

Developing a Culture of Assessment through a Faculty Learning Community: A Case Study

Stephanie A. Schlitz, Margaret O'Connor, Yanhui Pang, Deborah Stryker, Stephen Markell, Ethan Krupp, Celina Byers, Sheila Dove Jones, and Alicia King Redfern
Bloomsburg University of Pennsylvania

This article describes how a diverse, interdisciplinary team of faculty formed a topic-based faculty learning community. Following an introduction to faculty learning communities and a brief discussion of their benefit to faculty engaged in the process of adopting new technology, we explain how our team, through a competitive mini-grant application process and intensive training workshop, complemented by a series of follow-up training sessions, formed a faculty learning community that collectively adopted a web-based rubric model for performance evaluation, began implementing it, and, in doing so, developed a culture of assessment. We describe the web-based rubric software we adopted and provide short reports authored by seven members of the faculty learning community to exemplify how the implementation of web-based rubrics can enhance student performance, augment instructor evaluation of student performance, and facilitate outcomes assessment. The article includes a "lessons learned" section which synthesizes what we learned from the endeavor and emphasizes what we considered critical to the group's success.

As the generation of students who have grown up with digital technology continues to enter the university, the demand for higher education instructors to integrate technology in the classroom increases. Yet the richness of the technology resources available to instructors complicates matters. Alongside the increase in expectations for university faculty to gain technological competence, there is an increase in technologies that were not available to them when they were attending college (Nugent, Reardon, Smith, Rhodes, Zander, & Carter, 2008).

Although Keengwe, Kidd, and Kyei-Blankson (2009) point out that the use of technology in higher education is increasingly persistent, it is generally focused on productivity tools such as word processors and spreadsheets, while the extended use of technology to perform, for example, learning assessment, occurs very seldom. Consequently, Keengwe et al. (2009) have emphasized the need for methods of training that demonstrate to faculty how technology can benefit them; that describe the benefits of learning new technologies as more significant than the costs; and that illustrate that it is possible to acquire technological skills at a rate they can best assimilate and apply.

A faculty learning community (FLC) as defined by Cox (2004) is an interdisciplinary group of about twelve or fewer faculty that meets regularly for an extended period of time with the focus of enhancing the teaching and learning process by working to increase its members' acquisition of new skills. When an FLC is created to address the needs pertinent to a cluster of individuals (e.g., first year faculty members, untenured faculty members, or full professors), the FLC is cohort-based. Alternately, an FLC can be topic-based, formed to explore a common issue for an interdisciplinary group of faculty (Cox, 2004; Nugent, et. al, 2008;

Smith et al., 2008). Both types of FLC provide a forum for pedagogical discussion which can foster faculty development and, more specifically, which can enhance the integration of technology within the curriculum above and beyond the use of productivity tools.

In this article, we describe the process of creating a topic-based FLC centered on enhancing student assessment and on improving the quality of feedback provided to students. Following a description of the formation of the FLC, we discuss our adoption of web-based rubrics as tools for assessing student learning, and we provide a collection of "short reports" that exemplify individual FLC members' implementations of web-based rubrics. As evidenced in a number of the reports, a positive outgrowth of our work has been our ability to accumulate data on learning outcomes, which has extended the application of the rubric tools developed by FLC members beyond classroom implementation to include program- and college-level accreditation processes and which has facilitated the development of a culture of assessment within and beyond our FLC.

Background

Faculty Learning Community

According to Cox (2004), the qualities necessary for community in FLCs include safety and trust, openness, respect, responsiveness, collaboration, relevance, challenge, enjoyment, esprit de corps, and empowerment. The components of successful FLCs include a mission and purpose, curriculum (topics), administration, connections, affiliated participants, meetings and activities, scholarly processes, assessment, and enablers and rewards. These factors,

prerequisites to the success and endurance of an FLC, coincide with those that motivate faculty to participate in and practice the skills learned in technology integration workshops as described by Keengwe et al. (2009).

Moving a group of faculty to expand their use of technology beyond productivity tools and motivating them to advance to less known and less comfortable use of it requires a willingness to adopt change and to expose their lack of knowledge. While Sirum et al. (2008) point toward science instructors' isolationist approach to teaching and their resistance to change as impediments to best practices in science teaching, the problems of isolation and resistance to change are by no means discipline specific. These qualities are shared by faculty across disciplines and pose particular obstacles when faculty are confronted with the acquisition of technology-based pedagogical skills. Sirum et al. (2008) identify the formation of a cohort-based science FLC as crucial to life science instructors' success in adopting new approaches to teaching and student learning. Similarly, a topic-based FLC can serve as an enabling factor to nurture faculty in general in the integration of technology. In an FLC environment where trust and empowerment are integral to the group's dynamic, faculty are more willing to accept change and to try new approaches, especially when change and new approaches emerge from the group and everyone has the opportunity to contribute to the solutions (Long, Janas, Kay, & August, 2009; Smith et al., 2008).

Forming a Topic-Based Faculty Learning Community

Background Information

Bloomsburg University (BU) of Pennsylvania is one of the 14 member institutions within Pennsylvania's State System of Higher Education. As a four-year, public university, Bloomsburg University offers more than 80 programs of study leading to bachelor's degrees, 38 undergraduate minors, 18 graduate programs leading to master's degrees, a doctorate in audiology, and several certificate programs for professional educators. The student population consists of 8,000 undergraduate and 700 graduate students, most from the eastern half of Pennsylvania.

BU is in the initial phase of adopting a comprehensive, university-wide student outcomes assessment plan, which includes determining the software the university will use to collect and manage data. Currently, at the college and department levels, diverse approaches are being implemented to develop assessment plans, and faculty have been encouraged to develop measurements of student learning outcomes at the course and program levels.

The Assessment-based FLC at Bloomsburg University

Bloomsburg University's topic-based FLC was initiated when Celina Byers, a faculty member in the Department of Instructional Technology (College of Science and Technology), was seeking a rubric tool that provided specific feedback to students and articulated with Blackboard, the learning management system in place at BU. Based on research completed by Byers and Instructional Technology Specialist Regina Bobak, Waypoint software was selected for adoption on a university-wide level during fall 2007, with the aim of making the software available for use within individual courses as well as within the university-wide student outcomes assessment plan. To support faculty members in adopting the rubric tool, Sheila Jones, the University's Teaching and Learning Enhancement (TALE) Center director, and Byers organized and conducted a semester-long series of one-hour Waypoint training sessions. These training sessions were attended by a total of ten, self-selected faculty members, representing seven different academic departments.

