

THURSDAY, APRIL 5TH
WILLIAM PATERSON UNIVERSITY
PRESENTS THE 2007
UNIVERSITY
RESEARCH &
SCHOLARSHIP
DAY!

MAKING A DIFFERENCE THROUGH RESEARCH
PATERSON ROOM • CHENG LIBRARY

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William Paterson University
University Research & Scholarship Day 2007
Program and Schedule of Activities

Schedule At A Glance

9:30 to 12:00	Concurrent Individual and Group Presentations Cheng Library Auditorium Paterson Room Amy Job Classroom
12:30 to 1:50	All-University Poster Exhibit, Art Exhibition, Presentations and Lunch Amy Job Classroom Paterson Room
2:00 to 4:30	Concurrent Individual and Group Presentations Cheng Library Auditorium Paterson Room Amy Job Classroom

Presentation Schedule

Morning Individual and Group Presentations

Paterson Room

- 9:30** ***Emmanuel S. Onaivi, Biology***
Modification of Mouse Behavior by CB2 Cannabinoid Receptor Ligands
- 10:00** ***Tricia Snyder & Martin Gritsch, Economics & Finance***
An Empirical Examination of the Determinants of CEO Pensions
- 11:00** ***Linda Kaufman, Daniel Clark, & Serafim Stematis, Computer Science***
Solving Systems of Linear Equations with Symmetric and Band Coefficient Matrices
- 11:30** ***Cyril S. Ku & Philip K. Kang, Computer Science***
Software Engineering and Design Patterns for Relational Databases

Cheng Auditorium

9:30 Ronald Verdicchio, Anthropology

Co-Presenters: Blanka Dunn, Ana Rodriguez, Casy Walker, Jussley Martin & Laura Mungiello, Students

Cooperative Education and Schooling Models: How do American Schools Stack-Up?

Amy Job Classroom

11:00 Bogong Su, Computer Science

Co-Presenters: Erh-Wen Hu, Computer Science; Cyril Ku, Computer Science; and Steve Owiyo, Student

DSP Performance Comparison by using SMV Benchmark.

12:30 Janis Strasser & Holly Seplocha, Elementary & Early Childhood Education

Using Picture Books to Support Young Children's Literacy

1:30 Djanna Hill-Brisbane, Secondary & Middle School Education

Teacher Insiders' for Urban Schools—Exploring the Experiences and Practices of Urban Teacher Candidates

Poster Presentations and Art Exhibition

Paterson Room

Jane Bambrick, Cheng Library

Make a Difference with Letters: Flourish...!

Kathy Malanga & Nancy Weiner, Cheng Library

Circles of Collaboration: How the Library Supports Research

Donna Potacco & Rita Ramirez-Levine, Mathematics & Science Enrichment Center

Evaluation of the Use of Online Supplemental Resources in Developmental Mathematics

Lily Prince, Art

2 Fingerprint Paintings Commissioned for the New Medical Examiner's Forensic Lab, New York, NY through the New York City Department of Cultural Affairs.

Julie Rosenthal, Elementary and Early Childhood Education

If You Want to Learn New Words During Reading, Don't Skip Over the Words!

Afternoon Individual and Group Presentations

Amy Job Classroom

- 2:00** ***Melda N. Yildiz, Kathleen Malu, Gerri Mongillo, & Salika Lawrence, Secondary & Middle School Education***
Who Needs Textbooks? Exploring Reading and Writing Through Multiple Literacies
- 3:00** ***Christopher F. Mulrine, Special Education & Counseling***
Creating a Virtual Learning Environment for Gifted and Talented Learners
- 3:30** ***Robin Nemeroff, Psychology***
Bridging the Gap Between Mental Health Research and Community Practice: Identifying Children at Risk
- 4:00** ***Gennifer Furst, Sociology***
Prison-Based Animal Programs: Implications for Desistance

Cheng Auditorium

- 2:00** ***University Wide Panel of WPU Faculty Rajiv Kashyap, Steve Betts, Pixy Ferris, Raje Kaur, Timothy Liu, Ali Mir, Raza Mir, Frank Pavese, Thomas Uhlein, Miryam Wahrman***
The Road to Sustainability — How Can We Assure the Future?

