

# THE TEACHER

## The Excellence in Teaching at NGCSU Newsletter

1999-2000, Issue #3

Recently the RDPTL was able to send a team of people to the American Association of Higher Education Conference on Roles and Rewards in New Orleans. The team coordinated their schedules in order to attend the greatest number of sessions. Each team member was then asked to report on the best ideas they encountered during the conference. The following articles represent these ideas.

### **Scholarship and Bread Pudding**

**by Dr. Mary Lou Bryant Frank, Department Head, Psychology and Sociology**

All but one of the sessions I attended were reported on by at least one other faculty member. If interested, I would be glad to share a packet on a model of maintaining an educational program at a distance site. However, from the presentation, it seemed that the project was not very successful. Rather than providing yet another opinion on the same topics, I would like to offer some perspective on having the opportunity to attend the conference.

One night, several of us had dinner together and over three hours of conversation and food, we shared coffee and dessert. This one item was memorable, probably to some of us more than others. However, in many ways, attending the AAHE Conference was like "White Chocolate Bread Pudding."

It was something we could only get at a place like New Orleans. Sometimes it is important to connect with national groups to understand the new, tried, and tested things going on right now. Without understanding the diversity of approaches and viewpoints to rewarding the professoriate, it is difficult to appreciate the landscape of higher education.

It was rich. I grew to begin to better understand and respect the complexity of issues facing the different disciplines and faculty as we come together to continue to work toward excellence on this campus. Rewarding faculty's various roles is most valuable regardless of its complexity.

It was wonderful to share. I really enjoyed getting to connect with faculty/administrators across the campus. We could talk about our disciplines, new ideas from the conference, and ways in which we can work together. The value of collegiality, which was continually reinforced at the conference, was evident in the work with each other at the conference. I am hopeful that it will continue.

I am most grateful for being allowed to attend and participate. Please, enjoy the bread pudding recipe provided on the last page of the newsletter!

## Synergism and Faculty Development

by Dr. Susan Gannaway, Department Head, Teacher Education

NGCSU was able to send a fairly large group of faculty to this conference, some in their first and second years here, and others with considerable experience. The group ranged from Assistant Professors to the Associate Vice President for Academic Affairs. This is the second time this year that I have been able to attend a conference with a multidisciplinary group. Each time the group made a systematic effort to share the wealth of the conference by attending non-duplicative sessions, and to eat together and spend informal time together. During these times there was more systematic dialog than I have normally seen across campus. There were also multiple conversations about ideas, ranging from, “Why haven’t we thought about that?” to “We know at least as much about this as the presenters!” The fact that lots of us came back with a shared experience and a shared vocabulary should make it easier to communicate with each other and to examine the relevance of the conference presentations to our own setting. This leads to the faculty development observation that when appropriate the synergy of a team at one conference may hold more value for the individuals and the institution than attendance at separate conferences.

## A Faculty Development Model for Both Scholarship of Teaching and Scholarship of Community-Based Learning

by Dr. D. Brian Mann, Assistant Professor of French

An interactive session in which the presenters performed the following tasks: definition of Scholarship of Teaching, Scholarship of Outreach, and Traditional scholarship. Each concept was then explored in order to identify the differences and similarities between them and apply them to the more general concept of teaching excellence. Finally, in order to address individual campus positions on promotion and tenure issues, the presenters offered the results of their own efforts, deliberations, and projects in these areas.

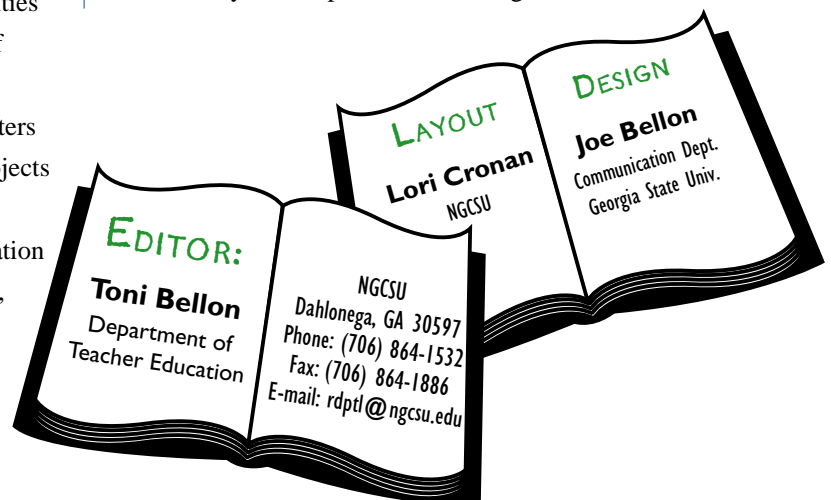
The evaluation of faculty, which arises from the consideration of performance in the three major areas of Research, Service, and Teaching, does not take into account the complexity of what the faculty workload entails, nor does it sufficiently provide for or recognize cross-pollination of certain projects. Criticism and discussion came from the following areas:

