RESEARCH IN DEVELOPMENTAL EDUCATION

D. Patrick Saxon, Editor

Published by Appalachian State University ***Volume 27, Issue 4, 2019***

Integrated Reading and Writing Courses in Higher Education: Technology, Support Services, and Class Sizes as Reported by Faculty

By Nara M. Martirosyan, D. Patrick Saxon, and Nicholas T. Vick

The integration of reading and writing instruction is currently a trend in the field of developmental education. Many colleges are moving to this combined course structure as part of their intent to reform course delivery for underprepared college students. Integrated reading and writing (IRW) is touted as a means of accelerated skills development for students who enter college underprepared for college gateway courses (Jaggars, Edgecombe, & Stacey, 2014). This is particularly the case at community colleges, where developmental education courses are more prevalent. Though IRW is not a new concept or necessarily an innovative practice, the recent trend in its application can likely be attributed to criticisms of traditional developmental education courses along with calls for broad reform in the field. A commonly-pitched model is described in a study of IRW at Chabot College (Edgecombe, Jaggars, Xu, & Barragan, 2014). However, practitioners know that models adopted for deployment on a particular campus may not wind up fully resourced or implemented entirely to specifications. This is why it is important to engage with faculty to get a sense of what is actually occurring once reforms are put in place. The purpose of this study was to collect information from faculty about the IRW classes that are currently being taught. Specifically, this report offers descriptive statistics on IRW faculty that participated in this survey and describes their participation in IRW-related professional development. It also examines IRW class sizes, the technology applications that are supplementing IRW instruction, and the student support services that are integrated with IRW courses.

Review of the Related Literature

The deployment of IRW courses, especially in community colleges, is ramping up. This is due to administrative mandates and a general desire to accelerate the development of college skills for underprepared students. For example, North Carolina and Virginia community colleges are now required to offer developmental writing and reading courses via the IRW model. Florida has mandated the model as an option for students who choose to enroll in developmental education. Texas has recently required IRW as the sole method of delivering instruction in reading and writing to the top level of community college developmental education students (Martirosyan & Saxon, 2017).

Professional development is likely important to improve the effectiveness of instructors in any discipline. Boylan (2002) described studies showing that developmental education programs with an emphasis on training and professional development achieved higher student success rates than those without. Because IRW course models in essence combine two traditional stand-alone courses, faculty delivering them may need to be retrained or attain new credentials. As a result, a mandate for IRW may cause anxiety on the part of faculty that are charged with developing and delivering these courses. Edgecombe et al. (2014) reported:

> The decision to redesign the curriculum was not without controversy. The prospect of integrating reading and writing, in particular, raised fears among faculty about having to teach a new subject. Some reading faculty had to pursue additional graduate course training to be credentialed to teach English composition. (p. 6)

Reform that includes IRW may be a seismic shift on some campuses. It seems that in such a case, training and professional development are important to the support, motivation, and success of faculty.

There were no studies identified that reported class sizes or suggested optimal class sizes for IRW courses. Some national studies that examined developmental writing class sizes (not necessarily IRW classes) reported a consistent average class size of about 20 students (Boylan, Bonham, Jackson, & Saxon, 1995; Gerlaugh, Thompson, Boylan, & Davis, 2007; Schults, 2001) at 2-year colleges. Developmental reading class sizes were slightly smaller, ranging 18 to 19 students (Boylan et al., 1995; Gerlaugh et al., 2007).

Though no literature addressing the use of technology applications in IRW classes was located, some pieces that addressed college instruction and student academic support in traditional developmental education classes may apply and were covered in this review. Technology plays an important role in the learning process for college students (Elzarka, 2012). In fact, instructors use various forms of technology to actively engage their students in and outside of the classroom (Hess & Saxberg, 2013). Distance learning options and other online programs continue to rise in popularity across the higher education landscape making technology use and accessibility increasingly important (Allen & Seaman, 2015). The types of technology used for developmental education academic support vary widely (Levin & Calcagno, 2008). In addition to online-based tutorial services, there are also virtual learning environments, blogs, E-portfolios, and instructional videos to support learning for developmental education students (Levin & Calcagno, 2008).