Paterson Room

- 2:30** ***Bogong Su, Steve Owiyo, Cyril Ku, & Erh-Wen Hu, Computer Science***
DSP Performance Comparison by Using SMV Benchmark
- 3:00** ***Keumjae Park, Sociology***
Neither Assimilation, Nor Transnationalism: Korean Immigrants' Organizing of Continuities and Discontinuities in Settlement Processes
- 3:30** ***Ellen Frye, Languages & Cultures***
Monological Sequencing in Calderon's "La Dama Duende"
- 4:00** ***Bettina Mason, Languages & Cultures***
The Academic, Personal and Social Barriers Faced by Low-Income Single Mothers Enrolled in Institutions of Higher Education, and Their Impact on Academic Persistence

Abstracts

Jane Bambrick, Library

Make a Difference with Letters: Flourish...!

Within the field of lettering arts there are many definitions for the term, "flourish." These include descriptions of simple extensions from the roots of letters to swooping and elegant lines that can be added to lower case letters, capitals or backgrounds for words or phrases. I will display historical and contemporary examples that represent the many avenues that flourishing can take. I will include samples of my completed work and selected works from other calligraphers. Hopefully, observers will enjoy my exhibit and leave with an understanding of the beauty and grace of a "flourish."

Ellen Frye, Languages and Cultures

Monological Sequencing in Calderón's "La dama duende"

My paper, titled Monological Sequencing in Calderón's La dama duende, is a taxonomical inventory and in-depth analysis of the monologues delivered by the protagonists and secondary characters. In its most basic definition, a monologue is simply an extensive discourse delivered by one character and at least one other character is listening (as well as the spectators). There are many subcategories, or variations, of the monologue, including the accidental monologue, internal monologue, informative monologue, descriptive monologue, actional monologue, dialogical monologue, commentative monologue, soliloquial monologue, double monologue, and triple monologue. As a dramatic device, monologues have several functions, all of which are directly linked to the spectators. Along with all of the other dramatic devices, monologues help to shatter the glass (or fourth) wall that allegedly separates the actors on stage from the spectators in the audience, thereby allowing direct communication. In this intermediary space, between the actor and spectator, direct communication does indeed take place, thereby allowing the spectator to feel like an active participant in the dramatic production.

**Research supported by ART Program*

Gennifer Furst, Sociology

Prison-Based Animal Programs: Implications for Desistance

The debate over treatment and punishment and what works in corrections is slowly being replaced by a discussion of desistance from crime in the United States. At the same time, there has been a proliferation of programs that bring domesticated animals into prisons. First, the development of these prison-based animal programs will be outlined. Then, the potential for the programs to impact criminal desistance will be presented. Drawing from interview data collected as part of a study of two prison-based animal programs in New Jersey, there is support for a labeling theory approach to desistance as outlined by Maruna, LeBel, Mitchell, and Naples (2004).

**Research supported by ART Program*

Dr. Djanna Hill-Brisbane, Secondary/Middle Education

Teacher Insiders' for Urban Schools: Exploring the Experiences and Practices of Urban Teacher Candidates

One of the greatest challenges for the United States as a nation, and for urban cities in particular, is how to attract and retain academically and pedagogically talented teachers for urban schools - teachers who are committed to remain in those schools to do the difficult, long-term work of reform and renewal. This work is critical if urban students are to succeed in post-secondary education and in the world of work. This qualitative study is based on a collaboration between an urban public school district and its neighboring northeastern university designed to recruit prospective teachers from the three largest high schools in

the district and return them as well-trained and effective teachers. Once students commit to return as teachers and are accepted to the university, the collaborative program offers them a full-scholarship to obtain their degree with teaching certification and the school district agrees to give them first consideration in hiring. The research sample consists of scholarship recipients or pre-service students of color in their final year of undergraduate study. There are two guiding research questions: From the perspective of teacher candidates for urban schools, 1) in what ways do their experiences inform their commitment to teach in that school system? And 2) in what way does the notion of social justice inform their academic life or practices?

Rajiv Kashyap (moderator), Marketing and Management Sciences

Stephen Betts (moderator), Marketing and Management Sciences

The Road to Sustainability – How Can We Assure the Future?