- Promotion and Tenure concerns: 1) Evaluations should

be closely and explicitly tied to the institution’s mission more important in documenting faculty performance. Not only should they do a better job of reflecting all of what faculty do, but input, especially input on teaching, should come from peers as well as students and administration. 3) A development/evaluation plan should be individually tailored to each faculty member’s role and goals within the department. Holding everyone to the same standard is unrealistic, and necessitates vague definitions of what teaching, service, and scholarship amount to.

- Institutional responsibility: The institution has an interest in and a responsibility to provide resources and instruction in providing guidance for faculty development. The presenters’ “technocats” program for collecting feedback and data on assessment techniques and a campus wide technology fair were explained, as was their “scholarship of teaching resource team.”
- Dossier preparation: The preparation promotion and tenure dossiers should be an ongoing concern and responsibility of the department for each of its faculty. 1) Events and workshops should be offered on a regular basis to pre-tenure faculty, and there should be an “in-residence” P/T group available for help and advice. 2) The dossier should document not just what is accomplished by the individual faculty member, but how it serves the needs of the students, the institution, and the community.
- The role of the community: 1) Community “capstones” can be organized in order to give students, faculty, and staff opportunities to work together towards a common goal. 2) These experiences can, in turn, give the

See Faculty Development Model, Page 5



## The Academic Scorecard: Measures of Organizational Effectiveness

by Dr. Lennet Daigle, Dean of Arts and Letters

I quickly recognized the soporific potential of this session, with my epiphany coming only moments after the first speaker noted that his university, The University of Southern California, relied upon a Harvard Business Review “balanced scorecard” system for obtaining funds in their “revenue central” management system. The discussion of the “balanced scorecard” system devolved into comments regarding matrices, nexuses and operational definitions, and after a while the whole presentation became hopelessly convoluted.

And yet – this was my second epiphany\* — it also became apparent that despite the theoretical mumbo-jumbo of the presenters, U.S.C. operates according to a simple and sensible organizational model. As the presentation progressed that model emerged, almost by happenstance.

The organizational approach is straightforward enough. It involves looking at any proposal from several perspectives. I am not certain of U.S.C.’s actual practice because during the session I began outlining my own variation, one that might be useful as a decision-making device at NGCSU.

The model involves looking at all decisions – let’s say, the decision to add a new program or a new sports team – from three perspectives. In my scribbling during the session, I modified the model to include four perspectives: the stakeholder’s perspective, an academic management perspective, a business management perspective, and a support perspective.

The model works in this way. A program is presented from the perspective of the stakeholder – a department in this instance— whose task it is to argue the benefits of the proposed program with regard to academic quality, student need, community needs, and the like.

A separate perspective is introduced, that of an academic management group – call these deans and an Academic Vice President – whose purpose is to balance the stakeholder’s perceived benefits against the relative benefits or drawbacks to the institution as a whole. Here, a program is considered in terms of the university’s mission, in terms of the effect that the new program may have on existing programs, etc.

The next perspective provided is that of a business manager. What will be the cost of the proposed program? Is this an absorbable cost? Is the cost perceived to be short term, or will it

extend through the life of the program?

terms of library and technology resources? What support will be needed in terms of facilities?

What intrigues me about a multiple perspective approach is that it formalizes something that is implicit – or should be implicit – in all academic decision making. In fact, it may well be in our best interest as faculty to request a formalized multiple perspective analysis before reviewing and approving any new program proposal.

With the information gained from such a review, faculty could ascertain whether a new program complemented or clashed with other valued programs. They would know whether the new program supported or undermined the mission of the university. Faculty would also be aware of whether the proposed program relied on current resources or whether it demanded new resources that extended far beyond the limits of a small institution. Faculty would continue to make academic decisions, but we would make them with the benefit of programmatic, management, and financial analyses.

\*I consider two epiphanies in a morning very good for a guy my age.

