

Commitment to The Wisconsin Idea

A Guide to
Documenting and Evaluating
Excellence in Outreach
Scholarship





Ward, David,
A Vision for the
Future: Priorities
for UW-Madison
in the Next
Decade. Madison:
Office of News
and Public Affairs,
April, 1995.

"As we approach the next century, we need to view the university not as the sole source of learning, but increasingly as an educational partner with a variety of public and private institutions, including business and industries. To do this, we must listen to and learn from the state's citizens, their elected officials, our alumni, and other friends. The communication revolution places us in the midst of a worldwide learning community. The challenge is to find new ways to originate, adapt, and transfer expertise from this global environment to the people of Wisconsin."

Prepared by:

The Council on Outreach

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And to our faculty colleagues at other universities, most especially at Michigan State University, Oregon State University and University of Illinois at Urbana-Champaign

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> Preface

Outreach activities have been and will remain fundamental to the mission of a Land Grant research university and are critical to the achievement of excellence. We sincerely hope that all faculty engage in outreach scholarship at various periods during their careers and that this publication contributes to and inspires us to that end.

It is our intent that this guide will help to clarify criteria upon which to make evaluations of excellence in outreach scholarship conducted by all faculty, not only those who have significant appointments to outreach positions.

During the 1994-95 academic year, University divisional committee chairs requested that the Council on Outreach develop materials to help faculty departmental and divisional committees describe and evaluate the quality of outreach scholarship. This guide is a result of that request within the overall context of appropriate committee guidelines.

We recognize that tenure recommendations are made by departmental executive committees and divisional committees based on established criteria. All candidates for tenure must relate their teaching, research, and service activities to the appropriate committee criteria. In their review of this document, the 1996-97 divisional committees found it to be a useful guide for probationary faculty and reiterated it is NOT a replacement for the tenure criteria.

The guidelines presented here provide a clear and enduring method for describing and evaluating the quality of outreach scholarship within individual departmental and divisional committee guidelines. With its focus on clearly relating outreach activities to those criteria, the guide provides assistance in the development of dossiers for probationary faculty and for all other reviews for merit and promotion purposes.

The guide was prepared with extensive advice from divisional committees from 1994-95 through the present. The Council on Outreach gratefully acknowledges the insight and help received from those committees. We also value the extent to which individual divisional committees have used drafts of this document when reviewing their tenure and promotion guidelines.

For the Council on Outreach,

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A Guide to Documenting and Evaluating Excellence in Outreach Scholarship

PART 1: Outreach in the 21st Century

Outreach scholarship is conducted
in all areas of the
university's mission:
teaching, research
and service.
It involves the
creation, integration, transfer and
application of
knowledge for the
direct benefit of
external audiences.

> Introduction and Purpose

As the University of Wisconsin–Madison refines and reshapes itself into a center of learning for the 21st century, the multiple roles of faculty members are being reconsidered and clarified. This guide provides assistance in evaluating outreach scholarship within that comprehensive and changing mission.

UW-Madison's community of scholars, steadfastly committed to the Wisconsin Idea, actively addresses the needs and aspirations of the people of Wisconsin, the nation and the world. Information also flows back to the University from these constituents, further influencing our teaching, research and service. The value of the interaction of theoretical knowledge and actual practice is translated into and embodied by the myriad of outreach activities of the University community.

At Wisconsin, outreach is a particular and distinct form of scholarly activity deeply embedded within the University's mission to create, integrate, transfer and apply knowledge. When conducting outreach scholarship, faculty are involved in outreach teaching, outreach research and outreach service.

Outreach teaching extends the campus instructional capacity through credit and noncredit continuing education courses, seminars, workshops, exhibits and performances to offcampus or non-traditional audiences. Outreach teaching includes innovative use of emerging instructional technologies and creates access for people at a distance to the resources of the University.

Outreach research extends the University's research capacity to academic and nonacademic audiences through such activities as applied research and technical assistance, demonstration projects and evaluation of ongoing programs.

Outreach service is designed to extend specific expertise to serve society at large, rather than service to the University or service to a profession. Outreach service may include participation on advisory boards, technology transfer, or policy analysis and consulting based on academic programs or the advancement of a department or unit mission.

This guide will help:

- develop a common understanding of what constitutes quality outreach:
- develop the language with which to describe quality outreach:
- suggest alternative ideas to faculty for documenting and reporting excellence in outreach;
- provide new faculty members with information they will need to demonstrate the quality of their outreach activities as part of the tenure review process;

- suggest ways for departmental and divisional committees to evaluate outreach achievements in tenure, promotion, and annual merit salary decisions; and
- encourage discussion about outreach scholarship among faculty, staff, administrators and university collaborators.

➤ Assumptions

The underlying assumption is that outreach teaching, outreach research, and outreach service are all basic components in the University's search for knowledge and for integrating that knowledge into the lives of people throughout the world.

The ideas in this guide are based on the following assumptions:

- ➤ Just as the range and scope of outreach responsibilities vary from department to department and college to college, so will the relative role of outreach scholarship vary from one faculty appointment to another.
- ➤ All faculty members will be expected to articulate and assess

- their outreach agendas as the University designs and implements a vision of its future and how it will best serve society.
- ➤ Every tenure case should include evaluation of the faculty member's accomplishments in the context of the Wisconsin Idea.

Evaluation of outreach scholarship should be conducted with regard to the agreed-upon responsibilities of the faculty member given the mission of the department and the excellence with which those responsibilities are carried out, not with regard to the source of funding for the faculty member's salary.

Outreach teaching, research, and service are all basic components in the University's search for knowledge...

PART 1: Outreach in the 21st Century

Outreach scholarship is regarded to be of high quality when there is evidence that it has resulted in significant outcomes.

➤ The Nature of Quality Outreach Scholarship

Outreach scholarship is regarded to be of high quality when there is evidence that it has resulted in significant outcomes. The most important of these is a beneficial impact, attributable at least in part to the application of relevant and up-to-date research knowledge to real-world needs, problems, issues, aspirations or concerns.

