NSF Grantees Poster Session - Monday, June 27, 2011 - 10:30am-12:00pm

First_name	Last_name	Poster Number	Paper Number	Paper Title
Mo	Ahmadian	1.	AC 2011-2812	Effective Practices in Multidisciplinary Teamwork
Nasser	Alaraje	2.	AC 2011-895	Digital Logic Design: Meeting Industry's Needs through University & Community College Collaboration
Mary	Anderson-Rowland	3.	AC 2011-2193	STEP Grant Challenges and Results
Ashley	Ater Kranov	4.	AC 2011-775	A Direct Method for Teaching and Measuring Engineering Professional Skills: A Validity Study
Farrokh	Attarzadeh	5.	AC 2011-2548	NSF Grantee Presentation: Challenges of Implementing a Peer Mentoring Program to Support STEM Learning
Stephanie	August	6.	AC 2011-2080	Engaging Students in STEM Education through a Virtual Learning Lab
Reid	Bailey	7.	AC 2011-798	Principles and Strategies for Developing and Implementing an Interdisciplinary Undergraduate Curriculum
Stacy	Bamberg	8.	AC 2011-2282	A SPIRAL Learning Curriculum for Second Year Students in Mechanical Engineering
Marilyn	Barger	9.	AC 2011-528	Best Practices for Student Robotic Camps
Lisa	Benson	10.	AC 2011-1576	CU Thinking: Problem-Solving Strategies Revealed
David	Benson	11.	AC 2011-2060	Mode of Error Analysis of Student Responses to Pre-Requisite Knowledge Assessments
Mary	Besterfield-Sacre	12.	AC 2011-1729	Understanding the Technical Entrepreneurship Landscape in Engineering Education
Jack	Beuth	13.	AC 2011-2488	Use of Software Agent-Monitored Tutorials to Guide Student Learning in Computer-Aided Design, Analysis and Mathematics Projects
F James	Boerio	14.	AC 2011-620	Nanotechnology in Undergraduate Education: Development of Experimental Modules
Holli	Burgon	15.	AC 2011-1291	The First-to-Fourth Flatline: Assessing Undergraduate Students' Creative Capacity
Susan	Burkett	16.	AC 2011-1481	Creativity in an Introductory Engineering Course
Patricia	Carlson	17.	AC 2011-647	Nine Years of Calibrated Peer Review in Rhetoric and Engineering Design
Sushil	Chaturvedi	18.	AC 2011-742	Simulation and Visualization Enhanced Engineering Education – Development and Implementation of Virtual Experiments in a Laboratory Course
Xuemin	Chen	19.	AC 2011-914	Using Virtual and Remote Laboratory to Enhance Engineering Technology Education
Xuemin	Chen	20.	AC 2011-1070	A Unified Framework for Remote Laboratory Experiments
Richard	Chiou	21.	AC 2011-2207	E-Quality Control Method for Measuring Solar Cell Efficiency
Chung-Suk	Cho	22.	AC 2011-2108	Research in Progress: Transforming and Integrating: Evolving Construction Materials & Methods to the Next Level
Shane	Cotter	23.	AC 2011-1877	Assessing the Impact of a Biometrics Course on Students' Digital Signal Processing Knowledge
Cynthia	D'Angelo	24.	AC 2011-2481	Undergraduate Engineers Engaging and Reflecting in a Professional Practice Simulation
Kirsten	Davis	25.	AC 2011-303	Bridging the Valley of Death: A 360°Approach to Und erstanding Adoption of Innovations in Engineering Education
Norb	Delatte	26.	AC 2011-417	Implementation and Assessment of Case Studies in a Freshman Engineering Program
Santosh	Devasia	27.	AC 2011-224	NUE (EEC): Integrating Nanodevice Design, Fabrication, and Analysis into the Mechanical Engineering Curriculum
Kathryn	Dimiduk	28.	AC 2011-1066	Helping Students Approach FEA Simulations like Experts
Jianyu	Dong	29.	AC 2011-1107	Enhance Computer Network Curriculum using Collaborative Project-based Learning
John	Duffy	30.	AC 2011-1988	Is Service an Expected Part of the Engineering Profession?