## Documenting the Link Between Classroom Practice and Student Understanding

by Dr. Catherine Finnegan, Director of Institutional Research & Planning

Most discussions on the scholarship of teaching begin with philosophy and opinion, but ultimately move to the more tangible question of “how can I prove that what I do in the classroom is scholarly?” Documenting and assessing the link between classroom practice and student understanding is an important part of developing this proof. Teaching and learning become scholarly when treated as a form of inquiry by evaluating the impact of planned work and by informing future practice based on the results.

In this workshop, four professors discussed how they were able to record and evaluate their effectiveness in communicating course goals and objectives by measuring student understanding. Initially, each identified a particular issue in teaching and learning in their class: in literature, reading, interpreting and understanding Shakespeare; in psychology, incorporating new models of classroom interaction such as service learning and online components; and, in business, building meaningful team experiences.

*See Documenting the Link, Page 7*

## Assessment of Student Learning: The Foundation of the Scholarship of Teaching

by Dr. Tom Fox, Dean of Natural and Health Sciences

Workshop presented by: Barbara Walvoord, University of Notre Dame; Virginia Anderson, Towson University; Gisela Escoe, University of Cincinnati

The goal of this workshop was to help participants examine proven strategies to collect data on “deep learning.” Deep learning includes problem solving, critical thinking and self-reflection. Participants learn how to use this data for assessment, tenure, promotion, publication and grants.

**Materials** provided (available for reference or copy):

Effective Grading: A Tool for Learning and Assessment, Barbara Walvoord and Virginia Anderson, 1998, Jossey-Bass Publishers.

Packet of Articles – 1) “Opportunities for Improvement: Advice from Consultant-Evaluators on Programs to Assess Student Learning,” Cecilia Lopez, North Central Accreditation Commission on Institutions of Higher Education; 2) “The Scholarship of Teaching,” Pat Hutchings and Lee Shulman, *Change*, Sep/Oct 1999; 3) “Enhancing Pedagogical Productivity,” Barbara Walvoord and Kristen Pool, *New Directions for Higher Education*, no. 103, Fall, 1998, Jossey-Bass Publishers.

Power Point notes and examples, Gisela Escoe.

### Summary

This workshop presented participants with an integrated look at how three institutions used assessments of student learning a) to support faculty evaluations (salary increases, tenure and promotion decisions), b) as the basis for faculty publications, and c) as the means of obtaining grant support.

### Walvoord

Barbara Walvoord began by addressing the question “How can I increase student learning and my productivity without increasing resources?”

Dr. Walvoord focused on grading practices and ways to use grading as a tool for assessment. Grading is a complex process that serves multiple roles of evaluation of the quality of student work, communication between the professor and the student, motivation to focus student effort, to focus effort for students and professors, and to bring closure. Grading can be an important tool for departmental and institutional assessment as well. Effective grading practices can help institutions address accreditation issues such as providing a direct measure of student learning, demonstrating the link between assessment and the mission, goals and objectives of the college or department. When well done, grading

can serve departmental and general education assessment. A number of references and examples are provided.

Walvoord spent less time but maintained high levels of student learning, satisfaction, and retention. She provided an accounting of the time required to teach a “traditional lecture/discussion class of 40 students (15.6 hours per week) with that of her “new mode” class of 56 students (12.5 hours per week).

Dr. Walvoord presented 12 principles for managing the grading process: 1) Appreciate the Complexity of Grading; Use It as a Tool for Learning, 2) Substitute Judgement for Objectivity, 3) Distribute Time Effectively, 4) Be Open to Change, 5) Listen and Observe, 6) Communicate and Collaborate with Students, 7) Integrate Grading with Other Key Processes, 8) Seize the Teachable Moment, 9) Make Student Learning the Primary Goal, 10) Be a Teacher First, a Gatekeeper Last, 11) Encourage Learning-Centered Motivation, and 12) Emphasize Student Involvement.

In order to save time and integrate grading, learning and motivation is to plan grading from the beginning of your course. Don’t consider only how you will develop goals but how your students will. Recognize that students may have different goals for your course than you do. One way to do this is to consider the following planning sequence:

- 1 Consider what you want your students to learn. Identify the learning you value most for your course.
- 2 Select tests and assignments that both teach and test the learning you value most.
- 3 Construct a course outline that shows the nature and sequence of major tests and assignments.
- 4 Check that the tests and assignments fit your learning goals and are feasible in terms of workload.
- 5 Collaborate with your students to set and achieve goals.
- 6 Give students explicit directions for their assignments.