Individual excellence in outreach is directly tied to and determined by the mission and policies of the University and of each department. Faculty members submitting evidence of outreach scholarship for purposes of tenure review should do so in the context of the University and department missions, and their letters of appointment. They should be evaluated in that same context. Several questions can be used to evaluate the quality and significance of a body of outreach scholarship:

- Is there evidence that the program addresses an issue of significant concern and is worthy of significant effort?
- 2. Do the outreach efforts draw upon the faculty member's disciplinary or professional expertise? Is there evidence of significant intellectual contribution to these efforts?
- 3. How do these activities relate to the department's mission?
- 4. Are there clear ties to a research base? Does the work use both scholarly and community assessments, build on previous work, and use basic and applied theory?
- To what extent do the activities represent potential new interpretations and applications of

- knowledge for use in specific settings?
- 6. Are there clearly focused and intended educational outcomes?
- 7. Is there a clear strategy to reach the desired outcomes?
- 8. Is there a plan to collect evidence that the program has achieved the intended outcomes?
- 9. Is there potential for the activities to generate new research questions or make more understandable the current body of knowledge?
- 10. Does the outreach activity impact public policy, improve practice among professionals, or influence those involved?
- 11. Is there evidence of an integrated body of work?
- 12. Is there a balance among outreach activities that includes research, teaching and service?
- 13. Does the effort utilize delivery methods that maximize impact?
- 14. To what extent do outreach activities have a multiplier effect (e.g., train trainers, build infrastructure for program continuation)?

If an outreach research activity involves the synthesis or summary of existing knowledge, a key component of the quality of the work is dissemination of such summaries. Summary or synthesis of existing knowledge meets the quality criteria only when it is combined with effective dissemination.

Quality outreach scholarship is characterized by efforts to bridge gaps

PART 1: Outreach in the 21st Century

Quality outreach scholarship is characterized by efforts to bridge gaps between theory and real-world needs, issues or concerns.

between theory and real-world needs, issues or concerns. In the best of cases, these efforts will not only enhance the faculty member's career, but also contribute to the vitality of the University and the larger community. Successful outreach activities will result in the effective communication of the problems, needs and aspirations of the people of Wisconsin to the University community, which in turn will help direct the University's mission to conduct basic research, and carry out graduate and undergraduate education.

Outreach activities will also meet the needs of people desiring lifelong learning opportunities.

Evaluation of quality should consider the kinds of evidence and the outcomes that will give sufficient indication of the intellectual contribution of the outreach scholarship. Simply listing activities without attention to assessment of quality does little to enhance a case for promotion or tenure. Assessment of quality should include substantiated evidence of excellence, innovation and impact.

➤ What Works: Procedures for Outreach Evaluation

The Provost's Council on Outreach has reviewed criteria and practice for tenure and promotion of faculty members with significant outreach responsibilities. The Council has found that the likelihood of favorable recommendations increases when:

- department expectations of the faculty member are clearly stated in the position description, the letter of appointment and any change documents;
- the new faculty member understands the requirements for tenure as established by the appropriate divisional committee;
- appropriate departmental evaluative and mentoring committees provide tenurerelated guidance to each

- probationary faculty member; and
- 4. the faculty member receives and acts upon the advice of the mentoring committee throughout the probationary period, both in:
 - a. designing outreach activities that satisfy departmental needs, meet the departmental mission and can be evaluated favorably in light of the promotion and tenure review process; and in
 - b. assuring that outreach activities are designed, implemented, evaluated, and documented so that they will be appraised properly and receive appropriate departmental recognition and support.

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PART 2: Promotion and Tenure Process

➤ Begin at the Beginning...

The promotion and tenure process begins with assessment by the candidate's academic department or unit. Therefore, a faculty member's expected involvement in outreach scholarship should be reflected in the position description and the appointment letter. It is important at the time of faculty hire to clarify the expectations for outreach research, teaching and service as well as the link to the mission of the department. In consultation with the Dean, the department should clarify all expectations in advance. These expectations should also be fully explained in department documentation prepared for tenure, promotion and merit review. Discussions with the department head or chair, senior faculty and members of the promotion and tenure review committee can help to clarify several points. These include:

- departmental expectations concerning the kinds of outreach scholarship that are encouraged;
- how each activity might best be evaluated and documented;
 and
- the criteria to be used in judging outreach performance at the departmental, college and divisional levels.

As part of this process, several questions should be considered:

- 1. What types of outreach activities are encouraged as part of the departmental mission?
- 2. In what areas has the department established a history of quality in outreach? How does the new faculty member's expertise enhance or modify that?
- 3. In what ways do the department's faculty members appropriately interact with practicing professionals or meet agency and industry needs for technical information and education?
- 4. What balance does the department expect faculty members who are working toward tenure to maintain among outreach research, outreach teaching and outreach service?

It is the responsibility of the department chair offering a position to a probationary faculty member to describe, at the time of hire, any special criteria for judging the quality of outreach activities that will be used to evaluate the candidate's performance. Such criteria should then be made in writing at the time of appointment. Subsequent modifications in official appointment papers should also be documented and become part of each faculty member's official personnel records.

> Prepare Early for Evaluation

Preparation for evaluation of outreach scholarship should begin early in each faculty member's appointment. As outreach programs are planned, conducted and evaluated, the faculty member should consider how those activities might best be interpreted for promotion or tenure committees. Developing high-quality outreach activities takes time and effort. For example, specific activities should be part of a long-term program of applied research, innovative curriculum development, artistic creation or problem solution for lifelong education. Thoughtful evaluation and reporting of evaluation results also require time and effort. Faculty members should plan their efforts far in advance and incorporate qualitative evaluation from the beginning. Beginning early will help to avoid a last-minute rush to document work and should result in clearer and more complete interpretation of accomplishments.

Ongoing evaluation of outreach initiatives can be helpful both:

- to improve work along the way; and
- 2. to determine its quality at the end of an activity.

These two types of evaluations should be performed separately. The expectations for quality intellectual achievement are as demanding for outreach scholarship as they are for other scholarly activities. Therefore, if outreach activities are to be used to support a favorable promotion decision, they should be planned to

be of the highest intellectual quality and to have the greatest likelihood of significant impact.

