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Article Abstracts:

Developmental Mathematics: Challenges, Promising Practices, and Recent Initiatives
By Barbara Bonham and Hunter R. Boylan

ABSTRACT: Developmental education has increasingly become part of the national debate in higher education. This is particularly true for developmental mathematics courses which, in general, have the highest rates of failure and noncompletion of any developmental subject area. This manuscript describes the current state of the art in developmental mathematics, discusses major initiatives designed to reform and improve success rates, and identifies research-based teaching practices associated with improved student performance in developmental mathematics courses.

Incorporating Study Strategies in Developmental Mathematics/College Algebra
By Selina Vasquez Mireles, Joey Offer, Debra D. Ward and Carol W. Dochen

ABSTRACT: The purpose of this paper is to discuss the effectiveness of incorporating study strategies in a developmental mathematics/college algebra program. Both quantitative and qualitative data were collected through a quasi-experimental methodology. Results show that students reported increases on the Learning and Study Strategies Inventory (LASSI) scales in study strategy usage, and this new strategy usage was supported by comments students made on open-ended surveys. A discussion of conclusions, limitations, recommendations, and suggestions is also included.

Improving Success in Developmental Mathematics: An Interview with Paul Nolting
By Hunter R. Boylan

Dr. Paul Nolting is a national expert in assessing individual math learning problems, developing effective student learning strategies, and assessing institutional variables that affect math success. Since his dissertation in 1986 on improving math success with study skills he has consulted with over 100 college, university, and high school campuses on math success. He has written journal articles; consulted on Quality Enhancement Plans; conducted live PBS and other broadcasts; presented at numerous national
conferences; and written several texts, tutor manuals, handbooks, DVDs, and computer assessment programs to improve math success. His Winning at Math text won book of the year award from the National Association of Independent Publishers for best text of the association and is the only research-based math study skills text published in the U.S. He is employed at the State College of Florida in Bradenton, FL and has been an institutional test administrator, learning specialist, director of Title III Programs, Student Support Services director, and disability coordinator. He has also been a graduate school adjunct instructor at the University of South Florida and Florida Gulf Coast University. His life has been dedicated to improving the success of math students.

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**Article Abstracts:**

Increasing Student Success and Retention: A Multidimensional Approach  
By Paul R. Fowler and Hunter R. Boylan

ABSTRACT: Students who are seriously academically deficient, those who are underprepared in all subjects, face many academic challenges as they begin their coursework in higher education. However, students also face nonacademic and personal issues that create additional barriers to success. The results of this study suggest that increases in student success and retention may be achieved if developmental educators also address the nonacademic and personal factors related to student success. The student success documented in this study was achieved through the use of: (a) clear student guidelines, (b) integrating first-year transition coursework, (c) intrusive academic advising to treat the nonacademic and personal factors, and (d) traditional developmental education coursework and tutoring to address the academic factors delivered via a Pathways to Success Program. The increase in the mean grade point average of program students as compared to nonprogram students, from 1.503 to 2.151, was statistically significant ($p = .000$). Increases in the number of students in good academic standing, increases in success in developmental education courses, and increases in the 1-year retention rate were also noted for participating students.

The Effectiveness of Computer-Assisted Instruction in Developmental Mathematics  
By Kathy Spradlin and Beth Ackerman

ABSTRACT: This quasi-experimental study compared academic performance of students enrolled in a developmental mathematics course using traditional instruction (i.e., lecture) and traditional instruction supplemented with computer-assisted instruction. In addition, gender differences in mathematical performance were also investigated. There was no statistically significant difference in the posttest scores
of students receiving traditional instruction and traditional instruction supplemented with computer-assisted instruction. There was a significant difference in the posttest scores of females and males, with females outperforming males in both modes of instruction.

Muriel Harris Interview
By Elizabeth Threadgill

Muriel “Mickey” Harris has been one of the most influential figures in writing center research and practice for over three decades. She is currently Professor Emerita of English at Purdue University. She founded The Purdue Writing Center which she directed from 1976 until 2003. She also founded Purdue’s Online Writing Lab (OWL), and the Writing Lab Newsletter for which she is currently the managing editor. She has contributed over 90 written works to the field, including six books and many book chapters and journal articles. Professor Harris is an innovator of writing center theory and practice and an advocate for students, tutors, colleagues, and the work of the writing center. She has been recipient of many awards and honors from several professional organizations, including the National Council of Teachers of English Exemplar Award. Most notably, for her service to and scholarship in the fields of developmental education, learning assistance, and writing centers, Dr. Harris has been honored with a festschrift, The Past, The Center, and the Future: A Millennial Festschrift in Honor of Muriel Harris and a namesake award, the Muriel Harris Award for Outstanding Scholarship, which the International Writing Centers Association (IWCA) awards tri-annually.

Ideas for Practice: A Collaborative Look to the Classroom
By Dorothy A. Osterholt and Katherine Barratt

ABSTRACT: Many developmental students begin college ill-equipped in the social and emotional competencies to be successful. Thus, it is essential that institutions of higher education address the broader needs of these students. The purpose of this article is to present collaborative learning as a tool for addressing the social and emotional inhibitors that may prevent success during this time of transition. We address potential concerns for making this pedagogical shift and present reasons for considering this approach. We also provide specific classroom applications of this process that increase the chance that all students acquire the full spectrum of skills crucial for academic success through cooperatively-shared experiences.

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Article Abstracts:

Bridging the Evidence Gap in Developmental Education
By Michael L. Collins; Invited Contribution
ABSTRACT: This article addresses conflicting perspectives regarding research in developmental education. Subsequent to examining opinions regarding the rigor of research in the field to date, recommendations for a research agenda are proposed. The study’s review of research strengths and weaknesses suggests multiple types of evidence, potentially pointing college leaders and policymakers to better strategies and approaches.

A Comprehensive Cost/Benefit Model: Developmental Student Success Impact
By Alejandro J. Gallard, Frank Albritton, and Mark W. Morgan

ABSTRACT: Colleges are facing an increasing population of students who begin their college experience in developmental education classes in reading, math, and/or English. Many of these students are unsuccessful in attaining a degree, sometimes because they are deterred by their lack of preparation and the delay of two or more semesters before they begin their college-credit courses. One community college in Florida has implemented an intervention in its developmental education program funded through a U.S. Federal Title III-A grant, achieving increases in course completion rates and student retention with an enhanced tutoring program. The authors present the cost/benefit of the tutoring intervention, demonstrating a surprisingly large return on the investment both to the college and society.

Transitions in Developmental Education: An Interview with Rosemary Karr
By Cristella R. Diaz

Rosemary Karr is a Professor of Developmental Mathematics at Collin College in Plano Texas where she has taught since 1990, subsequent to serving as a faculty member at Eastern Kentucky University. Professor Karr has coauthored three textbooks, written more than 10 solutions manuals, presented numerous papers, and has been an active member in multiple educational associations (previous President of the National Association for Developmental Education and reviewer/editorial panelist for the AMATYC Review). She has been honored as Outstanding Professor four times by Collin College and has received national and state recognitions: U.S. Professor of the Year for Community Colleges (Council for Advancement and Support of Education (CASE) and the Carnegie Foundation for the Advancement of Teaching, 2007), Outstanding Service to Developmental Education Students (NADE, 2007), Innovative Excellence in Teaching and Learning (National Conference for College Teaching and Learning, 1996), and the 2008 Texas Minnie Stevens Piper Professor. Her current research interest involves the impact that reducing mathematics anxiety has on student learning.

