Impact of Learning Assistance Center Utilization on Success  
By Keith A. Wurtz  
2

Factors Influencing College Persistence for First-Time Students  
By Shellynda Stewart, Doo Hun Lim, and JoHyun Kim  
12

NADE News: Comment on the Higher Education Act Reauthorization  
By Gwenn Eldridge, NADE President  
20

Annual Index Volume 38, 2014–2015  
21

Students’ Reflections on Mathematics Homework Feedback  
By Mara Landers and Daniel Reinholz  
22

NADE Members Respond—Developmental Education Research Agenda: Survey of Field Professionals, Part 2  
By D. Patrick Saxon, Nara M. Martirosyan, Rebecca A. Wentworth, and Hunter R. Boylan  
32

For Your Information  
35

Developments and Advertisers Index  
36

Article Abstracts:

Impact of Learning Assistance Center Utilization on Success  
By Keith A. Wurtz  

ABSTRACT: A large number of community college students are developmental students. One of the most important challenges for community colleges today is to create programs that effectively educate community college developmental students. This study examines the effect of learning assistance centers on the success and persistence of students at a Southern California community college that utilized learning assistance centers to improve student success. Sequential logistic regression was used to predict the effects of learning assistance center utilization on success and persistence while controlling for self-selection and prior skill level. The results indicate that learning assistance center utilization increased the probability of success and persistence more than prior skill level and self-selection. Students who utilized a learning assistance center were three times as likely to be successful in their course and almost twice as likely to persist to the subsequent term. Implications for future practice include the recommendation for requiring students to utilize learning assistance centers.

Factors Influencing College Persistence for First-Time Students  
By Shellynda Stewart, Doo Hun Lim, and JoHyun Kim  

ABSTRACT: Using Tinto’s (1993) longitudinal model of institutional departure, this study examined demographic variables, family characteristics, precollege and college academic performance factors, and extent to which mandatory placement in remedial courses predict persistence at a public research institution. This study also examined the relationship between ACT composite scores, high school GPA, first-semester college grade point averages, and persistence. Longitudinal data with 3,213 students were analyzed using factorial analysis of variance (ANOVA), Pearson’s product-moment correlations, and multiple regression analysis. Results showed significant mean differences for ethnicity, financial aid, and remedial status on persistence. High school GPA and first-semester college GPA were found to be significant predictors of persistence. Findings indicated that traditional college students who were academically prepared to take college-level coursework were more likely to persist than students placed in mandatory remedial coursework. Implications from this study suggest that support services such as tutoring, mentoring, counseling services, early intervention systems, and financial aid assistance will improve study participants’ academic deficiencies and increase persistence beyond the first year.

Students’ Reflections on Mathematics Homework Feedback
ABSTRACT: Homework is considered an important aspect of learning mathematics, but little research has considered how students utilize feedback as part of the homework process. This mixed methods, quasi-experimental study examines how community college students in a developmental intermediate algebra course participated in a feedback reflection activity throughout a semester and compares their outcomes with a class that did not engage in this activity. Although developmental math students are often positioned as deficient in skills and motivation, most students took this activity as an opportunity for self-assessment, documenting resources for success and critiquing their work for improvement. These students did not outperform peers on summative course assessments; however, there were differences in their growth as effective learners.

Volume 38, Issue 2, Winter 2015
Table of Contents
Investigating Academic Literacy Expectations: A Curriculum Audit Model
By Sonya L. Armstrong, Norman A. Stahl, and M. Joanne Kantner 2

Developmental Mathematics Success: Impact of Students’ Knowledge and Attitudes
By Babette M. Benken, Jorge Ramirez, Xuhui Li, and Scott Wetendorf 14

Ideas in Practice: Professional Development to Promote Universal Design for Instruction
By Carrie A. Rodesiler and Joan M. McGuire 24

For Your Information 31

NADE Members Respond—Developmental Education Research Agenda: Survey of Field Professionals, Part I
By D. Patrick Saxon, Nara M. Martirosyan, Rebecca A. Wentworth, and Hunter R. Boylan 32

Developments and Advertisers Index 36

Article Abstracts:

Investigating Academic Literacy Expectations: A Curriculum Audit Model
By Sonya L. Armstrong, Norman A. Stahl, and M. Joanne Kantner

ABSTRACT: Although much research has examined students’ readiness levels as they prepare to transition from high school to college, little published research exists on the specific literacy expectations students will face in their early college experiences. This article provides an overview of a model for determining the reading demands and expectations in such early-college courses. The evaluative model allows faculty teams to examine the academic literacy expectations for introductory-level general education and career technical courses and simultaneously explore the curricula in developmental reading courses. Using the model, evaluators can determine the degree of alignment of text difficulty levels, expectations for student literacy competencies, and standard literacy practices within and across courses.

Developmental Mathematics Success: Impact of Students’ Knowledge and Attitudes
By Babette M. Benken, Jorge Ramirez, Xuhui Li, and Scott Wetendorf

ABSTRACT: In order to improve student success within developmental programs, we conducted a study of 1st year students taking required, developmental mathematics courses at a large, urban public university. Findings suggest that merely the number of years of mathematics that students take in high school is not a precise indicator of student readiness and that passing courses in high school does not necessarily imply that students are prepared for the level of rigor expected in postsecondary institutions. Furthermore, results advocate for the re-evaluation of developmental mathematics courses to include student outcomes that focus on attitudes about mathematics in addition to content and skills.