There are still a number of challenges associated with the application of technology for instructional purposes in developmental education (Cederholm, 2010). As the use of technology continues to grow in developmental education, more research (e.g., Martirosyan, Kennon, Saxon, Edmonson, & Skidmore, 2017; Zientek, Skidmore, Saxon, & Edmonson, 2015) is emerging on instructional practices and challenges in integrating technology into developmental education classrooms. However, the available literature lacks efficacy studies specifically focused on IRW courses (Saxon, Martirosyan, & Vick, 2016). The authors of a recent study (Martirosyan et al., 2017) surveyed 890 developmental education faculty in Texas' 2- and 4-year colleges and identified instructor-reported challenges and best practices of incorporating technology into developmental education classrooms. Among the participants were 33 IRW instructors, of which 97% indicated that they used technology in their developmental education classroom.

The lack of technology support and training were among the challenges identified in the study. Some commercial software products, which included MyWritingLab™ were cited as commonly used supplements to classroom instruction. Based on their findings and those of other studies, the researchers concluded that faculty training on how to use technology is important and recommended that it be an institutional priority. Although not necessarily focused on technology applications, faculty professional development was also emphasized by Lampi, Dimino, and Taylor (2015) as an essential component for developing effective instructional practices in IRW courses.

The application of technology was cited as one of the most popular instructional strategies in Saxon et al.'s (2016) study on IRW. The participants reported the use of computer labs as effective supplemental tools for delivering instruction. Computer applications were especially used to provide practice and assessment opportunities in support of improving student writing skills. The use of online lab components is common in developmental education and, therefore, it is not surprising to see that IRW faculty reported it as a commonly used instructional strategy as well.

Regarding student support, Boylan (2002) has asserted that a comprehensive array of support services provided in a centralized, and highly accessible manner is necessary for higher student success rates in developmental education. Particular to IRW, Edgecombe et al. (2014) described a program whereby academic advisors are a vital resource for assisting students in need of writing skills development to make appropriate course placement decisions. No literature was identified that described or offered guidance for effective academic advising in IRW courses.

The limited availability of literature indicates that there is a need for more research in the effective integration of technology and academic support services into IRW instruction. This study was devised to address some of the gaps in this area of research. It offers an overview of IRW teacher characteristics, professional development, and class sizes, and it identifies some of the commonly used software and academic support services used by field practitioners across the United States. The findings could be especially helpful for those who are new to planning and teaching IRW courses and are looking for effective ways of incorporating technology and academic support services into their courses.

Research Questions

Several descriptive questions were asked in order to classify respondents by certain characteristics and to gather information about the extent to which institutional leaders were supporting IRW reform with associated training and professional development. Other questions were also asked: (a) Which technological tools are being used in IRW courses to supplement instruction?; (b) What are common support services that are integrated with IRW courses?; and (c) What are the IRW class size ranges that are encountered by respondents at their institutions?

Method

Sample

Participants of the study were developmental education faculty who responded to an online survey administered to the National Association for Developmental Education (NADE) 2015 IRW summit event attendees (Saxon et al., 2016). Of 205 participants who received the survey, 110 responded, which indicated a 54% response rate. At the time of the survey, 64 of the 110 respondents stated that they did not teach IRW courses and could not complete the survey. Responses from the remaining 46 participants were analyzed for this study.

Instrument

Data used for this study is a subset of the aggregate of data collected from the IRW online survey (Saxon et al., 2016). The survey consisted of 13 items that addressed participant demographics and various questions related to IRW implementation (e.g., challenges faced when teaching IRW courses, instructional best practices, support services available, etc.). Responses to the following three survey items were analyzed in this study: (a) Please list any technology/computer software (up to three items, if any) you use in your IRW courses, (b) Please list up to three support services (if any) that are integrated with or support your IRW courses, and (c) What is the average number of students in your IRW courses. All three survey items were open-ended.