While the initial objective aimed for in the training sessions was to support individual faculty members in the development of web-based, interactive rubrics to be used at the program or course level, evaluation data revealed faculty frustration with the training structure, particularly, a concern with continuity and a lack of motivation to complete the "homework" assignments between sessions. For these reasons, the primary training objective was not met, and when the semester concluded, participants had developed either incomplete rubrics or rubrics they were not prepared to put into practice.

Nonetheless, because Byers had experienced success incorporating a web-based rubric-driven performance evaluation schema in her courses, Jones and Byers persisted. As an incentive to encourage training participants to continue their work with web-based rubrics, Jones and Byers obtained University funds to offer a follow-up competitive mini-grant opportunity. Applicants for the mini-grants were required to submit an application including: (1) a proposal outlining their performance-based rubric project, (2) their goals and objectives for the project, and (3) the basic evaluation criteria for each of the main components addressed by the project. Recipients of the mini-grant were required to: (a) attend an intensive, three-day Waypoint workshop following the close of spring semester 2008, (b) attend three two-hour advanced Waypoint training sessions during fall semester 2008, and (c) conduct a one-hour TALE Center seminar for university faculty during spring 2009.

The mini-grant recipients were six faculty from six different academic programs: Business Education and Information and Technology Management (College of Business); Music, Theatre and Dance (College of Liberal Arts); Education of the Deaf (College of Education); Psychology (College of Liberal Arts); English (College of Liberal Arts); and Special Education (College of Education). Together with Jones and Byers, the team comprised one male and seven females, ranging in age from 33 to over 60, with university teaching experience ranging from one to 26 years.

In most cases FLCs are systematically developed with specific goals, objectives, and outcomes identified from the onset. In this instance, the competitive mini-grant opportunity and the intensive three-day training workshop, complemented by the follow-up training sessions, marked the beginning of an informal, assessment-based FLC which embodied all of the qualities of a learning community identified by Cox (2004).

Why Were Participants Successful in Forming an FLC?

Because mini-grant applicants self-selected and were required to submit a detailed proposal outlining their plans for a performance-based rubric project, those who received the mini-grants were highly motivated to participate in the workshop and to acquire new technological knowledge. And though mini-grant recipients were awarded a small amount of money for professional development (\$200), they described the sense of community that formed during the workshop and training sessions, a community of “technology risk-takers” and “pedagogy explorers,” as the most compelling enabler and/or reward.

The primary objective of each mini-grant recipient was foremost to become a better teacher. Consequently, the workshop curriculum focused on the construction of rubrics to enhance pedagogy. The workshop and training sessions were facilitated by both Jones and Byers, and the two formed a leadership combination which merged teaching and learning expertise with technology expertise. In this way, the workshop and training model ensured that the acquisition of new technological skill was consistently pedagogy-driven.

To fortify participant commitment to the workshop and training goals, the administration of the follow-up training activities was equally shared by all members. Together, participants identified training dates, times, and outcomes. Throughout the workshop and follow-up training, individuals were encouraged to exchange rubric projects, ideas, and suggestions so that what was learned individually was articulated to the group. Opinions and suggestions were freely expressed as

participants shared successes and challenges. Further, individuals were empowered to define new goals and objectives for the group as rubrics were implemented, evaluated, and revised and as serious discussions emerged about the relevance of the group’s work not only within individual classrooms, but also on a broader, university-wide scale. As a result of the sense of community, the climate of openness and respect, and the group’s growing commitment to assessment as well as to pedagogy, the collaboration continued beyond the initial requirements stipulated by the mini-grant.

The FLC and a Culture of Assessment

The driving force stimulating the comprehensive assessment of student learning in higher education is the need to meet national and state accreditation standards. For some universities, including Bloomsburg University, the standards of the Middle States Commission on Higher Education and other college-specific accreditation agencies (e.g., National Council for Accreditation of Teacher Education; Association to Advance Collegiate Schools of Business) are the forces shaping comprehensive outcome assessment plans. The overarching goals for assessment systems in higher education are the systematic gathering, analysis, and use of data to monitor college students’ performance and the improvement of an educational unit’s operations and programs for the preparation of future professionals.

According to Palomba and Banta (1999), effective university-wide assessment plans incorporate six essential strategies: developing learning goals and objectives; planning for assessment; involving faculty, staff, and students in assessment; selecting and designing methods; reporting and using results; and assessing the assessment program. While these strategies serve as a foundation for building community consciousness and a culture of assessment, achieving faculty understanding of the relevance and the necessity for assessing student learning in both general education and higher level courses is essential.

Although our assessment-based FLC was formed primarily to support individual faculty in adopting new technology to enhance classroom assessment, the involvement and guidance of Jones as TALE Director inspired not only better teaching practices but also the integration of assessment theories and practices as well as an understanding of the pedagogical principles behind them. For this reason, the faculty involved quickly recognized the potential of their work with rubrics to support data collection for accreditation purposes and for university-wide assessment, leading to a culture of assessment within the FLC that eventually extended beyond its initial goals. The group’s

Figure 1
Defining the Rubric in Waypoint

Name

Identifier

Description

Competency

Ext_Director_Gen_Dsgnr_EPP_Interesting_Ideas

E_2661_47353

Tahoma 1 (8 pt) **B** **I** **U**

Early Pre-production

Design meetings with director

Brings interesting and/or exciting suggestions and ideas

Bloomsburg: Theatre Arts Division

- Conceptual Understanding
- Presentation
- Integrate Research & Creativity**
- Research
- Completion Status
- Organization

Bloomsburg: General

- Writing Conventions
- Holistic

Figure 2
An Observation for a Rubric Element

1			1	Instructional strategies to deliver the instruction are included, clear and complete.
	Obs:			Instructional strategies to deliver the instruction are included, clear and complete.
	Adv:			Instructional strategy is the execution plan for the delivery of effective instruction. Good job!
	Ref:			

knowledge and experiences were ultimately disseminated through discussions with colleagues from participants' specific academic departments. Eventually, in an effort to extend the culture of assessment being cultivated within the group, the FLC initiated discussions pertaining to the advantages and disadvantages of using Waypoint as the university-wide assessment collection software.

Web-based Rubrics

Instructional rubrics are designed to assess complicated or extensive projects by breaking down evaluation criteria into elements and indicating the consequences of including or excluding each element (Andrade, 2000). Web-based rubric tools such as Waypoint, developed by Subjective Metrics (see Figure 1) and designed to interface with the freely available rubric tool RubiStar, facilitate the building and use of digital, interactive rubrics and enable the online collection and storage of data for performance evaluation and outcomes assessment.