Ideas in Practice: Professional Development to Promote Universal Design for Instruction
By Carrie A. Rodesiler and Joan M. McGuire

ABSTRACT: Given changing enrollment patterns in higher education that include more diverse learners, efforts to design instruction to be more inclusive are well documented. Developmental education programs comprise a dynamic environment for applying inclusive teaching strategies that promote learning. A grant-funded initiative for professional development that used the framework of Universal Design for Instruction (UDI) included activities in developmental reading, writing, and math courses. Participants, most of whom were part-time instructors, engaged in an intensive administrator-led, 2-day workshop followed by participant-led activities that extended over multiple semesters. Elements of the training are described; examples of strategies used by these instructors based on UDI principles are included; and insights into the value of designing teaching to incorporate UDI principles are shared. Participant feedback affirmed the benefits of professional development time with colleagues to share teaching ideas and to reflect on elements in the instructional cycle that lend themselves to deliberate planning. Recommendations for future initiatives to foster inclusive teaching practices are offered.
Innovative Developmental Education Programs: A Texas Model
By Eric A. Booth, Mary Margaret Capraro, Robert M. Capraro, Nandita Chaudhuri, James Dyer, and Miner P. Marchbanks III

ABSTRACT: This article provides insights from a 2-year, cross-site evaluation of state funded developmental education sites and serves as a focus article for response by those sites. Receiving grants from the Texas Higher Education Coordinating Board (THECB), nine sites (5 community colleges and 4 universities) implemented innovative developmental education programs in Texas. The Public Policy Research Institute at Texas A&M University was charged with evaluating the nine sites. A cross-site program evaluation collected quantitative data from the sites to determine success rates for students enrolled in their programs. Qualitative methods were used primarily to interpret the quality indicators present across sites. Data in the form of interviews, focus groups, and self-reports were applied. The successes and challenges were organized into four thematic categories: Curriculum Design and Instructional Strategies, Faculty and Staff Supports, Structures Supporting Learning, and Policy Issues. Findings show that accelerated approaches via redesigned curriculum for shortened, completely or partially self-paced, corequisite, and blended courses helped accelerate student completion or transition to credit bearing courses for the motivated students. Alternative instructional strategies provided a high level of interaction between students and instructors and on-line, on-demand tutoring at the sites. Focused professional development for the DE instructors and administrators was found to be useful in learning to deal with specific student problems.

e-Sponsor Mentoring: Support for Students in Developmental Education
By Russ Hodges, Emily Miller Payne, Albert Dietz, and Michelle Hajovsky

ABSTRACT: Researchers investigated the use of two mentoring programs for students who were part of a support component of Fundamentals of Conceptual Understanding and Success (FOCUS), a comprehensive intervention grant for students enrolled in developmental mathematics coursework at a large public Texas university. The technology-based mentoring program, titled e-Sponsor Program, was compared to a campus-sponsored mentoring program. The programs differed in terms of mentor-types, mentor training, and use of technology. Results of an end-of-semester survey revealed no statistically significant difference between groups in terms of participants’ quality interactions or perceived helpfulness of their e-Sponsor or mentor. The quantitative data confirmed that, regardless of group, more frequent quality interactions resulted in participants perceiving the interactions with mentor or e-Sponsor as very helpful. When participants’ perception of helpfulness of the e-Sponsor and mentor was examined in terms of form of communication, the only statistically significant finding was face-to-face interactions. In the qualitative portion of the study, four categories of quality interactions emerged from participants: (a) receiving study and scheduling tips, (b) practicing to interact with professors by practicing with e-Sponsors, (c) receiving helpful advice that could generalize to other courses, and (d) learning to advocate for themselves in academic and practical situation.

Faculty Advising to Support Student Learning
By Laurel V. Williamson, Rebecca A. Goosen, and George F. Gonzalez, Jr.
ABSTRACT: This article describes the implementation of a program undergirded by the theme of faculty and staff supports that physically brings advising to the point of instruction. Research shows that establishing a strong institutional connection with students improves retention, persistence, and success. What better way to do this than take advising into the classroom and create a strong partnership between faculty and student services to provide support, information, and career direction? Sustained through an ongoing dialogue between instruction and student development professionals, classroom activities and wrap-around support services can be uniquely focused on the individual student. The college found that advising becomes a tool delivered by a faculty-student services team that holds students accountable while providing needed assistance along the student’s educational pathway.

FOCUS: Sustainable Mathematics Successes
By Selina V. Mireles, Taylor W. Acee, and Lindsey N. Gerber

ABSTRACT: The FOCUS (Fundamentals of Conceptual Understanding and Success) Co-Requisite Model Intervention (FOCUS Intervention) for College Algebra was developed as part of the Developmental Education Demonstration Projects (DEDP) in Texas. The program was designed to use multiple services, courses, and best practices to support student completion of a credit-bearing mathematics course. The curriculum design and instructional strategies of the College Algebra FOCUS band are described and examples are included to expand on the richness of the model. Using repeated measures of students’ mathematics proficiency and baseline comparison group data of students’ course grades, we present evidence linking the FOCUS Intervention with increased mathematics proficiency, fewer course withdrawals, and improved course grades.

Transforming Developmental Education in Texas
By the Texas Higher Education Coordinating Board

ABSTRACT: In recent years, with support from the Texas Legislature, the Texas Higher Education Coordinating Board has funded various developmental education initiatives, including research and evaluation efforts, to help Texas public institutions of higher education provide more effective programs and services to underprepared students. Based on evaluation results from the various initiatives, especially the Developmental Education Demonstration Projects, a number of identified promising practices continue to be scaled and further evaluated in developmental education projects funded through August 2015. This report provides an update on the progress of developmental education initiatives and recommendations for future efforts to effectively and efficiently improve the persistence and success of underprepared students as they strive to reach their academic and career goals.

