

Survey of Professional Development Opportunities for Two-Year Institution and Community College Faculty

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Abstract

In August and September of 2010, members of the Engineering Technology Division of ASEE and the New York State Engineering Technology Association listservs were asked to complete an online survey. The survey was designed to probe the professional development funding opportunities for faculty members of two-year institutions and community colleges. Seventy-eight responses were received within one month. Out of 78 responses, 56 respondents indicated their institution affiliation, which resulted in 50 non-duplicated institutions being represented out of 344 institutions from the listservs. Based on the information collected, 14.1% of respondents are responsible for obtaining their own funding for professional development, out of which 45.5% are paying out of pocket. This could be a tremendous burden on new faculty members, who traditionally start at a low salary and need professional development the most. The remaining respondent pool was divided as follows: 16.7% are funded on the department level, 20.5% are funded on the division level, and 48.7% are funded on the college level. According to expectations, a high percentage of faculty members from private technical schools (more than 30%) are responsible for their own funding. Surprisingly, faculty at state-affiliated schools face a similar problem with more than 18% being forced to come up with funding for their professional development activities. There is an inverse relation between the department size and the funding opportunities provided at the department, division, or college level. It was also determined that 49% of all respondents have to pay their own professional organizations' membership dues.

Introduction

A request to complete an online survey was sent to members of the Engineering Technology Division of ASEE and the New York State Engineering Technology Association listservs in August and September of 2010. Members of two-year colleges were asked to complete a survey about how professional development activities such as conferences, workshops, and seminars were funded at their institutions. Additional information was requested such as the size of the department and college, program accreditation, private or public institution (and affiliation with county or state for public institutions), the number of department faculty members, and the number of students enrolled in the institution. Members were also asked to list their college to verify that respondents were from a two-year school. In a four-week period, 78 people responded, 56 of which indicated their college affiliation. This resulted in

50 different colleges being represented in the survey results out of 344 originally questioned. The results of the survey are presented and analyzed in this article, which is organized as follows. First, the motivation for the survey, criteria evaluated in the survey, and overall results obtained relevant to the funding opportunities and restrictions for the two-year institution and community college faculty are discussed. Then, the thorough analysis of correlation between the funding opportunities and limitations and the institutional accreditation status is conducted. Next, similar analysis is conducted to evaluate correlations between the funding and the institutional affiliation, such as state, county, or private. Furthermore, the correlations between funding issues and institution and department size are evaluated. Finally, additional input on the funding strategies and main conclusions are outlined.

Analysis of Funding Opportunities and Restrictions for Two-Year Institution and Community College Faculty

The survey was conducted to gather information on how other schools fund professional development with the goal of presenting the information to our administration. The survey questions were based on how funding is derived at Erie Community College and on the limited knowledge we had about how professional development was funded at other two-year colleges. The ASEE Engineering Technology Division listserv was chosen after seeing the large number of responses to a survey regarding calculus and physics requirements in engineering-technology programs [1]. The NYSETA listserv was surveyed as well, even though the number of two-year schools was much smaller.

The survey was meant to gather information, so we weren't sure what factors were potentially related to funding. We also wanted to determine if membership dues for professional organizations were funded as well, and what limits, if any, were imposed on the amount of dues paid. Some factors that could potentially be relevant were program accreditation, type of affiliation, size of school, and number of faculty in the department. The survey questions and corresponding logical organization of the survey are shown in Figure 1.

It was determined that 14.1% of all respondents are responsible for obtaining their own funding. 85.9% of respondents indicated that they have access to the following institutional funding sources: 16.7% are predominantly funded on the departmental level, 20.5% are predominantly funded on the divisional level, and 48.7% are predominantly funded on the college level. Out of the self-funding category, 45.5% of faculty members have to pay for the professional development activities out of their own pocket, 54.5% have access to federal and/or state grants, 9.1% have access to various corporate and/or foundational grants, and 9.1% are able to benefit from NEA/AFT or other union-related grants. 49.3% of all surveyed faculty members have a yearly limit on the number of conferences, workshops, or seminars they can attend that varies from 1 to 5 events per year, with the majority of faculty being limited to 1 or 2 professional development activities per year. More than 65% of the surveyed faculty indicated that they have a dollar limit on the individual-funded activities, which varies greatly with 50% of faculty being limited to less than \$1,000 per year, 47% being limited to \$1,000-\$3,000 per year, and 3% being able to use \$3,000 or more per year.

