and a steering member for Smart Learning Forum
and a steering member of e-Learning Asia Community.

Currently, he has involved Korean national R&D project for 3 years – Emotion Based Interactive Learning Management System – as consultant of standardization and marketing.
1530-1600  |  JOIN THE CONVERSATION!

Globalization, urbanization and the internet have dramatically changed the role of English in the past 20 years. Today, English proficiency can hardly be thought of as an economical advantage at all. It is certainly no longer a marker of the elite. Instead, it is increasingly a basic skill needed for the entire military industry, it enables a wider conversation, a global conversation, English has become the language of problem solving.

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Thomas Astrup is the Country Manager for EF Language Learning Solution, Thomas has worked with several global organizations, helping them create a language strategy for cross border communication. He has worked several years within the IT industry before moving into language learning. Thomas holds an MBA in Strategic leadership from the Norwegian School of Economics.
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The Military courses serve as a supplement to the general English courses in EF’s Online School. Combining our Military courses with general English courses is the most powerful solution for learners to reach a proficiency level where they can use English in any situation. Using the latest teaching techniques, our Military courses are organized by content. As well as expanding learners’ vocabulary, we focus on improving communication skills and using English in real-life situations required for both national and international missions.

We have used EF’s Online School since 2005 for our pilots and air traffic controllers. The interaction with qualified teachers, the flexibility, and the rich and deep content makes learning engaging and effective.”

CAPTAIN PATRICE FAUCHARD
Training Manager, Human Resources – Directorate of the French Army

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Part 1: Experiences from the supplier’s perspective
The German Armed Forces have established a simulation and test environment, known as the SuTBw. It is used for such diverse tasks as concept development and experimentation, procurement and training and exercises. The SuTBw provides for linking various simulation systems and simulators, each with their own highly specialized, individual capabilities, into high-performance simulation system networks, enabling the user to conduct complex exercises involving ground, air and naval assets, thus creating an overarching system of systems. Furthermore, it is also possible to incorporate foreign combat and C4I systems into the SuTBw’s advanced IT infrastructure. Different use cases highlighting the application of the simulation and test environment in training and exercises will be presented such as the Air Manouvre Tactical Leadership Training (AMTLT) of the German Air Aviation Forces and the Fleet Synthetic Training (FST) of the German Navy.

Part 2: The German Navy’s Synthetic Training Strategy
The German Navy utilizes the simulation and test environment SuTBw to enhance crew training, experiments and system tests. Arising from the requirement to test tactical data link interoperability for Link16, the German Navy started to use simulation systems within networks in partnership with the US Navy. This simulation network soon led to multilateral tests and synthetic training. This evolution from test tool to a simulation federation using the SuTBw with the development of a training architecture and organization will be presented. Aspects like mapping the synthetic and the real world, new platforms, new concepts, new demands and new challenges are today’s topics of development and discussion to create the future of the synthetic training of the German Navy.
Commander senior grade Ralf “Teddy” Henning joined the German Navy in summer 1983. He graduated from the Bundeswehr University as Master of Science in Computer Technology & Information Science. After serving as Officer of the Watch on Minesweepers including a tour to the Persian Gulf, he was posted on Frigates F122 class as Operations Officer. He qualified as Anti-Submarine and Anti-Air Warfare Officer. Later he became Executive Officer onboard First of Class F124 FGS Sachsen, where he gained his Commanding Officer’s Certificate. In between he had several functions in the German Navy’s procurement enterprise focussing on Combat Direction Systems. Currently he heads a department within the German TAUES-Team (test and training support federation), being selected to become the Branch Head on 1 July 2012. CDR Henning is married and lives in Wilhelmshaven. His hobbies are his dog, his fireplace, and Single Malt Whiskeys.

0915-0945 | DISTRIBUTED LEARNING AND SIMULATION IN LAPAROSCOPIC SURGERY

Surgery was traditionally performed by members of the barber’s guild. Although surgeons are presently required to be physicians and undergo an academic education, the postgraduate training of surgeons continues to utilize an apprenticeship type of approach in many countries.

The didactic education of surgeons has recently become much more formalized, especially in the US, where yearly exams of surgeons in training and final board certification of surgeons finishing their training have become mandatory. It has been difficult to develop objective evaluation tools for surgical skills, which are essential for proper patient management and performance of technically successful operations.