Volume 37, Issue 3, Spring 2014
Table of Contents

Analogical Processes and College Developmental Reading
By Eric J. Paulson 2

Study Skills Course Impact on Academic Self-Efficacy
By Brenna M. Wernersbach, Susan L. Crowley, Scott C. Bates, and Carol Rosenthal 14

Annual Index 23

Effective Student Assessment and Placement: Challenges and Recommendations
By D. Patrick Saxon and Edward A. Morante 24

NADE News: Initiatives Focus on Enhancing Service to Members
By Taunya Paul, NADE President 29

For Your Information 31

Techtalk: Mobile Apps for Disciplinary Literacy in Science
By Jodi Patrick Holschuh, Erin Scanlon, Tamara Harper Shetron, and David C. Caverly 32

Critical Thinking: Intellectual Standards Essential to Reasoning Well Within Every Domain of Human Thought, Part 4
By Richard Paul and Linda Elder 34

Developments and Advertisers Index 36

Article Abstracts:

Analogical Processes and College Developmental Reading
By Eric J. Paulson

ABSTRACT: Although a solid body of research concerning the role of analogies in reading processes has emerged at a variety of age groups and reading proficiencies, few of those studies have focused on analogy use by readers enrolled in
college developmental reading courses. The current study explores whether 232 students enrolled in mandatory (by placement test) developmental reading courses in a postsecondary educational context utilize analogical processes while engaged in specific reading activities. This is explored through two separate investigations that focus on two different ends of the reading spectrum: the word-decoding level and the overall text-comprehension level. The two investigations reported here build on comparable studies of analogy use with proficient readers. Results indicate clear use of analogy at the decoding level of reading with trends toward some types of analogy use facilitating comprehension at whole-text levels of reading.

Study Skills Course Impact on Academic Self-Efficacy
By Brenna M. Wernersbach, Susan L. Crowley, Scott C. Bates, and Carol Rosenthal

ABSTRACT: Although study skills courses improve student retention, the impact of study skills courses on students’ academic self-efficacy has not been investigated. The present study examined pre- and posttest levels of academic self-efficacy in college students enrolled in a study skills course (n = 126) compared to students enrolled in a general education course (n = 111). Students enrolled in study skills courses had lower initial levels of academic self-efficacy and demonstrated greater increases than comparison students, reaching equivalent levels or surpassing the comparison students at posttest. Results are considered in light of the broader issue of student retention and in the context of current practice.

Effective Student Assessment and Placement: Challenges and Recommendations
By D. Patrick Saxon and Edward A. Morante

ABSTRACT: Recent research on entering college student assessment instruments and placement practices has been critical. Critics suggest that commonly used assessment instruments are inaccurate, misused, and lack predictive validity. This article describes valid criticisms and appropriate uses of assessment instruments. It also lists challenges and provides recommendations to improve several common inadequacies in college assessment and placement processes. Finally, we discuss the role of assessment and placement as it is impacted by efforts to eliminate or redesign developmental education.
Academic Engagement: Hispanic Developmental and Nondevelopmental Education Students
By Stephanie J. Brickman, Edna C. Alfaro, Amy A. Weimer and Karen M. Watt

ABSTRACT: The purpose of this research is to identify any differences in the academic engagement of Hispanic students enrolled in a developmental course compared to those enrolled in a retention initiative course. Researchers proposed that personal interests and perceptions of instrumentality to future goals would help develop, guide, and direct successful academic engagement. The participants (N = 407) were Hispanic college freshmen. MANCOVA and SEM were employed to examine whether group differences emerged. Analyses revealed perceptions of instrumentality were a stronger predictor of selfregulation for nondevelopmental course students than for developmental education students.

Volume 37, Issue 1, Fall 2013
Table of Contents

Using Formative Assessment and Metacognition to Improve Student Achievement
By John Hudesman, Sara Crosby, Bert Flugman, Sharlene Issac, Howard Everson, and Dorie B. Clay

Readiness, Behavior, and Foundational Mathematics Course Success
By Kevin Li, Richard Zelenka, Larry Buonaguidi, Robert Beckman, Alex Casillas, Jill Crouse, Jeff Allen, Mary Ann Hanson, Tara Acton, and Steve Robbins

NADE News: Developmental Education is Not Going Away
By Patti Levine-Brown, NADE President

Doctoral Programs in Developmental Education: Interview with Three Leaders
By Marla Kincaid

Techtalk: Mobile Learning and Literacy Development
By David C. Caverly

Critical Thinking: Intellectual Standards Essential to Reasoning Well Within Every Domain of Human Thought, Part Two
By Richard Paul and Linda Elder

For Your Information

Developments

Advertisers Index

Article Abstracts:

Using Formative Assessment and Metacognition to Improve Student Achievement
By John Hudesman, Sara Crosby, Bert Flugman, Sharlene Issac, Howard Everson, and Dorie B. Clay

ABSTRACT: This paper describes a multistep Enhanced Formative Assessment Program (EFAP) that features a Self-Regulated Learning (SRL) component. The program, which teaches students to become more effective learners, has been applied in a wide range of academic disciplines. In this paper we report on how the EFAP-SRL model can be applied to the area of developmental mathematics. In a 3-year series of studies, EFAP-SRL students enrolled in associate degree developmental mathematics courses consistently earned higher pass rates in the course as well as higher pass rates on the mathematics portion of the ACT. In addition, there is some evidence that program students transferred this learning into subsequent college-level mathematics courses.