Opportunities and challenges due to advances in technology, political and economic shocks, environmental impacts of development, and growing gender and income inequities have helped raise an important question – How Can We Assure the Future? Our University-wide panel of WPU faculty will discuss possible answers and solutions. The panel, consisting of faculty members from various University departments, will provide insights into a diverse range of issues such as bioethics, corporate social responsibility, corporate environmentalism, health, poverty, social investing, and sustainable development. The session will follow a QA format and will be moderated by Dr. Stephen Betts and Dr. Rajiv Kashyap of the Department of Marketing and Management Sciences.

Participants:

Dr. Rajiv Kashyap is an Associate Professor and Chair, Department of Marketing and Management Sciences

Dr. Stephen C. Betts is an Associate Professor in the Department of Marketing and Management Sciences

Dr. Pixy Ferris is Professor and in the Department of Communication, and Director of the Center for Teaching Excellence

Dr. Raje Kaur is an Assistant Professor in the English Department

Timothy Liu is an Associate Professor in the English Department

Dr. Ali Mir is an Associate Professor in the Department of Marketing and Management Sciences

Dr. Raza Mir is an Associate Professor in the Department of Marketing and Management Sciences

Frank Pavese is an Adjunct Professor in the Music Department

Thomas Uhlein is an Assistant Professor in the Department of Art

Dr. Miryam Wahrman is a Professor in the Department of Biology

Linda Kaufman, Computer Science

Co-Presenters: Daniel Clark, Computer Science, student; Serafim Stamatidis, Computer Science, student

Solving systems of linear equations with symmetric and banded coefficient matrices

In high school one solved systems of 2 x 2 or 3 x 3 systems of equations by reducing the problem to one equation in one unknown. In simulation problems one may be asked to solve systems of equations that have hundreds of thousands of unknowns and to do this in a reasonable amount of time and computer memory demands that one take advantage of the structure of the problem. Many of the problems in physics laid out on a grid with only nearest neighbor interactions yield systems of equations whose coefficient matrix is symmetric and banded, having a huge triangle of zeros in their bottom left and upper right hand corner. We will talk about an algorithm that reduces a huge system to many problems that have one equation in one unknown or 2 equations in 2 unknowns. Our algorithm halves the number of operations over previous approaches.

Cyril S. Ku, Computer Science

*Co-Presenter: Philip K. Kang, Computer Science, Student
Software Engineering Design Patterns for Relational Databases*

The use of design patterns such as the GRASP (General Responsibility Assignment Software Principles) or GoF (Gang-of-Four) patterns in software engineering has been well-documented and widely used in software design and implementation. Research efforts have also been made to apply these design patterns to other design and implementation endeavors in computer science. One such effort is our (Marlowe, Ku, Benham) research to propose a strategy for the integration of the teaching of software engineering and databases, using an innovative curriculum for teaching database design and implementation based on the UML (Unified Modeling Language), the Unified Process, and design patterns. Our (Ku, Marlowe, Mantell) previous effort has demonstrated the use of GRASP patterns for the development of relational databases. In this research, we further investigate GoF design patterns for the design and implementation of relational databases. The application of generic software engineering design patterns to databases allows issues in logical design and in implementation of databases to be more easily connect with similar concerns in software engineering.

**Research Supported by ART Program*

Kathy Malanga, David & Lorraine Cheng Library

*Co-Presenter: Nancy Weiner, David & Lorraine Cheng Library
Circles of Collaboration: How the Library Supports Research*

This poster will demonstrate a variety of collaborations between the library and faculty in support of building student research skills. Examples of assignments that incorporate information and technology skills will be provided.

Bettina Mason, Languages and Culture

The Academic, Personal and Social Barriers Faced by Low-Income Single Mothers Enrolled in Institutions of Higher Education, and Their Impact on Academic Persistence

This study explores the experiences of single female college students who are financially disadvantaged while raising children and pursuing an education. In order fully understand the challenges and barriers faced by these women, it is important to realize their motivation to pursue an education in spite of these challenges. Because of the importance for single mothers to attain financial independence and self-sufficiency, higher education is a central concept of this study.

The literature of the following disciplines was analyzed: (1) the demographics and profiles of the financially disadvantaged single mother college student, (2) the characteristics and history of adults returning to college, (3) the history of welfare reform, and (4) the sociological research on women's issues related to higher education.