Questions for Practice: Reflecting on Developmental Mathematics Using 19th-Century Voices
By Marcus E. Jorgensen

ABSTRACT: In this article the author has used 19th-century arithmetic and algebra textbooks as a way to reflect on current practices in developmental mathematics education. Five areas of special interest were found: motivation, relevance, depth, pedagogy, and textbooks. Philosophic and practical statements from vintage textbook authors remind educators of a number of questions and issues within each of those areas of interest. In some respects, little has changed over the years and many issues remain unresolved or little progress has been made. One hundred years from now will things be the same, or is it time for a change, a rethinking?

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Postsecondary Literacy: Coherence in Theory, Terminology, and Teacher Preparation
By Eric J. Paulson and Sonya L. Armstrong

ABSTRACT: Postsecondary literacy instruction -- the teaching of basic writing and transitional, or developmental, reading in community colleges and 4-year colleges -- is an important and growing field, but also one still developing in key areas. In this article, we discuss three of these areas within which postsecondary literacy instruction can continue to develop. Specifically, we discuss current issues in theory, terminology, and teacher preparation within the field. We also explore specific suggestions for increasing coherence and consider focal points for further inquiry in each area.

Underprepared, Ethnically Diverse Community College Students: Factors Contributing to Persistence
By Peter Barbatis

ABSTRACT: The purpose of this study was to gain an understanding of the perceptions of underprepared college students who had participated in a first-year learning community at an urban, culturally diverse, commuter campus in the southeastern United States. Perceptions of graduates and those who earned at least 30 college-level credit hours were compared to their learning community peers who did not persist and had dropped out of college. A total of 22 students participated: 6 graduates, 12 persisters, and 4 dropouts. The factors included personal attributes, support systems, and other characteristics. Findings suggested the following ways to enhance the academic experience of underprepared college students: (a) include critical pedagogy, (b) integrate cocurricular activities with the academic disciplines, and (c) increase student-faculty interaction.

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Article Abstracts:

Is a Writing Sample Necessary for "Accurate Placement"?
By Patrick Sullivan and David Nielsen

ABSTRACT: The scholarship about assessment for placement is extensive and notoriously ambiguous. Foremost among the questions that continue to be unresolved in this scholarship is this one: Is a writing sample necessary for "accurate placement"? Using a robust data sample of student assessment essays and ACCUPLACER test scores, we put this question to the test. For practical, theoretical, and conceptual reasons, our conclusion is that a writing sample is not necessary for "accurate placement." Furthermore, our work on this project has shown us that the concept of accurate placement itself is slippery and problematic.

American Indian/Alaska Native College Student Retention Strategies
By Raphael M. Guillory

ABSTRACT: This article presents findings from a qualitative study examining the similarities and differences between American Indian/Alaska Native student perceptions of state representatives, university presidents, and faculty about persistence factors and barriers to degree completion specific to American Indian/Alaska Native students at three land-grant universities across Washington, Idaho, and Montana. A comparative analysis of themes emerging from interview data reveals conflicting perceptions among participant cohorts. Retention-to-graduation strategies are offered for institutions of higher education desiring to better serve these students and their respective tribal communities. The strategies offered, including specialized forms of culturally-sensitive career and academic counseling, peer mentoring, and Supplemental Instruction, can also help professionals delivering developmental education programming better serve this student population.

A Curriculum Focus Intervention’s Effects on Prealgebra Achievement
By David Yopp and Richard Rehberger

ABSTRACT: This paper discusses a pilot study of the effects of a curriculum focus intervention on students’ Prealgebra achievement. Elements of the intervention include identification of high-priority learning objective; structured repeatable testing; and a coherent, rubric-based feedback component. This research differs from traditional mastery learning research in that it focuses on a subset of high-priority learning objectives, as opposed to the entire curriculum, and focuses on assessing students’ ability to structure, represent, and communicate their processes and thinking skills, as opposed to assessing only whether the solution and processes are correct. Students in the treatment and control groups were given general (not mathematics specific) academic efficacy measures, a course-specific measure, and a common course final exam. Only the differences in the means on course specific measures were statistically significant, with the treatment group outperforming the control group on both the course-specific efficacy measure and the final. A possible negative effect was that students in the treatment group dropped out at a higher rate than students in the control group.

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Article Abstracts:

Literary Letters: Developmental Readers’ Responses to Popular Fiction
By Marty Frailey, Greta Buck-Rodriquez, and Patricia L. Anders

ABSTRACT: This article describes elaboration in "literary letters" (Atwell, 1984, 1987) written by developmental reading students. Nineteen community college students received instruction in "elaborative thought patterns," or types of elaboration, to improve the quality of their responses to popular fiction. This instruction was part of a literature-based component intended to foster positive changes in comprehension and attitude toward reading. Data were derived from (a) letters analyzed according to a coding system, (b) questionnaires, (c) focus-group discussions, and (d) self-evaluations. Students demonstrated improvements in quality of elaboration; they also reported positive changes in comprehension, writing, literature discussions, self-efficacy, and attitude.

The Paraprofessional-to-Teacher Pipeline: Barriers and Accomplishments
By Jorgelina Abbate-Vaughn and Patricia C. Paugh

ABSTRACT: This study examined barriers experienced by veteran school paraprofessionals attempting to complete a 4-year degree leading to public school teaching credentials. The study followed culturally and linguistically diverse, nontraditional student participants through their 1st and 2nd years as sophomore/junior students in a large urban university. The population exhibited a variety of academic, organizational, financial, and counseling needs typical of developmental learners. With significant numbers of adult learners re-entering baccalaureate degree-granting institutions, the notion of developmental education might be applied to such students; they bring a mix of academic needs and success through resilience based in their cultural funds of knowledge.

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ARTICLE ABSTRACTS:

Instructional Delivery in Developmental Mathematics: Impact on Retention
By Carol A. Zavarella and Jan M. Ignash

ABSTRACT: Studies of students enrolled in computer-based instruction have yielded mixed results, with some reporting a high dropout rate. This article describes a quantitative study examining the probability of students' withdrawal from a computer- versus lecture-based developmental math course based on learning style, reasons for selecting the instructional format, and entry test scores. Students in the computer-based format were more likely to withdraw from the course compared to those in the lecture-based format, and personal reasons for choosing a specific format appeared to influence completion rates. Implications for practice include suggestions for providing appropriate information to students prior to their enrollment in online developmental education courses.

Targeted Intervention for Developmental Education Students (T.I.D.E.S.)
By Hunter R. Boylan

ABSTRACT: This manuscript proposes a theoretical model that provides an alternative for assessing, advising, and placing underprepared students in colleges and universities. It advocates combining cognitive and affective assessment data along with information about students' personal circumstances to make more precise placement decisions via advising that targets both course and service recommendations. The article also includes a detailed description of the model and how it might be implemented. The assumption underlying this model is that although the traditional practice of placing students into remedial courses based on a single cut score on a cognitive assessment instrument is efficient, it is not necessarily effective. The use of the alternative model, referred to as "Targeted Interventions for Developmental Education Students," should enable institutions to place their underprepared students more accurately and serve them more effectively.