Readiness, Behavior, and Foundational Mathematics Course Success
By Kevin Li, Richard Zelenka, Larry Buonaguidi, Robert Beckman, Alex Casillas, Jill Crouse, Jeff Allen, Mary Ann Hanson, Tara Acton, and Steve Robbins

ABSTRACT: This study examines the effects of math readiness and student course behavior (e.g., attendance, participation, homework completion) on knowledge gain and course success using two samples of students enrolled in foundational skills (noncredit-bearing) mathematics courses. As hypothesized, entering student mathematics readiness and course behavior predicted posttest mathematics knowledge. Posttest knowledge and course behavior predicted course success (i.e., passing the course). Results highlight the importance of mathematics readiness and student behavior for understanding mathematics knowledge gains and course success. Implications for institutional policy and practice using effective diagnostic testing and behavioral monitoring are discussed.

Volume 36, Issue 3, Spring 2013
Table of Contents

Causal Attributions and Student Success in Developmental Mathematics
By Jacob Arthur Dasinger 2

Student Responsibility and Self-Directed Learning: An Interview with Christine McPhail
By D. Patrick Saxon 14

Commentary: Characterizing the Effectiveness of Developmental Education: A Response to Recent Criticism
By Thomas Bailey, Shanna Smith Jaggars, and Judith Scott-Clayton 18

NADE News: Opening Channels of Communication
By Patti Levine-Brown, NADE President 26

A Brief Response to Bailey, Jaggars, and Scott-Clayton
By Alexandros M. Goudas and Hunter R. Boylan 28

Annual Index 33

Critical Thinking: Intellectual Standards Essential to Reasoning Well Within Every Domain of Thought
By Linda Elder and Richard Paul 34

On the Developmental Education Radar Screen – 2013
By Eric J. Paulson 36

Developments 38

For Your Information 39

Article Abstracts:

Causal Attributions and Student Success in Developmental Mathematics
By Jacob Arthur Dasinger

ABSTRACT: This research examined differences in causal attributions and an exam score in a developmental mathematics course based on student classification: traditional, minimally nontraditional, moderately nontraditional, and highly nontraditional as well as grade and gender among nontraditional students. Statistical analysis revealed significant differences on the Revised Causal Attribution Scale (CDSII) in the Personal Controllability dimension for low-graded students, and in both the Personal and External Controllability dimensions for high-graded students. Based on gender, low-graded, nontraditional students showed a significant difference in the Locus of Causality dimension whereas no significant differences appeared among high-graded, nontraditional students.

Student Responsibility and Self-Directed Learning: An Interview with Christine McPhail
By D. Patrick Saxon

Christine McPhail formerly served as president at Cypress College in California and is founder and professor emeritus of the Community College Leadership Doctoral Program at Morgan State University in Maryland. She is the Managing Partner for The McPhail Group LLC and currently serves as a Leadership Coach for more than a dozen community colleges in the Achieving the Dream National Reform Network for student success. Her research interests lie in the intersection of leadership, teaching, and learning in higher education.

Commentary: Characterizing the Effectiveness of Developmental Education: A Response to Recent Criticism
By Thomas Bailey, Shanna Smith Jaggars, and Judith Scott-Clayton

ABSTRACT: Research conducted by the Community College Research Center (CCRC) and others was criticized in an article by Alexandros M. Goudas and Hunter R. Boylan (2012) published in the Journal of Developmental Education, Volume 36, Issue 1. They raise specific contentions related to the methodology applied in the CCRC studies, the review of related literature, and stated findings. Their article claims that we and others have overgeneralized, misinterpreted, and misapplied the data and research to advance a reform agenda that involves replacing prerequisite with corequisite developmental education. In this commentary we show that their key claims do not stand up to scrutiny. Moreover, we point out that, although we think research so far suggests that corequisite models have potential as part of a comprehensive reform of developmental education, we have never called for the elimination of prerequisite remediation. We conclude with some general suggestions—based on our research findings—for strengthening the services that community colleges provide to students with weak academic skills.

A Brief Response to Bailey, Jaggars, and Scott-Clayton
ABSTRACT: Shortly after we published “Addressing Flawed Research in Developmental Education” (2012) in the Journal of Developmental Education, Thomas Bailey, Shanna Smith Jaggars, and Judith Scott-Clayton from the Community College Research Center (CCRC) wrote a response rebutting several of our claims. Though their response corrects some confusion and clarifies a few of their positions on the debate, Bailey et al. appear to persist in a lack of understanding of the content and function of developmental education courses. Compounding the problem is that they solely rely on a relatively new and imperfect method for analysis, the quasi-experimental regression discontinuity design study. Based on these studies, Bailey et al. have consistently argued that developmental education as a whole is ineffective. In this brief response to Bailey et al.’s counterarguments, we elaborate on one of our original paper’s main points and discuss what we consider to be a fundamental flaw in their interpretation of data. The flaw apparently stems from a misunderstanding of what actually happens in remedial courses. As a result, they assume these courses should make remedial students perform better than statistically equivalent nonremedial students. We moreover point out other possible errors in the regression discontinuity approach and its application in developmental education.
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.

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.

Refocusing Developmental Education
By Thomas Brothen and Cathrine A. 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.
interpretations of that same data along with other infrequently cited studies to help shed light on what the current state of developmental education is with our nation’s nearly 1,200 community colleges.