Moreover, web-based rubrics can optimize the grading process for teachers and students by standardizing it, saving time, and allowing teachers to provide specific and tailored feedback to each student.

Building Rubrics with Waypoint

Developing a web-based rubric in a tool such as Waypoint starts with the definition and input of *elements*. The rubric developer defines the criteria of an assignment that will be assessed. For each criterion, an element is created in Waypoint. An element can have different numbers of *observations* that define the quality levels used to evaluate the assignment. Each observation contains the description of the observation (Obs), a space for advice (Adv) that can be filled with a general comment (which will be part of the rubric for all students who received that mark for the criterion), and a space for reference (Ref) for further research on the topic, as illustrated in Figure 2.

After all the elements have been created, they are aggregated into an assignment as illustrated in Figure 3.

Figure 3
Partial View of an Assignment Created in Waypoint

Name (Identifier):	TAC_Reflection One (TAC_R1_F2007)		
Description:	You can choose to reflect wearing one of the following hats:		
	<input type="text" value="Teacher or trainer who uses technology"/>		
	<input type="text" value="An ITS or Trainer who trains people how to use technology"/>		
	Use 500 to 800 words to produce and post in Blackboard, Discussion Board a reflection on technology integration that includes:		
	Discuss:		
	<input type="text" value="Which hat you are wearing and why"/>		
	<input type="text" value="How effective technology integration (TI) can increase teacher/trainer effectiveness"/>		
	<input type="text" value="How effective technology integration can increase student learning"/>		
	<input type="text" value="Three factors that need to be in place to facilitate effective technology integration"/>		
Created:	Sunday, September 16, 2007	Evaluation criteria provided with assignment guidelines	
Last Modified:	Sunday, September 16, 2007		This criterion is worth 10% of the grade for the project
Modified from ID:	89		
Show Adv/Ref:	<input type="checkbox"/>		
1 Complete reflection in terms of word count	<input type="checkbox"/> Conceptual Understanding	Wt (10.0%)	Performance
1	Your reflection contains the 500 to 800 words specified in the guidelines.		This level of quality is worth 10%
2	Your reflection contains either more or less than 500 to 800 words specified in the guidelines.		This level of quality is worth 6.7%
3	Your reflection contains either less than 250 or more than 1200 words.		This level of quality is worth 3.3%
4	Your posting contains little or no reflection.		This level of quality is worth 0%
2 Complete reflection with all 4 elements	<input type="checkbox"/> Conceptual Understanding	Wt (20.0%)	Performance
1	Your reflection contains all the required elements.		
2	Your reflection contains the required elements but it is not well and clearly written.		
3	Your reflection contains three of the four required elements.		
4	Your posting contains three of the four required elements but they are not well and clearly written		
5	Your reflection includes two of the four required elements		
6	Your reflection includes two of the four required elements included but not well and clearly written		
7	Your reflection includes one of the four required elements.		
8	Your reflection includes one of the four required elements but it is not well and clearly written		
9	Your posting includes little or no reflection		
3 Clear establishment of the hat worn	<input type="checkbox"/> Conceptual Understanding	Wt (10.0%)	Performance
1	The hat worn for the reflection is clearly indicated and the justification for the choice is provided and logical.		

After adding all elements to an assignment, the percentage of points for each criterion can be distributed. When an assignment is completed, the instructor is ready to start evaluating the students' performance on that assignment. Waypoint integrates with course management systems (CMS) such as Blackboard, Moodle, and WebCT Vista. Therefore, the evaluation process is accomplished by the instructor's selecting a student from the enrollment list and, based on the student's project, assigning an observation for each of the elements within the assignment rubric. At the evaluation time, it is possible to further personalize the feedback to be sent to the students by adding additional comments in the advice or reference fields of the observation. Because students receive a detailed rubric for each assignment with customized feedback in areas they need to improve, they perceive that they are receiving individualized attention for each of the projects they produce. Figure 4 provides an example of

the evaluation summary students receive (via email, CMS, or printed copy as determined by the instructor) for each assignment.

As a result of Waypoint's internal structure and design, instructors can re-use common elements for multiple assignments, and they can make their library of elements available to other instructors to use.

Rubrics as Assessment Tools

Central to accreditation agencies' assessment requirements are the dependability and reliability of the procedures that are designed to serve as accurate indicators of graduates' performance. Data from numerous, diverse research studies have shown the efficacy of rubrics for general education courses (Bresciani, 2007; Dunbar, Brooks, & Kubicka-Miller, 2006; Peat, 2006; Schneider, 2006) and higher level preparation courses (Pindiprolu, Lignugaris-Kraft,

Figure 4
Partial View of a Rubric Created in Waypoint

Wednesday 12/17/2008

Evaluation

Student: [REDACTED]
Assignment: TAC_Reflection_Three
Instructor: CELINA BYERS
Date: 12/06/2008

[REDACTED],

Further developing the section on what students need to do when using AL to enhance their learning would enhance your reflection. [quickFBShow3.cfm](#)

Thanks,
Dr. Byers

	Pts / Poss
1. Complete reflection in terms of word count	0.100 / 0.100
Your reflection contains the 500 to 800 words specified in the guidelines. Good job! Writing in accordance with guidelines is a frequent request when completing professional tasks.	
2. Complete reflection with all 4 elements	0.175 / 0.200
Your reflection contains the required elements but it is not well and clearly written. Writing clear and concise is a valuable professional skill.	
3. Clear establishment of the hat worn	0.067 / 0.100
The hat worn for the reflection is either not clearly indicated or the justification for the choice is unclear or not logical. Clear and concise writing is a valuable and necessary professional skill.	
4. How teachers/trainers can use AL effectively	0.200 / 0.200
Your reflection contains well written descriptions that clearly and logically explain how teachers/trainers can use AL effectively to enhance learning. Good Job! Technology tools are only meaningful when used effectively to a clearly defined goal.	

Rule, Peterson, & Slocum, 2005; Song, 2006). Carefully researched, cogent rubrics can help educators respond to the need to promote consistency in scoring and to improve instruction, which, combined, can lead to improvement in student learning. Although there are different types of rubrics (e.g., holistic rubrics, analytical trait rubrics, generic rubrics, task-specific rubrics), all well-developed rubrics provide written scoring guides that can be used individually or by multiple teachers (Arter & McTighe, 2001). As a result, the determination of inter-rater reliability can be easily established for written rubrics that measure students' performance on curricular benchmarks.