Sim Surgery, a spin off from Oslo University Hospital’s Intervention Centre, has developed a platform for surgical simulator training. The platform offers training in simple instrumental tasks to familiarize surgeons with the use of laparoscopic visualization and instrumentation. More advanced modules offer simulation of specific operative procedures, based on realistic scenarios, including possibilities for creating “serious complications” or “successful outcomes”.

The modules contain evaluation tools, which gives the student and the teacher accurate data on quality of the simulating sessions and the time requirement of each surgeon user.

A project funded by the Norwegian Research Council is presently adapting the simulation and related educational material to a distributed, cloud computing based learning platform.

Surgical simulations offer a training tool for the education of future surgeons. Evaluation tools may be used to secure that surgeons are properly trained prior to initiation of clinical work. The overall effect in the health care system may be increased quality and decreased complication rates and thereby overall improvement of patient safety.
0945-1015 | TRAINING CULTURAL AWARENESS IN MILITARY OPERATIONS IN 3D VIRTUAL WORLDS: EXPERIENCES FROM CAMO PROJECT

3D virtual worlds and game-based simulations are to an increasing degree used for military training, demonstrating concepts and situations that are difficult, expensive or unsafe to represent efficiently enough in a classroom setting. An example of such a concept is operational culture. Understanding culture is a basic component of operational planning, training, and execution. However, there is a lack of research-based methods for using game-based simulations in military training, especially in the area of cultural awareness. Also, the use of such systems requires aids for scenario development, training practices, and performance measurement tools that currently do not exist. The CAMO project (Cultural Awareness in Military Operations) seeks to address these challenges. The project is a joint effort between the Norwegian Defence University College, Norwegian University of Science and Technology (NTNU) and the University of Oslo. The goal of the project has been to create a game-based simulation in Second Life for training cultural awareness among military personnel preparing for international operations and to explore the advantages and limitations of 3D virtual worlds in this context. In addition, the project aims at creating methodological guidelines and tools for developing 3D educational simulations for future use in the Norwegian Armed Forces.

This talk will present the following main results of the project:
• A methodology for scenario development, identifying 5 major learning goals for cultural awareness training in military context (Tactics, Language, Religion, Gender, Socializing), with associated sub-goals, environmental cues, typical mistakes and responses. This methodology will facilitate rapid development of scenarios for future training needs
• A roleplay scenario, reflecting typical cultural and tactical challenges met by Norwegian troops in Afghanistan
• A 3D virtual environment (Afghan village), designed for cultural awareness training in accordance with the major learning goals
• Results of the virtual environment evaluation with cadets of the Norwegian Army War College
• Conclusions and future work

Ekaterina Prasolova-Førland is an associate professor at the Program for learning with ICT, Norwegian University of Science and Technology (NTNU). She received her Master’s degree in Technical Cybernetics in 2000 and PhD in Computer Science in 2004 from the same university. Her research interests include educational and social aspects of 3D virtual worlds and augmented environments as well as virtual universities, mobile learning and educational games. She is author and co-author of more than 50 publications on the topic. She is currently involved in two EU-financed projects focusing on creativity and educational games in 3D virtual worlds.

1015-1045 | IMMERSIVE E-LEARNING MADE EASY

A quick look at e-learning with itslearning – how and why e-learning is demystified for trainers and students around the world through highly effective and pedagogically sound tools. Exploring examples of interactive use from the UK’s Civil Aviation Authority to the Netherlands National Football Team, and quick and easy steps for fast implementation.

Alastair Cameron, Senior Learning Strategist at itslearning

A passionate believer that ICT can truly empower both teachers and students, Alastair has been working with schools, education authorities and the Naace think tank for the last ten years to improve the use of technology in education. In his work for learning platform provider itlearning, Alastair is currently helping educators improve their everyday interaction with students through elearning and better use of ICT, both in and outside the classroom, and also facilitates real-time global online collaboration projects for students and teachers. Alastair is a member of CoSN and SIIA, and hosts monthly webinars for educators featuring prominent educational thinkers.
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The Nordic Association for Training Simulators (NTS) welcomes you to:

**Topic:** Training of Operative Leadership using Simulators.

The following 10 speeches and other activities are included in the conference:

**"DESCRIPTION OF OPERATIVE LEADERSHIP"**
1. Operative Leadership-Def. & Description (Jan Snöberg, master mariner, Maritime Univ., Kalmar)