College Preparedness and Time of Learning Disability Identification
By Carla Abreu-Ellis, Jason Ellis, and Richard Hayes

ABSTRACT: This paper discusses the results of the Learning and Study Strategies Inventory (LASSI) administered to college students in order to identify similarities and differences between time of diagnosis of a learning disability and the development of learning strategies related to will, self-regulation, and skill components. Findings indicate that early identification (in K-12) and providing students with test-taking strategies may ameliorate academic success in higher education for students with learning disabilities. Recommendations for action will assist developmental educators to better serve college students with learning disabilities in higher education.

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ARTICLE ABSTRACTS:
Placement Tools for Developmental Mathematics and Intermediate Algebra
By William J. Donovan and Ethel R. Wheland

ABSTRACT: This paper investigates the placement of students at an urban Ohio college campus in developmental mathematics and Intermediate Algebra courses. We have found that the ACT Mathematics and COMPASS Domain I (Algebra) Placement scores both correlate well with success in the Intermediate Algebra course and that, although females have lower placement test scores than males, they have a higher success rate in the course. We determined that the existing cutoff for placement in the Intermediate Algebra course is accurate in predicting students to be more likely to succeed than fail the Intermediate Algebra course at this institution.

Developmental Education Literature: A Proposed Architecture
By Michael Preuss

ABSTRACT: Developmental education is an area of practice in higher education which continues to develop and expand. To date, it has been without a system portraying the logical relationships between various constructs employed in the field. A descriptive content analysis, considering 796 individual units from five different sources to construct a proposed architecture of the literature of developmental education, is presented. The project seeks to portray, in respect to the literature sampled, both the logical relationships existing between various topics in the literature of developmental education and the weight given to any particular topic. The result provides an overview of the field of developmental education and its literature based on the topics addressed and purposes advanced by the many practitioners and scholars who authored the manuscripts surveyed.

Community College Library Practices in Developmental Education
By Ann Roselle

ABSTRACT: This qualitative study examines current community college library practices in developmental education. Based on semistructured telephone interviews with 27 librarians across the United States, analysis of the results shows that there are librarians who proactively integrate basic library skills into developmental education and academic success courses, collaborate with developmental educators in designing library sessions and class assignments, interact with learning assistance and tutoring centers, and help reduce library anxiety and build student confidence.

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ARTICLE ABSTRACTS:

First Generation College Students: A Study of Appalachian Student Success
By Christie Hand and Emily Miller Payne
First-generation students represent a crucial population in institutions of higher education. Often considered “at-risk” in academic persistence and retention discussions, these students present both a challenge and opportunity to postsecondary education. This study focuses on a subgroup of first-generation students, those from Appalachia, and the factors contributing to their academic persistence. The participants were students from the Student Support Services program at a major Appalachian university. The phenomenological method was employed, enabling the themes to flow from the data rather than being presupposed by the researcher. The themes emerging from the students’ experiences were the importance of home culture and family, financial concerns, significance of an internal locus of control, relationships and emotional support, and communication of information. Each of these has shown a definite impact on the students’ academic persistence.

Ideas in Practice: Instructional Design and Delivery for Adult Learners
By Julia Simms and Dave S. Knowlton

ABSTRACT: A pertinent question for developmental educators is not whether computers should be used in developmental education but how (Dotzler, 2003; Rapp & Gittinger, 1993). Instructional design models appropriate for courses delivered electronically should be applied because part of the how requires ensuring that adult students who are enrolled in developmental courses experience computer-based instruction that is well-designed in terms of both efficiency and relevance of delivery. This article begins by describing the needs of adult students who are enrolled in developmental courses. Then, it describes a project in which Morrison, Ross, and Kemp’s (2004) curvilinear instructional design model was used to create computer-based instruction about fractions. Both the design and developmental phases are described. The article concludes with implications for others who might apply the model to various areas within developmental education.

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Article Abstracts

Impact of the Supplemental Instruction Experience on Science SI Leaders
By Nancy M. Lockie and Robert J. Van Lanen

ABSTRACT: This qualitative study describes the experiences of SI leaders in science courses. Analysis of data using Colaizzi’s phenomenological approach has indicated the following advantages of the SI
experience for SI leaders: (a) greater appreciation of the diversity of student learning styles, (b) increased understanding of the subject matter, (c) greater self-confidence as a learner, (d) development of closer relationships with faculty, (e) application of the strategies and skills learned as an SI leader in other courses, and (f) realization of the importance and value of collaborative learning. The results of this study can be used by Learning Center professionals and faculty to successfully recruit new SI leaders and to customize the SI model to maximize the effectiveness.

Ideas in Practice: Graphing calculators in Beginning Algebra
By Aimee Martin

ABSTRACT: This paper reports on a project to improve Beginning Algebra students' understanding of basic algebraic concepts through fully integrated use of the TI-83 graphing calculator. The methodology incorporated an intervention case study including approximately 700 Beginning Algebra students at an open-door community college of 8,500 students in the Southwest. Pass rates, empirically calculated at points before and after the implementation of the graphing calculator project, clearly showed an increase with the use of graphing calculators.

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Retrospective Miscue Analysis for Struggling Postsecondary Readers
By Eric J. Paulson and Pamela Mason-Egan

ABSTRACT: Retrospective Miscue Analysis (RMA) is presented as an instructional strategy for postsecondary reading instruction. Oral reading miscues, which form the core of the RMA approach, are briefly described, and RMA is discussed as a one-on-one instructional approach utilizing the reader's own miscues. The theoretical and underpinnings of RMA are discussed and detailed procedures for implementing RMA are provided. Examples from several RMA sessions that illustrate RMA procedures are presented.

Ideas in Practice: Strategic Note Taking in Developmental Mathematics
By Carol Eades and William M. Moore

ABSTRACT: This article conveys the importance of note taking in postsecondary developmental mathematics. It presents a strategic note-taking methodology that is designed to help students increase self-regulation and facilitate learning. Although the note-taking system is applied to developmental
mathematics, it can be used for any course. The article also describes what note-taking strategies can and cannot do for students and instructors. The authors conclude by inviting readers to analyze the success of this systematic process in their own classes.

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Does Faculty Employment Status Impact Developmental Mathematics Outcomes?
By David S. Fike and Renea Fike

ABSTRACT: This study assessed the impact of faculty employment status on student outcomes in developmental mathematics. The sample consisted of 1318 students enrolled in Intermediate Algebra classes at a community college. Multivariate analyses revealed that faculty employment status (full time or part time) was not associated with students' final grades or completion rates. Faculty education level was correlated with course final grades, with faculty possessing graduate degrees having better student outcomes. Student gender, race, and age were associated with outcomes; semester hours attempted were not. These findings should help equip administrators to make informed decisions regarding faculty assignments that lead to improved student outcomes and help faculty to target interventions for "at-risk" students.