Reports from FLC Participants

Ultimately, the six mini-grant recipients plus an additional faculty member from the College of Business authored short reports to describe their experience as adopters of web-based rubrics. Provided in the

following section, these seven short reports reflect the range and scope of the FLC's collaboration, faculty members' diverse pedagogical and assessment goals, and the achievement of the Waypoint training's initial objective: the implementation of performance-based rubrics.

Ethan H. Krupp, MFA (Music, Theatre and Dance): Using Waypoint in Assessment Data Collection

One area theater programs often wrestle with is how to collect assessment data related to productions staged by the program. They are, by their very nature, one of the most collaborative art forms around. Separating the work of individuals can be a challenge, but doing so is necessary for tracking the development of individual students and the program as a whole.

My Waypoint rubric was developed to allow the theatre program directors to collect feedback on student designers in a consistent manner. The specific questions

Figure 5
Key Elements

3 Great Places to Work Model		Wt 6.00 (60.0%)	N/A
Element Score: <input type="radio"/> Superior <input type="radio"/> Satisfactory <input type="radio"/> Marginal <input type="radio"/> Inadequate <input checked="" type="radio"/> N/A			Deductions
<input type="checkbox"/> 1	Report provides enough information about the GPTW model and the Great Places to Work list to provide an overview and give context to the rest of the report.		0
<input type="checkbox"/> 2	The report address the 3 relationships invoked by " At the heart of our defintion of a great place to work -a place where employees "trust the people they work for, have pride in what they do, and enjoy the people they work with"		0
<input type="checkbox"/> 3	The report addresses the central role of Trust and its constituent elements: Credibility, Respect and Fairness.		0
<input type="checkbox"/> 4	The report addresses the role of Pride in three respects: Pride in personal contributions, pride in team contributions, and pride in the organization` s standing in the community.		0
<input type="checkbox"/> 5	The report addresses Camaraderie as expresses by ability to be oneself, work in a friendly atmosphere, and have a sense of family or team toward co-workers.		0
<input type="checkbox"/> 6	The report gives evidence from the company studied which demonstrates its qualification on the five dimensions of the GPTW model.		0

on the rubric are all tied directly back to learning outcomes designed by the program and approved by our accrediting body, the National Association of Schools of Theatre. The advantages for us with Waypoint are that we can collect feedback for the individual student who worked on the show through the selections made on the rubric, and we can track trends across multiple shows with different student designers. Waypoint accomplishes this by allowing each element on the rubric to be linked back to unique learning objectives set up by the Theatre Arts Division. By seamlessly integrating detailed student feedback and monitoring performance related to learning outcomes, we are able to collect assessment data that was previously lost because we had no consistent data collection method and lacked the ability to strip out specific student identifiers.

*Steve Markell, PhD (Department of Management):
Developing a Waypoint Rubric for Reports by Student
Teams in a Management Class*

Organizational Behavior is a commonly required course for students seeking a Bachelor of Science in Business Administration with a major in Management. Students complete a first course in management and generally enter this course as juniors. The course covers social science topics across a range of perspectives, from individual (personality theory, physiological aspects of stress), to interpersonal (social perception, communication), to group (role structures and processes) and organizational (work design, organizational culture). The course is distinctive for its multidisciplinary and multilevel framework for describing the social context of work organizations.

Student team projects, a common course element, provide pedagogical advantages in engaging learners and meeting course goals which reflect The Association to Advance Collegiate Schools of Business (AACSB) accreditation requirements for students to demonstrate their ability 1) to communicate, 2) to use information

technology, and 3) to understand individual and group dynamics in organizations. Since discussions in the text and classroom are multilevel and multidisciplinary, students are prone to become confused or overwhelmed. Team projects are intended to help students acquire an integrative framework for understanding the topical discussions. One of the team assignments begins with *Fortune Magazine's* annual "100 Best Places to Work List." This list is developed for *Fortune Magazine* by the Great Places to Work Institute which conducts its own survey of employees and reviews company applications using criteria comprising its Great Place to Work Model. Student groups select a company from the list and prepare an oral presentation and a written report on the company practices that earned the company a place on the list.

I give students the rubric I use to evaluate the oral presentation and meet with each group after their presentation to go over their group and individual scores. For the written report, I wanted a way to deliver meaningful feedback to individual students. I use Waypoint to develop a rubric to assess writing conventions and the presentation's ability to communicate the substance of the Great Place to Work Model. The key element of the rubric appears in Figure 5.

Margaret O'Connor, DSc (Business Education and Information and Technology Management): Using Waypoint in Business Communications and Report Writing for Undergraduate and Graduate Levels

Writing research reports is a requirement for students within the College of Business, and Business Communications and Report Writing is taught by the Department of Business Education and Information and Technology Management. Business majors are required to take the course in place of Composition II during their fourth semester as undergraduates, once they have learned the basics of good writing and have practiced writing simpler messages such as memos, letters, and

negative messages. The same course is offered at the graduate level in the Masters in Business Education program for students who are new to the program. At the master's level, the course provides students a way to refresh themselves about proper business communications and how to write a communications research report.

In order to respond effectively to AACSB, Middle States, and National Council for Accreditation of Teacher Education standards for writing, assessment is critical in this course set. Waypoint supports the assessment process and provides a way to improve inter-rater reliability by using one digital rubric for evaluating both the paragraphs and the elements of the research report. Therefore, although several instructors teach the course, measurement of learning goals is standardized in a meaningful way.

For example, AACSB (2008) Guideline 15, *The Assurance of Learning Standards*, states that the management of the curricula must implement systematic documentation procedures to develop, monitor, evaluate, and revise the substance and delivery of the curricula of degree programs. Learning experiences and skill areas include communication abilities in oral and written form as well as the development of analytical skills, including statistical data analysis as it supports decision-making processes throughout an organization. The following capstone project is designed to elicit and evaluate students' communication abilities, as students must turn in the final project in lieu of a final exam. The project steps include

1. Students select a communications problem that they want to learn more about.
2. They decide whether or not they want to work in groups on the project.
3. Those who have chosen groups decide on one idea that interests all members of the group. This idea is approved by the instructor.
4. As students are learning the process of research report writing they are required to turn in homework assignments which break out the components of the research report. The main components are
 - A. Introduction to the communications problem, including a short literature review of eight to ten references.
 - B. The purpose statement, the scope of the project, timeline, budget, ethical considerations, methodology, including a literature review of eight to ten references as to other examples of

communication studies that use similar methods.

- C. Sample size, instrument used to collect the data, data analysis procedures, key findings, discussion, limitations, and next steps.

Points are given and feedback is provided so that students may improve each component for the final paper. However, given the short period of time to do the entire project, students are on their own to develop 10 key findings and report on the study's limitations and discussion of the project.

