New Staff in OED

Apollos Goyol, Ph.D., joined OED in May as an Assistant Professor and Evaluator. He has been assisting faculty in evaluating curricula, courses, educational materials, and educational programs. Dr. Goyol’s expertise also includes grant writing, research design, data analysis and management, design and use of evaluation instruments, and teaching.

After teaching for nine years in the Department of Mechanical and Electrical Technology at Plateau State Polytechnic in his native Nigeria, Dr. Goyol served as head of that department for four years. From 1995 to 2003, he was Director for Planning and Implementation at the Alternative Trade Network of Nigeria (ATNN), an organization committed to the economic empowerment of disadvantaged individuals through the creation of employment opportunities, primarily in the artisan industry. While at ATNN, he directed the planning, implementation, and evaluation of all projects and programs.

In 1998, Dr. Goyol received the Leadership Award from the Western Michigan University Division of Minority Affairs and an award for outstanding community service from the Metropolitan Kalamazoo Chapter of Jack & Jill of America, Inc. He completed his Ph.D. in Evaluation, Measurement, and Research from Western Michigan University in 2002. While in Michigan, he completed an internship at the Kellogg Foundation.

Lea Mabry, M.Ed., joined OED in January as a Web-based Learning Specialist. A former Little Rock resident, Lea has lived in Fayetteville, Arkansas, for the previous eight years and taught as a sixth grade technology teacher at McNair Middle School.

While in Fayetteville, Lea pursued a Master’s of Education Degree in Educational Technology at the University of Arkansas and graduated in the spring of 2003. She was the first recipient of the Outstanding Master’s Student Award in the Educational Technology Program in the College of Education and Health Professions. Her graduate studies focused on web-based learning and instructional design. Lea also holds a B.S. in Health Science from the University of Arkansas in Little Rock (UALR).

Lea’s career in education has spanned both the health care and technology fields. She coordinated the Continuing Medical Education Program at Arkansas Children’s Hospital (ACH) for several years. She left ACH to take a similar position at UALR’s Graduate Institute of Technology (GIT) where she coordinated short courses on topics ranging from environmental health to computer applications. In addition to her classroom teaching duties in Fayetteville, Lea coordinated and developed courses for the
New Staff (continued)

Technology Professional Development Program for the school district. Lea’s position in OED allows her to merge her educational degrees, interests and skills in health education and technology. Lea is also serving the second year of a three year term on the board of directors for the Arkansas Society for Technology in Education (ARKSTE), the state affiliate of the International Society for Technology in Education (ISTE). ARKSTE provides support for educators to integrate technology into education.

Anna Moses, M.Ed., returned to OED in February as an Instructor and Instructional Development Specialist. During her absence from OED, Anna received her M.Ed. in Instructional Technology from Arkansas Tech University, completed an internship at Arkansas Nuclear One’s training facility, and assisted in the direction of a state-of-the-art computer music lab, also at Tech. Since returning to OED, Anna has developed a syllabi template for the new College of Public Health, which is currently under review. She is developing a number of OED Fact Sheets, which are brief summaries of useful information for UAMS faculty presented in brochures and Web documents. (See related article.) She has worked with Diane Heestand, Director of OED, gathering educational technology usage data from the Southern Group on Educational Affairs, updating the Educator’s Portfolio for the College of Medicine, and producing a training video for the Department of Family Medicine. Beginning in July, Anna will take over as program administrator for the Teaching Scholars Program which is beginning its eighth year this fall.

| OED Directory |
|----------------|------------------|-------------------|------------------|
| Diane Heestand, Ed.D. | Director & Educational Development | Shorey G 308A | 686-7348 |
| Judy Garrett, Ph.D. | Learning & CB Assessment | JB 332 | 686-7349 |
| Apollos Goyol, Ph.D. | Educational Evaluation | Shorey G 309 | 686-7055 |
| Lea Mabry, M.Ed. | Web-based Learning Specialist | Shorey G 308B | 296-1087 |
| Lateefah Milton, A.A. | Business Officer | Shorey G 305 | 686-5720 |
| Cynthia Mercado, M.A. | Research Assistant | JBSU 2U/06 | 603-1634 |
| Anna Moses, M.Ed. | Instructional Development | Shorey G 308D | 526-4848 |
| Christi Pinkerton, B.B.A. | Research Assistant | JBSU 2U/06 | 526-6584 |
| Patricia O’Sullivan, Ed.D. | Educational Research | JBSU 2U/06 | 603-1217 |
| Mike Petty, Ph.D. | Instructional Development | JB 330 | 686-7054 |
| Kimberly Shields, B.S. | Research Project Analyst | JB 330 | 686-5631 |
| Robin Smith, Ph.D. | Web-based Learning Coordinator | Shorey G 308B | 686-7052 |
The New Year

While “new year’s” begin at just about anytime on campus depending upon the program, July 1st seems to be the natural beginning of a new year for the Office of Educational Development.