Limitations

This study relied on self-reported data from the participants. As with any self-reported data, questions regarding the reliability and bias should be considered. Another limitation is the timeframe of IRW practice. Because IRW courses are a relatively new trend in developmental education, faculty members might not have had enough time to engage in informed decision making and/or fully develop their use of the variety of technological tools and academic support services available to supplement their instruction and support student learning. Finally, the technology tools and academic support services identified are instructor-reported with no efficacy research behind them. More research in these areas is needed.

Data Analysis

Microsoft Excel was used to conduct data analysis. The 46 responses received for the average number of students in IRW classes were categorized and grouped into the following ranges: 12 or fewer; 13-19; 20-25; 26 and more. Answers to the *technology/computer software* item generated a total of 58 data points, and answers to 79 data points were present for the *support services* item. Data were coded and grouped. Nine different types of tools/computer software were identified as common technology applications in IRW courses, and six distinct themes emerged as a result of data analysis of the *support services* item. The three most frequently used technology tools, as well as the three most frequently used support services integrated with or supporting IRW courses, are presented and discussed in this paper.

Results and Discussion

Faculty Descriptive Statistics

As noted there were 46 responses that were analyzed for this study. The respondents were predominantly female ($n = 40$), and most worked at 2-year colleges ($n = 41$). The overwhelming majority were employed full time ($n = 42$). At first glance, this may seem notable as developmental education programs typically employ more part time teachers (Gerstein, 2009; Shults, 2000). However, it should be considered that the faculty solicited for participation in this study were participating in a conference-based professional development activity. Perhaps given the investment required to attend such an activity, it is not a stretch to assume that primarily full time faculty would be reached.

Respondents were asked about their content area of specialty. A relatively even split had either reading ($n = 13$) or English/writing ($n = 14$) as their content specialty. More than a third of respondents ($n = 17$) reported both as areas of specialty. Edgecombe et al. (2014) described a study at an institution where most faculty felt the combined teaching of reading and writing was intuitive and more effective than separate courses in each subject area. However, it should be emphasized that the IRW model combines two areas of instructional expertise and in many cases faculty will be skilled in only one of the two areas. This would have training and personnel development implications for an institution transitioning from a separate course structure to an IRW model. IRW courses require structural, curricular, and pedagogical reform (Edgecombe et al., 2014), as well as collaboration across the two content areas. And as noted, adopting this model will likely require training and

professional development for faculty. Therefore, it was perplexing to see that nearly two-thirds of the respondents (n = 31) had not received any formal training for the purposes of developing and delivering IRW courses. However, most (n = 38) had reported that their institution had funded some professional development with regard to IRW (see Table 1 for *Faculty Descriptive Statistics and Training Issues*).

Table 1

Faculty Descriptive Statistics and Training Issues

Gender		Employment Status		Content Area of Expertise	
Female	40	Part Time	4	English/Writing	14
Male	6	Full Time	42	Reading	13
				Both	17
				Other	2
Institution Type		**Required to Complete IRW Training?**		**Has your Institution Funded IRW Professional Development?**	
2-Year	41	Yes	15	Yes	38
4-Year	5	No	31	No	8

Class Size Ranges

Only a few respondents (n = 6) reported what may be considered small class size ranges of 12 or fewer students. More common (n = 15) was a range of 13 to 19 students per class. The most commonly reported (n = 18) class size range was 20 to 25 students. A few respondents (n = 7) reported having class sizes of 26 or more on a regular basis (See Table 2 for *IRW Class Size Ranges*). As noted, no research particular to IRW was located which specifies class sizes or suggests optimal class sizes, but it is typically considered that smaller class sizes are better. In general, the instruction of writing may be considered labor intensive for instructors. The IRW model is also an accelerated instructional model, meaning that students are expected to learn the course content in a shorter amount of time. As more students in need of skills development are placed into courses of shorter duration, wider variation in their preparation levels is likely. Smaller class sizes are also helpful because the demand for academic support and attention from the instructor is likely increased in an IRW structure.