Amelito	Enriquez	31.	AC 2011-188	Strengthening the Community College Engineering Pipeline Using Tablet PCs and Online Instruction
Stephanie	Farrell	32.	AC 2011-1031	Introductory Level Textbook Problems Illustrating Concepts in Pharmaceutical Engineering
Stephanie	Farrell	33.	AC 2011-1049	Drug Delivery Education Using Microsphere Technology
Bonnie	Ferri	34.	AC 2011-2226	TESSAL: Portable Distributed Laboratories in the ECE Curriculum
Ismail	Fidan	35.	AC 2011-1734	Art2STEM: Building a STEM Workforce at the Middle School Level
Tirupalavanam	Ganesh	36.	AC 2011-2123	Renewable Energy Internships: Study of Seventh and Eighth Grade Students Knowledge of Related Science and Engineering Content
Zenaida Otero	Gephardt	37.	AC 2011-1427	Integration of Particle Technology with Pharmaceutical Industry Applications in the Chemical Engineering Undergraduate Curriculum and K-12 Education
Katie	Grantham	38.	AC 2011-2173	Evaluation of Risk in Early Design's Usability in Failure Analysis Instruction
Yi	Guo	39.	AC 2011-644	A Case Study on Pill-Sized Robot in Gastro-Intestinal Tract to Teach Robot Programming and Navigation
James	Hanson	40.	AC 2011-2384	Incorporating Various Learning Styles in a Geotechnical Engineering Laboratory
Iem	Heng	41.	AC 2011-105	Introduction of Mechatronic Technology into Cross-Department Product Design Curricula
Geoffrey	Herman	42.	AC 2011-1800	Administering a Digital Logic Concept Inventory at Multiple Institutions
Margret	Hjalmarson	43.	AC 2011-1045	Linking Students' Interest in Electrical Engineering to their Conceptual Understanding
Sheng-Jen	Hsieh	44.	AC 2011-1996	Design of Problem Solving Environment for Automated System Integration Education
Fei	Hu	45.	AC 2011-130	Multi-Dimensional Tele-healthcare Engineering Undergraduate Education via Building-Block-based Medical Sensor Labs
Morgan	Hynes	46.	AC 2011-1689	The Role of Intentional Self-Regulation in Achievement in Engineering
Autar	Kaw	47.	AC 2011-210	Using Online Endless Quizzes as Graded Homework

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Michael	Kaye	48.	AC 2011-281	Developing a Robotics Technology Curriculum at an Urban Community College
Kathleen	Kitto	49.	AC 2011-1274	The iCollaborate MSE Project
Nathan	Klingbeil	50.	AC 2011-1558	The Wright State Model for Engineering Mathematics Education: Highlights from a CCLI Phase 3 Initiative, Volume 2
Milo	Koretsky	51.	AC 2011-1459	Enhancement of Student Learning in Experimental Design Using Virtual Laboratories: Year 3
Milo	Koretsky	52.	AC 2011-2155	Collaborative Research: Integration of Conceptual Learning throughout the Core Chemical Engineering Curriculum
Stephen	Krause	53.	AC 2011-1299	Addressing Misconceptions and Knowledge Gaps in the Restructuring of Atomic Bonding Course Content to Enhance Conceptual Change
Stephen	Krause	54.	AC 2011-1926	Developing a Materials Course Teaching Tool Kit to Promote Ease of Implementation of Innovative Classroom Instructional Materials
Stephen	Krause	55.	AC 2011-2262	The Effectiveness of Students' Daily Reflections on Learning in an Engineering Context
John	Krupczak	56.	AC 2011-1127	Laboratory Projects Appropriate for Non-Engineers and Introduction to Engineering
Javier	Kypuros	57.	AC 2011-1171	Guided Discovery Modules for Statics and Dynamics
Kemper	Lewis	58.	AC 2011-1149	Teaching the Global, Economic, Environmental, and Societal Foundations of Engineering Design through Product Archaeology