**"OPERATIVE LEADERSHIP TRAINING IN DIFFERENT FIELDS"**
2. Operative Leadership in Healthcare (Torben Wisborg, M.D., BEST-gruppen, Hammerfest)
3. Operative Leadership in Process Industry (Lester Borders, instructor, AREVA, Germany)
4. Operative Leadership in Transportation (Arto Helovuo, airline captain/instructor, Finnair, Helsinki)
5. Operative Leadership in the Defence (Thomas Damsgaard, L.t.com., Naval Academy, Copenhagen)

**"OPERATIVE LEADERSHIP TRAINING IN SIMULATORS"**
6. Construction of Operative Leadership Training (Jan Hedegård, psychologist, NTS)
7. Execution of Operative Leadership Training using simulators (speaker to be confirmed)
8. Evaluation of Operative Leadership Training (speaker to be confirmed)

**"THE INSTRUCTOR ROLE IN OPERATIVE LEADERSHIP TRAINING"**
9. Instructor competence for Leadership Training (Drew Gaffney, M.D./astronaut, Vanderbilt, USA)

**WORKSHOPS RE. OPERATIVE LEADERSHIP AND SIMULATOR TRAINING.**

**VISITS TO SIMULATOR TRAINING CENTRES.**

The conference fee includes participation in the conference, lunch and coffee during all three conference days and transport to and from the Simulator Training centres to be visited on 15 May. The conference fee does not cover accommodation, travel from home to Såstaholm return and dinner on 15 May.

The conference language is English.

Conference fee for NTS members: NOK 4 400
Conference fee for non NTS members: NOK 4 900
Conference fee for students: NOK 2 000

Last date for registration is Friday 20 April 2012. Booking of room is done by the conference participants directly to Såstaholm Conference Centre.

For more information about e.g. registration and hotel room booking: www.nordicsim.com
Instructors Conference
Stockholm 2012

Program:

Monday 14. may 2012

12:00-12:05 Welcome!
12:05-13:15 Lunch
13:15-13:45 Session 1 Conference introduction
   13:15-13:45 Speech 1.1 Conference purposes, programme, practicalities, participant introduction
   13:45-14:00 Speech 1.2 Conference scope: background, definition of "Operative Leadership"
   14:00-14:10 Break
14:10-17:25 Session 2 Operative leadership in different fields
   14:10-14:15 Session introduction
   14:15-14:55 Speech 2.1 Operative leadership in healthcare
   14:55-15:15 Coffee break
   15:15-15:55 Speech 2.2 Operative leadership in process industry
   15:55-16:35 Speech 2.3 Operative leadership in transport industry (air, land, sea)
   16:35-16:45 Break
   16:45-17:45 Speech 2.4 Operative leadership in defence
17:45-19:00 Spare time
   19:00 Conference dinner

Tuesday 15. may 2012

08:30-11:05 Session 3 Training of operative leadership in simulators
   08:30-08:35 Session introduction
   08:35-09:15 Speech 3.1 Background and construction of operative leadership training
   09:15-10:15 Speech 3.2 Execution of leadership
   10:15-10:35 Coffee break
   10:35-10:55 Speech 3.3 Evaluation of operative leadership training
11:05-14:50 Session 4 The instructor role in leadership training
   10:55-11:00 Session introduction
   11:00-11:40 Speech 4.1 Instructor competence for operative leadership training
   11:40-11:50 Break
   11:50-12:30 Speech 4.2 Cooperation between instructors during simulator training
12:30-13:30 Lunch
   13:30-14:30 Workshop 4.3 Cooperation between simulator instructors - pros and cons
   14:30-14:50 Coffee break
14:50-17:30 Session 5 Simulator Centre Visits
   14:50-15:00 Information about the simulator centre visits
   15:00-17:30 Simulator centre visits
17:30 Spare time

Wednesday 16. may 2012

08:30-11:40 Session 6 Operative leadership training exercises
   08:30-08:35 Session introduction
   08:35-11:30 Workshop 6.1 The participants practice operative leadership training in groups
   11:30-11:40 Break
11:40-13:00 Session 7
   11:40-12:30 Group discussion 7.1 Conclusions of operative leadership training
   12:30-12:45 Information about future NTS activities including "NTS SIMSEM 2012"
   12:45-13:00 Conference evaluation and closure

Changes may occur