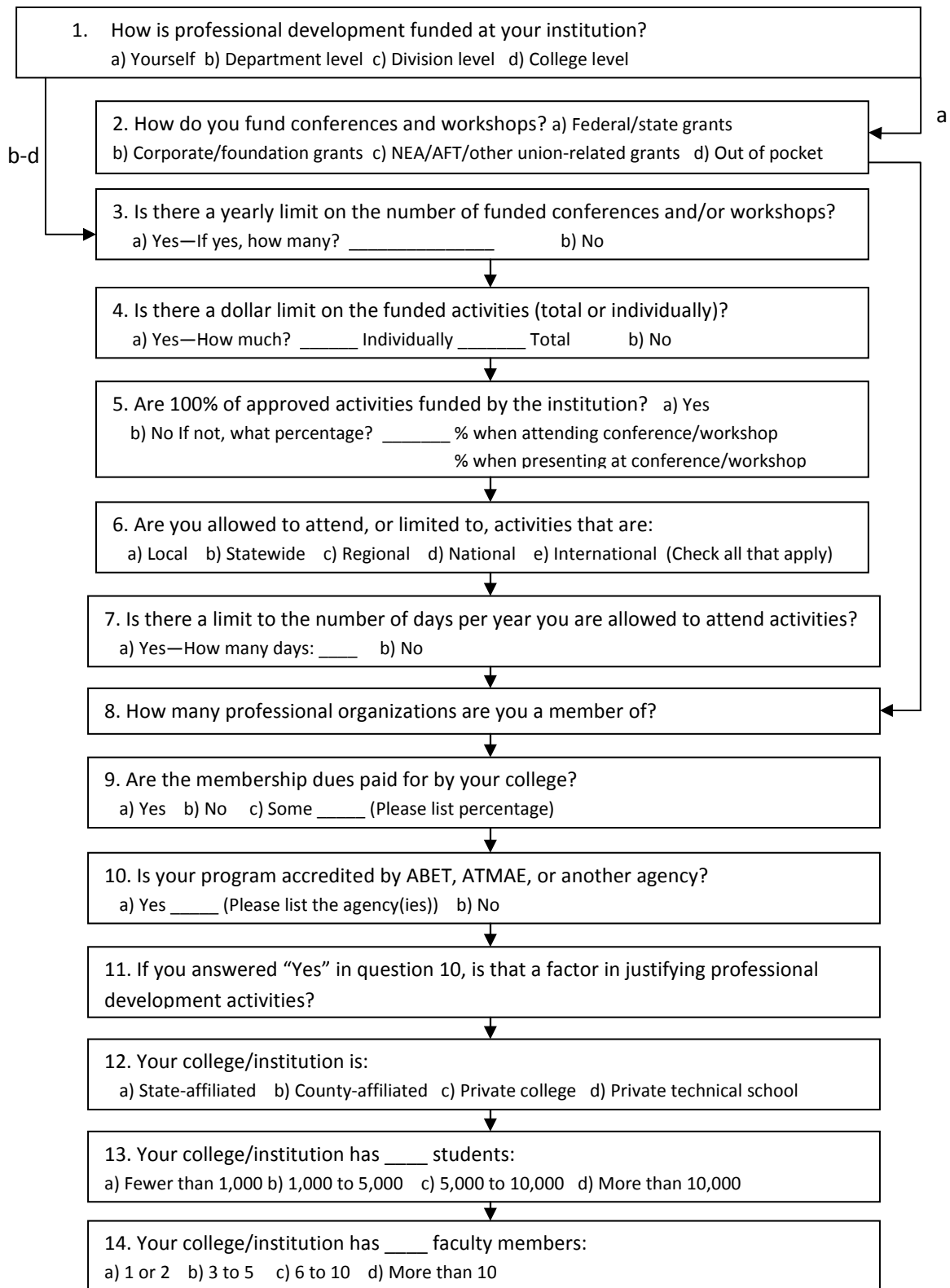


Figure 1: Survey Questions and Survey Logical Organization

Around 80% of the surveyed faculty members are allowed to attend local, state, regional, or national conferences using the funding sources from their institutions or from grants. However, only 20% are actually allowed to attend any kind of international conference or forum if funded through their institution or by grants. Only a small percentage of the surveyed faculty (13.2%) is restricted in the number of days per year allowed for professional development, which range from 3 to 10 days per year. Another category evaluated in the survey was related to the dues in the professional organizations and how these dues are funded. 36.5% of respondents indicated that all dues are paid by their institution, 49.2% claimed that all dues are paid out of pocket, and 14.3% said that only a portion of the dues (ranging from 12% to 80%) is paid by their corresponding institution.

Funding Opportunities and Restrictions Based on the Institutional Accreditation

In the following analysis, category “All” refers to all responses collected; category “Accredited” refers to the faculty from externally accredited programs through ABET, ATMAE, or similar agencies; category “Not accredited” refers to the faculty from non-accredited programs; and category “Not sure” refers to the faculty who failed to specify the accreditation status altogether. On the basis of the collected data, about 15.4% of the individual faculty members from the accredited programs are responsible for their own funding, as shown in Figure 2. This is only slightly larger than 14.1% of the whole number of faculty that participated in the survey who have to obtain their own funding. Surprisingly enough, the self-financing faculty from accredited programs are more likely to pay out of pocket (50%) than the faculty from non-accredited programs (20%). It also seems that faculty from non-accredited programs have better access to federal/state grants (80%) than their counterparts from the accredited programs (50%). The “Not-sure” category, which did not indicate to be either accredited or not accredited by the external accreditation bodies, indicated an even higher percentage of self-funded activities being paid out of pocket. Based on the comments given at the end of each survey, we speculate that most of the faculty members in this category are either newly hired (and are not familiar with all the details about their corresponding programs) or part-time faculty. This is disturbing since new faculty members, who typically need more professional development than senior faculty and make far less salary, may be forced to pay out of pocket. It is also disturbing to find that faculty from accredited programs have less access to federal and state grants than their counterparts from non-accredited programs, since the burden of keeping the accreditation current in their appropriate field requires more professional development.