A Retention/Persistence Intervention Model: Improving Success Across Cultures
By Geneva Escobedo

ABSTRACT: This article describes a 3-year pilot study that addressed persistence and retention of developmental students at a multi-campus community college in the Southwest. The study was conducted as part of a U.S. Department of Education Hispanic Serving Institution grant program. Qualitative research and formative evaluation with outcomes on data for three fall cohorts were collected and analyzed. Analysis of the data revealed that there was a significant difference between the persistence rates of three fall cohorts compared to the general population. The intervention strategies applied to the fall cohorts resulted in increased persistence rates.

Academic Motivation and Performance of Developmental Education Biology Students
By Randy Moore

ABSTRACT: This study assessed the impact of faculty employment status on student outcomes in developmental mathematics. The sample consisted of 1318 students enrolled in Intermediate Algebra classes at a community college. Multivariate analyses revealed that faculty employment status (full time or part time) was not associated with students' final grades or completion rates. Faculty education level was correlated with course final grades, with faculty possessing graduate degrees having better student outcomes. Student gender, race, and age were associated with outcomes; semester hours attempted were not. These findings should help equip administrators to make informed decisions regarding faculty assignments that lead to improved student outcomes and help faculty to target interventions for "at-risk" students.
ABSTRACT: At the beginning of classes, 1st-year developmental education students in an introductory biology class are confident that they will earn high grades and do extra-credit work if given the opportunity to do so. However, in this study fewer than 25% of students submitted such work, despite the fact that the extra-credit was guaranteed. Students who did the extra-credit work (a) were more likely to come to class, lab, and optional help-sessions and (b) earned higher grades than students who did not do the extra-credit work, even when the points earned by the work were not considered in calculations. These results indicate that the most successful developmental education students have a variety of motivation-related behaviors that maximize success, and the least successful students are often unwilling to expend the effort necessary to succeed.

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Online Mathematics Achievement: Effects of Learning Strategies and Self Efficacy
By Leigh M. Wadsworth, Jenefer Husman, Mary Anne Duggan, and M. Nan Pennington

ABSTRACT: A fluid and flexible learning strategies repertoire and self-efficacy have been documented as important factors for learning and achievement. However, there has been little research examining the effects of these same factors on achievement in an online learning environment. The current research investigates the strategies used by and self-efficacy demonstrated by successful college students in an online developmental mathematics course. This article provides evidence of the relationship between learning strategies, motivation, self-efficacy, and student achievement in this environment. Participants were 89 students enrolled in an online developmental mathematics course. Results indicate four types of learning strategies—motivation, concentration, information processing, and self-testing—along with self-efficacy predicting 42% (r=0.65) of the variance in grade achievement.

Ideas in Practice: Developmental Writers’ Attitudes toward Audio and Written Feedback
By Susan Sipple

ABSTRACT: Instructor commentary on student essays in developmental writing classes is typically delivered in handwritten margin and endnotes. Audio-recorded instructor commentary in these classes, delivered via cassette tape, CD-R, or email, may provide a more effective method for students who need individualized instruction. In this qualitative pilot study, designed to determine student attitudes toward audio and written commentary in developmental writing classes, results show a preference for audio commentary by the majority of study participants. Survey and interview responses reveal that audio commentary positively affected students’ perceptions of their motivation, self-confidence, revision practices, student-professor bond, and overall learning in ways written commentary did not.
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ACCUPLACERTM OnLine: Accurate Placement Tool for Developmental Programs?
By Cindy L. James

ABSTRACT: ACCUPLACER™OnLine appears to be a suitable placement tool for developmental programs, but little is known about its predictive validity. This study evaluates the correlation between ACCUPLACER™ OnLine test scores and student performance in various levels of English and mathematics developmental courses and the placement validity for these courses based upon preestablished cutscores. The results reveal strong predictive values for the ACCUPLACER™ OnLine Arithmetic and Elementary Algebra tests and achievement in the mathematics developmental courses but weaker values between the ACCUPLACER™ OnLine Reading Comprehension and Sentence Skills test scores and performance in the English developmental courses. Implications of these results relative to entry placement procedures are discussed.

L.D. Students’ Access to Higher Education: Self-Advocacy and Support
By Wanda M. Hadley

ABSTRACT: Increasing numbers of students with learning disabilities are entering postsecondary education. While in high school, students with a learning disability are assured services under the Individuals with Disabilities Education Act (IDEA). This legislation, however, does not apply to colleges and universities. This qualitative study applied psychosocial theorist Arthur Chickering’s (1969) vectors of student development theory to examine how traditional-age, first-year college students with learning disabilities adjusted to academic expectations as they moved from a sheltered secondary environment to a less monitored collegiate environment. The importance of students with learning disabilities self-advocating with their professors, and the importance of their professors’ support of their academic needs, were major findings of this study.

By Michael W. Galbraith and Melanie S. Jones

ABSTRACT: This article suggests that a balance of the art and science of teaching is essential if the learning and teaching process is to be a meaningful and rewarding educational journey. This notion is explored through a dialogue, held over a 3-year period, with a developmental mathematics instructor at a community college who discovered that technique alone was not sufficient to becoming a good instructor. An unusual situation occurred as a result of the dialogue: Discussion of research-based literature on college teaching and personal experiential reflectivity merged and resulted in an organizing framework for understanding the artistic and mechanic elements of effective instruction.
Ideas in Practice: Bringin’ Hip-Hop to the Basics
By K. Leigh Hamm Forrell

ABSTRACT: While shifting definitions of literacy and changing demographics of students in higher education, a unique opportunity arises for instructors of basic reading and writing to reflect on their classroom practices and question whether discursive practices within the academy readily align with students’ home and community values. This article describes how integrating hip-hop into the developmental/basic writing curriculum might bridge the gap between literacy practices within and outside of the classroom and why this is important in terms of student persistence and success. Specifically, this piece explores the research that has been done on the efficacy of an techniques for using hip-hop as a teaching tool in basic writing classrooms to connect with students and inform and enhance their composition projects. It also includes a discussion of specific practices—some outlined from related research and others that I developed based on research and piloted in my own classroom—for integrating hip-hop into the composition curriculum.

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Improving Supervision of Part-Time Instructors
By Patricia R. Eney and Evelyn Davidson

ABSTRACT: With an increasing number of colleges and universities turning to part-time instructors to teach courses at their institutions, developmental education professionals are faced with the task of finding appropriate ways to train, serve, and evaluate these instructors. Unfortunately, there is little published information on how to accomplish these tasks. Therefore, the authors have drawn on best practices and research in the field to develop recommendations for supervising part-time instructors.

Disability Services in Postsecondary Education: Impact of IDEA 2004
By Joseph W. Madaus and Stan F. Shaw

ABSTRACT: In November of 2004, Congress passed the reauthorized Individuals with Disabilities Education Act (IDEA). Although postsecondary institutions are not subject to the mandates of the IDEA, there will be a ripple effect of the law on postsecondary services for students with disabilities. The focus of this article is to provide information to postsecondary disability service providers related to four key areas of the new IDEA that will impact students accessing services in the coming years: (a) reevaluations of disabilities, (b) the summary of performance requirement, (c) transition planning, and (d) new criteria for the diagnosis of a learning disability. Changes in each area are highlighted, as a re possible implications for postsecondary disability programs.