Department chairs and mentoring committees should be involved in the planning process to ensure that the faculty member's proposed outreach activities are consistent with departmental expectations. Department executive committee members, senior faculty members, and promotion and tenure committee members should also be asked to share their insights regarding the campus promotion process. The appropriate divisional committee's review criteria are critically important and can provide useful guidance to all concerned.

In all cases, the faculty member should relate the case explicitly to the terms of his/her position description and appointment letter and to the relevant divisional committee criteria. Promotion and tenure committees judge how well the case has been made for the granting of tenure. It is not the quality of any one piece of work but the quality of the overall body of work as reflected in the dossier and the accompanying documentation that will lead to successful outcome.

Note that not everything undertaken as outreach will be or should be considered in promotion and tenure review. For example, routine protections to service clubs, or repetitions to service clubs, or repetitions and the same topic similar information, may not be sidered significant for review.

The expectations for quality intellectual achievement are as demanding for outreach scholarship as they are for other scholarly activities.

➤ Establish a Record of Quality Outreach Scholarship

PART 2: Promotion and Tenure Process The dossier should reflect the outreach activity and productivity of a faculty member given his/her appointment, and any subsequent, explicit modifications in the expectations of that appointment over the years. In this light and in concert with guidelines of the appropriate divisional committees, the dossier should include:

- a description of the outreach component of the position;
- detailed scholarly expertise and outreach applications;
- a description of the individual's outreach objectives and their relationship to his/her scholarly agenda, unit mission and societal needs;
- ➤ a description of significant outreach activities in which the faculty member played a major role, with qualitative indicators to evaluate the excellence of each activity [See Appendix 1];
- qualitative evaluations from those most able to provide

informed assessment, e.g., scholarly merit and appropriateness of expertise and project design from peers; impact from affected audiences, external agencies and institutions; degree of collaboration from the affected constituents;

- ➤ a narrative describing the activity, the reasons why it was undertaken, the faculty member's intellectual contribution and leadership role, and how the activity contributed to his/her scholarly advancement:
- ➤ the significance, including outcome indicators, of the activity to the external audience, to the profession/discipline and to the public good;
- the match, including outcome indicators, between faculty expertise and project objectives/constituent needs; and
- scholarly recognition including peer reviews of the activity and its results.

➤ Evidence of Excellence in Outreach Research

Outreach teaching and outreach service activities are relatively easier to evaluate than outreach research. This section provides further guidance on the evaluation of outreach research.

Tenure-track faculty whose primary responsibility is outreach scholarship are generally expected to engage in scholarly endeavors that result in innovations, advancement in knowledge, contributions to the discipline, or professional service to society. Efforts to improve the outreach function can themselves be a form of scholarly activity, which generate research and can result in publication. In addition, outreach that is truly innovative can advance a discipline or profession and attract external support. There are several ways (none alone is sufficient) to present evidence of scholarly excellence in these endeavors:

- 1. Publication in peer reviewed books, journals, and monographs; creation of videotapes, computer programs, and fact sheets; syllabus reprints; development of program materials; authored newspaper articles; exhibits, shows, and concerts; writing for business trade or community publications, and technical reports that fall between peer-reviewed and unreviewed publications.
- Evaluative statements from peers or clients related to the scholarly quality, creativity and impact of publications, reports and other materials produced by the faculty member. Because

of the unique nature of outlets for outreach scholarship, which are often not peer reviewed in the way of traditional academic iournals, the assumption that publication is an adequate reflection of peer review may not be possible or appropriate. Thus, specific evaluations of the quality of the work may need to be provided because it is expected that the portfolio will include a balance between peer reviewed and other publication. In the case of publications that are not reviewed. the results of innovative links made between theory and practice may be described along with other indications of value and/or impact.

- Grants and contracts designed to develop and deliver outreach innovations, when such grants and contracts are competitive and subject to peer review and approval.
- Documentation that individuals from outside the state or nation have sought out and want to study the outreach provider's work and innovations.
- Development of instruments and processes that are adopted by others to solve persistent problems.
- Receipt of issuance of patents and evidence of intellectual property such as copyrighted materials, software, multimedia presentations, etc.

Outreach that is truly innovative can advance a discipline or profession and attract external support.

➤ Confirming Evidence of Quality

PART 2: Promotion and Tenure Process

Documenting the impact of outreach activities and their contributions to professional improvement may be the most potent element supporting the faculty member's case in the review process.

Senior faculty members from comparable institutions with similar responsibilities represent a valuable source of evidence regarding the excellence of a faculty member's outreach efforts and related scholarly endeavors. In particular, these peer reviewers may be able to comment on the extent to which a UW-Madison faculty member has made a substantial contribution to the discipline or profession, and the extent to which that person has been recognized by other scholars, public policy makers and/or practitioners. Letters of support from these scholars should be solicited by the appropriate departmental committee.

Participants in outreach activities are often active professionals in various fields. They, too, are in appropriate positions to assess the impact of such activities when the primary focus is on applying knowledge to practical problems. They may be able to provide evidence of the contribution of scholarly endeavors to an increase in their awareness of the practical implications of theory or to an improvement of professional practice. Collecting documentation of the impact of outreach activities and their contributions to professional improvement may be the most potent single element supporting the faculty member's case in the review process.

However, participant evaluations must be carefully designed to reflect accurately the type of scholarship being evaluated (i.e., teaching, research or service). Especially in cases where participants are providing evidence on the quality of outreach research, the evaluations need to be more substantial, analytical and focused than is usually typical of outreach evaluation forms.

The qualifications of referees asked to comment upon leadership in a field or contributions to theory through outreach efforts must be made explicit in promotion papers. Although faculty members from comparable institutions may be preferred, it is imperative that review committee members be able to identify why the particular referees are highly qualified to assess the faculty member's standing. Referees' comments should be specific and concise. The context in which the faculty member is being judged and the evaluator's qualifications and background are all critical to the ultimate impact of the reference. The more familiar the referees are with the particular outreach effort, similar efforts and the field in general-and the more focused their evaluative comments-the more helpful will be their evaluations. It is the responsibility of the department to familiarize the referees with the divisional promotional guidelines and departmental missions.