5. Students follow APA guidelines, which they are already familiar with from Composition One.
6. Students are required to present their key findings to the class through a presentation, completed through Waypoint, during the last week of classes; the presentation is graded.
7. A peer review from classmates is given for the presentation completed through Waypoint.
8. Group members are required to do a peer review, completed through Waypoint, for each member who worked in their group to insure accountability of all group members.
9. Papers are turned in through Waypoint and graded according to the rubric components.

The Waypoint element shown in Figure 6 is designed to evaluate the discussion section of the research report, in which students are required to share what is important or interesting about the data and to make recommendations for organizations or future studies.

Yanhui Pang, PhD (Exceptionality Programs, Special Education): Using WayPoint for a Group Demonstration on Inclusive Practice for Undergraduate and Graduate Students

The Introduction to Exceptionalities course is taught by the Department of Exceptionality Programs. It is a mandatory course for all majors. The course reviews all major areas of exceptionality and acquaints students with the social, sociological, psychological, medical, historical, legal, economic, and professional aspects of disabilities. In addition, the course reviews current research and the latest techniques for facilitating meaningful interactions with individuals who have exceptionalities. Orientation to Exceptionalities is a graduate-level course which reviews the types of legislative support available for individuals with exceptionalities, including the right to education, employment, and entertainment, and reviews the

Figure 6
Discussion Section

Name ?	<input type="text" value="Discussion"/>
Identifier ?	<input type="text" value="E_2528_47462"/>
	Tahoma 1 (8 pt) B <i>I</i> <u>U</u> S x ₂ x ² [List Icons] T <>
Description ?	<p>Is the discussion meaningful? Distinctive to mundane Is it reflective? Does the student share their expectations versus their results? Is the discussion logical and appropriate? Does the student include the next steps?</p>
Competency ?	<p>-- Competencies -- Bloomsburg: eLearning Conceptual Understanding Presentation</p>
Kind ?	Performance (pick most appropriate) ▾
Grade/Level ?	College/University ▾
About Observations ?	<input type="radio"/> Show All <input checked="" type="radio"/> Hide All
1	<input type="checkbox"/> <input checked="" type="checkbox"/> 1 The discussion succinctly supports your findings and data. It is reflective and you share....
2	<input type="checkbox"/> <input checked="" type="checkbox"/> 2 The discussion does not succinctly support your findings and data. It has limited reflecti....
3	<input type="checkbox"/> <input checked="" type="checkbox"/> 3 The discussion is mundane. It does not reflect how the group feels about their findings,
4	<input type="checkbox"/> <input checked="" type="checkbox"/> 4 The discussion was left out.

appropriate and effective approaches for teaching individuals with disabilities.

The selection and use of assistive technology to accommodate individuals with exceptionalities in inclusive settings and to help them reach their potential is critically important according to Council for Exceptional Children (CEC) Standards (2003). The standards state that special educators should “identify and use instructional methods and curricula that are appropriate to their area of professional practice and effective in meeting the individual needs of persons with exceptionalities” (CEC, 2003, p.1). Special educators also need to be able to select and use “appropriate instructional materials, equipment, supplies, and other resources needed in the effective practice of their profession” (p.1).

The group demonstration project aims to provide students an opportunity to apply the knowledge and skills they mastered in the Introduction to Individuals with Exceptionality and the Orientation to Exceptionality class to their work with children with exceptionalities and their families in inclusive settings. The project provides pre-service teachers an opportunity to develop inclusive plans and to utilize assistive technology to accommodate children’s

special needs in inclusive settings, thus promoting the understanding of the importance of inclusion.

The group demonstration project steps include

1. At the beginning of the semester, the students are grouped into groups of four based on their interests and ability levels.
2. Each group picks an appropriate topic covered in the Introduction to Individuals with Exceptionality textbook. Guidelines are distributed at that time.
3. Each group has to meet with the instructor to go over their thoughts, their draft of their PowerPoint slides, and their visual/hands-on materials. The instructor gives them advice, suggestions, and comments.
4. Students make revisions accordingly.
5. In the actual demonstration, students present their case, going over the disability category including the definition, characteristics, and teaching strategies. They spend an equal amount of time talking about the specific child with the disability they have had a chance to work with, know of, or hear from, and showcase the teaching strategies and/or

Figure 7
Rubric Element

AT Group Demo_Visual & Supplementary Materials		Wt .30 (30.0%)	Performance: -/3
<input type="radio"/>	3	Oral report included computer-generated and/or hand made visuals (assistive technology, adapted toys, and teaching materials).	
<input type="radio"/>	2	Oral report included some visual and supplementary materials.	
<input type="radio"/>	1	Oral report did not include visuals or supplementary materials or materials used did not enhance presentation.	

assistive technology they have designed, adapted, or borrowed to address the child's special needs in the inclusive setting and to work with the child and his family.

6. As shown in Figure 7, students' demonstrations are evaluated based on the relevance and recent resources they used to develop and design the project, the depth they go into when discussing the topic, the visuals and supplementary materials they used to demonstrate how to accommodate the individuals' special needs in inclusive settings, and the organization and professionalism demonstrated in the project. The group receives the final evaluation report within a day or two after the demonstration and may present any questions they have regarding the evaluation report.

The group demonstration project improves students' collegiality and collaboration with peers. It provides students a deeper understanding of inclusiveness, such as the special challenges, the accommodations, the collaboration with the child's family, and the important roles the educators/practitioners play in the service delivery process. Students learn to use every possible means to meet children's special needs, and students' positive feedback indicates the explicitness of the rubric.

Alicia King Redfern, PhD (Psychology): Using Waypoint and Blackboard to Assess Student Learning in Psychology

According to Fink (2003), course instruction and student learning are improved when course objectives, student learning activities, and course assessment techniques are integrated with each other. A demonstration of how these concepts are being utilized in a psychology course on Psychological Tests & Measurements is presented below.

As a part of the requirements for psychology majors, students must take six upper-level psychology courses, of which one option is Psychological Tests & Measurements. As stated on the course syllabus, the course has six objectives. The following three are

pertinent to this illustration: 1) to have a thorough understanding of major psychometric properties of psychological tests, 2) to be able to administer and interpret the results of a standardized test, and 3) to be able to work collaboratively in small groups to enhance their mastery of course concepts. Toward these ends, students are required to administer and score a "real" psychological standardized test - under the supervision of the instructor - and then to make a classroom presentation on the test using PowerPoint slides.