As we begin this new year, I would like to briefly describe some of the recent changes within OED.

First, we have reconfigured our office space and moved several staff to accommodate two new staff positions. Judy Garrett, Ph.D. who oversees our Learning Assistance Program has moved from the basement of Shorey to Jeff Banks Dormitory (JB 332). Robin Smith, Ph.D. has moved to a back office in the basement of Shorey which she shares with new staff member, Lea Mabry. Apollos Goyol, Ph.D. joined our staff on May 1st as an educational evaluator and occupies a newly constructed office within the OED Shorey office. You will find an updated OED Directory listing all staff, office location, and phone numbers in this newsletter.

Beginning July 1st OED will manage the Teaching Scholars program. The program continues its eighth year under the direction of Lee Lee Doyle, Ph.D. and Diane Heestand, Ed.D. The purposes of the program are to improve the teaching skills of faculty in the five health professions colleges and to nurture the development of a group of faculty who actively engage in the scholarship of teaching.

The new class of Scholars will begin their monthly workshops the end of August. Members of the previous class are now beginning their scholarly projects in areas ranging from curriculum development to teaching critical thinking, obsetrics for family practice residents, hearing conservation to research into student persistence in respiratory care programs and the curricula of introductory anesthesiology rotations.

We begin the new year with eight faculty and five staff who are working on sixteen externally funded projects. Over 40% of our staff time is devoted to externally funded projects; seven years ago none of our staff contributed their time to grants and contracts. We continue to support the core educational missions of the colleges by providing the Learning Assistance Program and faculty development in the use of WebCT for distributed learning, the design of exams, the development of curricula, and the design of educational research. In my opinion, we are a lean office of instructional designers and educational evaluators. We are here to help you address and solve educational problems.

If you have questions about what OED might do for you, please contact Diane Heestand at 686-7348 or HeestandDianeE@uams.edu

Diane E. Heestand, Ed.D.

OED Mission Statement

The mission of the Office of Educational Development is to improve teaching and learning at the University of Arkansas for Medical Sciences. We seek to develop and nurture a community of educators across the health professions colleges and centers of excellence who value the art and science of teaching and actively contribute to the scholarship of teaching.
Currently, UAMS is developing its first Project L.I.V.E. Case. L.I.V.E. stands for Learning through Interactive Video Education. L.I.V.E. integrates video and still images into traditional problem-based learning (PBL). Now learners see the problem as it unfolds to the health care provider. No longer does the case present in writing that the patient is anxious, but rather the student observes that anxiety in the video and has access to the diagnostic and laboratory results to make an informed decision about the case.

The development and dissemination of Project L.I.V.E. resulted from a Fund for Improvement of Post-Secondary Education (FIPSE) Award from the Department of Education, awarded to the University of Colorado College of Medicine. These funds are awarded to innovative projects to improve education. L.I.V.E. is one of several of these highly competitive awards given to medical schools.

At UAMS, the members of the Nutrition Academic Award are working with the Project L.I.V.E. developers from the University of Colorado College of Medicine to develop a case concerning adolescent obesity. The case was developed from the records of an actual patient at Arkansas Children’s Hospital. The script was developed collaboratively between UAMS and both Project L.I.V.E. staff and the Nutrition Academic Award faculty members at the University of Colorado College of Medicine. Currently, L.I.V.E. staff are shooting the video to accompany the script. We look forward to seeing our own case in use this new academic year.

L.I.V.E. was developed not only to integrate video into PBL, but also to allow students to participate anywhere and anytime in a PBL experience. L.I.V.E. can be run both face-to-face and asynchronously. Students away from the main campus have a CD with the L.I.V.E. case. They have an interactive, Web-based discussion as they would in a traditional PBL case and progress through the case on their CD. Students participate without facing the long download times associated with online video.