> ...And End at the End

At the time a tenure recommendation is to be made, the divisional committee members have the least responsibility for the outcome. The major responsibility for a positive tenure recommendation rests with the faculty member in performing to a standard of intellectual excellence and programmatic impact, and with the department for mentoring the probationary faculty member in such a way that the recommendation to tenure is a foregone conclusion.

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APPENDIX 1
Examples
to Assist
Evaluation
of Outreach
Scholarship

Characteristics of Outreach Scholarship:

Evidences clear ties to mission and goals of the university and the department

Evidences innovation in the application of disciplinary knowledge and methodology

Makes a unique contribution of lasting value, i.e., generates new knowledge or represents potential new interpretation or application of knowledge

Methods clearly based in and informed by recognized disciplines and professions

Efforts may be applied, collaborative, responsive, interactive and decision oriented

May be based on synthesis of existing knowledge across disciplines May be based on synthesis of knowledge, practice and ethics Research and educational programs based on and appropriate to needs of program clientele

Effectively communicates research findings to users
Specifically applies disciplinary expertise to needs of clientele
Develops and refines teaching content, methods and technology
Encourages participant involvement in inquiry or investigation
Fosters use of new technologies, materials or procedures
May be conducted as assistance to group planning and
problem solving

Work can be replicated, elaborated and disseminated Educates university peers on issue priorities of outside constituencies Generates new research questions Fosters lifelong learning behavior

Audience for Scholarship:

General public of all ages

Practitioners and professionals, both public and private

The public university: impact on university missions in teaching, research and service

Colleagues: interdisciplinary collaboration

Provides opportunities for student learning and graduate student support

Unit or other faculty in progress toward developing outreach potential

Use of outreach potential to improve institutional operations and visibility

APPENDIX 1 Examples to Assist Evaluation of Outreach Scholarship

Methods of Dissemination:

Peer-reviewed journal articles
Books, monographs, book chapters
Exhibitions of artistic endeavors
Publications in and coordination of conference proceedings
Extension bulletins and publications
Computer software and files available on the Internet
Technical publications, trade journals
Radio, video and satellite programming
Professional and public conferences, short courses, seminars,
workshops, study tours, institutes, targeted briefings
Patents and copyrights
Public and proprietary reports
Innovations in curriculum offerings

Criteria for Quality:

Significance of problem addressed: how serious was the problem or need; what social, economic or cultural consequences could have resulted from not addressing the problem or need? Scale of the problem: what are the size, trends, future directions and geographic distribution of the problem? Evidence of an integrated body of work Clarity of rationale, purpose, strategies Breadth, value and persistence of use and impact Clarity and appropriateness of goals to mission, context, resources Project appropriately designed to meet needs of beneficiaries Clear ties to research base: uses literature and community assessments, builds on previous work and on basic and applied theory Originality Richness and depth of creative expression Appropriate methodological rigor and technical competence Internal validity Success at integration among disciplines, collaboration that builds capacity

Qualitative Evidence of Quality:

Evaluation of programmatic impact on intended audience
Change in professional practice or personal conduct
Peer observation and review
Participant evaluation
Adoption of methods/materials in other states, national benefits
(e.g., commercial, societal, cultural, environmental)
Duration of public value
Change in public policy
Leadership in collaborative projects
Impact on scholarship priorities within the University

State, national, international stature of the contribution

were used, were sources well leveraged?

Use of resources: were adequate resources available; what resources

Honors and awards, public recognition Partnerships formed; teamwork evident in number and nature of collaborations and intra-institutional linkages

Quantitative Evidence of Quality:

Number of projects or events

Number of projects or events involving distance education
technologies

Enrollment demand; participants, non-traditional students
Number of contact/instructional hours

Number of participant hours

Demand for publications and presentations

Program revenue where required for position

Number of innovations in delivery (e.g., student involvement, use of technology)

Outside funding support from grants, fees for service, other revenue

Number of patent citations

APPENDIX 1
Examples
to Assist
Evaluation
of Outreach
Scholarship

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APPENDIX 2 Specific **Examples** of Outreach **Activities**

The following descriptions of programs illustrate outreach activities that have been included in recent (1990-1995) tenure dossiers at the University of Wisconsin-Madison. All faculty whose activities are described here received tenure and promotion to associate professor. Please note that none of these examples describes a complete tenure case. In all cases, they were presented as part of the tenure dossier.

Title:

Environmental Quality—Solid

and Hazardous Waste Management

Division:

Physical Sciences

Example of: Outreach Teaching

Note:

This program illustrates an important contribution to transformation of knowledge into practice, specific application of disciplinary expertise and fostering the use of new

technologies.

Goals:

To assist county agents in meeting local needs for up-todate, reliable information about solid waste management alternatives; and to provide business, agricultural, and local government with technical and legal information that offers cost-effective and environmentally sound methods of managing hazardous materials and hazardous waste.

Program:

Methods of instruction vary with the needs of each group and include monthly newsletters (700 names), two- and three-day annual statewide conferences (200 attendees), speeches around Wisconsin and throughout the Midwest each year (60 speeches), ETN teleconferences to statewide audiences (400-500 people), technical fact sheets, and activities for specific waste management alternatives.

Impact:

Wisconsin has become a leader among states in assisting town and county government officials and industry in understanding and dealing with waste and with regulations. The legislature has recognized Wisconsin's position in the forefront of national extension waste management programming and has provided three new specialist posi-

tions to further the teaching effort.

Title: Conceptualization and Implementation of

Critical Thinking Methods in Nutrition Education

Division: Biological Sciences

Example of: Outreach Teaching

Note: This program illustrates the adaptation of a theoretical

framework to develop educational materials designed to

enhance specific skills.

APPENDIX 2
Specific
Examples
of Outreach
Activities

Goals: To enable individuals to make nutrition and related behav-

ioral decisions more skillfully by improving their ability to clarify and assess personal values, refine reasoning pro-

cesses and integrate and analyze information.

To increase the productivity of nutrition education programs, to help learners gain new information on nutrition issues and enables them to utilize the information in a way that fosters their ability to make reasonable and reflective

decisions based on that information.

Program: Developed a conceptual framework of critical thinking in

nutrition which was then used to develop an instrument to evaluate audiovisual teaching materials. Evaluated the instrument in terms of validity and reliability. Then demonstrated its application in an assessment of the critical thinking attributes contained in a sample of 13 audiovisual materials on nutrition and osteoporosis. Addressed the need for more attention to critical thinking in audiovisuals

by developing a model video.