To facilitate this process, Waypoint and Blackboard are utilized. Blackboard is used to communicate the guidelines of the assignment to students and to maintain their grades for the assignment. A rubric is developed for the assignment using Waypoint. The rubric contains well-defined performance criteria that tie course objectives to student learning and assessment activities. Students are sent an advanced copy of the Waypoint rubric through Blackboard in order for them to know what is expected of them and how the assignment will be graded, thus enabling them to maximize their performance. Since the assignment requires students to make live classroom presentations, the instructor, using a laptop, is able to grade students' performance using the Waypoint rubric and then simultaneously to post their grades to Blackboard's gradebook and send students a copy of their graded rubric.

The specifics of the assignment include a general description of the content and grading procedures for the student presentations. For example, the general content and grading procedures for the student presentation are as illustrated in Figure 8.

In the Waypoint rubric, the general guidelines listed in the assignment are transformed into well-defined performance criteria. The resulting criteria not only tie the course objectives to the students' presentations and assessments, but, as importantly, enable the students to more actively engage in the assignment. For example, items #1 (Test Description), #2 (Test Administration & Scoring), and #5 (Group Assessment) listed in the guidelines document are transformed in the Waypoint rubric as shown in Figure 9.

Without a doubt, integrating Waypoint with Blackboard has been extremely effective in enhancing course instruction, as well as improving students' learning and performance. By integrating student learning and

Figure 8
Content and Grading Procedures

Project Content & Grading: 200 Total Points	
1. Test Description: 20 points	<ul style="list-style-type: none"> - Title - Author - Publisher - Year published - Description of what test measures and how it measures it
2. Administration & Scoring Procedures: 60 points	<ul style="list-style-type: none"> - Administer test to another group in the class - Score other group's tests - State what the test requires examinee to do - State how is it scored - State how are scores interpreted - <i>Provide an example - suggest presenter discuss his/her test results</i>
3. Test Reliability & Validity: 40 points	<ul style="list-style-type: none"> - What is the reliability of the test (reliability coefficient and what it means) - What is the validity of the test (validity coefficient and what it means)
4. Test Critique: 40 points	<ul style="list-style-type: none"> - Provide name and credentials of reviewer - State at least three (3) strengths of test - State at least three (e) weaknesses of test
5. Group Assessment: 20 points	<ul style="list-style-type: none"> - Was group cohesive (i.e., introduce one another and supportive of each other)? - Were tasks equally divided among group members? - Did the presentation flow smoothly? - Was presentation within 20-minute time limit?
6. Individual Assessment: 20 points	<ul style="list-style-type: none"> - Did individual speak well (i.e., volume, speed and diction)? - Was individual professionally attired (i.e., no jeans or sneakers)? - Was individual audience-centered rather than instructor-centered?

Figure 9
Rubric Elements

1	Administering The Test	Multiple	Wt (5.0%)	Performance
1	Test directions were clear and examinees' progress was monitored.			
2	Test directions were clear but examinees' progress was NOT monitored.			
3	Test direction were NOT clear but examinees' progress was monitored.			
4	Test directions were NOT clear NOR was examinees' progress monitored.			
2	Scoring The Test	Multiple	Wt (5.0%)	Performance
1	All tests were scored correctly.			
2	One or two tests were scored INCORRECTLY.			
3	Three or more tests were scored INCORRECTLY.			
3	Group Assessment	Multiple	Wt (10.0%)	Performance
1	Group performed at the HIGHEST level. SUPPERB demonstration of group cohesiveness, equal division of tasks, and organization.			
2	Group performed at a HIGH level. VERY GOOD demonstration of group cohesiveness, equal division of tasks, and organization			
3	Group performed at SATISFACTORY level. ADEQUATE demonstration of group cohesiveness, equal division of tasks, and organization.			
4	Group performed at a LOW level. LESS THAN SATISFACTORY demonstration of group cohesiveness, equal division of tasks, and/or organization.			
5	Group performed at LOWEST level. LITTLE demonstration of group cohesiveness, equal division of tasks, and/or organization.			

assessment activities with course goals, course instruction and teaching activities have become more integrated and consistent. As a result, students seem to be having more “significant” learning experiences – that is, informal feedback from students indicates that they have found the rubrics to be very help in preparing for assignments and in understanding how assignments are graded, and they are appreciative of receiving immediate feedback on their performances. In conclusion, using Waypoint rubrics on Blackboard has resulted in the instructor becoming more coherent, clear, and interactive in developing course learning and assessment activities that are compatible with course objectives, and, in turn, has enabled students to become more proficient and self-directed learners.

Stephanie A. Schlitz, PhD (English): Adopting Web-based Rubrics to Enhance the Teaching and Evaluation of College-level Writing

The National Council of Teachers of English (NCTE, 2008) recognizes that “Developing, researching, and validating a writing assessment is a constant process...” (p. 3). While engaging in this assessment process can prove challenging for any college-level writing instructor, I have found that with support from web-based rubric software such as Waypoint, I can more effectively evaluate students’ writing and can more readily maintain doing so as an ongoing aspect of my pedagogy. Digital rubrics are flexible, transparent, and easily modifiable. By adopting a digital rubric model and by adapting my existing evaluation criteria to correspond with the element and observation format defined by Waypoint, I have been able 1) to assess and to respond to students’ writing in an efficient, electronic format that stores my evaluations for future reference; 2) to compare performance within and between students and writing assignments online via a secure web application; and 3) to test the validity of my evaluation criteria, to begin researching their clarity from a student perspective, and to modify and then to reuse them in a new rubric as the assignment and writing context evolve.

NCTE (2008) standards further state that “students should have access to the goals, purposes, and scoring criteria for required assessments” (p. 3). The challenge of responding to this Principle of Effective Writing Assessment is often practical – especially for teachers who use electronic media as a primary mechanism for communication. Because Waypoint interacts with Blackboard, the CMS supported by Bloomsburg, I have been able to share the rubrics I’ve developed for the writing assignments my students complete alongside the assignment requirements, creating an environment where assignment goals, purposes, and scoring criteria are accessible to students in a web format they can refer to repeatedly.

Although I would recommend the adoption of a web-based rubric model to other writing instructors, adapting to this new model did pose some challenges for me. For example, the challenge imposed as I was forced to modify my evaluation criteria to match the architecture of a specific software model was an impediment, though one offset by the training workshop and team adoption model. Also, the necessity to restructure my evaluation process to compensate for Waypoint’s inability to allow context bound feedback and its inability to capture the subtleties of evaluation many writing assignments demand were further impediments. Nonetheless, in my experience, rubrics do serve to focus student writers and to focus instructor evaluation of students’ work. I am finding that web-based rubrics in particular offer an efficient, quantitative data collection method that can augment my evaluation of students’ writing, can contribute to improved student performance, and can be extended to support the evaluation and improvement of writing pedagogy.