Extensive examples and hints are provided in Walvoord’s book.

### Anderson

As professors we want to know what students are learning. What do they know and what can they do at any point in a course or program of study? We want our students to be able to distinguish between evidence-based ideas or theories and ideas supported by anecdotal evidence.

Virginia Anderson discussed the articulation of criteria for assessing student learning and followed that with case studies that focused on student learning after she made some teaching improvements in her biology class. She began to reflect on her teaching by asking, “What should my students be able to do?”

What should they know?" She developed or used various assessments to determine, before and after students took her senior biology course, what concepts students understood (using a test developed by Austin Peay University), what skills they developed (an "in-house" laboratory skills test), and what attitudes they held and what behaviors they displayed (a list of 35 attitudes and behaviors asking students "in which have you participated?").

Dr. Anderson teaches a senior level biology course in which students design an original scientific experiment, carry it out, and write it up in scientific report format. She uses Primary Trait Analysis to score student performance to score student performance. She developed a scoring rubric to assist her, and outside evaluators, in consistently assigning appropriated grades. An example of the scoring rubric and the evaluation form was provided to participants.

Scoring consistency was demonstrated to participants by having them perform an analysis of project titles. Using the scoring rubric, consistency among participants was remarkably high, demonstrating the effectiveness of this method.

Dr. Anderson also described how statistical analyses performed on two classes formed the basis for effective assessment. Having data that could be analyzed this way helped Dr. Anderson obtain grant support to undertake her current study on student learning as well.

#### **Escoe**

Gisela Escoe teaches a large introductory economics class to non-majors. She is concerned that this class may be the only economics these students study in their lives. Previous assessments indicated that students were not learning economics very effectively. She wants to increase student learning, improve student attitudes toward economics, and increase the relevance of the course to student lives. She uses her assessments of this course to report to funding agencies, report to her department, for publications, and to inform her teaching methods.

Dr. Escoe performs a number of assessments. She administers a cognitive learning exam - the Test of Understanding College Economics. This is a nationally normed, multiple-choice exam that she administers in a pretest/post test format. She assesses student skill acquisition through critical thinking exercises (CTEs). These exercises assess students' ability to express ideas and apply economics concepts to their own situation. The CTEs are constructed by the instructor, evaluated using Primary Trait Analysis, and graded by TAs. Affective learning is assessed by a nationally normed, likert scale instrument - "Attitude Towards

Economics," and by instructor constructed student surveys in either multiple choice or likert scale format.

Multivariate regression analysis is performed with these data using student characteristics, student ability and teaching characteristics as controls. As incentives, students are given credit for participation and constructive feedback from the instructor.

Pedagogical innovations were found to have a positive and significant impact on student learning and attitudes. An increase in the average student's learning if the student moved from the class with the least amount of cooperative learning to the class with the most cooperative learning suggests an increase in the learning of economics of 14.5% (one standard deviation would be 8%). Moving between the classes with the least and the most cooperative learning improved student attitudes by 3.1% (one standard deviation would be 1.7%).

Finally, Dr. Escoe offered some practical advice. Instructor constructed tools proved to be very useful for most assessment goals, but in her experience were not adequate for publishing. Take advantage of relevant data on students available from student records. Have a plan but continually re-evaluate your needs and be flexible.



#### **Faculty Development Model (con't from Page 2)**

community an opportunity to share ideas with the institution in order to determine how individuals at the institution are evaluated and promoted. This was followed by a detailed example of one of the institution's "community partnerships."

Ultimately, the value of the session lay in its approach to the scholarship of teaching, and how all aspects of the faculty member's role can be documented and assessed in order to allow him/her to demonstrate what s/he does, justify it, and quantify the results for students, community, and administration alike.

## Using Learning Teams in the Classroom

Dr. Mark Davis, Department Head, Biology

In a session entitled “Building Learning Teams,” Dr. Larry Michaelsen (Michael F. Price College of Business, University of Oklahoma-Norman) introduced the audience to the power of using small groups in college classrooms. Forming learning teams of six to seven students in his business management classes, Michaelsen changed his classes from a traditional lecture and discussion approach (which was mostly lecture with little class discussion) to classes with minimal lecture. The new approach *requires* pre-class individual study coupled with in-class team discussions.