Impact: Used the framework to develop and evaluate materials and

methods in college nutrition courses. In comparison to a control group, students in the experimental group had greater gains in academic knowledge and deductive reasoning abilities over the course of a semester. Publication of 3 journal articles describing the framework and its application to nutrition education. Wrote an Instructor's Guide for a popular nutrition textbook which applied the framework

and sold over 15,000 copies.

Application of Distance Learning Technology to Technical Japanese Instruction and to Approaches for Accessing Japanese Scientific and Technical Information

Division:

Physical Science

Example of: Outreach Research

Note:

APPENDIX 2

of Outreach

Specific

Examples

Activities

This program illustrates the discovery, application, evaluation and publication of database search techniques to enhance public use of a specific database.

Problem: Engineers and managers in American industry and government need to be able to gather scientific, technical and business information from Japan in a complete and timely manner.

Goal:

To create tools or procedures for professionals to use when accessing Japanese language sources of information and to evaluate alternative methods for using such sources.

.Method:

The Japan Information Center of Science and Technology (JICST) database is the major bibliographic database for science and technology in Japan. A procedure was developed for English speakers to access the on-line JICST database from the U.S. In addition, a number of different methods were developed to search this data base and their effectiveness was analyzed.

: Impact:

Because this is such a new topic for research, no specialized journals exist in this area. Several articles on the search procedure developed have been published and JICST has incorporated the procedure into their guide and sent it to all non-Japanese subscribers to the Japan Online Information Service. This professor is the only faculty member in the country who is conducting outreach research in these areas (use of Japanese language databases). Numerous invitations to make presentations at national and international conferences.

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Development of a Multipurpose Audio-Print Collection

Humanities

Example of:

Division:

Outreach Teaching

Note:

This program illustrates development of education materials for use by a wide variety of nontraditional students.

Need:

To enhance the experience of students in the Independent Learning Program and to generate new program revenues.

Program:

Using outside funding and a collaboration between the University of Wisconsin-Extension's Independent Learning Program and Wisconsin Public Radio, a collection of new audio-print correspondence courses was developed. Audiotapes and study guides were designed for the following uses: 1) as course materials for Independent Learning students earning college credit; 2) for Wisconsin Public Radio listeners; 3) for teachers and group leaders in and out of Wisconsin seeking stimulating discussion material.

Impact:

Audio programs were heard by over 200,000 public radio listeners. Independent Learning students enrolled in the new audio-print courses showed greater success and satisfaction at completing the courses than those students enrolled in traditional correspondence courses without audio materials. Tapes and guides were sold to individuals, schools, libraries, and retirement centers in nearly all 50 states and two other countries. The audio-print courses were honored with several national awards.

Title: Parent Education

Division:

Social Studies

Example of:

Outreach Research and Teaching

Note:

An outstanding example of creation of new knowledge from synthesis of existing knowledge, integration of knowledge and practice, and creation of an opportunity for creative interaction between knowledge and practice. The program also assists with planning or problem-solving in community settings and is consistent with mission of the

department.

Need:

Educational materials for parents of young children identified as priority by county extension agents particularly, to

reduce incidence of child abuse.

Program:

Develop a monthly newsletter for parents that translates complex research findings on child development and child

care into informative and captivating articles.

Impact:

Reaches 25% of new parents in the state of Wisconsin-20,000 families; adopted by 20 other states; and has become a North Central Regional Publication that sells 4,000 copies/year. Joint evaluation of impact by UW faculty and county extension faculty identified a substantial decrease in the amount of slapping and hitting of children by parents. Also discovered that "at risk" parents improved their child-rearing behaviors more after reading the news-

letter than did other parents.

Conserving Soil and Water Resources and

Minimizing Nonpoint Source Pollution Associated

with Agricultural Practices

Division:

Physical Sciences

Example of:

Outreach Teaching

Note:

This is a combination of three specific programs carefully designed to meet the overall objectives. This work provides an excellent example of effective program needs identification and skillful program development and delivery to solve practical problems and to benefit clientele. The extension program is closely linked to applied research efforts, which provide first-hand, research-based information to address

extension client needs.

Objectives:

To increase client understanding and awareness of the detrimental effects of soil erosion and to provide them with practical options to keep soil losses and water pollution at minimal levels. To develop a cadre of trained professionals who could assist farmers in implementing desirable conser-

vation practices.

Program 1:

Planning for Conservation Compliance

Need:

1985 Food Security Act linked eligibility to receive payments from various USDA programs to mandatory compliance with effective soil conservation practices by Dec. 31, 1994. The act applies to 3.8 million acres of Wisconsin cropland. Responsibility for developing educational materials and program to implement these provisions was as-

signed to Cooperative Extension.

Program:

Provide education and techniques needed to achieve compliance including use of tillage methods, residue management to maximize erosion control, and methods to measure residue cover in the field. Based on a program developed in another state, a new program in conservation compliance implementation strategies was developed for agribusiness clients in 10 area meetings conducted throughout Wisconsin during one year. The meetings were supported with an extension publication.

Program 2:

Conservation Plan Implementation:

Managing Crop Residues with Tillage Tools

Need:

Many state agency personnel lack experience in use of different tillage tools to achieve levels of residue cover. With the evolution of new tillage tools designed for high-residue systems, experienced agricultural extension agents, farmers and equipment suppliers have little expertise in

Examples of Outreach Activities

APPENDIX 2

Specific

APPENDIX 2 Specific Examples of Outreach Activities

selecting tillage equipment and field operations that will yield the desired amounts of residue cover. These personnel also need skills for on-site measurement of residue cover.

Program:

In-field demonstrations of tillage equipment were developed that emphasized the effects of various techniques and implements on residue cover. The demonstrations were designed to provide unique hands-on opportunities for participants to measure residue cover in the field following a range of tillage operations.

Audience:

The state of the s

Extension and state and federal agency personnel and agribusiness personnel, especially farm equipment dealers. Nine demonstrations were conducted over two years for more than 450 participants.