Developmental Mathematics in 4-Year Institutions: Denying Access
By Irene M. Duranczyk and Jeanne L. Higbee

ABSTRACT: In this article we use two avenues to make a case for retaining developmental mathematics education at 4-year postsecondary educational institutions. First we review the literature surrounding inadequate preparation for college-level mathematics. Then we report results from a qualitative research study that examined students’ perspectives on policies related to relegating all developmental
mathematics course offerings to a 2-year institutions. We conclude that both students and institutions benefit from making developmental mathematics available at a 4-year institutions.

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Computer Homework Effectiveness in Developmental Mathematics
By Eric Jacobson

ABSTRACT: Students in a college prealgebra course were required to do all homework on the computer practice/tutorial system which accompanied their textbook. Student evaluations of the computer experience were strongly positive. However, exam performance did not reflect these high opinions. Computer students did not do better on course exams than control students. Difficulties in learning to enter mathematical notation with keyboard and mouse may have distracted computer students from the mathematics they were to learn. A relatively large investment of time and resources could be required to make computer support software beneficial; institutions should not depend on student opinions to decide if the effort is worthwhile.

Ideas in Practice: Building Bridges in a Multicultural Learning Community
By Patricia A. James, Patrick L. Bruch, and Rashné R. Jehangir

ABSTRACT: This article describes conceptual foundations and practical student outcomes of a learning community designed to serve culturally diverse, first generation students in a developmental college at a research university. We focus on the social, cultural, and cognitive bridges that our themes enabled students to build between their nonacademic lives and higher education and share details of a student project that highlights the strengths of a multicultural learning community approach for 1st year students. We also discuss principles of learning communities that can be utilized in other settings.

Strategic Reading and Learning, Theory to Practice: An Interview with Michele Simpson and Sherrie Nist
By Norman A. Stahl
(Interview – no abstract)

Ideas in Practice: Theoretical Bases for Using Movies in Developmental Coursework
By Linda Sweeney

ABSTRACT: This article discusses the use of movies from a practitioner’s viewpoint, supporting the process of screening, discussing, and/or writing about movies as an enhancement of the literacy process. Substantiation from a variety of literature sources is explored, from classic language arts theory to second
language journals and English journals. Implications and indications are made for watching or assigning movies for developmental reading and writing coursework.

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Prefreshman Summer Programs’ Impact on Student Achievement and Retention  
By Joseph Christopher Maggio, William G. White, Jr., Susan Molstad, and Neelam Kher

**ABSTRACT:** This study utilized 397 students who participated in Prefreshman summer programs in 1998 at six universities and who were tracked for 3 years. The purpose of this study was to identify which Prefreshman summer program characteristics and precollegiate student characteristics had an effect on college GPA and student retention. The findings revealed that high school GPA had a direct positive effect and program size and program length had direct negative effects on college GPA. Furthermore, age and voluntary peer/professional tutoring had direct negative effects on student retention. The findings and implications for practice are discussed.

Performance Indicators for Postsecondary Disability Services  
By Stan F. Shaw and Lyman, L. Dukes, III

**ABSTRACT:** There is an increasing expectation of state-of-the-art services for college students with disabilities. Although access to postsecondary education has resulted in positive outcomes for students with disabilities, there has been little validation of services that should be available to students with disabilities. This study sought to identify and validate Performance Indicators that experts agree foster access to postsecondary education. The results identified 90 Performance Indicators that are essential "best practices" for disability services in higher education. The findings provide direction for institutions of higher education to implement and validate their services for students with disabilities.

Attendance: Are Penalties More Effective Than Rewards?  
By Randy Moore

**ABSTRACT:** This study examined how developmental education students’ grades and attendance rates were affected by (a) penalties of excessive absenteeism, and (b) an emphasis on the academic benefits of class attendance in a large introductory biology course. On average, students in sections of the course in which the importance of attendance was stressed throughout the semester came to class more often and made higher grades than did students in sections in which the importance of attendance was not emphasized (despite the fact that students received no academic credit for coming to class.) Imposing a penalty for excessive absences did not affect attendance or grades. These results indicated that improved rates for class attendance were associated with improved academic performance and that an emphasis on the academic benefits of class attendance was more effective for boosting attendance and academic performance than penalties for excessive absenteeism.

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Reconceptualizing Diversity in Higher Education: Borderlands Research Program
By Ross B. MacDonald and Monica C. Bernardo

ABSTRACT: In this article we intend to contribute to a deeper discussion of diversity in the context of developmental education theory and practice. The article is a position piece, proposing that diversity be defined as a continually expanding awareness of the dynamics of difference in regard to social power, personal perceptions, and judgments about others. It then discusses the theoretical and practical underpinnings of a research program identifying the competencies of multicultural students and their applications in educational settings. Although untested, the ideas are intended to challenge thinking, promote discussion, and set the stage for future articles reporting on outcomes of the research program.

Women with Attentional Issues: Success in College Learning
By Jill Hinckley and Peg Alden

ABSTRACT: This pilot study, funded from a 5-year grant from the U.S. Department of Education Title III Strengthening Institutions Program, explores the factors identified by women with AD/HD that are necessary to their achieving college success. The results of this study, based on 13 in-depth interviews with women who are both academically successful and have AD/HD, highlight the influence of motivation, attitude, support systems, self-reflection, and social-academic balance on academic success. The article concludes with implications that may help instructors and institutions better serve women with attentional issues in the college setting.

Increasing Attendance Using Email: Effect on Developmental Math Performance
By Eric Jacobson

ABSTRACT: From the assumption that class attendance is important for learning it follows that methods which increase attendance will increase learning. To increase attendance, students who missed developmental math classes were sent email reminders that they should attend. Students in sections which received the email reminders did attend at higher rates than students in matched sections. The higher attendance, however, did not result in greater learning as measured by standard course examinations. Attending class may be superficial behavior not necessarily related to the deeper study behaviors which determine learning outcomes.

Ideas in Practice: Science Courses in Developmental Education
By Leonardo Hsu, Murray Jensen, Randy Moore, and Jay Hatch

ABSTRACT: One of the goals of developmental education is to help students to be able to succeed in mainstream college courses. However, courses in developmental education traditionally have focused exclusively on reading, writing, and basic mathematics. In this article, we discuss the role that science courses can play in developmental education. Drawing upon examples from our own courses, we illustrate
how science courses can be used both as vehicles for the application of best practices in teaching and as contexts within which to conduct research on how to help developmental students acquire the skills they need to succeed.

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**Article Abstracts**

Theory, Practice, and the Future of Developmental Education: Toward a Pedagogy of Caring  
By Carl J. Chung

ABSTRACT: The guiding premise of this article is that developmental education and learning assistance programs will continue to be undervalued and vulnerable as long as there is no overarching, shared theoretical framework that practitioners can (and want to) call their own. The traditional approach to addressing this theory crisis has been to import theories from outside the field. This article presents an alternative approach. Advantages and benefits of a practice-oriented approach are identified and briefly discussed.

