

## Supporting Education Programs Through the Electronic Reserve System (ERes)

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### ABSTRACT

Institutions of higher learning are incorporating an increasing number of online courses as a complement to the traditional face-to-face offerings supporting their designated curriculum. The implementation of online interactions ranges from complete cyber-based degree programs to hybrid online environments. The School of Education and Child Development at Drury University utilizes various software systems to support teacher education courses presented totally online, in a blended format, and as a web-facilitated component. One of the current software programs being used is the Electronic Reserve System (ERes), which enables faculty members at over 220 institutions of higher learning to build a bridge between on-line courses and traditional classrooms.

Online learning is considered the most rapidly “growing segment in the educational marketplace” and the utilization of online learning by institutions of higher education is a significant component of the expanding movement in the lifelong learning process (Conhaim, 2003, p. 37). Online courses have “at least 80% of the course content delivered online;” blended courses have “between 30% and 80% of the course content delivered online;” and web-facilitated courses have 1% to 29% of the course content delivered online using “web-based technology to facilitate what is essentially a face-to-face course” (Allen & Seaman, 2003, p. 6). According to *Sizing the Opportunity: The Quality and Extent of Online Education in the United States, 2002 and 2003*, “large institutions have the greatest number of students taking all their courses online, but the smallest schools have the highest percentage of students taking all their courses online” (Allen & Seaman, 2003, p. 19). The 2003 Sloan Survey of Online Learning indicated that a majority of the questioned academic leaders claimed that online learning outcomes are comparable to the academic results acquired during traditional instruction and “eighty-one percent of all institutions of higher education offer at least one fully online or blended course” and believe that online education “is a critical long-term strategy for their institution” (Allen & Seaman, 2003, p. 2). The surveyed individuals also believe that the next three years will provide substantial improvement in the quality of online learning.

Drury University has used software developed by Docutek Information Systems, Inc. ([www.docutek.com](http://www.docutek.com)) since the beginning of the 1998-1999 academic year. The Electronic Reserves software (ERes) has enabled faculty members at Drury University and over 220 other institutions of higher learning to build a bridge between on-line course

and traditional classroom based instruction through the implementation of a hybrid online environment (Williamson & Slye, 2002).

### **Current Uses of the ERes System at Drury University**

This section details the current uses of the ERes system in teacher education courses at Drury University. The ERes system is used in most of the courses required for the teacher education program and also for courses leading to the Master of Science in Education degree.

### **Technology in the Classroom - EDUC 200**

EDUC 200, Technology in the Classroom, is an introductory course in educational technology. In this course students explore a number of technologies that can be used in the classroom. All assignments created using computer technology are sent as email attachments to the instructor and posted in the student's folder on the course ERes page. These assignments include a letter of introduction, software evaluation sheet, Microsoft (MS) Publisher activities, Internet contract sheet, Internet unit plans, Internet activity sheet, Microsoft (MS) Power Point autobiography, Microsoft (MS) Power Point lesson plan, and a final project incorporating Microsoft (MS) Word, Power Point, and the Internet. Students are also required to participate in on-line interaction through responses to questions posted on the course discussion board.

### **American School Systems - EDUC 203**

American School Systems (EDUC 203) is a course that looks at the perspectives of history, philosophy, and sociology regarding the organization and management of the public education system. Students enrolled in EDUC 203 write seven essays based on topics such as philosophy of education, state curricula standards, and learning theories.

The instructor may elect to accept electronic submission of assignments and allow students to use a method of peer review via the ERes discussion board. The students use additional computer-based operations during assigned tasks requiring individually design school governance graphic organizers through the use of Microsoft (MS) Word software program and exploring web sites supporting the topic of discussion. If a class meeting is cancelled due to inclement weather, the students have been instructed to access lectures and assignments through the course ERes page.

### **Educational Psychology - EDUC 302**

EDUC 302, Educational Psychology, is designed to introduce different theories and principles of development, learning, motivation, and assessment of student learning. All assignments created using computer technology are sent as email attachments to the instructor and posted in the student's folder on the course ERes page. These assignments include a written critique of a classroom visit, lesson plan, behavioral objectives and assessment plan, and a research paper. Students are also required to participate in on-line interaction through responses to questions posted on the course discussion board.

### **Methods of Teaching Elementary Science - EDUC 382**

EDUC 382, Methods of Teaching Elementary Science, is a course designed to introduce students to basic principles and new trends of instruction and curriculum development in elementary school science. All assignments created using computer technology are sent as email attachments to the course instructor and posted to the student's folder on the course ERes page. These assignments include three science lesson plans in the areas of Life Science, Physical Science, and Earth Science, and a written reflection of the required field trip. Students are also required to post summaries of each

chapter in the text and respond to two other students' summaries on the course discussion board.