Impact: Extension and government agency participants have a greatly improved ability to give their clients sound advice on appropriate tillage equipment and field operations to achieve compliance with farm conservation plans. The program provided renewed confidence that improved residue-management practices can facilitate compliance with farm conservation plans.

Program 3:

Variable Rate Application Technology to Improve Profitability and Reduce Nonpoint Pollution

Need:

Traditionally, soil management and crop-production practice recommendations have been developed on a field-byfield basis. However, there is evidence of within-field variation in soil properties.

Program:

Research demonstrated that economic and environmental benefits can be obtained by tailoring fertilization strategies to match the substantial variation in soil properties within many fields. A program was developed to illustrate the extent of soil-fertility variation within typical production fields and to demonstrate the advantages of applying nutrients at variable rates.

Impact:

Soil-specific adjustments of nutrient-application rates reduce the need for nutrient applications where soil fertility is high, thus avoid excessive nutrient additions and possible loss of excess nutrients to the environment with no impact on crop production. In areas with low fertility levels, increased application rates improve profitability by avoiding crop-nutrient deficiencies in these areas. This program has received enthusiastic support from producers and agribusiness groups.

Title: Development of a Lending Policy for a Specialized Financial Institution

Division: Social Studies

Example of: Outreach Service

Note: This program illustrates an important contribution to transformation of knowledge into practice and specific application of disciplinary expertise to meet the needs of

participants. It also has a substantial impact on the allocation of resources to meet the needs of a target population.

Need: Chartered by the federal government, the financial institu-

tion was mandated by Congress to make its best efforts to lend at least 35% of its portfolio to low-income customers. Because this was a new institution, no policies were in

place.

Program: As a member of the board of directors of the institution,

the faculty member chaired a committee responsible for developing low-income lending guidelines and methods for evaluating the success of these lending efforts. The faculty member also chaired a subsidiary corporation charged by Congress to develop new businesses in low-income areas. As chair, leadership was provided for development of a strategic plan and establishment of credit policies and

guidelines.

Impact: The low-income lending policy and guidelines determined

the distribution of more than \$150 million per year at the time of tenure. The subsidiary corporation had a \$30 million corpus and a \$3 million annual budget.

A Weekend of Interdisciplinary Events

for the Community

Division:

Humanities (Ad Hoc Promotional Committee)

Example of: Outreach Teaching

Note:

This grant-funded program illustrates a successful integration of campus and community resources to provide stimulating learning for out-of-school adults in the greater

Madison community.

Need:

To generate new audiences for university-sponsored con-

tinuing studies programs in the humanities.

Program:

An intensive weekend of events was organized around a single writer-his works and era-to demonstrate the overlap among all the arts. Participants could attend exhibits and slide lectures at the Elvehjem Museum of Art, a concert at Mills Hall, readings and talks at the Madison Public Library, and a dramatic performance at Vilas Theatre by one of the writer's descendants. Grant funding made it possible to offer all events free to the public, to bring in guest artists and scholars from outside Wisconsin, and to provide free transportation for disabled adults wishing to attend.

Impact:

Nearly 400 out-of-school adults attend the events, turning in rave reviews of the program as well as requests to be notified of future university-sponsored events. Connections were forged between various departments and facilities on

campus and in the community.

APPENDIX 2 Specific Examples of Outreach Activities

Title: Increasing Production of Dairy Cattle

Division: Biological Sciences

Example of: Outreach Research

Note: This research program was designed to provide solutions

to practical problems of external clientele in an area that is clearly tied to the mission of the department and the university. The work is applied, collaborative, responsive, interactive and decision oriented, and results were effec-

tively communicated to practitioners.

Need: To reduce cost of production on Wisconsin dairy farms.

Approach: Applied research on nutrition of the lactating dairy cow

with primary emphasis on carbohydrate and protein nutrition. Directly related to outreach teaching program.

Findings: More corn can be replaced with high-fiber byproduct feeds

than had previously been thought possible. Also found that too much reduction of nonstructural carbohydrate (NCS) reduces milk protein content and price paid to producers

for milk.

Impact: Identified cost saving for producers through use of high-

fiber products. Developed practical guidelines for carbohydrate levels in dairy rations to be used in computerized ration-formulation programs to minimize disease and production problems. Found that certain additives did little to enhance production or protein level and could be elimi-

nated, which reduces ration costs.

Environmental Protection and Sustained Agricultural Production—Soil and Water Conservation

Division:

Physical Sciences

Example of:

Outreach Research and Teaching

Note:

This case illustrates creation of new knowledge from synthesis of existing knowledge and integration of knowledge and practice. The program also fosters use of new technologies and is responsive to needs of participants.

Goals:

To help clients achieve compliance with state and federal legislation dealing with soil and water conservation, with particular emphasis on crop residue management, no-till systems, and variable rate fertilizer recommendations; and to increase client understanding and awareness of the detrimental effects of soil erosion and to provide them with practical options to keep soil losses and water pollution at minimal levels.

· Program:

Created a new program and extension publications on conservation compliance through planning; a series of programs for agribusiness on conservation compliance for dealers; in-field demonstrations (10) of tillage equipment and proper usage; applied research to demonstrate within-field variation of soil properties and the agronomic and economic benefits of tailored fertility-management practices; and other instructions including new software, papers and technical guides, and book chapters.

Impact:

Immediate application of applied research results to meet client information needs and to comply with government regulations and programs. Thousands of acres are being planted with no-till drills for soil and water conservation. National field programs are being widely used.

Improvement of Role of Livestock in the Economy of a Developing Country

Division:

Biological Sciences

Example of:

Outreach Teaching and Service

Note:

The faculty member that conducted this program was not specifically budgeted on Cooperative Extension dollars. This program illustrates the nature of presentation by a resident faculty of excellence in outreach teaching and outreach service. The program fosters use of new technologies, or procedures, is responsive to needs of participants and assists planning or problem solving in group settings.

Need:

The host country is 80% rural and dependent upon livestock for sustenance. The faculty member diagnosed a need for sustainable agriculture and for an intellectual infrastruc-

ture for sustainable development.

Goals:

To improve the role of livestock in the host country's economy; to strengthen the host country's foodstuff-research capacity; and to improve the international out-

reach dimensions of the college.