The other key component of L.I.V.E. is curricular. L.I.V.E. initially was developed for pediatrics with the goal of ensuring that medical students cover clinical topics often not seen in clerkship because of their rarity, seasonal variation, or sensitivity. Shaken baby is an example of the latter. Because of legal issues, students often are not involved in these cases yet are expected to have child abuse needs of accommodating PBL into busy schedules, but L.I.V.E. also has the opportunity to enhance other aspects of learning. The discussion with the video appears to have more elements indicating higher-level critical thinking than is generated from groups with paper and pencil tests. Students who have taken the shaken baby case are more likely to undertake the correct legal actions when confronted with a simulated patient presenting with child abuse. The students find the approach engaging and useful, particularly if they can not be face-to-face with their classmates.

Patricia S. O’Sullivan, Ed.D.

Project L.I.V.E. Learning Outcomes

- Promote problem-solving & self-directed learning
- Facilitate visual & auditory recognition skills
- Increase skills & motivation to use new technologies
- Use a time efficient distance educational program that has a positive impact on attitudes or perceptions about learning
- Promote transfer of knowledge in a clinically relevant manner
What’s New in OED’s Academic Support Services

Two things: One is that the office responsible for coordinating these services has moved to JBSU. Judy Garrett’s new office is in Room H332 of JBSU. Dr. Garrett’s phone number is still 686-7349. The other new item is that several web-based ‘learning skills’ materials are now available to UAMS students in the colleges of Medicine, Pharmacy, and Nursing.

Through a collaborative effort between OED and a former microscopic anatomy tutor, Dr. Kevin Whaley, web-based tutorials (WebCT) were available to all students in the course during fall semester, 2002. Due to the extensive use of these materials, no ‘face-to-face’ tutoring was done in the College of Medicine (COM) Microscopic Anatomy Course last fall. These materials provided approximately 100 hours of supplemental instruction and practice quizzes and will be revised this summer to reflect changes in the course.

Another set of web-based ‘learning skills’ materials, the result of a collaborative effort between former tutors in the College of Pharmacy (COP) Physiology Course and OED, were available to entering students in the COP this past year. Based on actual course content, these materials provided approximately 60 hours of supplemental instruction in ‘learning how to learn’ in the COP.

This summer, a set of web-based ‘learning skills’ materials is available to all entering students in the College of Nursing (CON). These materials provide an overview of the learning process and provide practice with learning skills such as developing overviews, identifying learning tasks (i.e., test questions) commonly used in health professions education, condensing and organizing, and monitoring learning.

Before the development and use of web-based tutorials, OED’s academic support services, such as tutoring and learning skills consultations, were available only to those students who were in imminent danger of failing. Now any entering student in the COM, CON, and COP who would like to ‘shore up’ his or her study and learning skills can do so at any time.

For additional information about these materials, contact Judy Garrett at either 686-7349 or GarrettJudithE@uams.edu.

Judith E. Garrett, Ph.D.

Peer Evaluation

OED is working with Graduate Medical Education (GME) to develop assessment/evaluation tools designed to measure the level of competency of our UAMS residents across the 47 accredited residency programs on campus. With funding from the Medical Research Endowment Fund, UACOM residency programs are piloting a set of 7 surveys for use in an institutional 360° evaluation of resident performance.
Peer Evaluation (continued)

The evaluators include:

- Self
- Peer
- Patient
- Attending/Faculty
- Nurse
- Other Healthcare Professionals (Technicians, Social workers, Pharmacists, etc.)
- Administrative Staff

Approximately 20 residency programs at UAMS are currently using the 360° evaluation. Some of you within the UAMS community may have already been asked to evaluate residents’ interpersonal and communication skills, as well as their professionalism, using these surveys.

This concept is not new – business and K-12 education have utilized multi-rater feedback (MRF) evaluations for over a decade; healthcare is beginning to adopt the concept. What is particularly new to medical education is the Peer evaluation. Peer evaluations are being introduced in a variety of settings within the medical community, including the American Board of Internal Medicine’s (ABIM) use of Peer evaluations as a component of their recertification process.