Although American society has a long tradition regarding education as a means to achieve material security and social status, access to higher education has been extended to certain disadvantaged and deserving groups, such as minorities and war veterans, to enable them to improve the quality of their lives. Unfortunately, this opportunity has not been readily extended to welfare recipients. The potential of higher education as a means by which financially disadvantaged women could achieve independence and become productive members of society, is addressed in this study, with the primary focus on academic retention.

Christopher F. Mulrine, Special Education and Counseling

Creating A Virtual Learning Environment for Gifted and Talented Learners

Teachers have to find creative ways to stimulate thinking and to create higher-order learning opportunities for all students, especially the gifted and talented learner. One suggestion is to create enrichment activities

that integrate curriculum with technology. In recent years, information technology has become a common teaching practice for gifted and talented learners (Kalchman & Case, 1999, Wallace, 2005, Wasserman, 2001). This same information technology can also be used to design a virtual learning environment that allows for enriched learning experiences and more advanced study for the gifted and talented learner. Creating a virtual learning environment provides an opportunity to differentiate learning. Virtual learning environments may be used to develop cultural experiences in the visual, creative and performing arts, allow for virtual visits to all types of museums, industries, governmental agencies, and institutions, expose students to different ideas through prominent and/or controversial persons, or provide advanced study in the content areas that include research activities (Belcrasto, 2002). They can be an exciting learning approach for students because of the unlimited amount of information that is available online. The main goal for this accepted article in Gifted Child Today was to show teachers how to integrate curriculum with technology for gifted and talented students. I will explain how to create a virtual learning environment using an interdisciplinary thematic unit appropriate for a specific grade and subject through designated sites on the Internet.

Robin Nemeroff, Psychology

Bridging the Gap Between Mental Health Research and Community Practice: Identifying Children at Risk

This study was designed to investigate the feasibility of establishing ongoing, early identification services for mental health problems within school settings. 41 school counselors and other mental health professionals in 23 middle, junior, and high schools were given training and supervision in the administration of an evidence-based mental health assessment tool, the Voice DISC-IV (Diagnostic Interview Schedule for Children), over the course of 1 ½ school years. During the study, 530 students were selected to be assessed with the DISC, and 72% were confirmed to be at-risk for a mental health problem. Among those students who obtained positive DISC results, 71% had never been in treatment before. The most common problems identified by the DISC were symptoms related to suicide (28%), Social Phobia (28%), Attention Deficit Hyperactivity Disorder (26%), and Oppositional Defiant Disorder (26%). In cases where parents agreed to seek further evaluation as a result of the DISC findings, 65% of the children were evaluated by a health or mental health professional within 2 weeks. Thus, the use of a computerized, evidence-based mental health assessment tool appears to be a feasible strategy for providing early mental health identification services in schools and can help to bridge the gap between mental health providers and the unmet needs of children who are at-risk for mental health problems within the community.

**Research supported by ART Program*

Emmanuel S. Onaivi, Biology

Modification of Mouse Behavior by CB2 Cannabinoid Receptor Ligands

It was previously thought that marijuana acts by activating brain-type cannabinoid receptors called CB1, and that a second type called CB2 cannabinoid receptor was found only in peripheral tissues. In this study the effects of the putative CB2 agonist, JWH015, the mixed CB1/CB2 agonist WIN55212-2 and CB2 antagonist SR144528 in mouse motor function tests and in the two compartment black and white box were evaluated. Acute treatment with CB2 agonist (JWH015) altered mouse locomotor activities in a strain and gender dependent fashion. A general pattern of depression in locomotor activity was induced by JWH 015 in both males and females in the three mouse strains tested as the dose was increased. In the two compartment black and white box the acute effects of JWH015 at low doses (1-20 mg/kg) did not induce robust anxiolytic response rather this peripheral administration of JWH015 induced an anxiogenic profile of response in the black-white test box. In contrast chronic treatment of control mice with JWH015 induced an anxiolytic profile of response in comparison to the chronic mild stress animals. Using the DBA/2 strain the spontaneous locomotor activity and stereotype behavior was enhanced by acute administration of low doses of SR144528. SR144528 did not induce stereotype behavior in female mice at the doses used. In the two compartment black and white box test box treatment with SR144528 had little or no effect on the time mice spent in both chambers by male or female DBA/2 mice except a reduced time spent in the white chamber by the male mice at the highest dose

used. The spontaneous locomotor activities in both chambers by both DBA/2 male and female treated with SR144528 were also not significantly different from vehicle treated control mice. These effects of CB2 cannabinoid receptor ligands in in vivo behavioral tests are provided as functional evidence of CB2 cannabinoid receptors in the brain that plays a role in the modification of mouse behavior.