Feedback on Developmental Writing Students’ First Drafts
By Beth Gulley

ABSTRACT: Many writing teachers provide feedback to their students through writing conferences; however, the existing literature indicates teachers may unintentionally harm their weaker students by using this strategy. To better understand the effect of the writing conference on developmental writing students, the researcher created a mixed design ANCOVA to answer the research question: What is the effect of oral feedback delivered via student teacher conferences on significant revisions to content, structure, grammar, and style for developmental writing students? The study found no statistically significant difference among treatment groups. Therefore, the researcher concluded that students improved their drafts regardless of the feedback method.

Strategies to Increase Enrollment, Retention, and Graduation Rates
By Patricia Y. Talbert

ABSTRACT: Student retention in postsecondary institutions continues to be a vexing problem, as graduation rates have continued to decline over the last decade. To be a competitive force in the global economy, it is crucial to keep students in school. This research uses a conceptual data model to introduce academic leaders’ (N = 104) perspectives to increase enrollment, retention, and graduation rates in higher education. The study is composed of two different facets. First, a review was conducted on a subsegment of the Minnesota Measures data regarding student enrollment and performance in two- and four- year degree programs in higher education in the state of Minnesota. Second, strategic methods are introduced from academic leaders involved in planning and developing programs to increase enrollment, retention, and graduation rates; findings provide special attention to reaching out to the minority population, first-generation students, and new attendees.

Volume 35, Issue 3 Spring 2012

Table of Contents

The Consequences of Delayed Enrollment in Developmental Mathematics
By David S. Fike and Renea Fike

NADE News: Challenge to Take Ownership
By Rebecca Goosen, NADE President

Ideas in Practice: Toward a Participatory Approach to Program Assessment
By Patrick L. Bruch and Thomas Reynolds

The Impact of History on the Future of College Reading: An Interview with Norman A. Stahl
By Sonya L. Armstrong

Editorial: What Do Placement Tests Measure?
By Edward A. Morante

For Your Information

Critical Thinking: Competency Standards Essential to the Cultivation of Intellectual Skills, Part 4
By Linda Elder and Richard Paul

Developments

Advertisers Index

Annual Index • Volume 35, 2011-2012

Article Abstracts:

The Consequences of Delayed Enrollment in Developmental Mathematics
By David S. Fike and Renea Fike

ABSTRACT: Though a large percentage of U.S. students enter higher education with mathematics deficiencies, many institutions allow these students to decide the timing of their enrollment in developmental mathematics courses. This study of 3476 first-time-in-college students entailed the review of student outcomes (Fall GPA, Fall-to-Spring retention, Fall-to-Fall retention) for those who enrolled in developmental math during their first semester compared to those who delayed...
enrollment. The findings suggest that policy requiring mandatory enrollment during the first semester for developmental math students may be in the best interest of students and their institutions.

Ideas in Practice: Toward a Participatory Approach to Program Assessment  
By Patrick L. Bruch and Thomas Reynolds

ABSTRACT: Drawing on critical multicultural education scholarship, this article discusses an alternative assessment of academic support programs. It highlights the importance and value of supplementing traditional assessments with direct student participation. Through a discussion of data from a summer bridge program at a large research university, the article examines how a participatory approach can illuminate strengths in a program as well as enduring challenges that might block student success.

Volume 35, Issue 2 Winter 2011  
Table of Contents

Unsuccessful and Successful Mathematics Learning: Developmental Students Perceptions  
By Laurel Howard and Martha Whitaker 2

NADE News: Join the Conversation  
By Rebecca Goosen, NADE President 16

Academic Coaching to Promote Student Success: An Interview with Carol Carter  
By Amy L. Webberman 18

Ideas in Practice: Professional Development to Manage Atypical Learner Behaviors  
By Anthony G. Colarossi, Rachelle Maltzman, Hope Parisi, Christine M. Rudisel, and Tara Weiss 22

Editorial: Educational Emergency Room Reform  
By the Executive Board, National Association for Developmental Education (NADE) 32

Critical Thinking: Competency Standards Essential for the Cultivation of Intellectual Skills, Part 3  
By Richard Paul and Linda Elder 34

On the Developmental Education Radar Screen  
By Eric J. Paulson 36

For Your Information 39

Developments and Advertisers Index 40

Article Abstracts:

Unsuccessful and Successful Mathematics Learning: Developmental Students Perceptions  
By Laurel Howard and Martha Whitaker

ABSTRACT: Limited research has been published that examines newly successful mathematics students’ perceptions of what hindered their acquisition of basic math skills in the past and their beliefs about what enables them to be successful now and in the future. This article describes a qualitative study that examines the perspectives and experiences of newly successful developmental mathematics students. Each student could identify a negative turning point in their past that led to unsuccessful mathematics experiences and the mathematics concept associated with it. They each also reflected on the change in their mindset, a positive turning point, that fueled a shift in their strategies and resulted in successful mathematics experiences. Understanding students’ perceptions about their shift from unsuccessful to successful mathematics students can inform practice and fuel additional research.