Deborah Stryker, PhD (Special Education: Education of the Deaf): Using Waypoint in Report Writing and Presentation for Undergraduate and Graduate Levels

As a faculty member teaching in both a traditional classroom format as well as a distance learning format when preparing students to become teachers of Deaf and hard of hearing (Dhh) children and youth, I found the use of a performance-based rubric to be most helpful in more clearly defining assignment parameters. In addition to facilitating clarity in the structure of the assignment, which was based on the standards established by the Council on Education of the Deaf (CED) and the Council for Exceptional Children (CEC), it facilitated my ability to define the level of performance I expect from each student, providing me with a more fair and consistent means of grading and providing feedback to my students. Another bonus to the use of Waypoint was that it shortened my grading time because I was able to (a) build written descriptions of common errors into the rubric and (b) distribute the feedback very efficiently by just pressing the icon “email.”

Curricular Subjects for the Deaf and Hard of Hearing is a required methods course for students wanting to become teachers of Dhh children and youth, and it is offered online with synchronous and asynchronous learning formats. It is a dually listed course; that is, students have the option of taking this course as a graduate student or as an upper level undergraduate course elective.

The process of developing my Waypoint rubric for the assignment “Language/Literacy Research Report: Curriculum and/or Assessments Used When Teaching

Figure 10
Research Report Scope Elements

4	Curriculum Report Scope WHY*	Content	Wt (5.0%)	Performance
1	Your explanation of why you chose this program or district is clearly described and written.			
2	It is not really clear why you chose the program you chose to review their curriculum.			
5	74.569 Curriculum Report Scope Curriculum Description*	Content	Wt (5.0%)	Performance
1	Your description of the curriculum is thorough and very clearly written.			
2	Your description of the curriculum is not very clear.			
3	You did not include a description of the curriculum.			
6	74.569 Curriculum Report Scope Assessment Rep*	Content	Wt (0.0%)	Performance
1	Your Assessment tools description, which is optional, is complete and clearly written.			
2	Your Assessment tools description is included but not clearly written.			
3	You do not have a description of the assessment tools used in this language/literacy program.			
7	74.569 Curriculum Report Scope Benefits*	Content	Wt (10.0%)	Performance
1	Your explanation of the benefits to using these assessments with DHH students (10) is complete, and clearly written.			
2	Your explanation of the benefits to using the assessments with DHH students is complete but not clearly written			
3	You have not included an explanation of the benefits to using with DHH students			
8	74.569 Curriculum Report Scope Exp/Rationale*	Content	Wt (20.0%)	Performance
1	Your explanation or rationale for the appropriateness of this language and literacy curriculum with DHH students is clearly written. (20)			
2	Your explanation / rationale for appropriateness with DHH students is not very clear. It is well written			
3	Your explanation / rationale for appropriateness with DHH students is not complete and not clearly written.			
4	You do not have an explanation or rationale for appropriateness with DHH students.			

Students who are Deaf or Hard of Hearing” began from my desire to better communicate the expectations of the assignment. For this assignment, I require the students to research, review, and report on a language and literacy curriculum, the assessment tools that are used when teaching students who are Dhh and the benefits of this curriculum and the assessment tools to students with a hearing loss. The final project includes three components: an APA research report, an online synchronous presentation, and a one-page overview handout.

To illustrate the correlation between my performance-based assessment and the *CED/CEC Instructional Content and Practice Standard: Student will be knowledgeable regarding curricula and instructional strategies used in general and deaf education* (Council on Education of the Deaf, 2003), a section of my rubric is provided in Figure 10.

While the learning curve I experienced when developing my first Waypoint grading rubric was challenging, mainly because of the terminology differences between Waypoint rubrics and standard rubrics (e.g. rubrics are referred to as *assignments*, criteria are *elements*, and the many descriptors of performance are *observations*), the benefits have far outweighed those initial problems. I have since developed more Waypoint rubrics and am currently researching my students’ attitudes toward the use of this kind of feedback.

Lessons Learned

The motivation that led the group of faculty to form and sustain the assessment-based FLC was the shared commitment to becoming better teachers. In our case, improving pedagogy involved learning new technology, and FLC members reinforce what has been pointed out in the literature: FLCs offer a wonderful way to demystify technology-related training because they enable effective participation and encourage participants to embrace what they learn during training. For members of this FLC, the three-day intensive workshop was an essential element towards the acquisition of new technological skills, and, significantly, FLC members note the importance of having felt safe to acknowledge failure and to learn from mistakes throughout the workshop. FLC members also describe the follow-up meetings as essential for the continued development and integration of web-based rubrics and emphasize the role of these meetings in fostering ongoing collaboration.

Participants stress that the group’s diverse make-up, including faculty at different ranks (from assistant to full) and at different stages in their career and experiential backgrounds, enriched the community experience. They note the benefits of working with colleagues across departments and colleges and of developing interdisciplinary affiliations that contributed to the overall esprit de corps of the group. Although

participants elected to participate by submitting mini-grant proposals, the selection of mini-grant recipients was competitive, and individuals report feeling supported not only by the small fund provided by the mini-grant, but also by the opportunity to blend social and professional activities, to share the workload, and to gain insight from colleagues.

Engaging in scholarly processes further contributed to the cohesiveness of the FLC. For example, the group has presented internally at a university TALE meeting and externally at an academic conference. Members of our team have also collaborated on an Institutional Review Board approved survey designed to collect data from students who agree to evaluate their experience as users of web-based rubrics (a summary describing the results of this study is forthcoming).

Perhaps most significantly, our FLC members underscore the importance of having established a clear link between technology, assessment, and pedagogy from the onset of this endeavor. Our facilitators were experienced faculty who were also experts in the technology we adopted, and the topic of assessment was explicit from the project's inception. Throughout our work together, the acquisition of new technological skill and the emphasis on assessment have consistently been driven by pedagogical aims.

Conclusion

The energy level and the focus of the FLC stimulated the decision to share our "lessons learned" as we continued collaboration by co-authoring this article. In essence, sharing the model and strategies we used as we endeavored to juggle the scholarship of teaching and learning brought synergy to the team. Moreover, it enabled us to reflect on the development and the outcomes of our assessment-based FLC. Our research, experience, and practice demonstrate that when a self-selected team of technology risk-takers and pedagogy explorers is provided with training, resources, and organizational support, one outcome is the formation of an FLC. When the FLC is driven by assessment goals, such as the construction and implementation of a web-based rubric designed to enhance performance-based assessment, the development of a culture of assessment is achievable.