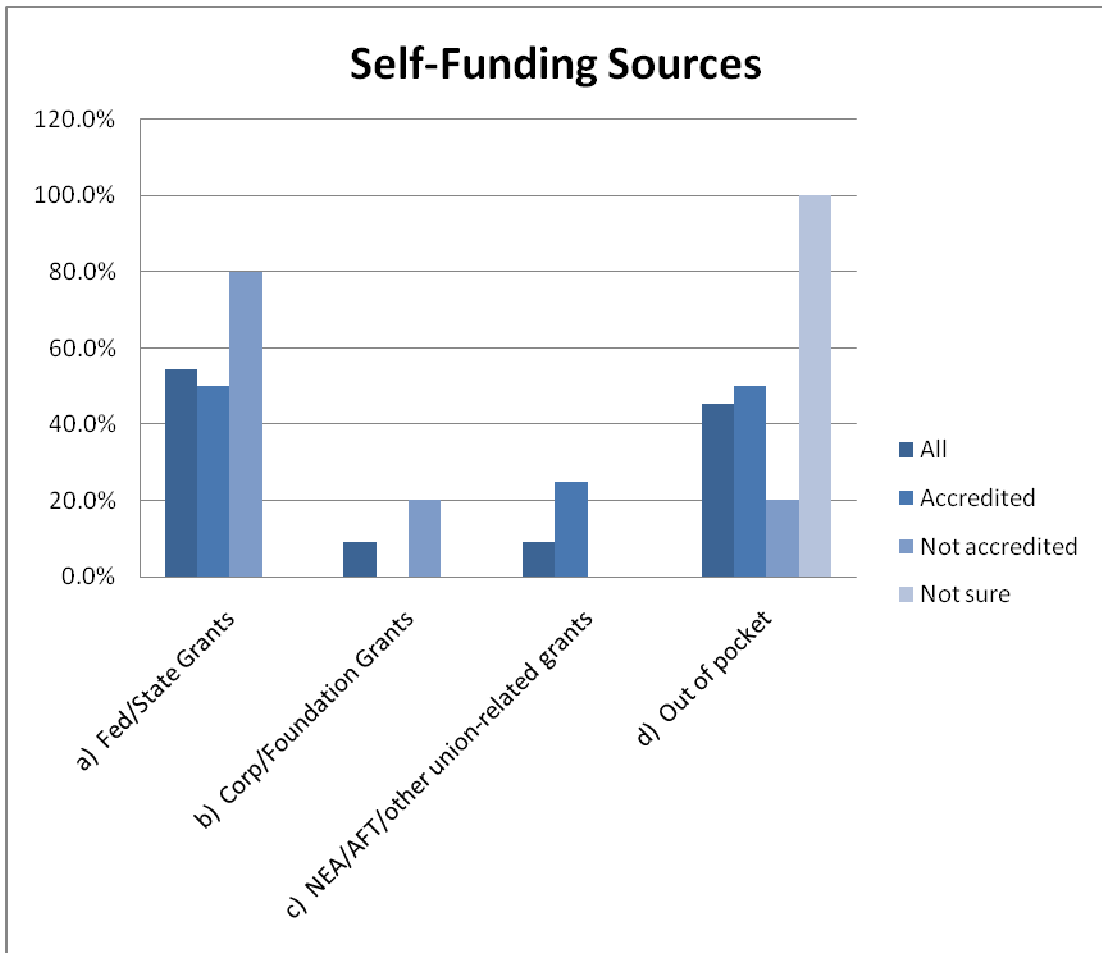


Figure 2: Funding Sources Used by Self-Funded Faculty

Figure 3 indicates that the faculty from accredited programs have more stringent limitations on the number of conferences and workshops they can attend on a yearly basis as a part of professional development. 54.5% of the faculty from accredited programs have yearly limitations on the number of funded conferences/workshops they can attend in comparison with only 37% of the faculty from non-accredited programs. Furthermore, a higher percentage of faculty from accredited programs have limits on the number of days per year allowed (18.2%) relative to the faculty from non-accredited programs (11.1%). However, faculty from accredited programs have a higher percentage of approved activities, which are 100% funded, compared to those from non-accredited programs (45.5% versus 40.7%) as presented by Figure 4. On a similar note, 42.3% of the faculty from accredited programs have their institutions paying membership dues in their professional organizations versus only 37.5% of the faculty from non-accredited programs.

