

Armenian Faculty Members' Perceptions of Faculty Workshops on Student Evaluation Methods

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Abstract

Armenia's educational structure prior to 1991 followed closely the Soviet model of government controlled curriculum and teaching methodologies. Since 1991, Armenia has been striving to reform their post-secondary education system. One such reform includes the current educational evolution occurring at the Armenian State Agrarian University (ASAU). As part of this evolutionary process of change, the (ASAU) with assistance from the United States Department of Agriculture (USDA) Foreign Agricultural Service (FAS) through the Caucasus Agricultural Development Initiative (CADI) have begun implementation of the Bologna process. As a part of this process, ASAU faculty members were provided instruction in selected effective methods of student evaluation. The multi-fold purpose of this study was to describe selected characteristics of faculty members in ASAU and to describe their perceptions concerning the "importance of" and their "ability to" perform the evaluation practices and activities presented during professional development seminars. Quantitative methods were used to collect data from 22 agricultural faculty (i.e., a purposive sample) for this descriptive study. The highest rated training topic need identified was rubric development curriculum. Faculty also indicated a need for training in summative evaluation techniques (2nd highest) and creating and designing test questions (3rd highest need). To determine if participants were self efficacious with regards to concepts in each workshop a mean score was calculated for the question "Rate your ability to implement the concepts covered in today's workshop." Armenian faculty members rated themselves as between "Average Ability" and "Much Ability" with regards to the five overarching workshop topics.

Key words: Armenia, Faculty Development, Student Evaluation

Introduction and Background

Armenia is a landlocked country in Western Asia that lies on the isthmus between the Black and Caspian seas. While the country has experienced periods of independence, much of its existence has been under the control of various empires including the Roman, Byzantine, Arab, Persian, and Ottoman (Central Intelligence Agency, 2007). More recently, Armenia was taken over by the new Soviet communist regime in Russia in 1920 and officially became a part of the Union of Soviet Socialist Republics (USSR) from 1920 to 1991 (Central Intelligence Agency, 2007; Microsoft®, Encarta® Online Encyclopedia, 2007). Although Armenia gained its independence in 1991, it was 1995 before the first post-soviet constitution was adopted (Microsoft®, Encarta® Online Encyclopedia, 2007).

The changes in the political structure initiated in 1991 and further developed in subsequent years lead to widespread reform occurring in all areas of Armenian government, including the area of education. Armenia's educational structure prior to 1991 followed closely the Soviet model of government controlled curriculum and teaching methodologies. Faculty lectures with little or no student feedback were common in the classroom. Student performance was often based on an end-of-the semester oral and/or written examination. Since 1991 Armenia has been striving to establish its own education system, curriculum, teaching, and evaluation methods.

Armenia has been very progressive in instituting appropriate reforms for the benefit of Armenians. Such reforms include economical reforms that, according to the USDA "dramatically lowered inflation and created growth, making the country economically stronger" (USDA, 2006, Economic Progress Spurs Investment section, ¶ 2). The Armenian government was very progressive in redistributing land to agricultural producers following the end of power for the USSR that has proved to be economically beneficial when compared to other former Soviet republics who were slower to return the land to the people (Lerman, 2006). Agriculture is a major contributor to the Gross Domestic Product (GDP) of the nation. In 2005 the estimated GDP was 4.9 billion dollars (Microsoft®, Encarta® Online Encyclopedia, 2007) with agriculture comprising 24% of this total (Lerman, 2006).

With the aforementioned facts in mind, it comes at no surprise that the Armenian State Agrarian University (ASAU) is a front-runner in establishing educational reform to benefit the students that will lead one of the nations most important industries; agriculture. As part of this evolutionary process of change the (ASAU), with assistance from the United States Department of Agriculture (USDA) Foreign Agricultural Service (FAS) through the Caucasus Agricultural Development Initiative (CADI) have begun implementation of the Bologna process.

The Bologna Declaration of 19 June 1999 - declaration and subsequent communiqués are well-known in higher education circles. By May 2007, 46 countries had joined the European Higher Education Area (EHEA) framework with the goal of a common educational market (London Communiqué, 2007; Bergan, 2007; South East Europe Education Cooperation Network, 2007). Fundamentally, the transformation was all about attracting students to European universities (higher education institutions or HEIs) and better accommodating students in this emerging era. University experiences must prepare students for the future—not for the past (Baumann, Bielecki, Heerens, & Lažetic, 2005; Benelux Bologna Secretariat, 2007; Geven, 2007).

A portion of the goals of the Bologna process is to institute a level of quality control among universities and to provide a common academic currency that will provide students mobility in choosing to pursue advanced degrees in other nations (London Communiqué, 2007).

As a part of this process, ASAU faculty members were provided instruction in selected effective methods of student evaluation. An evaluation of those workshops provided the data for this study.

Purpose of the Study

The multi-fold purpose of this study was to describe selected characteristics of faculty members in the Armenian State Agrarian University and to describe their perceptions concerning the “importance of” and their “ability to” perform the evaluation practices and activities that were presented during professional development seminars dealing with methods of student evaluation in 2007. In addition, findings will be used to better inform providers of professional development regarding the relevance, appropriateness, and anticipated value of future professional development seminar topics and training.

Methods

Instruments were developed to assess the perceptions of the 22 workshop participants and were distributed and collected at the end of selected workshops in 2007. The instruments were kept short and direct to ensure participants would complete the instruments because they were being asked to complete a total of five surveys over the duration of the workshops.