Table 2

IRW Class Size Ranges

Class Size Range (# students)	# Respondents Reporting
12 or fewer	6
13 - 19	15
20 - 25	18
26 or more	7

Technology Applications in IRW Courses

One of the survey questions asked participants to list up to three technology/computer software items used in their IRW courses. A total of 58 data points were received for analysis, leading to the identification of nine different types of technology tools/computer software used by the participants. Table 3 displays these results along with the frequency of use of particular technology/software applications. As shown, the three top ranking tools were *MS Office and Smartboard Technology, MySkillsLab™, and a Learning Management System.*

Table 3

Reported Technology/Computer Software Usage in IRW Courses

Survey Item	Technology/Software Applied	Frequency (n)
Technology/Software used in IRW courses	MS Office and Smartboard Technology	14
	MySkillsLab®	8
	Learning Management System	6
	Connect IRW®	3
	Aplia™	3
	MyWriting Lab™	3
	MyLabsPlus™	2
	MyReadingLab™	2
	Pearson Lab Products	2

MS Office and Smartboard Technologies. The top ranking technologies listed by respondents were MS Office and Smartboard technologies. For face-to-face instruction, respondents mentioned a common use of overhead projectors and laptops. In IRW courses, instructors reported using the following technologies most often:

- MS Word
- MS PowerPoint
- Smartboard

Word-processing programs such as MS Word are valuable tools for developmental English students because of functionalities such as spell checking and comment features to assist the proofreading and revising process.

MySkillsLab™. The second highest ranking type of technology identified in the survey was MySkillsLab™. This is an interactive online platform that can assess student learning. The program also offers personalized instruction to assist students in building core foundational skills in reading and writing. Pearson designed a customized MySkillsLab™ for Patrick Henry Community College that specifically focuses on developmental English learning outcomes. Instructors at the college closely monitor student progression through MySkillsLab™ (Zollars, 2013). Other variations of MySkllsLab™ include Aplia™, MyWritingLab™, and MyReadingLab™, and Connect IRW®. For these various supplemental supports, some instructors reported dissatisfaction with the services. Other participants commented that they did not use additional technology for instruction.

Learning Management System. The third highest ranking type of technology identified in the survey was the use of a Learning Management System (LMS). Blackboard® was the most common LMS reported, and according to participants, there are a variety of uses for Blackboard® including:

- Posting course materials
- Managing homework and class discussions
- Posting course announcements
- Providing feedback to students on assignments

Moodle™ is another common LMS used for instruction with similar features as those found in Blackboard®. Currently, there is no existing research that specifically supports the use of an LMS for IRW instruction. Indeed, an LMS is typical for many college courses regardless of the subject matter; however, the participants in this study did rely on communicating with students and enhancing their courses through an LMS.

Support Services

The second research question in the study focused on identifying support services integrated with IRW courses. Participants were asked to list up to three services that are either integrated with or provide support for their IRW courses. A total of 79 data points were received. The data analysis revealed seven themes which are displayed in Table 4. The top three ranking themes were: Academic Support, Library Services, and Advising. These three themes are the focus of discussion in this section.

Table 4

Reported Support Services Integrated with or Supporting IRW Courses

Survey Item	Themes	Frequency (n)
Support Services Integrated with or Supporting IRW Courses	Academic Support	39
	Library Services	4
	Advising	4
	Support Courses	3
	Disability Services	3
	Counseling Services	2
	Peer Support	2

Academic Support. The top ranking support service identified in the survey was academic support. The respondents indicated that academic support can occur in a variety of forms. The different types cited by participants were:

- embedded tutoring,
- peer tutoring,
- faculty tutoring,
- online tutoring,
- mandatory tutoring, and
- computerized instruction.