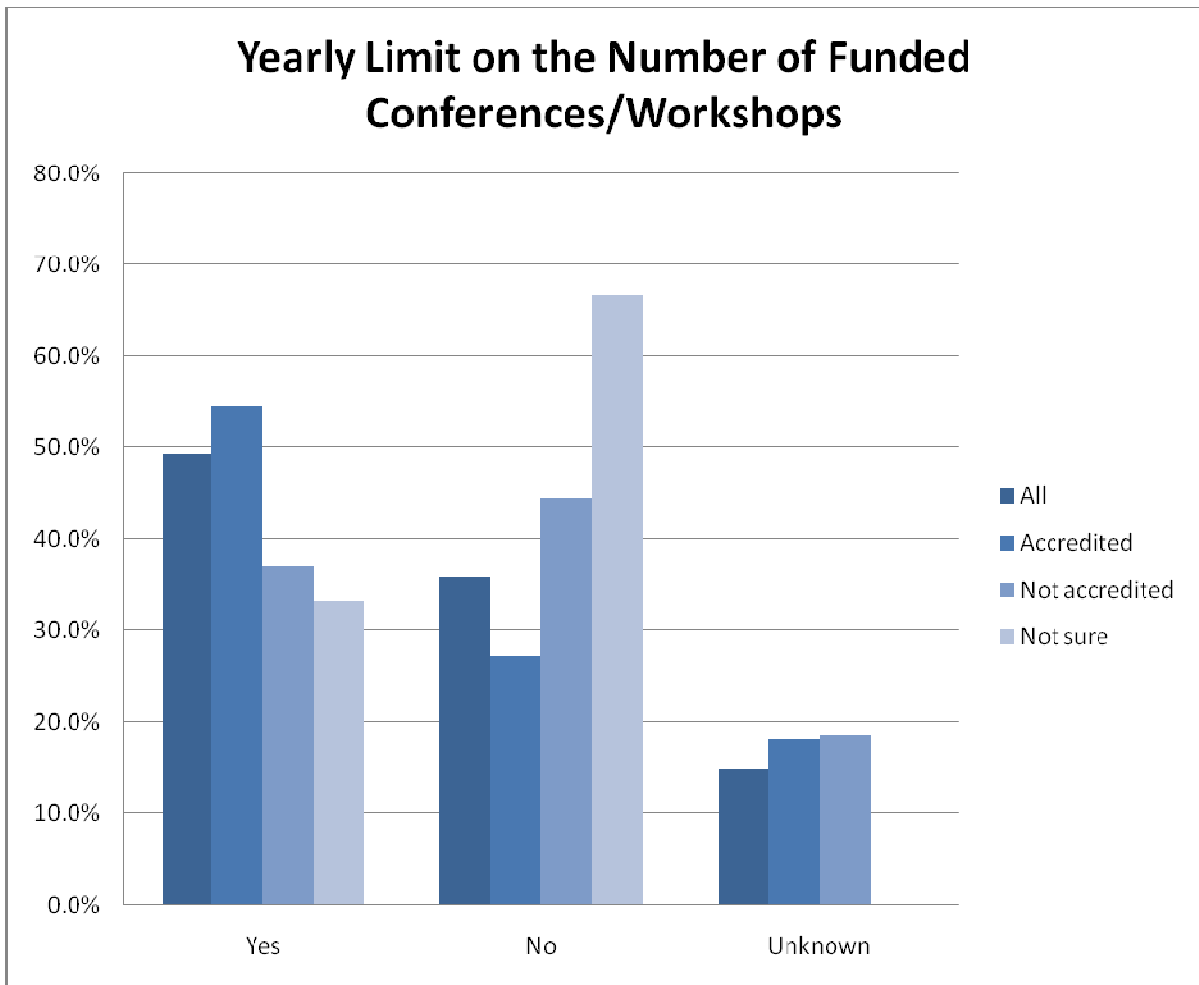


Figure 3: Analysis of the Yearly Limit on the Number of Funded Conferences and Workshops Based on the Accreditation Status of the Institution

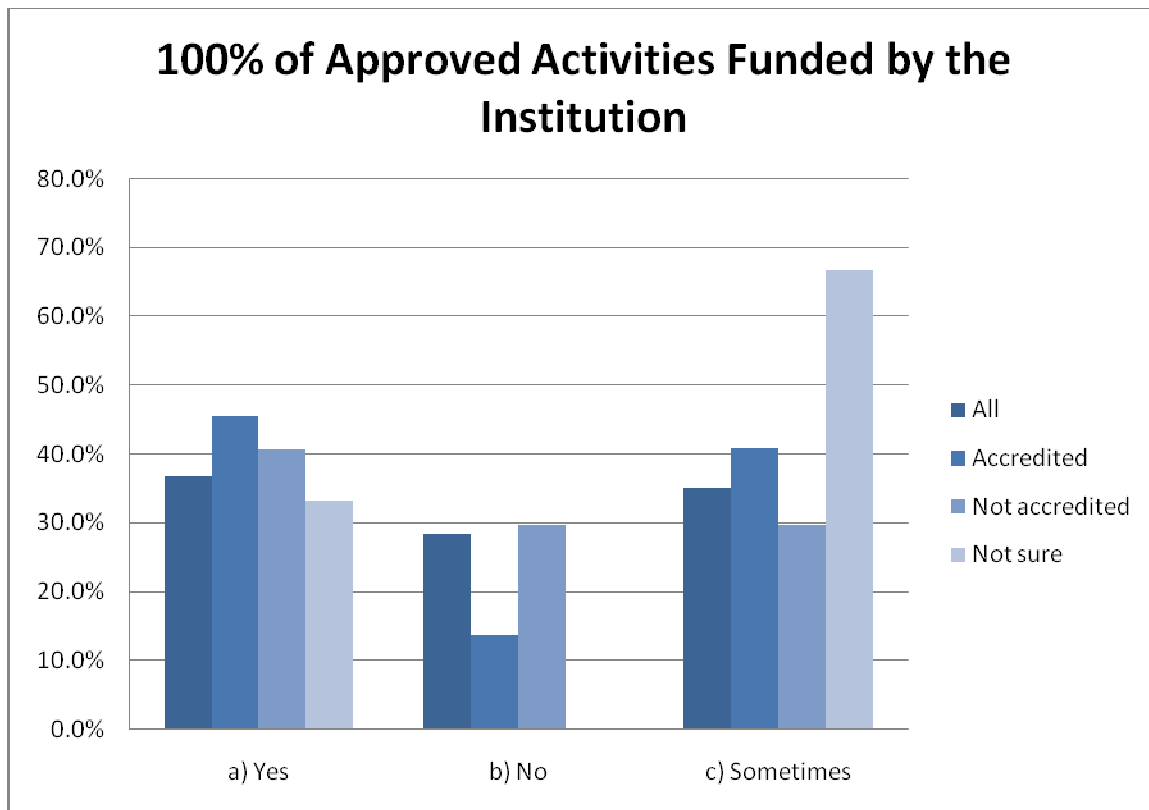


Figure 4: Analysis of the Percentage of Completely Funded Approved Activities versus Accreditation Status of the Institution