Program:

Studied local culture and devised methods for producing cash-flow for livestock producers based on certain religious needs. Subsequently developed and presented a number of culturally sensitive short courses for immediate dissemination of research information to the greatest number of practitioners. Simultaneously developed M.S. and Ph.D. course structures at the host country's major university. All aspects of the program were supported by a large

foundation grant.

Impact:

133 researchers in the pipeline (sustainable development); discernible increase in per-capita income in targeted rural areas; implementation of a model for improved practices in livestock management (sustainable agriculture) in rural areas; ongoing "fairs" structure for demonstration purposes; funding from refereed foundation; strengthened in-country research capacity; and development of model

for information dissemination in rural areas.

APPENDING Opening Stamples of Outreach **APPENDIX 2**

Specific

Examples

Activities

of Outreach

Title:

Housing-Related Education—Statewide

Division:

Social Studies

Example of:

Outreach Teaching

Goals:

To improve the quality of life for older citizens by improving the quality of housing resources with a focus on

affordability and air quality.

Note:

This program illustrates outreach teaching based on evaluation and analysis of the needs of program clientele. The materials communicate new understanding and insights among leaders and develops and refines new teaching

content.

Program:

Didn't describe a particular project. Department's cover letter explained the program. Extensive publications regarding these topics.

Assessment:

Numerous letters from recipients of service, training, and information describing the materials as the "best" available. Other frequently used descriptors: "excellence," "applicability," "utility."

Impact:

The department used excerpts from bread and butter letters throughout to document the excellence, applicability and utility of applicant's work.

Title: Modification of Textiles for Improvement of

Properties and Reduction in Environment

Effects—Cold Plasma Modification

Division: Physical Sciences

Example of: Outreach Research and Teaching

Note: Designed to identify and provide solutions to practical

problems of external clientele in areas that are clearly tied to the mission of the department. Used rigorous methods based in and informed by recognized disciplines and effectively communicated findings to outside constituencies.

Goals: To improve, care and maintain textile materials and to find

new and innovative applications for fibrous materials such that material life expectancies are increased, energy con-

sumption reduced, and users are more satisfied.

Program: Transfer the science and technology from this research

program to industries, firms, governmental agencies and consumers by teaching courses in-plant, authoring company publications, offering expert assistance on specific problems, consulting on UW-Extension publications, presenting radio and ETN spots, and teaching and partici-

pating in an Engineering Research Center program.

Impact: Key role was played in stabilizing a state textile collection.

Wettability of plasma treatments was demonstrated to be long lasting, a result that is of great industry interest. Cold plasma modification of textiles has received national and

international attention and a patent filing.

Dairy Cattle Feeding and Nutrition

Division:

Biological Sciences

Example of:

Outreach Teaching

Note:

Based on evaluation and analysis of the needs of program clientele, this program is designed to meet those needs by interpreting research and conducting related educational programs in which content is appropriate to target clientele.

APPENDIX 2
Specific
Examples
of Outreach
Activities

Goal:

To increase dairy production with emphasis on new developments in nutrition and feeding practices. Broad-based program for feed professionals.

program for feed

Need:

Declining resources to provide information to dairy producers. Conducted studies to determine current sources of information, training and human resource development, structure of industry, information needs, sustainable agriculture and analysis of current UW programs.

Interaction with community of scholars:
Program planning includes veterinarians, private consultants, premix companies, formula-feed manufacturers, county agents, specialists from other animal sciences departments, the School of Veterinary Medicine and extension specialists at other UW campuses. Faculty member convenes and leads planning group and coordinates the proceedings.

Comprehensive teaching strategy:

- advanced nutrition conference for veterinarians, consultants, and feed industry technicians and service and research reps (M.S. and Ph.D. level):
- advanced nutrition seminar for feed advisors and sales reps (B.S. level);
- feed school for feed advisors and sales reps (lower education level).

Impact:

Provide educational opportunities for hundreds of professionals who had not previously been served by university programs or feed consultants. Focus on intermediary providers of information rather than on producers to get multiplier effect. Each trained feed consultant works with about 60-70 producers.

Pre- and post-tests of participants show substantial increase in knowledge and awareness. Awards for extension programming: extension excellence award; county agents award for exceptional service; industry award for educational activities. Participants consistently evaluate programs as high quality.

Title: Institution and Delivery of

Technical Japanese Instruction

Division: Physical Sciences

Example of: Outreach Teaching

Note: Characterized by the development of innovative teaching

materials and techniques, this program illustrates the application of distance education technology to teach a difficult subject to students dispersed throughout the country.

Problem: Engineers and managers in American industry and govern-

ment need to be able to read, write and understand technical Japanese to be competitive in a global marketplace and to deal more effectively with Japanese corporations and governmental organizations in matters involving technology, production, markets and overall business strategy.

Goals: To develop an outreach program of credit and non-credit

courses in technical Japanese for English speakers that are delivered electronically, live and interactive, nationwide. To provide professionals with the ability to read technical and business Japanese and thereby gain direct access to the information available in printed materials of various kinds. To help professionals understand the historical trends and current conditions behind Japanese attitudes and activities with regard to research, development, manufacturing and

commerce.

Methods: Adapted existing credit courses for a professional audience

and used technology for distance learning to provide these courses in a live and interactive manner throughout the U.S. Also adapted two for-credit courses for a professional audience and offered as non-credit courses via interactive satellite broadcasts through the National Technological University. Created a certificate in Technical Japanese Studies for Professionals to provide a structure and a goal for professionals who enroll in technical and other Japan

related courses.

Impact: Fourteen professionals completed the certificate in the first

three years. Generates approximately \$100,000 in additional tuition each academic year for the UW. Received \$5.1 million to support the program from U.S. Air Force U.S.—Japan Industry and Technology Management Training program. More than 1,000 American engineers and managers participated in Japan related credit or non-credit courses over five years. Selected by the National Technical University as one of the top 16 credit course instructors from a group of approximately 500 instructors at over 40 universities. Received the Distinguished Credit Program Award from

the Association for Continuing Higher Education.