According to respondents, academic support might take place in a tutoring center, reading center, writing center, or a computer lab depending on available space, resources, and organizational structure. For instance, at Cape Fear Community College, enrolled students can receive assistance in the college's Writing and Reading Lab either on a drop-in basis or by appointment (Cape Fear Community College, 2015). Research has proven that tutoring is beneficial for developmental English students in IRW courses. Vick, Robles-Pina, Martirosyan, and Kite (2015) found that students who received tutoring performed statistically significantly better than their non-tutored peers over three semesters of IRW developmental English courses at three different levels.

Library Services. The second highest ranking support service identified in the survey was the use of library services. According to Lee (2000), developmental education students are more likely to experience library anxiety. Although the respondents in this study did not elaborate on the use of library services for their courses, there are a number of recommendations and best practices in existing research. For example, Roselle (2008) conducted semi-structured telephone interviews with 27 librarians and found that 100% of the participants teach basic library skills to provide a foundation for student success. These basic skills include students developing a familiarity and comfort with the library and being able to conduct research. For developmental reading courses, Roselle (2008) mentioned the importance of embedding library instruction into course content. In developmental writing courses, many librarians offer ongoing support throughout the duration of a course (Roselle, 2008).

Another example of promoting the use of library support among students is the creation of marketing materials such as handouts and signs (Thomas, 2000). In addition, developmental education instructors can create assignments that require library use (Farrell, 2004; Thomas, 2000). The infusion of information literacy into course content is another common recommendation for instructors promoting library support services (Garcia, 2014; Thomas, 2000). Farrell (2004) also suggested the creation of PowerPoint presentations that include detailed screenshots to teach students how to conduct database searches. For developmental education students, library support is useful because of access to technology and the provision of a comfortable space to study (Lee, 2012).

Advising. The third highest ranking support service identified in the survey was advising. Advising was considered particularly important by the respondents because of the need to place students into the correct sequence of coursework. For example, in the North Carolina Community College System, IRW courses are accelerated. Therefore, students must be advised as to the pace and intensity of the classes, and if necessary, the need to reenroll in the correct developmental English courses if their IRW requirements are not fulfilled during the initial accelerated timeframe. Fowler and Boylan (2010) recommended that academic advising for developmental education be prescriptive and intrusive as well as incorporate the following actions to increase student success and retention:

- The registration of initial course placement based on transcript analysis,
- The implementation of mandatory advisor and student meetings throughout a semester,
- The discussion of noncognitive variables,
- The assessment of student goals, and
- The activation of an early warning alert system.

Moore (2005) found that developmental education students often do not provide honest self-assessments of their academic performance for variables such as class attendance and completion of outside reading assignments. Therefore, Moore (2005) recommended that advisors encourage honesty from their students and promote sound academic behaviors.

Implications for Practice

As IRW is a current trend, college administrators and teachers are charged with overhauling reading and writing courses that have been traditionally taught standalone, in multilevel progressive sequences. The courses are now combined and offered in one or two semesters. Such drastic change has rendered previously used course materials obsolete. It also likely leads to a heavier reliance on technology-based instruction as students spend less time overall in skills development classes. Furthermore, the market for commercial textbooks and technology applications is limited as vendors struggle to develop and rollout IRW course materials. These challenges have placed instructors in a precarious position when planning and delivering IRW instruction. The ideas and practices contained herein may be useful to professionals who are now in the planning stages of such an instructional model. Included are specifics on instructional technology applications that are being deployed in IRW classes. There is also insight for administrators as they address the instructional and talent development challenges that may ensue with the adoption of the IRW model. Class size information may serve as benchmarks for comparison purposes.