Ideas in Practice: Professional Development to Manage Atypical Learner Behaviors  
By Anthony G. Colarossi, Rachelle Maltzman, Hope Parisi, Christine M. Rudisel, and Tara Weiss

ABSTRACT: Issues of atypical learners in the developmental English classroom of an urban community college prompted a faculty collaborative “Group” response. Instructors and tutors were unable to help these students progress in their learning and the classroom atmosphere was impacted. The Group reached out to frustrated instructors and planned strategies for improving academic outcomes, offered collegial support, and provided professional development to tutors and instructors. Applying current action research-based models and focusing on a case-study format, the Group’s structure evolved to support more effective integration of atypical learners in the classroom.
Cost of Developmental Education: An Update of Breneman and Haarlow
By Joshua Pretlow III and Heather D. Wathington 2

Spelling Facilitates Good ESL Reading Comprehension
By Gail August 14

Ideas in Practice: Collaborative Problem-Based Learning in Intermediate Algebra
By Leslie B. Goldstein, Brian L. Burke, Amy Getz, and Paul A. Kennedy 26

NADE News: A Mosaic of Activities
By Jane Neuburger, NADE President 29

For Your Information 31

Critical Thinking: Competency Standards Essential for the Cultivation of Intellectual Skills, Part 2
By Richard Paul and Linda Elder 36

Techtalk: The Community of Inquiry Model for a Developmental Writing Classroom
By Ann Wolf, Chris Gilmer, and David C. Caverly 38

Developments and Advertisers Index 40

Article Abstracts:

Cost of Developmental Education: An Update of Breneman and Haarlow
By Joshua Pretlow III and Heather D. Wathington

ABSTRACT: Since Breneman and Haarlow (1998) first estimated the national cost of developmental education to be approximately $1 billion dollars, the developmental education landscape has shifted in numerous ways. This paper provides an update to their estimate in light of both these changes and improved data that disaggregates the cost to community colleges and four-year public institutions. An updated national cost estimate of developmental education to public institutions in the academic year 2004-2005 is estimated to be $1.13 billion, a 13% increase over the estimate of Breneman and Haarlow. This paper calls for states to make data on developmental education both transparent and publicly available in order to accurately derive a precise cost of developmental education both at the local and national levels.

Spelling Facilitates Good ESL Reading Comprehension
By Gail August

ABSTRACT: Adult ESL students were given reading comprehension and vocabulary tests, followed by spelling tests based on words in these assessments. The results showed that spelling knowledge of specific words in a reading selection affected reading comprehension of that text. However, the spelling of vocabulary words did not affect performance on a vocabulary test. The effect of spelling on reading comprehension may be related to information contained in English orthography and the role of spelling in the efficient storage and retrieval of words. The results suggest that integration of spelling instruction with vocabulary acquisition can facilitate college reading comprehension.

Ideas in Practice: Collaborative Problem-Based Learning in Intermediate Algebra
By Leslie B. Goldstein, Brian L. Burke, Amy Getz, and Paul A. Kennedy

ABSTRACT: A key goal in developmental education has been optimizing student success in future college-level classes. This study compared three sections of a problem-based collaborative learning pilot course of Intermediate Algebra to the original course section at a four-year public liberal arts college. The pilot course differed from the original course in three main areas: structure, content, and assessments. Results showed that student performance and satisfaction with the pilot course did not differ significantly from the usual course but that success in College Algebra the following semester was significantly higher among students from the pilot course sections, especially for Native Americans.

Volume 34, Issue 3 Spring 2011
Table of Contents

Developmental Mathematics: Challenges, Promising Practices, and Recent Initiatives
By Barbara Bonham and Hunter R. Boylan 2

Incorporating Study Strategies in Developmental Mathematics/College Algebra
By Selina Vasquez Mireles, Joey Offer, Debra D. Ward and Carol W. Dohen 12

Improving Success in Developmental Mathematics: An Interview with Paul Nolting
### 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.

### Volume 34, Issue 2, Winter 2010  
Table of Contents

- Increasing Student Success and Retention: A Multidimensional Approach  
  By Paul R. Fowler and Hunter R. Boylan  
  [2]

- The Effectiveness of Computer-Assisted Instruction in Developmental Mathematics  
  By Kathy Spradlin and Beth Ackerman  
  [12]

- Writing Center Work Bridging Boundaries: An Interview with Muriel Harris  
  By Elizabeth Threadgill  
  [20]

- Ideas for Practice: A Collaborative Look to the Classroom  
  By Dorothy A. Osterholt and Katherine Barratt  
  [26]

- Editorial: What Are We Going to Do About It?  
  By D. Patrick Saxon and Hunter R. Boylan  
  [36]

- Critical Thinking: Competency Standards Essential for the Cultivation of Intellectual Skills, Part 1  
  By Linda Elder and Richard Paul  
  [38]

- Techtalk: The Community of Inquiry Model for an Inverted Developmental Math Classroom  
  By Scott McDaniel and David C. Caverly  
  [40]

- For Your Information  
  [41]

- Developments  
  [43]

- Advertisers’ Index  
  [44]
**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.

**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.

**Volume 34, Issue 1, Fall 2010**

**Table of Contents**

- Bridging the Evidence Gap in Developmental Education
  By Michael L. Collins
  2

- A Comprehensive Cost/Benefit Model: Developmental Student Success Impact
  By Alejandro J. Gallard, Frank Albritton, and Mark W. Morgan
  10

- Transitions in Developmental Education: An Interview with Rosemary Karr
  By Cristella R. Diaz
  20

- Questions for Practice: Reflecting on Developmental Mathematics Using 19th-Century Voices
  By Marcus E. Jorgensen
  26

- For Your Information
  35

- Critical Thinking: Ethical Reasoning as Essential to Fairminded Critical Thinking, Part IV
  By Linda Elder and Richard Paul
  36

- Techtalk: An Online Framework for Developmental Literacy
  By Melissa Burgess and David C. Caverly
  38

- Developments and Advertisers’ Index
  40

**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.

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?