Both qualitative and quantitative methods were used to collect data from 22 agricultural faculty of agriculture (i.e., a purposeful sample) for this descriptive study – only quantitative data will be reported in this manuscript. The participants attended three series of workshops; each series of workshops included 10 two-hour professional development seminars on student evaluation during the summer of 2007. Seminar topics were presented by two faculty members from a four-year land-grant institution in the USA. The seminars were delivered in English and translated into Armenian.

The instruments asked four questions with the first three using Likert-type responses. The questions were: (1) Rate the importance of the concepts covered in today’s workshop; (2) Rate your ability to implement the concepts covered in today’s workshop; (3) Rate your prior level of instruction on concepts covered in today’s workshop; and (4) Please provide any additional questions or comments you may have regarding today’s workshop. This instrument was modified from a questionnaire used previously by American agricultural educators who served as in-service education providers to Lithuanian agricultural educators (Edwards & Thuemmel, 2000).

The descriptors for the “importance” scale were “5” = “Great Importance,” “4” = “Much Importance,” “3” = “Average Importance,” “2” = “Little Importance,” and “1” = “No Importance.” The descriptors for the “ability” scale were “5” = “High Ability,” “4” = “Much Ability,” “3” = “Average Ability,” “2” = “Low Ability,” and “1” = “Negligible Ability.” Cronbach’s coefficient alpha reliability estimates for the rating scales were .88 (importance) and .54 (ability), respectively. The questionnaire items were reviewed and validated by consensus of the researchers and then translated into Armenian by an English language specialist. Data were analyzed using descriptive statistics, including the calculation of frequencies, percentages, means, standard deviations, and rankings.

Results

Personal characteristics provided by ASAU departments revealed that faculty participants’ ages ranged from 36-68 years; the majority of the participants were male; teaching

experience at ASAU ranged from 4-30+ years; and a number of faculty had participated in projects and/or tours at universities in the US.

Objective 1: To determine if the workshops were perceived as needs of the participants a mean weighted discrepancy score (MWDS) was calculated by subtracting the competency (ability) score from the importance score and by multiplying that number times the mean importance rating for each competency then dividing by the number of observations (Borich, 1980; Joerger, 2002). The highest rated training topic need identified was rubric development curriculum. Faculty also indicated a need for training in summative evaluation techniques (2nd highest) and creating test and designing test questions (3rd highest need). Faculty members reported formative evaluation techniques and taking multiple measures as not needed (Table 1).

Table 1

Workshop Participants' Perceptions of Need for Selected Workshops, Armenian State Agrarian University, 2007

Workshop Topics	*MWDS
Designing and using rubrics	2.09
Summative evaluation techniques	0.55
Creating test and designing test questions	0.31
Formative evaluation techniques	-0.18
Taking multiple measures of student learning	-0.64

Note. * MWDS – Mean Weighted Discrepancy Score

Objective 2: To determine if participants were self efficacious with regards to concepts in each workshop a mean score was calculated for the question “Rate your ability to implement the concepts covered in today’s workshop.” Armenian faculty members rated themselves as between “Average Ability” and “Much Ability” with regards to the five overarching workshop topics. Mean scores approached “Much Ability” for design and use of rubrics, creating test and test questions, taking multiple measures, and formative evaluation techniques (Table 2).

Table 2

Workshop Participants' Self Efficacious Scores for Workshop Topics, Armenian State Agrarian University, 2007

Workshop Topics	Mean
Designing and using rubrics	3.95
Creating test and designing test questions	3.83
Taking multiple measures of student learning	3.77
Formative evaluation techniques	3.76
Summative evaluation techniques	3.5

Note. * 1 = Negligible Ability, 2 = Low Ability, 3 = Average Ability, 4 = Much Ability, 5 = High Ability

Conclusions

The purpose of this study was to determine if workshop participants perceived the workshop material as what they needed and if they were self-efficacious with regard to the workshop material. According to the participants in this study, they had the greatest need for training in designing and using rubrics, followed by summative evaluation techniques, and creating tests. Under the old Soviet model of government-controlled curriculum and teaching methodologies, SAUA faculty didn't have the freedom to incorporate evaluation techniques (rubrics, multiple summative evaluation instruments, etc.) into their courses. A majority of the participants were teaching at ASAU under the old Soviet model and were eager to modify their student evaluation techniques, as expressed during the workshops.

Participants in this study did not perceive that they needed training in formative evaluation techniques and taking multiple measures of student learning. The participants also reported that they were approaching "Much Ability" on all five workshop topics that were examined in this study (designing and using rubrics, creating and designing test questions, taking multiple measures of student learning, and formative evaluation techniques).

Educational Importance, Implications, and Application

The current educational system at ASAU still reflects the influence of centralized control as witnessed during the Soviet Era. Many faculty members have embraced modern pedagogical and evaluation techniques not previously used at the university. Providers of professional development need to be informed about the value of their programs and efforts so that current and future programming meets the needs of their clientele. Glanville (2006) noted that "all higher education institutions should aspire to improve and enhance the education they offer their students" (p. 49). It is apparent from the results of this study that ASAU faculty with a cadre of experiences perceived a true need to incorporate new evaluation techniques into their courses, and to demonstrate a level of self-efficacy that will enable them to construct change in their courses and curriculum and enhance education at ASAU.

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