### **Advanced Educational Psychology - EDUC 605**

EDUC 605, Advanced Educational Psychology, is a graduate course in the study of cognitive processes, and the psychological foundations of educational practice and research. All assignments created using computer technology are sent as email attachments to the course instructor and posted to the student's folder on the course ERes page. These assignments include journal article reviews in the areas of theory, student diversity, student motivation, and exceptional students, a book review, a cooperative lesson plan using constructivist theory, a MS Power Point presentation dealing with an educational theorist, and a research paper. Students are also required to post summaries of readings from the course and respond to other students' summaries on the course discussion board.

### **Technology in the Classroom - SCI 620**

SCI 620, Technology in the Classroom, is a graduate course in educational technology. In this course students explore a number of technologies that can be used in the classroom. All assignments created using computer technology are sent as email attachments to the instructor and posted in the student's folder on the course ERes page. These assignments include a letter of introduction, homework organization sheet, MS Publisher activities, unit plan activities, Internet activity brochure, prototype web page using MS Publisher, MS Power Point autobiography, MS Power Point lesson plan, research paper on classroom rules, a prototype gradebook using MS Excel, research report on technology and the learning process, and the final project incorporating MS

Word, MS Power Point, and the Internet. Students are also required to post summaries of each chapter in the course textbook and respond to two other students' summaries on the course discussion board.

### **Improvement of K-12 Science Instruction - SCI 631**

SCI 631, Improvement of K-12 Science Instruction, is a graduate course designed for the in-service teacher to improve background knowledge in science concepts and instructional strategies in elementary, middle, or high school curriculum. All assignments created using computer technology is sent as an email attachment to the course instructor and posted in the student's folder on the course ERes page. These assignments include a research report on a minority scientist, journal article reviews, a science performance event, a lesson plan, and a list of science resources. Students are also required to post summaries of each chapter in the course text and respond to other students' summaries.

### **The Home, School, and Community - SS 624**

SS 624 The Home, School, and Community, is a graduate course focusing on the Comer School Development Program model for parent participation and community involvement for the improvement of elementary and secondary education. All assignments created using computer technology are sent as email attachments to the instructor and posted in the student's folder on the course ERes page. These assignments include a cooperative project designed to meet a need in a local school, curriculum alignment with the Developmental Pathways of the Comer Model, and a research paper on the Comer Model. Graduate students also submit an article for publication and use the discussion board for peer review of their writings. Students are also required to post

summaries for each of the readings in class and respond to other students' summaries on the course discussion board.

### **Creating an ERes Course Page**

The following sections detail the steps necessary to create an ERes page for a course, add documents to the course page, set up a discussion board for the course page, and create folders on the course page.

Creation of an ERes course page requires an account with Docutek Information Systems, Inc. Drury University professors have access to ERes through the library. From the ERes homepage the following steps are completed:

- 1) Click on *Create a Course Page*.
- 2) Type in the username and password then click *login*.
- 3) Enter number of instructors then click *Continue*.
- 4) Select name of instructor, department, enter course number, term, year, and course name then click *Continue*.
- 5) Type in course information, course password, number of students, choose alphabetical or time order document ordering, choose whether or not to enable discussion board and live chat room, then click *Continue*.
- 6) Verify that the information is correct then click *Continue*.

Congratulations! An ERes course page has been created. The following steps can be utilized to add documents to the ERes course page.

### **Adding Documents to an ERes Course Page**

From the ERes homepage complete the following steps:

- 1) Click on *Admin Functions*.

- 2) Type in the username and password then click *login*.
- 3) Select the course to which documents are to be added (place the cursor on the course number and click).
- 4) Click on *Add a document or link*.
- 5) Choose the type of document to which a link is to be established (e.g. *Add a file-based document*).
- 6) Click on *Transfer file(s)*.
- 7) When the ERes v4.1 file upload dialogue box appears click on *Browse*.
- 8) Using the drop-down arrows select the source of the file, click on the file and then click on *Open*.
- 9) When the ERes v4.1 file upload dialogue box reappears click on *Transfer*.
- 10) A dialogue box will appear with the word *Success!*; to add more files repeat steps 7-9, or click on *Done* if no more documents are to be added.
- 11) Once the ERes v4.1 dialogue box disappears click on *Continue*.
- 12) Click inside the box next to the file name and click on *Continue*.
- 13) Enter document title and document password (if the file is not to be viewed by anyone without the password) then click *Continue*.
- 14) If visibility dates are to be added (where the document can only be viewed during a particular period of time) click on *Add visibility dates to this document*, otherwise continue to step 15.
  - a) Select start and end dates for visibility and select disposition after visibility is over, either delete (the document will be deleted from the ERes course page



at the end of visibility) or archive (the document will remain on the ERes course page but will be unavailable to anyone but the instructor until it is restore) then click *Continue*.

b) Select *add a document* and continue with step 15, or *EDUC 100 Course Page Mgmt* and return to step 4, or select *logout* if finished.