Several residency programs at UAMS have incorporated the Peer evaluation in their 360° evaluation plan. Historically, researchers have found that residents have a dim view of Peer evaluation. They do not like rating each other and tend to rate peers higher than do other groups of healthcare workers involved in the evaluation process. This is likely because their educational and clinical support systems are highly dependent on their peers (i.e. a resident might need someone to cover call). Peer ratings can also provide unreliable data when there are rifts amongst the residents that are outside of the professional domain (cultural, religious). These issues can cause problems in using this type of evaluation and must be considered in the planning and implementation process.

Yet, Peer evaluations provide valuable information concerning clinical and interpersonal skills. Few faculty members know these skills as thoroughly as fellow residents. These skills can be evaluated with sufficient reliability with a reasonable number of participants. While we need 20-30 patient evaluations for reliability of data collected, we know that 6-10 raters per resident provide sufficient reliability for the data analysis from other groups, as they interact with the resident on a more frequent basis (plus we perform “rater training” with these groups).

When smaller programs (fewer than 6 “peers”) consider using these ratings, the program directors involved must balance this evaluation tool against the:

- Lack of reliability
- Likelihood of biased data
- Potential deterioration of student/resident support systems

Another problem for small programs is confidentiality of results. As data are pooled from raters, individual responses to questions and written comments by raters in larger programs become hidden within the greater number of responses. As smaller programs use Peer ratings there is the possibility of loss of anonymity. It is important that program directors strive to maintain confidentiality of rater responses in all situations, but especially in smaller programs.

As the use of Peer ratings becomes more ingrained in the health education culture, the aversion to the process will likely lessen. Ramsey et al., in an editorial from the Journal of General Internal Medicine, state that Peer ratings are an assessment tool that has a place in the process of evaluation across the continuum of health education and practice and that it is time to research the value of this assessment technique. But we must be cognizant of the guidelines for using Peer evaluation.
Peer Evaluation (continued)


Michael E. Petty, Ph.D.
UAMS Introduces WebCT 4.0
Retires WebCT 3.8 and 3.6

As of June 2003, WebCT 4.0 will be available at http://distance-ed.uams.edu.

Some new features associated with WebCT 4.0 include:

- Browser Checker that can automatically detect if the user's browser is compatible with WebCT and will direct them to a page where the user can download a compatible browser.
- Support of additional browsers: AOL 7.0 and 8.0; Internet Explorer 5.0, 5.5 and 6.0; Netscape Navigator 6.2 and 7.0.
- New Course Design Wizards help you create and modify the following elements of WebCT courses:
  - Homepage
  - Syllabus
  - Content Organizer Pages
  - Content Modules
  - Discussions
  - Mail
  - Calendar
  - Chat
- Course tasks and activities now require fewer clicks.
- When entering a new screen, the cursor is now placed in the first input field, allowing you to begin typing immediately without having to click in a field first.
- The view of the course (student or designer) is now maintained until the other view is specifically chosen.
- My Grades and My Progress now offer a sample student view to demo how this information is presented to students.
- In Mail, when a user redirects a message to an external email address, message attachments are now also sent.
- A Questions Browser has been added to Quizzes/Surveys. It is similar to the WebCT File Browser and makes it easier for designers to select questions to add to a quiz.
- Microsoft FrontPage and Microsoft PowerPoint files may be directly imported into WebCT 4.0 with all their structure and linking in tact.
- For multiple choice questions, letter indices are now properly displayed.
- There is now a built-in html editor that uses word-processor type controls (WYSIWYG) and includes spell check. Available for use with:
  - Mail Messages (also available to students)
  - Discussion Postings (also available to students)
  - Files in file manager
  - Pages and text blocks in a Content Module
  - Text blocks on Student Homepages (also available to students)
  - Text Blocks on Organizer pages
- Supports additional MacIntosh Operating Systems.

View an example of updated styling in WebCT 4.0.

Easy Course Design with Wizards

All courses remaining on the WebCT 3.6 server (http://webct.uams.edu) will need to be migrated to the WebCT 4.0 server (http://distance-ed.uams.edu) by December 2003.

We will now have a “true” back up server available in case of a failure.

For assistance or more information, please contact Robin Smith at 686-7052 or smithrobinm@uams.edu

Robin Smith, Ph.D.
10 Steps to Improved Data Collection

This is an extended article that provides guidelines to help you while you are developing a survey for data collection. You can enhance the quality and quantity of your survey data by following these ten steps during the planning stage. Under some of the steps, there are links to tables or examples to help you complete the steps.