Jianyu	Liang	59.	AC 2011-1397	Developing Inquiry-based Nanobiotechnology Laboratory Experience for Sophomores
Gene	Liao	60.	AC 2011-197	Establishment of an Integrated Learning Environment for Advanced Energy Storage Systems: Supporting the Sustainable Energy Development
Thomas	Litzinger	61.	AC 2011-1781	Writing Effective Evaluation and Dissemination/Diffusion Plans
Suzanna	Long	62.	AC 2011-1210	Using Retrospective Assessment to Measure Levels of Student and Faculty Engagement in the Development of Sustainability Supply Chain and Facility Logistics Curriculum
Hong	Man	63.	AC 2011-2001	A Comparative Study of Classroom Learning and Online Learning on Medical Imaging with Computer Lab Exercises
Janice	Margle	64.	AC 2011-1340	Toys'n More: Initial Implementation of Intervention Strategies
Michael	Mauk	65.	AC 2011-2797	Lean Six Sigma Nanomanufacturing Course for Engineering and Engineering Technology Programs
Jay	McCormack	66.	AC 2011-962	Classroom Learning Activities to Support Capstone Project Assessment Instruments
Kathleen	Meehan	67.	AC 2011-2329	Lab-in-a-Box: Online Instruction and Multimedia Materials to Support Independent Experimentation on Concepts from Circuits
Darrin	Muggli	68.	AC 2011-280	A Model for Initiating ABET-Accredited Engineering Degree Programs using Distance Education
Janet	Murray	69.	AC 2011-1198	InTEL: Interactive Toolkit for Engineering Learning Contextualizing Statics Problems to Expand and Retain Women and URM Engineers
Jeremiah	Neubert	70.	AC 2011-586	Using Undergraduate Mentors to Deliver Engineering Content to Calculus for Increased Persistence in Engineering
Garret	Nicodemus	71.	AC 2011-2144	Incorporating Screencasts into Chemical Engineering Courses
Matthew	Ohland	72.	AC 2011-836	SMARTER Teamwork: System for Management, Assessment, Research, Training, Education, and Remediation for Teamwork
Gul	Okudan Kremer	73.	AC 2011-1356	An Investigation on the Impact of the Design Problem in Ideation Effectiveness Research
Lawretta	Ononye	74.	AC 2011-2660	Progress and Impact of SET: An NSF S-STEM Scholarship Project
James	Palmer	75.	AC 2011-831	JavaGrinder: A Web-Based Platform for Teaching Early Computing Skills
Hirak	Patangia	76.	AC 2011-2122	Development of Novel Learning Materials for Green Energy Education Centered Around a Photovoltaic (PV) Test Station
Dianne	Pawluk	77.	AC 2011-1500	Development of Haptic Virtual Reality Gaming Environments for Teaching Nanotechnology
Donald	Plumlee	78.	AC 2011-814	Assessing Engineering Student Attitudes about Cognition Due to Project-Based Curriculum
Donald	Plumlee	79.	AC 2011-1091	Engineering Education Research to Practice (E2R2P)
Salahuddin	Qazi	80.	AC 2011-2026	Visualization and Manipulation of Nanoscale Components Instruction for Engineering Technology Students
Stella	Quinones	81.	AC 2011-1904	NSF CCLI: An Applied Quantum Mechanics Course Aligned with the Electrical and Computer Engineering Curriculum
Sarah	Rajala	82.	AC 2011-1724	ransitioning America's Veterans into Science, Technology, Engineering, and Mathematics (STEM) Academic Programs
John	Reisel	83.	AC 2011-243	Initial Evaluation of the Impact of Math Study Groups on First-Year Student Course Success
Matthew	Roberts	84.	AC 2011-746	Development of an Introduction to Infrastructure Course