Funding Opportunities and Restrictions Based on the Institutional Affiliation

In the following section, the correlation between the funding situation and institutional affiliation, such as “state,” “county,” and “private” was considered. Out of the total number of responses, 63.3% came from state-affiliated institutions, 25% from county-affiliated institutions, and 11.7% from private schools and colleges. It was somewhat surprising to find out that only 10% of self-funded faculty members are affiliated with county institutions, as Figure 5 indicates. Considering that county-affiliated institutions make up 25% of the respondent pool, the fraction of self-funded faculty in county-affiliated institutions is much smaller than in the state-affiliated institutions (80% of self-funded faculty comes from state-affiliated colleges that make up 63.3% of the total respondent pool). So, a higher percentage of state-affiliated faculty members are responsible for their own funding in comparison with the county-affiliated. The situation for private institutions is similar to the state-affiliated institutions.

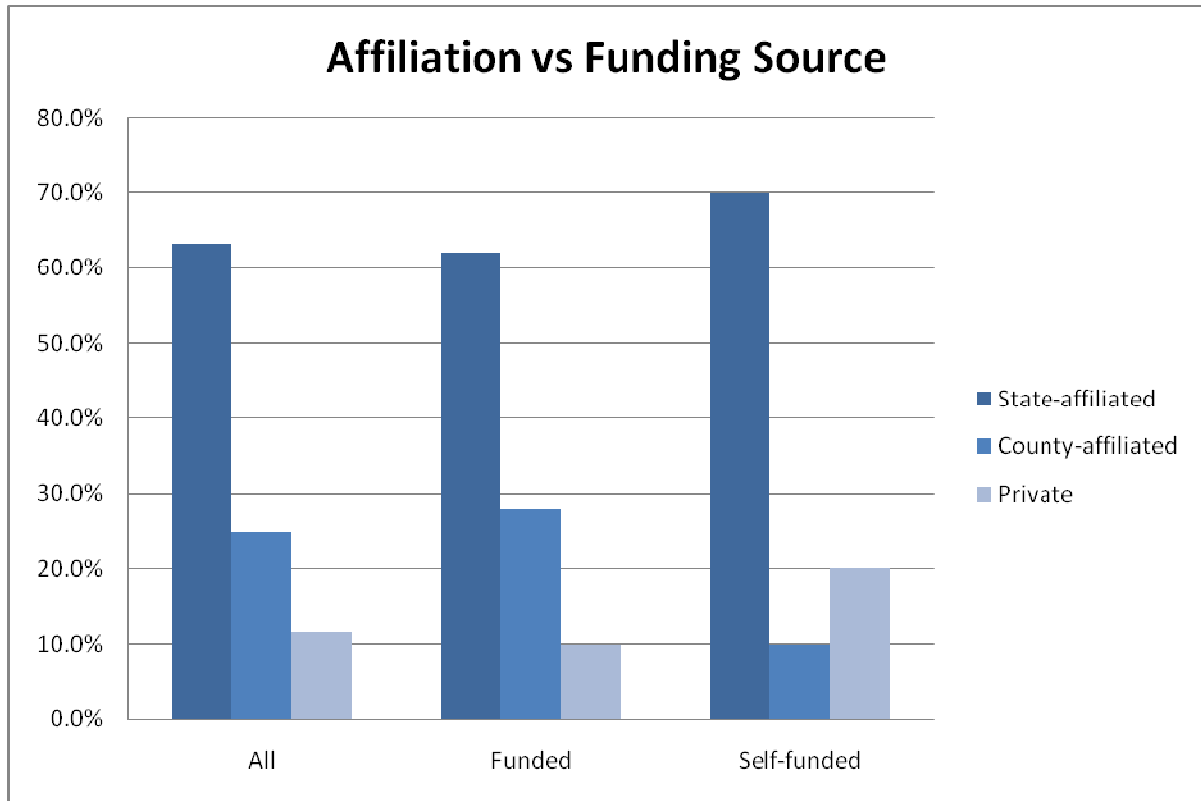


Figure 5: Breakdown of Funding Categories by the Institutional Affiliation

As Figure 6 indicates, 53.3% of county-affiliated institutions cover professional membership dues for their faculty completely. A much smaller percentage of state-affiliated institutions (28.9%) and private institutions (43%) cover professional membership dues fully. An equal percentage of state affiliated, county affiliated, and private institutions cover only the portion of the professional membership dues. The partial percentage of membership dues covered varies from 12% to 80% depending on the individual institution.

Figure 7 shows that county-affiliated institutions impose much more stringent limitations on the number of days per year allowed to attend professional-development activities, (21.4%) in comparison with the state-affiliated institutions (12.9%). The data for private institutions is inconclusive, with 60% of respondents from such institutions indicating that they are not familiar with the limitations on the number of days allotted for professional development per year.