Reducing Attrition Rates for Maori Students  
By D.F.McKenzie

ABSTRACT: Attrition statistics for first-year students in many tertiary environments suggest that students face a wide variety of obstacles. Students in Developmental Education programmes usually have one additional obstacle, viz. they have a history of failure in academic settings. Therefore there are emotional and psychological barriers in addition to academic ones. Those students who come from low socio-economic background, often linked to membership of a minority ethnic group, face further obstacles again. This paper follows the efforts made in one Developmental programme to reduce the dropout rate for such a group of students.
Teaching in Postsecondary Institutions: An Interview with Dr. Wilbert McKeachie
By Russ Hodges and Christie L. Hand

BIO: Wilbert J. McKeachie is Professor Emeritus of Psychology and former Director of the Center for Research on Learning and Teaching at the University of Michigan, where he has spent his entire professional career since obtaining his doctorate in 1949. In more than 30 books and monographs, 120 chapters, 200 journal and professional articles, and 500 scientific and professional presentations and workshops, he has left a legacy of immense proportions to the fields of psychology and education. Perhaps he is best known for Teaching Tips, Strategies, Research and Theory for College and University Teachers (2002, 11th ed., Houghton Mifflin).

Dr. McKeachie is Past President of the American Psychological Association; the American Association of Higher Education; the American Psychological Foundation; the Division of Educational, Instructional, and School Psychology of the International Association of Applied Psychology; and the Center for Social Gerontology. He is also Past Chairman of the Committee on Teaching, Research, and Publication of the American Association of University Professors and of Division J (Psychology) of the American Association for the Advancement of Science. He has been a member of the National Institute of Mental Health Council, the Veterans’ Association Special Medical Advisory Group, and various other government advisory committees on mental health, behavioral and biological research, and graduate training.

Among other honors, he has received eight honorary degrees and the American Psychological Foundation Gold Medal for Lifetime Contributions to Psychology. Most recently, the College Reading and Learning Association, during their 2004 annual conference, honored him with a Lifetime Honorary Membership for his contributions to the practice and research of college teaching, the training of college teachers, and the study of human learning at the college level.

Developmental Mathematics Self-Efficacy
By J. Michael Hall and Michael K. Ponton

ABSTRACT: The purpose of this study is to determine differences in mathematics self-efficacy between students enrolled in a developmental mathematics course and those enrolled in a calculus course. Data from a sample of 185 freshmen students at a single 4-year institution using the Mathematics Self-Efficacy Scale are analyzed. Results indicate that calculus students possess not only better mathematical skills but also a more powerful sense of self-belief in their ability to succeed in a college mathematics course. The results of this study suggest that future teaching methodologies should be designed specifically for students enrolled in developmental courses that not only develop mathematics capability but also a self-awareness of increased capability. Efficacy-enhancing instructional strategies should be tested for effectiveness, thereby improving the teaching and learning process for all learners.

Research Tips: Interview Data Collection
By Dale T. Griffee
Featured Column; No Abstract

TechTalk: Wireless Networking
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Featured Column; No Abstract

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Reading and Learning Strategies: Recommendations for the 21st Century
By Michele L. Simpson, Norman A. Stahl, and Michelle Anderson Francis

ABSTRACT: Finding practical ideas about college reading and learning strategy programs that have been drawn from theory and research is difficult for most veteran instructors, but is even more difficult for those instructors new to the field. Over a decade ago the authors reviewed the literature and generated a list of their own “best ideas” as a way of facilitating professional development. Given the promising research trends and best practices that have emerged since then, the authors deemed it important to update these ideas or recommendations. In addition, the authors have purposely cited many scholarly sources in order to provide an extensive bibliography for colleagues new to the field.

Refocusing Developmental Education
By Thomas Brothen and Cathrine Wambach

ABSTRACT: Dissatisfaction with student success has caused a crisis in developmental education. Critics from both inside and outside the field question whether remedial courses really prepare students for future college work or even if they are properly part of the college mission. In this article, we review research and present information that suggests developmental educators should redefine core principles and key concepts to reinvigorate theory and practice in the field.

Delaying Developmental Mathematics: The Characteristics and Costs
By Marianne Johnson and Eric Kuennen

ABSTRACT: This paper investigates which students delay taking a required developmental mathematics course and the delay’s impact on student performance in introductory microeconomics. Analysis of a sample of 1462 students at a large Midwestern university revealed that, although developmental-level mathematics students did not reach the same level of performance as nondevelopmental microeconomics students, students who did take developmental mathematics performed better than students who had not yet done so. We recommend that students needing mathematics remediation take the course in their first semester and that the importance of developmental courses to other disciplines be stressed.

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Influences of Online Delivery on Developmental Writing Outcomes
By Trudy G. Carpenter, William L. Brown, and Randall C. Hickman

ABSTRACT: Four years of data on the academic performance of 256 students who self-selected online developmental writing rather than a face-to-face section (about 10% of the 2,275 students enrolled in the course overall) are examined in this empirical study. The research controls for self-selection effects related to demographic variables, student status, and academic preparedness. Resulting analysis of the data suggests that instructional delivery method-asynchronous or face-to-face-has a significant impact on student outcomes. The researchers summarize findings related to the influences of various factors on the retention and success of students in the online course. Based on these findings, the researchers offer suggestions for improving or creating a new online developmental course and discuss implications for future research.

The Beginning Pioneers: Martha Maxwell
By Martha Casazza and Laura Bauer

BIO: Truly a pioneer in the field of learning assistance and developmental education, Martha Maxwell has mentored hundreds, if not thousands, of professionals and students as well as authored a variety of reference shelf publications. Her career spanned 50 years. In her classic, Improving Student Learning Skills, she says there are seven persons named Martha Maxwell: counselor, teacher, academic advisor, reading learning disabilities specialist, researcher, administrator, and perennial student.

Do Colleges Identify or Develop Intelligence?
By Randy Moore

ABSTRACT: Most colleges and universities emphasize identifying smartness much more than developing smartness. This value is made explicit in the many influential rankings of colleges and universities, in which elitist schools who recruit students with high SAT scores, grade point averages, and class rankings
are declared "better" than other schools. The pursuit of high academic rankings (a) often is accompanied by a disdain for underprepared students who lower a school's ranking and (b) often contradicts the alleged desire to promote educational opportunities for groups of students who are placed at a strong disadvantage by factors such as SAT scores.

Validity and history: What really happened?
By Dale Griffee

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Article Abstracts

Students' Resistance to Change in Learning Strategies Courses
By Myron H. Dembo and Helena Praks Seli

ABSTRACT: Research findings indicate that many students fail to benefit from academic support services and courses. The paper discusses reasons why some students resist changing their academic behaviors and links the reasons to learning and motivation variables. The explanations for failure to change include: (a) students believe they can't change, (b) they don't want to change, (c) they don't know what to change, or (d) they don't know how to change. The authors describe an assignment in which students identify their own academic problems and conduct individual case studies based on a four-stage process for behavioral change: self-observation and evaluation, goal setting and strategic planning, strategy-implementation and monitoring, and strategic-outcome monitoring.