Michaelsen summarized the traditional learning versus team learning approaches. Traditional learning defines the instructor as the dispenser of information, a “sage on the stage,” who assumes most of the responsibility for ensuring that learning occurs. In the traditional classroom, faculty shoulder the burden for learning, a role that has previously been referred to as the “Atlas complex.” Students are passive recipients of the information imparted by the professor, and subject mastery is determined primarily by testing individual students. In a traditional approach, most professors believe that the only way to ensure students are exposed to course concepts is to personally deliver that content during lectures.

Most faculty that employ the traditional approach think that using class time for group work is counterproductive because it reduces the amount of content that can be covered. Any group work that usually takes place in a traditional classroom typically occurs outside the classroom. As a result, instructors have minimal opportunity to help students learn from their group experience. Michaelsen believes that the traditional approach does little to prepare students to become life-long learners because the passive role of students in traditional classes fosters student dependency. Michaelsen argued that this approach fosters a sink or swim mentality because students study — and succeed or fail — as individuals. When students graduate and enter the job market, they typically work as members of a team — a role that contrasts sharply with their academic experience. Because “no one receives a lecture in the real world after graduation,” students usually enter the job market without adequate experiences that would enable them to function as productive team members.

In contrast to the traditional approach, the team learning approach redefines the primary roles and responsibilities of students and instructors. Professors are now seen as course designers and managers of the instructional process. Faculty

become facilitators (“guides on the side”) who clarify murky areas, pose questions for students to solve, and provide activities that require students to apply concepts in various ways. The responsibility for ensuring that learning occurs is shifted to students. No longer passive recipients of information, students are active learners that develop competence and confidence.

Michaelsen assigns students to teams and uses novel activities to foster team learning. Readiness Assurance Diagnoses (RADs), administered at the beginning of each unit, provide the incentive for students to complete pre-class individual study assignments. All RADs are multiple choice tests. Each student in a learning team first takes the RAD as an individual, then takes the same test with the entire team. The team submits a single answer sheet, but the team cannot take the test until all members of the team have submitted individual answer sheets. After team members submit individual answer sheets, the entire team then discusses the test, decides the best answer to each test question, then submits a single team answer sheet. Unlike questions on conventional multiple choice tests, each question on a RAD can be answered three times — as though it was three separate questions. This multiple answer option is available for both individuals and for teams. For example, if a team is confident that the answer to a question is answer b, the team will choose answer b three times. On the other hand, if a team can eliminate all answer choices except b and c, then the team could choose to answer b twice and answer c once (or vice versa). This type of assessment fosters spirited group discussion about concepts and allows partial credit for eliminating some, but not all, incorrect answers.

Michaelsen uses a “5 Minute Rule” to enhance readiness before class and maximize efficient use of class time: when one third of the learning teams have finished the group test, the remaining teams have 5 minutes left to complete their tests. Once each team has completed the test, both individual answer sheets and group answer sheets are graded (using a scantron machine for quick grading) and the professor returns tests immediately. Teams then discuss the incorrect answers submitted by the group and have a specified amount of time to submit *written* appeals regarding missed questions. Teams may use texts or evidence from assigned readings to support their appeal. After reviewing appeals (and awarding credit if appropriate), the professor uses the remainder of the period to clarify “problem” issues or concepts and direct group activities. During the application-oriented activities, students expand their understanding and use of concepts. The activities reflect what students should be able to *do*

once they have completed a unit of instruction.

Student grades are based upon scores in each of the following performance areas: (a) individual performance (individual RADs; final exam), (b) team performance (team RADs; completed team assignments), and (c) peer evaluation. On the first day of class, the entire class reaches a consensus concerning the contribution of each performance area to the final grade. Restrictions on grades imposed by the professor include a minimum percentage for peer evaluation (10%), a minimum percentage for the final exam (50%), and a maximum percentage for the group RADs (24%).

Michaelsen emphasized that *more* content is covered using the learning team approach than with the traditional lecture format, and that students retain more material. This is counter to the conventional notion that faculty must personally deliver content during lectures to ensure that students are exposed to adequate course concepts. The use of learning teams produces a different classroom dynamic; students are more involved in the course and demonstrate a higher interest level during each class session. In contrast to most traditional classes, students in team learning classes are actively engaged in, and assume responsibility for, their own learning. Students learn to function as members of a team; they also value team membership and develop interpersonal skills.