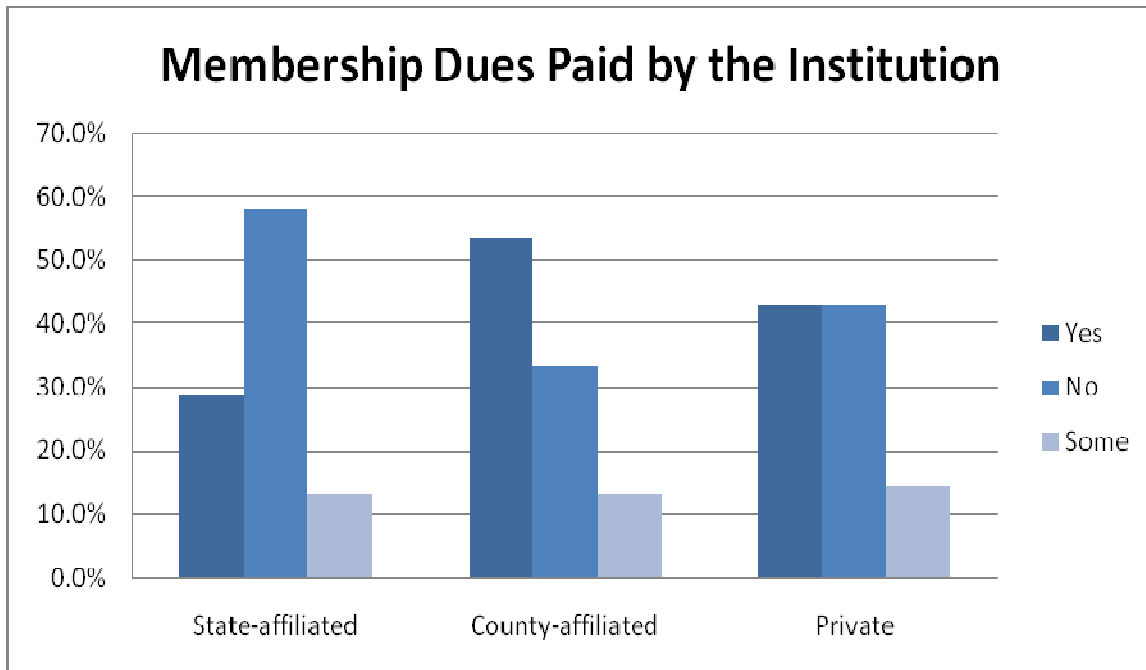


Figure 6: Professional Membership Dues Paid by the Institution Compared to the Institution Affiliation

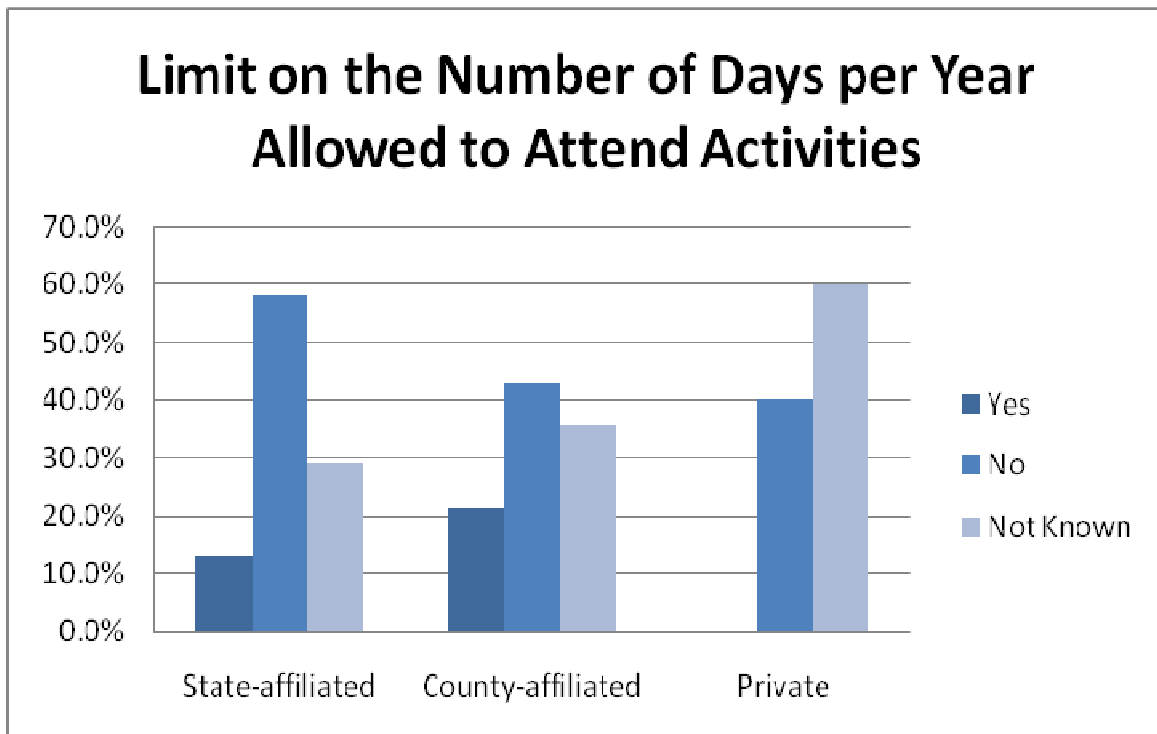


Figure 7: Limits on the Number of Days Allowed for Professional Development Activities for Various Institution Affiliations

