

Summary of OSEA Evaluation Activities and Results
Fall, 2003 – Summer, 2005

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Introduction

The evaluation team (indicated above) assembled early in the autumn quarter of 2003. The team identified and reviewed literature sources as well as met frequently to summarize what was being learned from the review process. After a 4-6 month period, decisions were made in regard to the evaluation strategy and research studies that could be conducted. The project director (Jean Girves) was included periodically in key meetings of the team for input into evaluation planning and to establish a fairly seamless communication channel between the evaluators and project staff. It should be noted that the evaluators attended all meetings of the steering committee and frequently reported evaluation progress to that group. Overall the following evaluation activities were undertaken.

1. Initial development of separate but similar web-based surveys for students and faculty involved in OSEA.
2. Pilot testing of the surveys, subsequent refinement, and successful submission of final forms for IRB approval.
3. Implementation of the forms in the winter and spring of 2005 with an analysis of the results.
4. Development, implementation, and analysis of student and faculty evaluation forms for the first research forum conducted by OSEA in the summer of 2004.
5. Development, implementation, and analysis of faculty forms for the best practices workshop implemented in the winter of 2005.
6. Development of two sets of instrumentation for research studies related to the Alliance. The studies dealt with factors that might predict the persistence of underrepresented minority students in STEM disciplines and reasons underlying differences in responses of faculty and students to the evaluation surveys. (Both studies were completed by the summer of 2005. See the dissertations of White and Lee, 2005.)

7. Revision of the forms noted in point 4 above for use with the second research forum to be held in August of 2005.

Seven surveys were implemented and one focus group interview was conducted from August of 2004 through August of 2005 (excluding instruments developed for the two research studies mentioned earlier). See Table 1.1 for a more detailed overview of evaluation activities.

Table 1. Overview of OSEA Evaluation Activities in 2004/2005

Event	Date	Participants	Focus	Evaluation activity
Ohio Student Research Forum 2004	August 19-20, 2005	Students Faculty members Administrators	Satisfaction with activities Factors that lead to students' initial interest in STEM and that continue to influence that interest.	Student survey Faculty/administrator survey Focus Group Interview
Summer Bridge Programs—Best Practices Workshop	January 26, 2005	Faculty members Administrators	Satisfaction with activities Level of skills related to program management and planning.	Faculty/administrator survey
OSEA Evaluation	February 14 to March 25, 2005	Students Faculty members Administrators	Extent of importance, satisfaction, and frequency of use of study skills and retention services provided by institutions. Perspectives about cultural dimensions related to retention.	Student survey Faculty/administrator survey
Ohio Student Research Forum 2005	August 10-11, 2005	Students Faculty members Administrators	Satisfaction with activities Factors that lead to students' initial interest in STEM and that continue to influence that interest.	Student survey Faculty/administrator survey

Highlighted Results

In this section, evaluation results are presented. In terms of utility, we have chosen key findings from the evaluation surveys distributed in the Winter-Spring of 2005 to students and faculty representing the 15 OSEA institutions and from the evaluation of the first research forum. In Table 1.2, the results of the main section of the student evaluation form are displayed. Table 1.3 contains a comparison of the results of the faculty and student responses to the questions that were in common across their evaluation forms. Table 1.4 has the main outcomes for students and faculty attending the 2004 Summer Research Forum.

Table 1.2 OSEA Evaluation 2005—Students’ Perspectives of Study Skills (n=168)

Categories	Number of items	Importance ^a (Mean)	Competency ^b (Mean)	Frequency ^c (Mean)
Academic Skills	6	4.31	3.68	3.92
Communication Skills	4	4.11	3.65	3.38
Leadership Skills	6	4.30	3.80	3.86
Coping and Interaction Skills	7	4.25	3.90	3.73
Team Skills	3	4.47	4.25	4.03
Other	2	4.45	4.39	4.44
Total items/average	28	4.29	3.87	3.83

^a“The extent to which the skill is important to your academic success.” 5-point scale: 1= Strongly Disagree and 5=Strongly Agree.

^b“How would you rate yourself on this skill?” 5-point scale: 1=Not Very Good and 5=Very Good.

^c“How often do you use this skill?” 5-point scale: 1=Never and 5=Very Frequently.

Table 1.3 OSEA Evaluation—Comparison of Students (n=168) and Faculty/Administrators’ (n=39) Perspectives of Services

Categories	Number of items	Group	Importance ^a (Mean)	Satisfaction ^b (Mean)	Frequency ^c (Mean)
Pre-College Services	3	S	3.87	3.47	-- ^d
		F/A	4.32	3.52	--
Academic Services	15	S	3.88	3.44	2.57
		F/A	4.11	3.48	2.96
Financial Support	6	S	4.37	3.41	3.22
		F/A	4.42	3.75	3.92
Total items/average	24	S	4.00	3.43	2.76
		F/A	4.21	→ 3.55 →	→ 3.23 →

^a“The extent to which the service is important to your academic success” for student survey and “Extent to which the service is important to the academic success of students” for faculty/administrator survey.

^b“The extent to which you are satisfied with the service” for student survey and “Your satisfaction with the service for students” for faculty/administrator survey.

^c“How frequently do you use this service?” for student survey and “Frequency of students’ use of this service” for faculty/administrator survey.

^dQuestion was not asked.

Table 1.4 OSEA Evaluation for 2004 Summer Research Forum Comparison of Students (n=31) and Faculty Members’ (n=11) Satisfaction

Categories	Group	Number of items	Mean ^a
Assessment of Activities			
Orientation and registration	S	3	4.24

	F/A	3	4.25
Small group discussions	S	5	4.29
	F/A	3	4.19
Workshops	S	7	4.24
	F/A	-- ^b	--
Speeches	S	2	4.32
	F/A	2	4.70
Student research presentation/posters	S	2	4.45
	F/A	2	4.65
General features	S	6	3.78
	F/A	6	4.62
Overall Satisfaction			
	S	4	4.40
	F/A	4	4.40

^aScale: 1= Poor, 3=Fair, and 5=Excellent.

^bQuestion was not asked.

Conclusions

First, we conclude that the approach to evaluation was fairly successful given the results shown in the tables. Further we would recommend that it be continued but that all instruments should be examined in depth and revised and refined accordingly.

Second, the results in Table 1.2 indicate that the skill categories contained in the instrument were highly valued by students with their competencies in regard to them being at a somewhat lower point. Faculty and staff should look at these results and if they are similar in subsequent evaluations, strategies for enhancing student skill sets might be considered.

Third, in terms of the services available (Table 1.3) a very noticeable and generally consistent pattern was observed for both students and faculty responders. The services were seen as important with a lesser sense of satisfaction with them with a then lesser frequency of use. What underlies these outcomes and how they might be attended to, are not apparent from this data and could become the focus of later investigation?

Fourth, the first forum was a major success as supported by the high average scores of students and faculty in nearly all categories. (The one instance in which this was not the case was due to food and accommodation problems – ones not under the control of project staff.) This year's forum utilized a relatively similar evaluation instrument and we are hopeful that the results will be equal to and possibly better than those from the first year thus supporting evaluation-based changes made in this year's efforts.

Fifth, although not part of the evaluation report the two research studies are accessible through the electronic dissertations mechanism of The Ohio State University. They provide additional information relevant to the Alliance and should be consulted by interested parties.