Local Child Care Needs

Division:

Social Studies

Example of:

Outreach Research and Service

Note:

Characterized by in innovative research process, this project was designed to provide solutions to practical problems of external clientele. The work is innovative, applied, collaborative, interactive and decision oriented. Adoption of the technique in numerous other states indi-

cates the work is easily replicated.

Need:

General public awareness of need for local child care, but

no clarity on what kind of care was needed.

Program: "

Work with county extension agents to establish local task forces designed to identify child care needs and respond to findings. Became the basis for a new method of extension programming in which county faculty work with a campus-based specialist to conduct an applied research project. Local task force is also involved in the research process from designing the questionnaire and analyzing the results to issuing findings.

The method has become a new model for outreach teaching in which the county extension office becomes a collaborating research site, conducting investigations aimed at educating the public and answering local public policy questions. Instead of preparing materials for agents, this faculty member teaches them how to conduct research, manage and analyze data on a computer, write research reports for public consumption and use research findings to inform public-policy education efforts.

Impact:

52 Wisconsin communities issued local reports after 18 months. Eleven of these set up school-aged child care projects as independent businesses, which generated local jobs. Method of community needs assessment, which creates partnership between Madison faculty, county faculty and the community, has been applied to other community problems in Wisconsin.

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Implementing Dietary Guidelines in Educational Programs for General Audiences and At-Risk Groups

Division: Biological Sciences

Example of:

Outreach Service

Note:

This series of publications illustrates the use of traditional extension publication and distribution methods to provide current information on critical issues to the people of Wisconsin in an accessible and understandable manner. Also illustrates the use of the county agent system to extend the presentation of information throughout the state.

Goals:

To improve the likelihood of healthful dietary choices by consumers within the constraints of existing resources and environmental influences.

Program:

Develop materials and programs that extend research-based nutrition information to educators, agricultural leaders, health professionals, and the general public in a manner that makes the information most easily understood and readily used in making decisions. Developed more than 30 2-page fact sheets for use by Extension Home Economists as inserts for their newsletters distributed statewide, also used for local press releases and handout for educational programs. Developed extension bulletin on vitamins and mineral supplements. Developed educational resource packets to be used by other presenters including detailed procedures, outline, evaluation materials, handouts, audiovisual masters and suggestions for adapting the lessons to various audiences, formats and time allocations.

Impact:

1,800 copies of extension bulletin sold. 6500 people in 16 Wisconsin counties attended programs on Starch and Fiber. In addition 186 leaders trained to present the program had extended the information to an average of 7.6 colleagues and peers, 12 counties used materials in their nutrition education programs. In one year, over 7000 people in 26 counties participated in the Eating Right (Less Fat in the Diet) program. In a follow up sample of 5% of participants after 3 months, over 80% indicated they would see a physician to get their cholesterol checked; 75% were more confident in their ability to avoid too much fat and 82% planned to use high fat foods less often. After another program (using the same materials), over 2/3 reported knowing more about the necessity for fat in the diet, the disadvantages of high levels of fat in the diet and planned to use less fat. In one county, each of the following goal behaviors was reported to be achieved by at least 1/3 of the

participants: modifying recipes to reduce fat, making better choices when eating out, decreasing fatty desserts, and reducing high fat dairy products. In Waukesha county 95% of participants reported dietary changes (buying and using less high fat foods, trimming fat from meats, changing to skim milk) after a series of programs. In addition, fat and cholesterol knowledge scores were well above nationwide averages after these programs.

Title: Enhancing the Business Skills of

Cooperative Management Personnel

Division: Social Studies Division

Example of: Outreach Teaching

Note: This program illustrates the development of a comprehensive training approach to management training, adaptation

of existing materials to the needs of a unique client base, and development of new materials tailored to the needs of

the client population

Goal: To develop a variety of graduated learning opportunities for

cooperative managers that consistently identified operational differences between cooperative and other forms of

business.

Program: Methods of instruction vary with the needs of each group.

Methods used include a basic introduction to cooperative management in an independent study format; development of a three-week, on-campus, intensive, mid-level training insitute which includes a six-month application project in the participant's cooperative; a three-day annual national conference (300 attendees) which presents advanced and issues-oriented information in a workshop format. Methods also include speeches and customized workshops through-

out the country each year.

Impact: The University of Wisconsin is the nationally recognized

center for management training for consumer cooperatives. Very high participant evaluations of all programs, anecdotal reports of significant impact on increased financial and business performance of participating cooperative businesses and of career development of individual participants. Significant program revenue generation. Significant

grant support for curriculum development.

The faculty member received a national education award presented by 15 national cooperative organizations for having had a major impact on the cooperative education

process.

Excellence in Outreach can and should be documented at many times in a faculty member's career. The following example was undertaken by a full professor. Neither tenure nor promotion is at stake, but the documentation is important to an annual review, merit or any number of other uses.

APPENDIX 2
Specific
Examples
of Outreach
Activities

Title: "Theodore Roosevelt": A Television Biography

for The American Experience (PBS)

Division: Humanities

Example of: Outreach Teaching and Service

Note: This program incorporates historical research and inter-

pretation into the presentation of material for an influential

medium of communication.

Need: "The American Experience" is a well-established series

of PBS programs that presents the work of independent producers on subjects taken from American history. The series enjoys a large viewing audience in both its original broadcasts and frequent rebroadcasts. Videocassettes of these programs are available for purchase from PBS and are widely used in classrooms in schools and colleges, as well

as by private individuals and groups.

Program: The faculty member was one of a team of six internation-

ally known American historians chosen to research and develop this documentary. He participated in the production of the four-hour television program from early in its inception to final editing. At the outset, he suggested both research material and secondary works for the planning of the script and reviewed the successful proposal for funding to the National Endowment for the Humanities. Later, he read and criticized the working script for emphasis and interpretation, as well as spotting errors of fact. Still later, he was interviewed for several hours on camera, giving interpretations of the subject, and, when edited, those interviews made up a fairly substantial part of the television program. Finally, he reviewed both a transcript of the audio portion of the program and watched tapes of the video, making comments and suggestions for corrections

and changes.

Impact: Thus far, the program has been broadcast nationwide and

rebroadcast several times by local stations, including WHA-TV. The videos have been widely distributed to schools and

individuals.