**Research supported by ART Program*

Keumjae Park, Sociology

Neither Assimilation, Nor Transnationalism: Korean Immigrants' Organizing of Continuities and Discontinuities in Settlement Processes

Sociological literature on immigrants' integration to the United States has been somewhat polarized. Traditionally, immigrants' adaptation has been most often analyzed from the perspective of assimilation which posits that immigrants gradually disconnect from their countries of origin as their assimilation processes into the U.S. society proceed. On the other hand, recent studies on transnationalism emphasize that immigrants, far from severing their ties to their home communities, actively turn their transnational ties into resources that assist their settlements in the United States. This paper critiques that both approaches tend to overemphasize only one aspect of immigrants' experiences, and argue that immigrants organize changes and consistency in their everyday practices, networks, and culture to make sense of their new surroundings in the U.S. Using interview data on Korean immigrant women, the paper documents immigrants' agency in handling continuities and discontinuities they experience as a result of immigration.

Donna R. Potacco, Mathematics and Science Enrichment Center

Co-Presenter: Rita Ramirez-Levine, Mathematics and Science Enrichment Center

Evaluation of the Use of Online Supplemental Resources in Developmental Mathematics

This review discusses the findings of a multi-phase project which studied the use of supplemental mathematics resources to facilitate the education of developmental mathematics students.

There were significant differences of students' pass rates between supplemented and non-supplemented student groups and between the student groups and the institution's pass rate. These differences disappeared when all instructors' student pass rates were averaged raising the question as to whether the absence of supplement effect seen in some studies is due to an averaging effect.

Students of instructors that used a consistent and mandatory supplement policy throughout the semester demonstrated greater supplement usage. Additional factors that influenced student usage of the program were identified, including instructor variations, course construction, program selection and student lifestyle. Student preferences for the online, hybrid, or traditional option appeared to be influenced by their technological experience with the supplement during the semester. The reasons for students' preference for each option were discussed.

Benefits, obstacles, technological and administrative considerations for the selection and use of supplemental programs were identified for institutions and instructors considering their implementation.

Lily Prince, Art

2 fingerprint paintings commissioned for the new medical examiner's forensic lab, New York, NY through the New York City Department of Cultural Affairs, 2006.

I would like to exhibit jpegs of the 2 fingerprint paintings I recently completed that were commissioned for the new medical examiner's forensic lab, New York, NY through the New York City Department of Cultural Affairs, 2006.

Julie Rosenthal, Elementary and Early Childhood Education

If you want to learn new words during reading, don't skip over the words!

The effect of orally pronouncing unknown vocabulary words during otherwise silent reading on memory for

those words was explored. Sixty-two fifth graders of varying reading ability read passages in which decodable, low frequency nouns were embedded and underlined. Half of the students were instructed to orally pronounce the underlined words when they came to them during silent reading. The other half were instructed to put a check next to underlined words they felt they had seen before. Children who decoded words performed better on vocabulary learning posttests than children who did not pronounce words out loud. Oral pronouncers also spelled target words more accurately immediately following passage reading and on a delayed posttest. In addition, students were interviewed about their normal strategy use when they encounter unknown words in text. Most students, especially poorer readers, said that they skip over, guess, or ask a teacher for the word. The results suggest that phonological recoding, long thought to be a critical component of acquiring word-specific orthographic representations, also contributes to vocabulary-word learning. However, children often do not decode words that appear difficult or that are unknown.

**Research supported by ART Program*

Tricia Snyder, Economics, Finance, and Global Business

Co-Presenter: Martin Gritsch, Economics, Finance and Global Business
An Empirical Examination of the Determinants of CEO Pensions

CEO compensation has attracted a good deal of attention lately. A relatively new line of research scrutinizes executive pensions, which can be very sizable. Similar to bonuses and stock option compensation, pensions can potentially be used to attract talented employees and to mitigate the principal-agent problem. This may be especially true for larger firms that, in principle, are more prone to the principal-agent problem. In this paper, we examine a number of factors that may influence a firm's decision to offer their CEO a pension plan. In general, our results show that of all the examined variables, firm size has the strongest impact on the likelihood that the firm's CEO has a pension plan.