15) If additional documents are to be added, click on *Add/modify another document* and continue with step 5, or if finished, click on *logout*.

### **Establishing a Discussion Board on an ERes Course Page**

From the ERes homepage complete the following steps:

- 1) Click on *Admin functions*.
- 2) Type in username and password then click *Continue*.
- 3) Select the course to which documents are to be added (place the cursor on the course number and click).
- 4) Click on *Discussion Board functions*.
- 5) Click on *Create*.
- 6) Type in topic name and click *Continue*.
- 7) To post a message to the new discussion topic click on *Course Page* and continue with step 8, otherwise click on *logout*.
- 8) Enter the course password and click on *Accept*.
- 9) Click on *Discussion board*.
- 10) Click on the topic you just created.
- 11) Click on *Post new message*.

12) Type in name, email (if desired), the subject, and message edit password (this is highly recommended in case a typographical error is discovered later and it is necessary to change the text), then enter the text and click on *Continue*.

13) To return to the ERes course page click on *Course page*, otherwise click on *logout*.

### **Creating Folders on an ERes Course Page**

From the ERes homepage complete the following steps:

- 1) Click on *Admin Functions*.
- 2) Type in username and password then click *Continue*.
- 3) Select the course to which documents are to be added (place the cursor on the course number and click).
- 4) Click on *Add a folder*.
- 5) Type in folder name and password (if the folder is not to be opened by anyone without the password), then click *Continue*.
- 6) Click on *Course page management* (if other folders are to be added and follow steps 4 and 5), or click on *Course page* (if access to the actual course page is desired), or click on *Logout* (if job is finished).

### **Conclusion**

The ERes system, developed by Docutek Information Systems, Inc., is an integral part of the teacher education program at Drury University. The faculty members typically require the use of ERes in their undergraduate and graduate courses. Students quickly become adjusted to the necessity of sending their assignments to the instructors as email attachments. This electronic transaction eliminates the need for students to submit hard

copies of their assignments and also facilitates the resolution of issues that may be created due to the challenges of distant learning. By using the ERes system the student and faculty member can promptly check the appropriate folder on the ERes course page to verify student completion of the designated assignments.

One of the benefits of using the ERes system is that students are provided with an electronic portfolio of their work in a particular class. This information is available to the student from any location at any time. Many institutions and accrediting agencies require individuals to develop an electronic portfolio. The ERes system allows students at Drury University to become accustomed to the virtual collection of their work and the electronic submission of assignments. This ability minimizes the learning curve when institutions such as Drury University adopt new electronic portfolio processes such as FolioTek.

Another benefit of using the ERes system is that students have the ability to post reading summaries and interact with their colleagues in an asynchronous on-line environment. Students can submit reading summaries or post responses from any location with an Internet connection at any time, twenty-four hours a day, 365 days a year, thereby permitting students to complete their assignments at their own pace without the necessity of physically being present in a classroom.

The use of the course discussion board allows for participation by all students. In a typical classroom environment, some students do not actively participate due to issues of self-esteem or shyness. The discussion board eliminates the obstacles that some students feel and encourages them to participate much more actively than they would in a classroom setting. Students also benefit from having the opportunity to reflect upon what

they want to post on the discussion board before actually postings. This results in the creation of more meaningful thoughts expanded through higher order thinking.

A final benefit of using the ERes system is that communication between faculty and students is enhanced. By posting course page announcements, faculty members can alert students to changes in the schedule. For example, if the professor is ill, he/she can post a course announcement informing the students that class will be cancelled for that day and provide them with instructions for completing the assignment out-of-class. This also holds true for situations where classes are cancelled due to inclement weather or instructor absence. In this fashion, valuable instructional time is simply transferred to an electronic format without losing quality instructional time. Faculty members may also choose to enable the course chat room and set aside a special time when all students need to be online to participate in real-time discussion.

Without the ERes system, students at Drury University would not have the opportunity to collaborate with their colleagues in an on-line fashion. Faculty members would be limited with regards to their instruction, grading, and communication with the students. The benefits of the ERes system have been demonstrated and reinforced numerous times during the four years that the system has been used at Drury University.

## References

- Allen, I. E. and Seaman, J. 2003. *Sizing the Opportunity: The Quality and Extent of Online Education in the United States, 2002 and 2003*. Needham/Wellesley, Massachusetts: The Sloan Consortium. Retrieved December 22, 2003, from [http://www.sloan-c.org/resources/sizing\\_opportunity.pdf](http://www.sloan-c.org/resources/sizing_opportunity.pdf)
- Conhaim, W. W. 2003. Education Ain't What It Used To Be: Perspectives. *Information Today*. 20(11).
- Williamson, E. and Slye, G. (2002). Supporting Teacher Training Programs with an Electronic Reserve System (ERes). Paper presented at the Society for Information Technology and Teacher Education (13<sup>th</sup> International Conference).

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