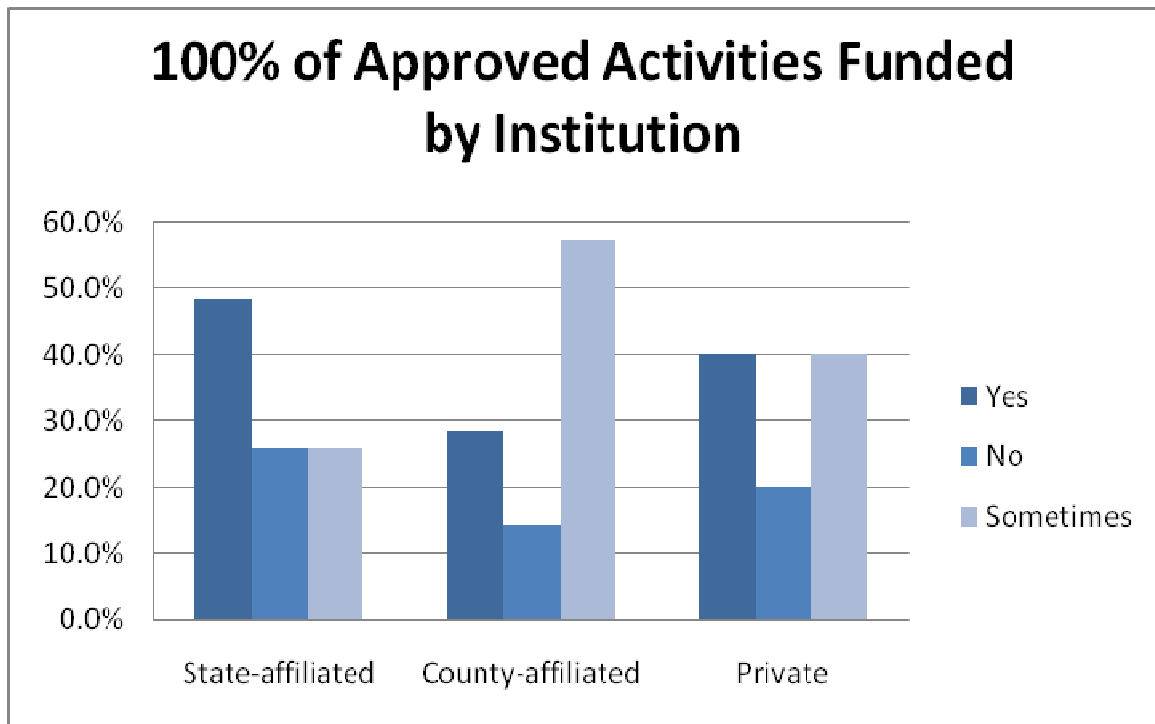


Figure 8: Funding of Approved Professional Development Activities for State Affiliated, County Affiliated and Private Institutions

Finally, state-affiliated institutions tend to fund more overall approved professional-development activities (48.4%) than county-affiliated institutions (28.6%), with private institutions falling in between (40%), as shown in Figure 8.

Analysis of Funding versus Institution and Department Size

In this section, the analysis of the possible dependence of funding sources for the faculty professional development on the size of the two-year institution is presented. The following categories were tracked based on the total number of students enrolled in the institution: fewer than 1,000 students, 1,000 to 5,000 students, 5,001 to 10,000 students, and more than 10,000 students. The results for funding sources are presented in Figure 9. According to Figure 9, a larger fraction of faculty from small schools (with fewer than 1,000 students) and from very large schools (with more than 10,000 students) are responsible for their own funding for professional development activities, compared to colleges with an intermediate number of students enrolled (1,000 to 10,000). Out of this faculty who are responsible for their own funding sources, 100% of respondents from institutions with fewer than 1,000 students have to finance most of their professional development activities out of pocket, followed by 60% of faculty from the largest colleges (with more than 10,000 students), and only 33% of faculty from the intermediate colleges (with 5,001 to 10,000 students).

The survey results also indicated that funding sources vary based on the number of faculty in each individual department. The largest percentage of faculty members (23.5%) from departments with more than 10 faculty members are responsible for their own funding,

followed by 21.1% of faculty from departments with 6 to 10 faculty members, 9.1% of faculty from departments with 1 to 2 members, and 7.7% of faculty from departments with 3 to 5 faculty members. Out of these faculty members who must self-fund their professional development activities, 75% of faculty from departments with more than 10 members and 40% of faculty from departments with 6 to 10 members must pay out of pocket. Considering the fact that the starting salary for two-year schools is generally poor, this could substantially hinder the professional development of the faculty members and, as a result, the quality of education (especially in the technology fields).