Janis Strasser, Elementary & Early Childhood Education

Co-Presenter: Dr. Holly Seplocha, Elementary & Early Childhood Education
Using Picture Books to Support Young Children's Literacy Learning

This article describes various ways in which teachers can use picture books to support literacy in early childhood classrooms. The connection between picture books, oral language development, and phonological awareness is discussed. Various techniques for using picture books and creating print-rich environments are also included. The article contains several anecdotes of the ways that teachers are using picture books to support literacy.

The content was originally part of a presentation at the Oxford Roundtable in Early Literacy in March/April 2005. It will be published in the Summer 2007 issue of Childhood Education (Volume 83). This is the journal of the Association of Childhood Education International.

Bogong Su, Computer Science

Co-Presenters: Erh-Wen Hu, Computer Science; Cyril Ku, Computer Science; Steve Owiyo, Student
DSP Performance Comparison by using SMV Benchmark

Unlike general-purpose processors, digital signal processors (DSPs) are strongly application-dependent. To meet the needs for diverse applications, a wide variety of DSPs based on different architectures ranging from the traditional to VLIW have been introduced to the market over the years. The functionality, performance, and cost of these processors vary over a wide range. In order to select a processor that meets the criteria of their applications in a cost-effective way, DSP application developers rely on the performance data of the processors. Performance data are also essential for the designers of DSP processors to improve their design. Consequently, several DSP benchmarks have been proposed over the past decade or so. However, none of these benchmarks seem to have included recent new DSP applications.

In this paper, we use a new benchmark we have recently developed to measure and compare the performance of popular DSP processors from Texas Instruments and StarCore. The new benchmark is based on the Selectable Mode Vocoder (SMV), a speech-coding program from the recent third generation (3G) wireless applications. All benchmark kernels are compiled by the compilers of the respective DSP processors and run on their simulators. Geometric mean of code size and weighted mean of clock cycles are used to compare the performance of DSP processors. In addition, we studied the relationships between code structures of the benchmark and the various features of the DSP processors. We also analyzed how such relationships might impact on performance. Extensive experimental data gathered, analyzed, and presented in this paper should be helpful for processor and compiler designers to optimize their design toward specific design goals.

**Research supported by ART Program*

Ronald P. Verdicchio, Anthropology

Co-Presenters: Blanka Dunn, student; Ana Rodriguez, student; Casy Walker, student; Jussley Martin, student; Laura Mungiello, student

Comparative Education and Schooling Models: How do American Schools Stack-Up?

The proposed symposium will present and discuss a compilation of five student field research projects that were conducted in the field during Anthropology of Education: Foundations for Teaching in fall, 2006. Using ethnographic research methods, student-researchers identified a research subject who attended elementary or secondary school in a foreign country and employed an interview protocol to collect data, interpret findings, and analyze the findings in relation to the American education system. The research reports submitted for presentation in this proposal were selected from a pool of 37 student papers. Research subjects who were interviewed attended schools in Portugal, Zimbabwe, Columbia, Belarus, and Israel. The method the student-researchers used to collect data from subjects varied from virtual interviews in Spanish, to internet camera interviews, and face-to-face interviews. The findings were published in five page research reports with field notes as appendices.

The format of the symposium will begin with an overview of ethnography as the anthropologist's primary research method and its application to conducting research at the undergraduate level. Next, there will be a brief, but succinct discussion about the need for educators to be informed about educational systems in other cultures. The latter discussion will be led by the Professor Verdicchio. Next, the student panel will present their research problems, methods and research findings using presentation graphics. The remaining time will be allocated for a discussion with the panel and the audience. The discussion will be moderated by Professor Verdicchio

Melda N. Yildiz, Secondary & Middle School Education

Co-Presenters: Kathleen Malu, Secondary & Middle School Education; Gerri Mongillo, Secondary & Middle School Education; Salika Lawrence, Secondary & Middle School Education