Volume 33, Issue 3, Spring 2010
Table of Contents

Postsecondary Literacy: Coherence in Theory, Terminology, and Teacher Preparation
By Eric J. Paulson and Sonya L. Armstrong 2

Underprepared, Ethnically Diverse Community College Students: Factors Contributing to Persistence
By Peter Barbatis 14

Cultivating Critical Thinking: An Interview with Stephen Brookfield
By James Johnson 26

Annual Index, Volume 33 32

For Your Information 33

Critical Thinking: Ethical Reasoning as Essential to Fairminded Critical Thinking, Part III
By Richard Paul and Linda Elder 34

Techtalk: Cloud Computing and Developmental Education
By Douglas R. Holschuh and David C. Caverly 36

Developments and Advertisers’ Index 38

Article Abstracts:
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.

Volume 33, Issue 2, Winter 2009

Table of Contents

Is a Writing Sample Necessary for "Accurate Placement"?
By Patrick Sullivan and David Nielsen 2

American Indian/Alaska Native College Student Retention Strategies
By Raphael M. Guillory 12

Principles of Academic Success and Mentorship: An Interview with Saundra McGuire
By Kenyatta Y. Dawson 22

A Curriculum Focus Intervention’s Effects on Prealgebra Achievement
By David Yopp and Richard Rehberger 26

For Your Information

Critical Thinking: Ethical Reasoning and Fairminded Thinking, Part II
By Richard Paul and Linda Elder 40

Techtalk: Digital Storytelling and Developmental Education
By Kay Gregory, Joyce Steelman, and David C. Caverly 42

Developments and Advertisers’ Index 44

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.

**Volume 33, Issue 1, Fall 2009**

**Table of Contents**

- **Literary Letters: Developmental Readers’ Responses to Popular Fiction**
  By Marty Frailey, Greta Buck-Rodriquez, and Patricia L. Anders 2

- **The Paraprofessional-to-Teacher Pipeline: Barriers and Accomplishments**
  By Jorgelina Abbate-Vaughn and Patricia C. Paugh 14

- **Strategic Learning and College Readiness: An Interview with Claire Ellen Weinstein**
  By Taylor W. Acee 20

- **Position Paper: Creating a New Professional Association**
  By David Arendale, Hilda Barrow, Kathy Carpenter, Russ Hodges, Jane McGrath, Pat Newell, and Jan Norton 28

- **Critical Thinking: Ethical Reasoning and Fairminded Thinking, Part I**
  By Richard Paul and Linda Elder 36

- **TechTalk: Mobile Learning and Access**
  By David C. Caverly, Anne R. Ward, and Michael J. Caverly 38

- **Developments and Advertiser’s Index**
  40

**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.

**Position Paper: Creating a New Professional Association**
By David Arendale, Hilda Barrow, Kathy Carpenter, Russ Hodges, Jane McGrath, Pat Newell, and Jan Norton

ABSTRACT: This position paper investigates the merits and potential benefits of creating a new, more comprehensive professional association for members of the learning assistance and developmental education profession. This task was assigned to the College Reading and Learning Association/National Association for Developmental Education (CRLA/NADE) Working Group by the CRLA and NADE national executive boards. This Working Group considered not only the issue of effectiveness of the current professional associations but also the merits of expanding the mission and vision of a new professional association. Building upon the success of CRLA and NADE, the Working Group identified many ways a new
association could better serve members and have a greater influence on student success and in society (CRLA/NADE Taskforce, 2007).

**Volume 32, Issue 3, Spring 2009**

**Table of Contents**

Instructional Delivery in Developmental Mathematics: Impact on Retention  
By Carol A. Zavarella and Jan M. Ignash  
2

Targeted Intervention for Developmental Education Students (T.I.D.E.S.)  
By Hunter R. Boylan  
14

Learning Center Issues, Then and Now: An Interview with Frank Christ  
By Barbara J. Calderwood  
24

College Preparedness and Time of Learning Disability Identification  
By Carla Abreu-Ellis, Jason Ellis, and Richard Hayes  
28

For Your Information  
38

Critical Thinking Strategies for Improving Student Learning, Part III  
By Linda Elder and Richard Paul  
40

Techtalk: *Second Life* and Developmental Education  
By Melissa L. Burgess and David C. Caverly  
42

Annual Index, Volume 32  
44

Developments and Advertisers’ Index  
46

**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.

**Volume 32, Issue 2, Winter 2008**
Table of Contents

Placement Tools for Developmental Mathematics and Intermediate Algebra
By William J. Donovan and Ethel R. Wheland 2

Developmental Education Literature: A Proposed Architecture
By Michael Preuss 12

Community College Library Practices in Developmental Education
By Ann Roselle 24

Critical Thinking: Strategies for Improving Student Learning, Part II
By Richard Paul and Linda Elder 34

Techtalk: Wikis and Collaborative Knowledge Construction
By David C. Caverly and Anne Ward 36

Developments 38

Advertisers’ Index 39

For Your Information 40

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.

Volume 32, Issue 1, Fall 2008

How Research contributes to Access and Opportunity Around the World
By Hunter R. Boylan 2

First Generation College Students: A Study of Appalachian Student Success
By Christie Hand and Emily Miller Payne 4

Words from Experience: An Interview with Gladys Shaw
ARTICLE ABSTRACTS:

First Generation College Students: A Study of Appalachian Student Success
By Christie Hand and Emily Miller Payne

ABSTRACT: 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 “factors” 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.
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.