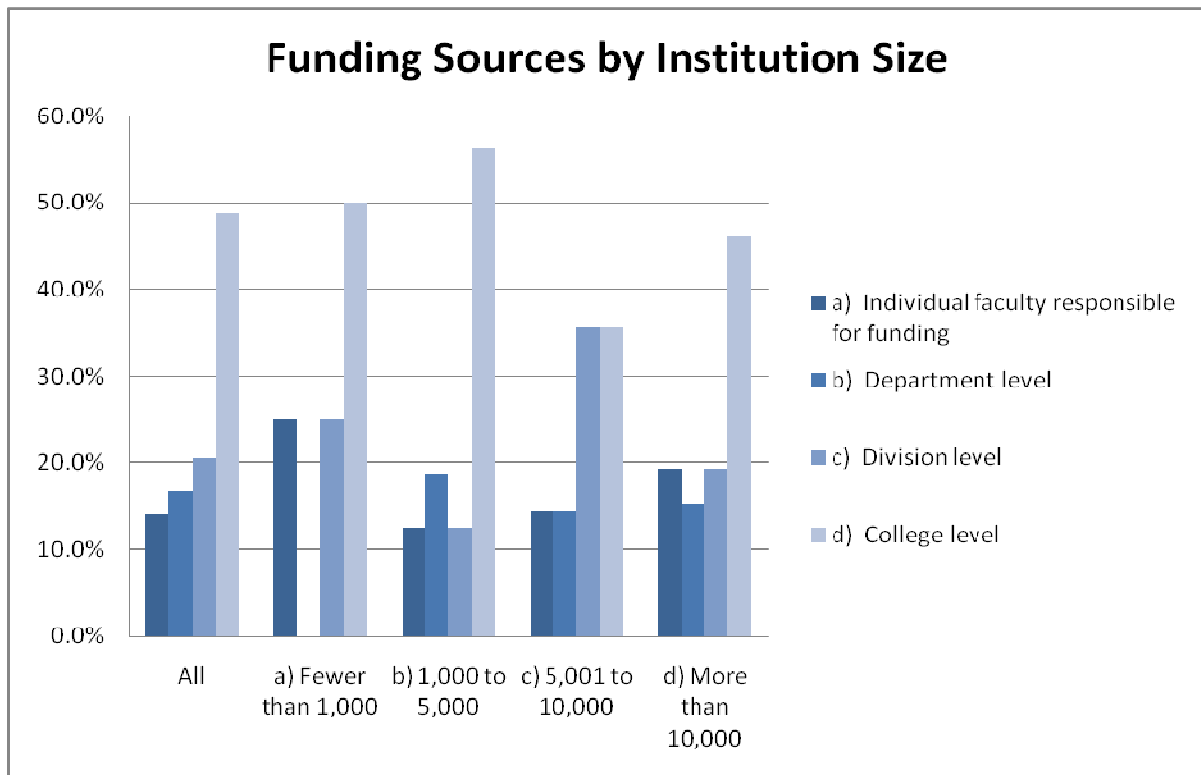


Figure 9: Funding Sources versus Institutional Size Represented by Number of Students Enrolled

Additional Comments on the Funding Schemes Represented

The questionnaire discussed in the current paper was designed as a probe of alternative-funding strategies employed by two-year institutions. It offered a limited selection of possible answers for each question in the attempt to keep the length of the survey down to the level that would not constrain the number of completed surveys. At the end of the survey, the respondents were presented with the opportunity to put in additional comments about their funding situations. Some of the most interesting comments on the funding strategies are summarized below:

- Some institutions only pay conference registration costs.

- Some institutions' funding is from the contract agreement up to \$1,000 per individual, with another \$1,000 if it is not all used by others. Additional funds for workshops and conferences are also available from other sources inside and outside the college.
- Most colleges do not provide professional-development funding for adjunct faculty.
- Another funding scheme includes a travel grant that can be applied for and has the maximum amount available. This amount can be spent on one or more conferences. Any expenses over that maximum amount are paid out of pocket.
- Many colleges indicated that funding is available from multiple sources, for example departmental funds together with grants.
- Other colleges allocate a certain amount per faculty (usually less than \$1,000). However, if all the funds are not allocated, faculty may attend events that cost more than \$1,000.
- Another strategy includes a special foundation, which will fund up to \$500 per year for up to two people within each division to attend development activities that the school will not fund. The interested faculty applying for these funds must donate at least \$10 a month to the foundation.
- According to the next strategy, a contract ensures that each faculty member is allocated several hundred dollars per year for travel and dues. Faculty may transfer funds to each other and any unused funds are pooled at the end of the year to cover expenses beyond the original amount per faculty.
- Another group of colleges allots funds to bring speakers from outside the college for professional development in addition to funding conferences and workshops. This situation was not offered as part of this survey to be evaluated, since it is not a typical strategy for two-year colleges.
- Finally, there are comments made in this survey indicating additional difficulties with funding due to the difficult current economic situation.

Conclusion

The current paper presents results and analysis of the funding opportunities, sources, and restrictions for various two-year institutions offering technology programs. It was found that a high percentage of faculty members are forced to self-finance (including out-of-pocket financing) their professional-development activities. In this respect, the faculty members from institutions with fewer than 1,000 students and with more than 10,000 students, as well as faculty from larger departments, are affected the most. In conjunction with generally low salary ranges for two-year college faculty, this could present a substantial barrier for sufficient faculty development, especially in the technology departments. This could potentially lead to the deterioration of the quality of education.

Other sources of funding, as well as various limitations on the professional-development activities, were analyzed, and interesting correlations with the institution affiliation, accreditation and such were determined. At the present time, conducting a follow-up survey may be warranted by the possibility of gathering more information to clarify funding strategies involving multiple levels of funding of professional-development activities.

References

- [1] Harvey Lyons, M.L. Brake, “An Informal Survey of Calculus and Physics Requirements in Engineering Technology,” *The Technology Interface Journal*, Spring 2010, Volume 10 Number 3 ISSN 1523-9926, <http://technologyinterface.nmsu.edu/Spring10/>.

Biography

ELENA V. BREWER is an instructor in the Electrical Engineering Technology Department at Erie Community College. She received her PhD in physics from the State University of New York at Buffalo. Elena is currently active in course and program development, which requires a substantial amount of professional development, explaining her interest in the survey.

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