Enabling Access: Toward Multicultural Developmental Curricula
By Patrick L. Bruch, Rashné R. Jehangir, Walter R. Jacobs, and David L. Ghere

ABSTRACT: This article seeks to initiate discussion of the contours of a multicultural developmental curricula. It first discusses the need for multiculturalism in developmental education and offers an understanding of access to higher education that integrates key strengths of several, currently popular,
conceptions of multiculturalism. Then, it presents a model curriculum and discusses specific classroom practices to implement a multicultural developmental approach.

50 Years after Brown v. the Board of Education: An Interview with Cheryl Brown Henderson
By Nancy E. Carriuolo

Significance Testing Program Evaluation
By Dale T. Griffee

ABSTRACT: Despite its widespread use in evaluation data analysis, statistical testing has come under persistent criticism resulting in calls for its rethinking, and even possible elimination (Carver, 1978, 1993). Saxon and Boylan issue a call “to strengthen developmental education research and to make it more accessible” (2003, p. 2). Among the types of research they consider appropriate is control group methodology which often makes use of statistical tests. This paper responds to that suggestion, and seeks to explain statistical testing, to state what it can and cannot tell us, and to make practical recommendations for its use.

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Self-Regulation Support Offered by Developmental Educators
By Dawn B. Young and Kathryn Ley

ABSTRACT: Poor self-regulation may partially explain developmental student academic achievement because self-regulated learning has been consistently related to achievement in learners across age and educational groups (Lan, 1998; Ley & Young, 1998; Zimmerman & Martinez-Pons, 1990). Underprepared college students, those who enrolled in college developmental courses, may require more external support from the learning environment. By observing two master developmental educators in the classroom for an entire semester we have sought to answer the question, “what is the experienced developmental educator doing to foster self-regulation in the poorly self-regulated student?” Results demonstrate that the developmental education classroom, although rich with instructional interactions, has provided self-regulation support only on a selective basis. Explanations regarding the lack of prevalent self-regulation support and recommendations as to how it may be provided are included.

ESL Student Transition to College: The 30-Hour Program
By Myra M. Goldschmidt, Norma Notzold, and Christine Ziemba Miller

Abstract: This paper describes a student-designed and student-conducted program initiated to provide incoming college students, including a unique group of English-as-a-second-language (ESL) students, with those skills necessary for success in their freshman classes. This individualized 30-hour, precollege program, offered during the summer prior to freshman year, is designed to ready underprepared students for their math and English classes and to introduce them to learning strategies that can be used in all of their college courses.

Recruiting and Retaining Women and Minority Faculty: An Interview with JoAnn Moody
By Nancy Carriuolo

BIO: Dr. JoAnn Moody’s book Faculty Diversity: Problems and Solutions will be published in early 2004 and can be ordered at www.routledge.com. A higher education diversity consultant, Dr. Moody coaches senior faculty and administrators about how to recruit, retain, and mentor U.S. gender and racial minority faculty and students. As director of the Northeast Consortium for Faculty Diversity, she also prepares underrepresented minority students for a strong start in the professoriate. Her web site is DiversityOnCampus.com.

Ideas in Practice: A Novel, "Cool" Assignment to Engage Science Students
By Murray Jensen, Randy Moore, Jay Hatch, and Leon Hsu

ABSTRACT: We've developed a unique assignment that rewards students' creativity. Students are told to "do something cool" that is related to human anatomy and physiology. This article documents the history
of the assignment, provides examples of both good and bad projects, and reports students' reactions to the assignment. Evaluating the projects is the most difficult part of the assignment for instructors, but the overall benefits of the project outweigh this detriment.

Critical Thinking and the Art of Close Reading
By Richard Paul and Linda Elder
Featured Column; No Abstract

Techtalk: Implications of Changing Storage Needs in Developmental Education
By Lucy MacDonald and David C. Caverly
Featured Column; No Abstract

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Program Evaluation for Postsecondary Disability Services
By David R. Parker

ABSTRACT: In an era of decreased funding and rising expectations for demonstrable outcomes, postsecondary professionals face a growing need to evaluate the effectiveness of their program's mission and activities using data-driven procedures. Numerous studies have documented disappointing educational and occupational outcomes for young adults with disabilities. These findings have driven reform efforts designed to make special education services more accountable. This article draws upon recommendations in the literature and examples from five campuses to describe a decision-making process that can be used to organize an evaluation action plan. Although examples are specific to disability services, the rationale, framework, and activities described in this article can be applied to any program in higher education. Recommendations for making program evaluations a routine component of professional practice are presented.

Diversity as a Resource in Developmental Education: Research and Policies
By Hunter R. Boylan, E. Michael Sutton, and James A. Anderson

ABSTRACT: Recent research indicates that interacting and taking classes with students of a different ethnic background contributes to students' intellectual development. Because a large number of minority students pass through developmental courses on their way to the credit-bearing curriculum, these courses may serve as either a barrier or a facilitator for minority retention. This manuscript proposes methods of increasing retention of minority students--thereby enhancing intellectual development--through developmental education. It also offers a challenge to developmental educators to view the diversity of their classes as a benefit to learning rather than as a detriment to teaching.

Connections: An Integrated Community of Learners
By Rebecca Brittenham, Richard Cook, Janet B. Hall, Phyllis Moore-Whitesell, Connie Ruhl-Smith, Morteza Shafii-Mousavi, Jay Showalter, Kenneth Smith, and Karen White

ABSTRACT: This study compares the outcomes of connected developmental mathematics and developmental writing sections to those of nonconnected sections at a regional commuter campus of a Midwestern public university system. The Connections Program directs all of the university support systems toward students enrolled simultaneously in developmental mathematics and developmental writing courses. The program proposes to underprepared students that they are entitled to learn the habits of mind, to practice the social and academic skills, and to build the personal and professional connections that lead to academic success. The Connections Program courses have significantly higher pass rates in math (85% pilot vs. 69% all developmental sections) and in writing (85% vs. 53%). Students enrolled in the two connected developmental courses returned to the university the following fall at a 13.9% higher rate than all other students in this cohort of first-year students, including students requiring only one or no developmental courses. The results suggest that a public university with a large commuter population of developmental students can teach basic skills and encourage psychological and social adjustment to university life through appropriately designed academic programs.

Ideas in Practice: Letters of Advice From At-Risk Students To Freshmen
By Nannette Evans Commander and Maria Valeri-Gold
ABSTRACT: This article describes an assignment that required at-risk students to give advice for success in college to freshmen through letter writing. Analysis of the letters revealed ten specific themes that mirrored what instructors of orientation classes often communicate to beginning students. Research documents that letter writing is a valuable tool for learning about writing skills. In addition to being an effective writing exercise, at-risk students shared their valuable experiences as they connected with freshmen who learned essential elements for success.