Conclusion

The findings of this study described select faculty characteristics, reported class sizes, and offered a list of technology tools and academic support services that are currently used in IRW classes in 2- and 4-year colleges in the United States. The use of nine different technology tools/computer software applications were reported by the participants in the study (see Table 3), and a total of seven academic support services identified as supplemental support were incorporated in IRW courses (see Table 4). Three of the highly ranked items for each area were presented and discussed in this paper. This information offers a brief snapshot of some of the elements that constitute a current trend to combine the instruction of reading and writing in basic skills courses. Faculty who currently teach IRW courses or plan to teach in the near future might find this information helpful as they design their instruction and consider technological applications and academic support services that can be embedded into their instruction.

References

Allen, I. E., & Seaman, J. (2015). Grade change: Tracking online education in the United States. *Babson Survey Research Group and Quahog Research Group, LLC*. Retrieved from http://www.onlinelearningsurvey.com/reports/gradelevel.pdf

Aplia™. *[Computer Software]*. Independence, KY: Cengage Learning.

Blackboard®. *[Computer Software]*. Washington, DC: Blackboard®, Inc.

Boylan, H. R. (2002). *What works: Research-based best practices in developmental education*. Boone, NC: National Center for Developmental Education.

Cape Fear Community College. (2015). *Learning Lab*. Retrieved from http://cfcc.edu/learninglab/tutoring/

Cederholm, A. (2010). *The use of technology in developmental education*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3439803)

Connect IRW®. *[Computer Software]*. Columbus, OH: McGraw Hill Education.

Edgecombe, N., Jaggars, S. S., Xu, D., & Barragan, M. (2014). *Accelerating the integrated instruction of developmental reading and writing at Chabot College* (CCRC Working Paper No. 71). New York, NY: Community College Research Center, Teachers College, Columbia University.

Elzarka, S. (2012). *Technology use in higher education* (Doctoral dissertation). Retrieved from http://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1039&context=cgu_etd

Engstrom, E. U. (2005). Reading, writing, and assistive technology: An integrated developmental curriculum for college students. *Journal of Adolescent and Adult Literacy, 49*(1), 30-39.

Farrell, S. L. (2004). Start-up of a mandatory library orientation program in developmental education. *Community and Junior College Libraries, 13*(1), 51-54.

Fowler, P. R., & Boylan, H. R. (2010). Increasing student success and retention: A multidimensional approach. *Journal of Developmental Education, 34*(2), 2-10.

Garcia, L. (2014). Applying the framework for information literacy to the developmental education classroom. *Community and Junior College Libraries, 20*(1), 39-47.

Gerlaugh, K., Thompson, L., Boylan, H., & Davis, H. (2007). National study of developmental education II: Baseline data for community colleges. *Research in Developmental Education, 20*(4), 1-4.

Gerstein, A. (2009). *Community college faculty and developmental education: An opportunity for growth and investment*. Retrieved from http://archive.carnegiefoundation.org/pdfs/elibrary/community_college_faculty.pdf

Hess, F. M., & Saxberg, B. (2013, December 16). Just remember how the book revolutionized teaching. *National Review*, Retrieved from http://www.nationalreview.com/article/366375/how-use-technology-education-frederick-m-hess-bror-saxberg

Inspiration®. *[Computer Software]*. Retrieved from http://www.inspiration.com/

Jaggars, S. S., Edgecombe, N., & Stacey, G. W. (2014). *What we know about accelerated developmental education*. New York, NY: Columbia University, Teachers College, Community College Research Center.

Lampi, J. P., Dimino, R. K., & Taylor, J. S. (2015). Connecting practice and research: A shared growth professional development model. *Journal of Developmental Education, 39*(1), 32-33.

Lee, S. W. (2012). An exploratory study of library anxiety in developmental education students. *Community and Junior College Libraries, 18*(1), 67-87.

Levin, H. M., & Calcagno, J. C. (2008). Remediation in the community college. *Community College Review, 35*(3), 181-207.

Martirosyan, N. M., Kennon, J. L., Saxon, D. P., Edmonson, E. L., & Skidmore, S. T. (2017). Instructional technology practices in developmental education in Texas. *Journal of College Reading and Learning, 47*(1), 3-25.