Who Needs Textbooks? Exploring Reading and Writing Media through Multiple Literacies

Teacher candidates in initial and advanced programs participated in various new media projects via course assignments where they designed and created media productions; studied information literacy; and evaluated library resources. Candidate projects produced with new media and technologies suggested that they were cognizant of multiple perspectives that were reflected by their interest and commitment to multiculturalism. The studies discussed provide resources, activities, and tools for future teachers to liberate themselves from a traditional textbook format and to redesign their curriculum focusing on the needs and aspirations of their students. Goals of this participatory research included the identification of the challenges integrating media into the curriculum and to discover effective methods to naturally integrate literacy, multiple forms of media, and new technologies.

This panel presentation presents classroom research that addresses the development of media literacy skills and the integration of these skills into K-12 teacher education programs. It addresses:

Celebrating Process: Teachers researched, produced, and presented multimedia projects and documentaries by reflecting on teaching philosophies and classroom practice from process to product.

Sharing Best Practices: Our presentation outlines strategies and challenges in designing our courses integrating new media and technologies.

Rethinking Curriculum: In our courses and research, we deconstructed the national and local curriculum and standards; documented participants' experiences and projects to articulate the realities of conditions in schools through their research, analysis, and dialog.

**Research supported by ART Program*

Time Slot	Paterson Room	Amy Job Classroom	Auditorium
9:30 - 9:50	Emmanuel S. Onaivi (Biology), Modification of Mouse Behavior by CB2 Cannabinoid Receptor Ligands		Ronald P. Verdichio (Anthropology) & five students, Comparative Education and Schooling Models: How do American Schools Stack-Up?
10 - 10:20	Tricia Snyder & Martin Gritsch (Economics & Finance), An Empirical Examination of the Determinants of CEO Pensions		
10:30 - 10:50			
11 - 11:20	Linda Kaufman, Daniel Clark & Serafin Stamatits (Computer Science), Solving systems of linear equations with symmetric and banded coefficient matrices		
11:30 - 11:50	Cyril S. Ku & Philipp K. Kang (Computer Science), Software Engineering Design Patterns for Relational Databases		
12 - 12:20			
12:30 - 12:50		Janis Strasser & Holly Seplocha (Elementary & Early Childhood Education), Using Picture Books to Support Young Children's Literacy Learning	
1 - 1:20	Lunch and Poster Presentations by Jane Barrbrick, Kathy Malanga & Nancy Weiner, Donna Potacco & Rita Ramirez-Levine, Lily Prince, and Julie Rosenthal		
1:30:00 - 1:50		Dianna Hill-Brisbane (Secondary and Middle School Education), 'Teacher Insiders' for Urban Schools -- Exploring the Experiences and Practices of Urban Teacher Candidates	
2 - 2:20		Melda N. Yildiz, Kathleen Malu, Gerri Mongillo & Salika Lawrence (Secondary & Middle School Education), Who Needs Textbooks? Exploring Reading and Writing through Multiple Literacies	
2:30 - 2:50	Bogong Su, Steve Owyo, Cyril Ku & Erh-Wen Hu (Computer Science), DSP Performance Comparison by using SIMV Benchmark		Rajiv Kashyap & Steve Betts (Marketing and Management Sciences), moderators for a University wide panel of WPU faculty, The Road to Sustainability -- How Can We Assure the Future?
3 - 3:20	Keumjae Park (Sociology), Neither Assimilation, Nor Transnationalism: Korean Immigrants' Organizing of Continuities and Discontinuities in Settlement Processes	Christopher F. Murline (Special Education and Counseling), Creating a Virtual Learning Environment for Gifted and Talented Learners	
3:30 - 3:50	Ellen Frye (Languages & Cultures), Monological Sequencing in Calderon's "La dama duende"	Robin Nemeroff (Psychology), Bridging the Gap Between Mental Health Research and Community Practice: Identifying Children at Risk	
4 - 4:20	Bettina Mason (Languages & Cultures), The Academic, Personal and Social Barriers Faced by Low-Income Single Mothers Enrolled in Institutions of Higher Education, and Their Impact on Academic Persistence	Gennifer Furst (Sociology), Prison-Based Animal Programs: Implications for Desistance	
4:30 - 4:50			