Table of Contents

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

Postsecondary Attendance and Success Patterns: An Interview with Clifford Adelman
By Geoffrey Akst

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

Special Feature: Advice for Novice Researchers Who Wish to Publish Their Results
By Nancy Carriuolo, Hunter Boylan, Michele Simpson, Carol Bader, and Barbara Calderwood

Critical Thinking: The Art of Socratic Questioning, Part II
By Linda Elder and Richard Paul

Developments

For Your Information

Advertisers’ Index

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.

**Volume 31, Issue 1, Fall 2007**

**Table of Contents**

Does Faculty Employment Status Impact Developmental Mathematics Outcomes?
By David S. Fike and Renea Fike 2

A Retention/Persistence Intervention Model: Improving Success Across Cultures
By Geneva Escobedo 12

Challenges and Potentials in Developmental Education: An Interview with Raymund A. Paredes
By Hansel Burley 18

Academic Motivation and Performance of Developmental Education Biology Students
By Randy Moore 24

For Your Information 34

Critical Thinking: The Art of Socratic Questioning
By Richard Paul and Linda Elder 36

Techtalk: Assistive Technology
By David C. Caverly and Debra Fitzgibbons 38

Developments and Advertisers’ Index 40

**Article Abstracts**

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: 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.

**Volume 30, Issue 3, Spring 2007**

**Table of Contents**
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.
ACCUPLACER™ 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.
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.

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.
Article Abstracts

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.

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.

Volume 29, Issue 2, Winter 2005
Table of Contents

Prefreshman Summer Programs’ Impact on Student Achievement and Retention
By Joseph Christopher Maggio, William G. White, Jr., Susan Molstad, and Neelam Kher 2

Performance Indicators for Postsecondary Disability Services
By Stan F. Shaw and Lyman, L. Dukes, III 10

Oral History of Postsecondary Access: K. Patricia Cross, a Pioneer
By Laura Bauer and Martha E. Casazza 20

Attendance: Are Penalties More Effective Than Rewards?
By Randy Moore 26

Research Tips: Classroom Observation Data Collection, Part II
By Dale T. Griffee 36

TechTalk: Building Academic Literacy through Online Discussion Forums
By Cynthia L. Peterson and David C. Caverly 38

Developments and Advertisers’ Index 40

Article Abstracts

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.

Volume 29, Issue 1, Fall 2005
Table of Contents

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

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

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

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

For Your Information

Critical Thinking... and the Art of Substantive Writing, Part I
By Richard Paul and Linda Elder

Research Tips: Classroom Observation Data Collection, Part I
By Dale T. Griffee

Developments and Advertisers' Index

Article Abstracts

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.

Volume 28, Issue 3, Spring 2005
Table of Contents

Theory, Practice, and the Future of Developmental Education
By Carl J. Chung 2

Reducing Attrition Rates for Maori Students
By D.F. McKenzie 12

Teaching in Postsecondary Institutions: An Interview with Dr. Wilbert McKeachie
By Russ Hodges and Christie L. Hand 20

Mathematics Self-Efficacy of College Freshman
By J. Michael Hall and Michael K. Ponton 26

For Your Information 33

Research Tips: Interview Data Collection
By Dale T. Griffee 36

Techtalk: Wireless Networking
By David C. Caverly and Lucy MacDonald 38

Developments 40

Advertisers' Index 41

Annual Index, Volume 28 42

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.

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.

Volume 28, Issue 2, Winter 2004
Table of Contents

Reading and Learning Strategies: Recommendations for the 21st Century
By Michele L. Simpson, Norman A. Stahl, and Michelle Anderson Francis 2

Refocusing Developmental Education
By Thomas Brothen and Cathrine A. Wambach 16

Delaying Developmental Mathematics: The Characteristics and Costs
By Marianne Johnson and Eric Kuennen 24

In Memoriam, Arthur E. Whimbey 30

For Your Information 33

Critical Thinking... and the Art of Close Reading, Part IV
By Linda Elder and Richard Paul 36

TechTalk: Keeping Up With Technology
By David C. Caverly and Lucy MacDonald 38

Developments and Advertisers' Index 40

Article Abstracts

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.

Volume 28, Issue 1, Fall 2004
Table of Contents

Basic Writing Placement with Holistically Scored Essays: Research Evidence
By Richard N. Matzen and Jeff E. Hoyt

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

Oral History of Postsecondary Access: Martha Maxwell, a Pioneer (interview)
By Martha E. Casazza and Laura Bauer

Do Colleges Identify or Develop Intelligence?
By Randy Moore

For Your Information

Critical Thinking... and the Art of Close Reading, Part III
By Richard Paul and Linda Elder

Research Tips: Validity and History
By Dale T. Griffie

Developments and Advertisers' Index

Article Abstracts

Basic Writing Placement with Holistically Scored Essays: Research Evidence
By Richard N. Matzen Jr. and Jeff E. Hoyt

ABSTRACT: Recently, the popularity of timed-essay exams has increased, becoming part of the Graduate Management Admissions Test (GMAT) in the late 1990s and now being incorporated into The College Board Scholastic Aptitude Test (SAT) in Spring of 2005 and ACT (American College Testing Program) test in Fall of 2004. This research evaluates the A value added of an essay component, contrasting placement using ACT's multiple choice COMPASS (Computerized Placement Assessment Support System) writing test versus essays holistically scored by English faculty. Evidence suggests that (a) combining the timed-essay exam score with another score may improve accurate placement; (b) that the timed-essay exams, not multiple-choice tests, may be fairer for minority students; (c) and that a questionnaire creates an invaluable context when relating scores on placement tests to final grades in courses.

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.
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.