Mrinal	Saha	85.	AC 2011-937	Interactive Scenario Based Teaching of Metal Casting Process
William	Schlecht	86.	AC 2011-878	Multi-Disciplinary Project-Based Paradigm that Uses Hands-on Desktop Learning Modules and Modern Learning Pedagogies
Lisa	Schneider	87.	AC 2011-176	Impact of Collaborative Problem-solving Workshops in Engineering Calculus Course on Applied Mathematical
Zhigang	Shen	88.	AC 2011-806	Complex Engineering System Leaning through Study of Engineering Cases using 3D Animations
Larry	Shuman	89.	AC 2011-1167	CCLI: Model Eliciting Activities: Experiments and Mixed Methods to Assess Student Learning
David	Soldan	90.	AC 2011-699	From Defense to Degree: Accelerating Engineering Degree Opportunities for Military Veterans
Mukasa	Ssemakula	91.	AC 2011-1573	Manufacturing Integrated Learning Lab (MILL): A Curriculum Model for Hands-On Manufacturing Education
Ingrid	St. Omer	92.	AC 2011-1550	Engineering Veteran Pathways
Chris	Swan	93.	AC 2011-1324	The EFELTS Project: Engineering Faculty Engagement in Learning Through Service
Chris	Swan	94.	AC 2011-1328	ISES: A Longitudinal Study to Measure the Impacts of Service on Engineering Students

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Ying	Tang	95.	AC 2011-768	Interactive Virtual Reality Games to Teaching Circuit Analysis with Metacognitive and Problem-Solving Strategies
Patrick	Tebbe	96.	AC 2011-1445	Engaged in Thermodynamics: Addressing the Student to Learning Material Interface
AnnMarie	Thomas	97.	AC 2011-507	Certificate/Concentration in Engineering for P-12 Educators
Douglas	Timmer	98.	AC 2011-716	Web-based, Active Learning Modules for Teaching Statistical Quality Control
Rebecca	Toghiani	99.	AC 2011-1239	Engineering Future Chemical Engineers: Incorporation of Process Intensification Concepts into the Undergraduate Curriculum
Julie	Trenor	100.	AC 2011-206	CAREER: Influence of Social Capital on Under-Represented Engineering Students' Academic and Career Decisions
Tzu-Liang	Tseng	101.	AC 2011-2246	Digital Additive Manufacturing for Engineering Education: A Virtual Rapid Prototyping Simulator Approach
Pratibha	Varma-Nelson	102.	AC 2011-2630	The Role of Centers for Teaching and Learning in Improvement of Undergraduate Engineering Education
Margot	Vigeant	103.	AC 2011-2273	Inquiry-Based Activities to Address Critical Concepts in Chemical Engineering
Shawn	Wagoner	104.	AC 2011-1595	Experimental Modules Introducing Microfabrication Utilizing a Multidisciplinary Approach
Steve	Warren	105.	AC 2011-1927	A Rapid Analysis and Signal Conditioning Laboratory (RASCL) Design Compatible with the National Instruments myDAQ® Platform
Cindy	Waters	106.	AC 2011-339	Incorporating Problem-Based Learning and Case Studies in Lab Courses: Student Perceptions and Educational Benefits for this Teaching Pedagogy
Tom	Weller	107.	AC 2011-361	The Portability of Systems-Centric Content to Existing Sub-Discipline Courses
Karen	Wosczyna-Birch	108.	AC 2011-2670	Regional Center for Next Generation Manufacturing
Jason	Yao	109.	AC 2011-2781	Using Portable Electronics Experiment Kits for Electronics Courses in a General Engineering Program
Carmen	Zafft	110.	AC 2011-1395	NSF STEP Award: The College of Engineering at the University of Nebraska
Yongpeng	Zhang	111.	AC 2011-399	Virtual and Remote Functionality Development for Undergraduate Laboratory
Kathleen	Alfano	112.	AC 2011-2806	NSF ATE CREATE Renewable Energy Center