References

- Andrade, H. (2000). Using rubrics to promote thinking and learning. *Educational Leadership*, 57(5), 1-7.
- Arter, J., & McTiche, J. (2001). *Scoring rubrics in the classroom: Using performance criteria for assessing and improving student performance*. Thousand Oaks, CA: Corwin.
- Association to Advance Collegiate Schools of Business. (2008). *Eligibility procedures and standards for business accreditation*. [Adopted April, 2003; revised January 31, 2008.] Annotated version. Retrieved from <http://www.aacsb.edu/accreditation/standards.asp>
- Bresciani, M. J. (2007). *Assessing student learning in general education: Good practice case studies*. Bolton, MA: Anker.
- Council for Exceptional Children. (2003). *What every special educator must know: Ethics, standards, and guidelines for special educators* (5th ed.). Retrieved from http://www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandards/Red_book_5th_edition.pdf
- Council on Education of the Deaf, Office of Program Evaluation. (2003). *Manual 1: Standards for programs preparing teachers of students who are deaf and hard of hearing*. Washington, DC: Author.
- Cox, M. D. (2004). Introduction to faculty learning communities. In M. D. Cox & L. Richlin (Eds.), *Building faculty learning communities: New directions for teaching and learning* (pp. 5-23). San Francisco: Jossey-Bass.
- Dunbar, N. E., Brooks, C. F., & Kubicka-Miller, T. (2006). Oral communication skills in higher education: Using a performance-based evaluation rubric to assess communication skills. *Innovative Higher Education*, 31(2), 115-128.
- Fink, L. D. (2003). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco: Jossey-Bass.
- Keengwe, J., Kidd, T., & Kyei-Blankson, L. (2009). Faculty and technology: Implications for faculty training and technology leadership. *Journal of Science Education & Technology*, 18(1), 23-28.
- Long, L., Janas, D., Kay, L., & August, C. (2009). Introducing online learning at a small college through a faculty learning community. *Online Journal of Distance Learning Administration*, 12(1), 5-15.
- National Council of Teachers of English. (2008). *NCTE-WPA white paper on writing assessment in colleges and universities*. Retrieved from <http://www.ncte.org/library/NCTEFiles/Resources/Positions/WPAwritingassessment.pdf>
- Nugent, J., Reardon, R., Smith, F., Rhodes, J., Zander, M., & Carter, T. (2008). Exploring faculty learning communities: Building connections among teaching, learning, and technology. *International Journal of Teaching & Learning in Higher Education*, 20(1), 51-58.
- Palomba, C. A., & Banta, T. W. (1999). *Assessment essentials: Planning, implementing, and improving*

- assessment in higher education*. San Francisco: Jossey-Bass.
- Peat, B. (2006). Integrating writing and research skills: Development and testing of a rubric to measure student outcomes. *Journal of Public Affairs Education, 12*(3), 295-331.
- Pindiprolu, S. S., Lignugaris-Kraft, B., Rule, S., Peterson, S., & Slocum, T. (2005). Scoring rubric for assessing students' performance on functional behavior assessment cases. *Teacher Education and Special Education, 28*(2), 79-91.
- Schneider, F. J. (2006). Rubrics for teacher education in community college. *The Community College Enterprise, 39*-55.
- Sirum, K., Madigan, D., & Klionsky, D. (2009, January). Enabling a culture of change. *Journal of College Science Teaching, 38*(3), 38-44.
- Smith, T. R., McGowan, J., Allen, A. R., Johnson, W. D., II, Dickson, L. A., Jr., Najee-ullah, M. A., et al. (2008). Evaluating the impact of a faculty learning community on STEM teaching and learning. *The Journal of Negro Education, 77*(3), 203-226.
- Song, K. H. (2006). A conceptual model of assessing teaching performance and intellectual development of teacher candidates: A pilot study in the US. *Teaching in Higher Education, 11*(2), 175-190.
-
- STEPHANIE A. SCHLITZ is an Assistant Professor of English and Linguistics at Bloomsburg University. Her research and teaching areas include theories and practices of text encoding, historical linguistics, and Scandinavian languages and literature. She is an active member of the digital humanities community and currently serves as co-Chair of the Text Encoding Initiative's Education Special Interest Group.
- MARGARET O'CONNOR is an Associate Professor at Bloomsburg University in the Department of Business Education and Information and Technology Management. She holds a Doctor of Science degree from Robert Morris University. Her research focuses on information systems for developing countries as well as classroom diversity.
- YANHUI PANG is an Assistant Professor in the Department of Exceptionality Programs at Bloomsburg University of Pennsylvania. Her research interests focus on the legislative support for Early intervention (EI), family's roles in EI service delivery; comparison of quality early childhood education cross cultures, the EI to preschool transition, and ESL teaching.
- DEBORAH STRYKER, Ph. D., Assistant Professor in the Department of Exceptionality Programs. She teaches both online and traditional format courses within the areas of Special Education and Deaf Education. Her research interests include educating deaf children with additional mild/moderate disabilities, distance education, and factors that influence attitudes toward individuals with exceptionalities.
- STEPHEN J. MARKELL, PH. D., is Associate Professor of Management in the Department of Management, College of Business, at Bloomsburg University. Dr. Markell has 25 years experience as a management educator and interdisciplinary researcher. His recent research explores what and how management educators teach business undergraduates.
- ETHAN H. KRUPP is an Assistant Professor and the Technical Director for the Theatre and Dance Division at Bloomsburg University. He teaches both general education theatre classes and major class in technical theatre production and design.
- CELINA BYERS, Associate Professor in the Department of Instructional Technology in the College of Science and Technology at Bloomsburg University of Pennsylvania, teaches face-to-face and online graduate courses. Her major research interests are effective learning processes, game-based learning, theory and practice of assessment, leadership, and application of technology to enhance learning and instruction.
- SHEILA DOVE JONES, Ed. D., is a Professor in the Department of Exceptionality Programs, Special Education Program, at Bloomsburg University. Currently, she is the Interim Director, Office of Planning and Assessment and was the Director of the Teaching and Learning Enhancement Center from 2007-2009. Her scholarship areas include assessment outcomes in teacher education and research on assistive technology and attitudes of professional and students toward individuals with exceptionalities.
- ALICIA KING REDFERN, Ph. D., is an Associate Professor of psychology at Bloomsburg University. She is a member of the American Psychological Association, American Psychological Society, Gerontological Society of America, American Association for Higher Education and Pennsylvania Black Conference on Higher Education. Her research areas of expertise include students of color in higher education, aging, and Africana womanism.