Martirosyan, N. M., & Saxon, D. P. (2017). *Technology and support applications in integrated reading and writing courses*. Paper presented at the annual meeting of College Academic Support Programs, Galveston, TX.

Moodle™. *[Computer Software]*. Retrieved from https://moodle.org/

Moore, R. (2005). Advising students in developmental education: How accurate are developmental education students' self-assessments? *Research and Teaching in Developmental Education, 22*(1), 53-58.

MyLabsPlus™. *[Computer Software]*. New York, NY: Pearson Education.

MyReadingLab™. *[Computer Software]*. Upper Saddle River, NJ: Pearson Education.

MySkillsLab™. *[Computer Software]*. Upper Saddle River, NJ: Pearson Education.

MyWritingLab™. *[Computer Software]*. Upper Saddle River, NJ: Pearson Education.

Roselle, A. (2008). Community college library practices in developmental education. *Journal of Developmental Education, 32*(3), 24-32.

Shults, C. (2001). *Remedial education: Practices and policies in community colleges* (Executive summary, Research Brief AACC-RB-00-2). Washington, DC: American Association of Community Colleges.

Thomas, S. E. (2000). The necessary library revolution in community college developmental and remedial programs. *Community and Junior College Libraries, 9*(2), 47-58.

Vick, N., Robles-Pina, R., Martirosyan, N. M., & Kite, V. (2015). The effectiveness of tutoring on developmental English grades. *The Community College Enterprise, 21*(1), 11-26.

Zientek, L. R., Skidmore, S. T., Saxon, D. P., & Edmonson, S. L. (2015). Technology priorities and preferences of developmental mathematics instructors. *Community College Enterprise, 21*(1), 27-46.

Zollars, M. (2013). *Pearson: English instructor exchange*. Retrieved from http://www.englishinstructorexchange.com/2013/03/22/developmental-english-redesign-virginia-community-college/

Acknowledgment

Nara M. Martirosyan is an Assistant Professor, and D. Patrick Saxon is a Professor and Doctoral Program Director at Sam Houston State University in Huntsville, TX. Nicholas Vick is the Director of Tutorial and Academic Success at Pitt Community College in Winterville, NC.

Research in Developmental Education is published four times per academic year.

Editor: D. Patrick Saxon, *Editorial Assistant*: Linda Spoelman Kolk, *Subscription Manager:* Angie Turrisi

Manuscripts are accepted by the Editor, RIDE, National Center for Developmental Education, ASU Box 32098, Appalachian State University, Boone, NC 28608. They may also be sent electronically in MS Word to saxondp@appstate.edu.

Changes of address should be sent to the Subscription Manager.Please visit www.ncde.appstate.edu for contact information. Subscriptions are $20.00 a year. North Carolina residents add $1.55 sales tax; subscribers in foreign countries add $8.00 per year shipping. Send subscriptions to: Managing Editor, RIDE, at the same address or call (828) 262-2876.

Developmental Education Administration

Doctorate of Education

Preparing professionals to design and lead programs that help students suceed.

Online

- **100% *online* program**
- **Flexible course scheduling**
- **Designed for working professionals**
- **Scholarships available**

For more information, please contact:

D. Patrick Saxon
patrick.saxon@shsu.edu
936.294.1147

Or visit the program website:

http://www.shsu.edu/programs/doctorate-of-education-in-developmental-education-administration/

Apply Today!

www.ApplyTexas.org

March 1 Application Deadline

New Cohorts Begin Each Summer

Sam Houston State University
MEMBER THE TEXAS STATE UNIVERSITY SYSTEM

Appalachian State University
National Center for Developmental Education
Reich College of Education
ASU Box 32098
Boone, NC 28608-2098

RETURN SERVICE REQUESTED

Non-Profit Org.
U.S. Postage
PAID
Permit No. 36
Boone, N.C.