**Step One: Identify Your Purpose and Benefits of the Activity**

Begin by using Table 1 to identify the purpose of your survey and the benefits you hope to bring to you and to the participants. This information will help to set up your survey in an efficient and meaningful way. Take a look at the table, determine the purpose or purposes of your data collection, and check off the benefits of each purpose. Add other purposes and benefits as needed.

**Step Two: Set Your Information Goals**

Step Two involves identifying the overall kind of information that you need to collect. Some examples follow:

Information participants can report about themselves:

- Expectations before a training session compared to satisfaction after a training session
- Interest in a particular subject

Information an observer could report about a participant:

- Behavior changes
- Performance
- Knowledge application

**Step Three: Evaluate the Population Involved and Determine Type of Instrument**

Evaluation of the population will help to determine the type of instrument that will be most effective. Structured interviews are often used when the population targeted is an ethnic minority, where cultural considerations exist, such as low English reading skills, or limited experience completing forms. Mail questionnaires typically involve a streamlined format that is extremely efficient in layout and economical in the use of words. Reading skills and experience with forms are a prerequisite. Select words and format that are easily understood by the participants. Unfamiliar content and medical terms should be defined. The layout of the survey should be user friendly and self-explanatory. Take into consideration whether the survey will be completed by the participants or a trained observer. Some of the participant characteristics to consider are:

- Type of Employment
- Racial/Cultural heritage
- Education level

Remember the collection of accurate and complete data depends on words and format that allow the participants to easily and quickly complete the survey.

**Step Four: Select Variables and Response Formats**

Make a comprehensive list of all the variables associated with your study topic. Group the variables into topics that are related. Consider how you intend to analyze the data as you review various response formats such as rating scales and checklists. It is helpful to maintain a file of formats commonly used for particular variables, such as agree/disagree items, ethnic origin, or gender.

Select formats that can record responses across related sub-topics within the same table or scale as demonstrated in the...
checklist example, Example 1. A bubble-type of response format may be needed if data is to be collected from a large number of respondents. Example 1 is a checklist effectively formatted for determining participant needs.

Rating scales are another type of response format that are commonly used to record agreement, satisfaction, importance, and usefulness. See Example 2.

**Step Five: Design Items to Address Your Dependent Variables**

The data collection instrument should include variables that may be affected by your experiment or intervention. These are your dependent variables. These variables represent important aspects of the topic under study such as location, size, preferred times to attend training, presence/absence of a targeted attitude, behavior, service, feature, or program component.

The design of a data collection instrument should group or categorize topics. It is most effective to present multiple aspects of a topic and produce several responses before moving on to another topic, as illustrated in Examples 3 and 4. Also illustrated in these examples is efficient use of space.

The open-ended question is another commonly used response format. Research has shown that structuring this type of item can increase the quality and quantity of data collected. Examples of open-ended questions are:

- Strengths of the course
- Suggestions for improvement
- General impressions of your experience
- Computer related issues

**Step Six: Design Items to Address Your Independent Variables**

Gender, race, age, and job type are associated with many independent variables, sometimes significantly. Examples 5 and 6 illustrate layouts that use space efficiently to collect this information.

**Step Seven: Establish the Order for Items**

First, present items that have a high comfort level and require little effort for the respondent, such as gender, race, job category, and age. The position of other items should follow a logical sequence related to the content but also take into consideration the available space so that scales or checklists are not split across two pages.

**Step Eight: Create a Title**

Add a title that introduces the purpose and benefits of the data collection activity, such as, “Help Us Improve the Usefulness of Future Education Programs,” “Employer Attitudes about Their Employees with Disabilities,” or “Questionnaire for Participants in Health Services Summer Workshops.”

**Step Nine: Create a Statement of Purpose and Benefits**

Make a direct link between the title and a concise one-sentence statement based on decisions you made in Step One. See Examples 7 and 8.

**Step Ten: Create a General Instruction Statement**

A general instruction statement should follow the statement of purpose and benefits. This is the place to cover the issue of confidentiality, average completion time, and return instructions. See Examples 9 and 10.

Following these 10 steps should increase the effectiveness of your data collection efforts.

To print all tables and examples, click here.

Virginia A. Johnson, Ed.D., CRC

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