Faculty in team learning classes no longer shoulder the burden for student learning. Freed from this millstone, faculty members have more freedom, and more time, to design activities and assignments that develop higher level cognitive skills in students. Rather than using class time to “cover material,” faculty use class periods to help students learn to use concepts. Instead of attempting to make class presentations more exciting or interesting, faculty members can focus on designing courses that provide students with more opportunities to learn. That shift in focus provides an incentive for faculty to design course activities that require students to apply what they have learned. Team learning fuels instructor enthusiasm because the approach taps into the energy released as student groups develop into learning teams. With the team learning approach, both teaching and learning become more enjoyable.

The following articles (taken from a reference list provided) are relevant to the topic of team learning:

Michaelsen, L.K. and Black, R.H. 1994. Building learning teams: the key to harnessing the power of small groups in higher education. In Collaborative Learning: A Sourcebook for Higher Education Vol. 2, State College, PA: National Cen-

ter for Teaching, Learning & Assessment

Michaelsen, L.K. 1994. Classroom organization and management: Making a case for the small-group option. In Handbook of College Teaching: Theory and Applications. Prichard, K.W. and Sawyer, R.M. (Eds.) Westport, CT: Greenwood Publishing Group, Inc.

Michaelsen, L.K., Fink, L.D. and Watson, W.E. 1994. Pre-instructional minitests: An efficient solution to covering content. *Journal of Management Education* 18(1): 32-34.

Michaelsen, L.K., Jones, C.F. and Watson, W.E. 1993. Beyond groups and cooperation: building high performance learning teams. In To Improve the Academy: Resources for Faculty, Instructional and Organizational Development. Wright, D.L. and Lunde, J.P. (Eds.) Stillwater, OK: New Forums Press Co.

Watson, W.E., Michaelsen, L.K. and Sharp, W. 1991. Member competence, group interaction and group decision-making: A longitudinal study. *Journal of Applied Psychology* 76: 801-809.

### **Documenting the Link** (con't from Page 3)

Working with colleagues on their campuses, they reviewed the literature on their chosen teaching challenge, often finding answers to their questions outside their disciplines. Based this information, each devised a strategy for addressing their concerns and for evaluating whether they had succeeded in meeting that challenge. These strategies ranged from simple pre- and post-test evaluations to more complex experimental designs, including quantitative and qualitative evaluations of a control group and an experimental group. For example, the literature professor asked students at the beginning of the semester to read a Sonnet, then to evaluate their comprehension of the poem and its characteristics. He gave them the same evaluation at the end of the semester and compared student answers. One psychology professor, who had involved students in service learning project, asked a colleague in sociology to observe her class discussions and compare the level of involvement and comprehension of students who had actively participated in the service learning projects.

Simple or elaborate, each assessment provided the faculty members with insight into the effectiveness of their teaching and the understanding of their students. Based on this information, each adjusted their teaching to meet the concerns and challenges identified by their assessments. Often these adjustments extended beyond their individual classrooms, and inspiring whole departments and, in one case, the institution to examine its practices.

## White Chocolate Bread Pudding

Palace Café – 605 Canal Street

3 cups whipping cream  
10 oz white chocolate  
1 cup milk  
1/2 cup sugar  
2 eggs  
8 egg yolks  
1 loaf french bread (sliced into 1/4" pieces, dried in oven)  
2 teaspoons chocolate shavings (for garnish)

Sauce:  
8 ounces melted white chocolate  
3 ounces heavy cream



Heat whipping cream – add white chocolate – when chocolate is melted – remove from heat  
(Note: you may want to use a double boiler to avoid scorching)

In a double boiler heat milk, sugar, eggs, and yolks until warm.

Blend egg mixture into cream and chocolate mixture.

Place bread slices in a baking pan – pour 1/2 mixture over bread and let settle (until the bread soaks up the mixture) then top with the rest of the mixture.

Cover with foil and bake for 1 hour at 275 – remove foil and bake for 15 minutes longer until the top is golden brown.

To serve: spoon hot out of the pan or let cool to room temperature – then place in the refrigerator for about 45 minutes, loosen sides and invert pan. Cut into square, circle, triangle, etc. Top with sauce and sprinkle with chocolate shavings.

Sauce: Melt white chocolate in double boiler – remove from heat and mix in heavy cream. Spoon over bread pudding.

Note: May be kept at room temperature.



## Scholarship and Bread Pudding Revisited

It is easy to cut a helping too large for one setting. The AAHE team participants brought back so many good ideas that we were unable to print them all in this newsletter. Please look for additional ideas in our next publication.