Critical Thinking: Teaching Students How to Study and Learn (Part IV)
By Linda Elder and Richard Paul
Featured Column; No Abstract

Techtalk: How Technology has Changed Developmental Education
By David C. Caverly and Lucy MacDonald
Featured Column; No Abstract

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Article Abstracts

Supplemental Instruction: Short/Long-Term Impact on Academic Performance
By Peggy Ogden, Dennis Thompson, Art Russell, and Carol Simons
ABSTRACT: The purpose of this study was to assess Supplemental Instruction (SI), an academic assistance program, for short-and long-term impact on college academic performance and retention. Data were compiled for students registered in a political science course supported by SI. Four groups were identified according to their university entry status and SI participation: traditional (regularly admitted) SI participants, conditional (Learning Support Programs and/or English as a Second Language entry status) SI participants, traditional non-SI participants, and conditional non-SI participants. All SI participants volunteered for the program. Conditional students participating in SI had significantly higher short- and long-term outcomes compared to conditional non-SI participants. Conditional SI participants reenrolled at a higher rate than did the other three student groups included in this study.
Principles for Effective Teaching
By Patricia Smittle

ABSTRACT: Effective teaching in developmental education is one of the most challenging jobs in the college teaching profession. The search for teaching excellence in this field extends beyond basic cognitive issues to address noncognitive needs of underprepared students also. The six principles for effective developmental education teaching reviewed in the article are the product of integrating research findings from successful developmental education programs and general principles for effective teaching in undergraduate education. The principles focus on key elements that teachers may use to support effective teaching.

Perceived Inhibitors to Mathematics Success
By Ethel Wheland, Rose Marie Konet, and Kevin Butler

ABSTRACT: This study examines five perceived inhibitors to successful performance in an intermediate algebra course: perceived inhibitors examined are (a) non-native English speaking status of the instructor, (b) instruction provided by teaching assistants versus adjunct faculty, (c) student performance in mathematics compared to other courses, (d) relationship of performance in an intermediate algebra course to success in subsequent mathematics courses and (e) student attendance. Student performance data, collected using uniform, nongrader-biased computer-based assessment techniques, are presented and then analyzed. Discussion of the results, their implications and potential strategies to more actively influence students’ beliefs about mathematics are included.

Social and Emotional Intelligence: Applications for Developmental Education
By Suzanne B. Liff

ABSTRACT: By addressing social and emotional learning within their classrooms, postsecondary educators, in both traditional and developmental classrooms, will foster the scholarly, as well as interpersonal, growth of students. This article explores the very real, if not causal, relationship between social and emotional intelligence and success in college. Student needs and faculty capacities to address those needs are the focus. Six components of the social and emotional intellectual paradigm, gleaned from the literature and merged with the voices of college educators, are reviewed and pragmatically applied to campus life and learning. Traditionally not a pedagogic focus of higher education beyond a variety of developmental enhancements, it will be shown how sensitivities and learning within the affective domain are strongly linked to the efficacy of a successful collegiate experience for all students.

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**Article Abstracts**

**Program Evaluation Studies: Suggested Strategic Learning Delivery Models**  
By Michele L. Simpson

ABSTRACT: Although strategic learning delivery models such as study strategy courses or paired courses are essential in assisting college freshmen with their challenging academic tasks, very few program evaluation studies have been conducted on their efficacy. In order to encourage academic assistance professionals to evaluate their strategic models, the author shares seven suggestions that have been drawn from personal experiences and actual research studies. These suggestions focus on important questions that should be asked, instruments that might be used, possible data analyses methods, and tips for collecting data and writing reports.

**Curriculum and Affect: A Participatory Developmental Writing Approach**  
By Thomas J. Reynolds and Patrick L. Bruch

ABSTRACT: Developmental writers have traditionally been taught according to a method that favors mastery of smaller discrete skills before moving on to sophisticated writing tasks. This article first describes an alternative approach to a 1st-year developmental writing curriculum. We explain our approach in terms of its theoretical foundations and practical activities. We then discuss student perceptions of our "literacy work" curriculum gathered through a survey of students upon completion of a 2-semester developmental writing sequence. The article concludes by highlighting the promise of a participatory approach to developmental writing instruction.

**Comprehension Monitoring: An Aid to Mathematical Problem Solving**  
By William A. Schurter

ABSTRACT: Teaching problem solving continues to be a challenging and often frustrating task for mathematics teachers. Students do not understand how to use all of the information available to them, and perhaps more importantly, they do not know what it is that they do not understand. This study investigates using comprehension monitoring as a technique for problem solving by students in three different sections of developmental algebra. It concludes that although there is no apparent difference in the conscious use of these techniques, the students who receive increased emphasis in the use of comprehension monitoring strategies perform better in mathematical problem solving than students who do not receive this type of instruction.

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Article Abstracts

Repetition and the Informational Writing of Developmental Students
By Dolores Perin

ABSTRACT: This study investigated the effects of task repetition on the writing skills of upper-level developmental reading students. On two occasions spaced 1 week apart, the students were presented with college-level allied health and business text and asked to write an informational report. Although no writing instruction was provided in the interval, performance changed significantly on four of five indicators of writing skill. Productivity, use of source text, and representation of key ideas improved, which suggests that the simple repetition of meaningful literacy tasks has potential to facilitate learning in developmental education classrooms. However, there was also an increase in copying from the sources, possibly the result of students’ growing recognition of task difficulty.

Comparison of Beginning Algebra Taught Onsite Versus Online
By Gail H. Weems

ABSTRACT: This study compared two sections of beginning algebra: one taught online and the other onsite. The dependent variable of primary interest was mathematical achievement; however, other variables included student attitude toward mathematics, their reasons for selecting an online section, and their critiques of the online format. Although there was not a significant difference between exam averages for the two formats, there was a significant decrease in performance by the online students across the exams, whereas performance by the onsite students remained relatively stable. Significant differences were not found regarding student attitudes toward mathematics. Students indicated an overall satisfaction with taking the course online and many plan to enroll in online, courses in the future.

Ideas in Practice: When Older Readers and Younger Readers Meet
By Jennifer M. Good and Terry C. Ley

ABSTRACT: To encourage older students (high-needs, college-level students involved in developmental education) to develop their own literacy skills while also providing an opportunity for them to interact with youth from the surrounding community, a program model entitled “Community Days” was designed for university freshmen enrolled in a developmental studies course. The program model includes the following components: (a) the older students are taught a variety of prereading, during reading, and postreading strategies which they apply to their own reading processes in order to help them construct meaning; (b) the older students spend an introductory session at the library learning various search methods; (c) the older students search for a selection of children’s literature that would be appropriate for a specified age group; (d) the older students plan and explain the use of specific prereading, during reading, and postreading activities in order to engage an audience in their chosen text; (e) the older students visit a local public school where they read the books to kindergarten and elementary school-aged children, engaging the students in the predetermined reading activities; (f) the older students reflect in writing on their own reading process and the reading processes of others. The theoretical underpinnings of this model are discussed, and responses from the older students illustrate their perceptions of the experience.

Developmental Mathematics Education and Supplemental Instruction: Pondering the Potential
By Gary L. Wright, Robin Redmon Wright, and Charles E. Lamb

ABSTRACT: During the Spring, Summer, and Fall 2000 semesters, data were gathered and analyzed concerning the effective use of Supplemental Instruction (SI) in 90 developmental mathematics courses. The study monitored student outcomes in a small pilot program conducted at a southern state university with about 11,000 students. The student outcomes suggested that Supplemental Instruction may have made a positive difference in the performance and retention rates of developmental mathematics students when the instructor was actively involved in promoting the SI group and certain modifications were made to the traditional role of the SI leader in the classroom.