

# Learner-Centered Education Grants

## 2004 Final Report

### 1. Project Name and Project Director's Name. Include mailing address, phone and e-mail address.

**Project Name:** Assessing and Evaluating Learning  
Outcomes in Traditional, Hybrid, and Online  
First-Year Composition Course

**Director Name:** Patricia Webb

**Address:**

Department of English  
Arizona State University  
P.O. Box 870302  
Tempe, AZ 85287-0302

**Phone:** (480) 965-2503

**E-Mail:** patricia.webb@asu.edu

### 2. Brief Description of Project:

This project critically analyzed the current use of online technologies (particularly the Blackboard course framework) in first year composition courses at Arizona State University. The first online composition course was taught here in the English department in Summer 1999 and was then followed in Fall 2000 by a small-scale pilot program that offered hybrid composition courses that met one day in a face-to-face, traditional classroom environment and one day in an online, Blackboard-supported environment. There are three main reasons for continuing to use the hybrid and online formats: 1.) to make better use of the limited classroom space available on the ASU-Tempe campus; 2.) to offer current students greater flexibility, 3.) to draw in a new audience of people from the community who, in the past, have not been able to take courses.

Many claims have been made about the benefits of teaching writing courses online, and at the heart of these claims is an assertion that online learning supports learner-centered education (LCE). LCE positions students as co-constructors of knowledge by requiring them to be more active participants in their education rather than passive receivers of pre-constructed knowledge. Online learning is supposed to require that students be more independent, more self-directed, more active, and more disciplined.

## Learner-Centered Education Grants

The hope is that since students are taking more responsibility for their learning, they will actually learn more.

However, others argue that student learning is actually hindered because students do not have the face-to-face support of their instructor, do not get to know their peers and face extensive technical difficulties. Higher attrition rates along with higher frustration levels and lowered expectations and reductive learning are some of the things that have been attached to online learning. Particular to ENG 101/102, critics claim that since it is the "gateway" course to the university (i.e. the course that introduces students to the university) and is one of the few courses where the students will actually have one-on-one interaction with the professor, it should be taught in a face-to-face (f2f) environment.

Given the controversies surrounding the impacts of mediated classroom environments, it is incumbent upon us to evaluate the success of each learning environment to insure that these uses of technologies are actually helping students achieve learning outcomes while at the same time providing them with greater flexibility. Since the introduction of these new environments, no large scale project has assessed students' success in courses that are delivered online (either fully or partially) through Blackboard. To address this need, I created an extensive online survey instruments for students that assessed attitudes about 1.) the level of interaction in the course; 2.) the level of learning in the course; 3.) the impact of the Blackboard course environment on the interaction and learning; 4.) student satisfaction with the presentation of course materials/goals. This survey went through three major revisions before it was given to 8 sections (20 students in each section) of ENG 101 courses and 8 sections (20 students in each section) of ENG 102 courses that were taught either in a hybrid or online environment at Arizona State University during Fall 04.

When the data from the survey was analyzed, it is clear that while the online and hybrid environments are certainly providing the flexibility for which they are touted, many students are dissatisfied with the level of interaction and learning in the courses. Students felt connected to their peers through the technology, but they did not feel connected to their instructors, a perception that led them to be dissatisfied with their learning and with their experience in the course.

The results from this project suggest two needs. First, those of us in ASU's Writing Programs should address the students' critiques of technology use. This could be done through training and mentoring that focus on learner-centered education goals. Secondly, the Writing Programs should consider using a revised version of this survey to continue to monitor and track the impact that mediated environments are having on students' learning in order to determine how best to continue to offer courses in online and hybrid environments. Ongoing, longitudinal surveys will more clearly tell us whether or not the course environments are offering flexibility while at the same time achieving the intellectual rigor found in more traditional classroom environments.

# Learner-Centered Education Grants

## 3. Goals, Outcomes and Assessments

### a. Goals and Primary Accomplishments:

1. To use a pilot study survey that measures the current "state of affairs" in mediated first-year composition (ENG 101 and ENG 102) courses at ASU by examining the impact of new media (primarily myASU and Blackboard) on students in the new online and hybrid course environments.
2. To analyze the survey data to determine if the current state of affairs promotes Learner-Centered education goals particularly in terms of interaction, learning, and flexibility.
3. To revise the assessment measurement so that it can be used by ASU's Writing Program on an ongoing basis to continue to monitor and improve the impact of the new environments on students' learning.

### b. Outcomes and Assessment for each Goal:

*Goal #1: To use a pilot study survey that measures the current "state of affairs" in mediated first-year composition (ENG 101 and ENG 102) courses at ASU by examining the impact of new media (primarily myASU and Blackboard) on students in the new online and hybrid course environments.*

The survey revealed that the primary and most significant use of the Blackboard courseware system (which is accessed through myASU) was the asynchronous Discussion Board. In the hybrid courses, the Discussion Boards were used to supplement the one-day-per-week face-to-face class meeting while in the online courses, the discussion boards were the primary mode of communication and, in some cases, the primary method of learning.

Student responses to the survey showed that they valued the discussion board highly because of the interaction with their fellow students. In both the online and hybrid versions of ENG 101 and ENG 102, they learned the most from the Discussion Board exchanges because they were allowed to express their own opinions and engage with their peers' opinions. However, students were mixed about the instructors' presence on the boards. For some students, the instructors' posts helped them clarify their understanding of the course material and they felt the instructors had a favorable impact on their learning; for others, however, the instructors were not active enough and did not give appropriate feedback. This lack of presence lead students to feel disconnected from their instructors. Yet other students noticed the "hands-off" approach of the instructors, but felt that it allowed them to be more self-directed and independent in their learning.

## Learner-Centered Education Grants

Secondly, posting handouts, assignments, and reading questions was a frequently used feature of Blackboard (typically in the “Course Documents” or “Assignments” folders). Students in both the online and hybrid courses appreciated the accessibility of assignments. They felt that since they could refer back to the assignments quickly online, they were able to complete their assignments more effectively and efficiently. They also commented that this accessibility helped them to stay on track more.

Besides the Discussion Boards and availability of handouts, the third most frequently mentioned use of technology in ENG 101 and ENG 102 was online research. Since the course required students to learn to use technology more efficiently, students reported that their newly learned skills transferred to a stronger ability to find research material online and to critically evaluate the material they did find. The instructors' use of the Blackboard framework helped them accomplish these goals by including tutoring/mentoring sessions, supplying effective and readily available handouts, and creating links to important research engines, sites, and directories.

The overall student satisfaction level with these and other uses of technology, however, was low. When asked whether they would take a course completely online, students responded as follows:

Disagree: 22.4%	Agree: 12.1%
Strongly Disagree: 41.4%	Strongly Agree: 5.2%
Neither Agree/Disagree: 19.0%	

When asked whether the course met their expectations, students responded:

Disagree: 48.3%	Agree: 1.7%
Strongly Disagree: 46.6%	Strongly Agree: 0
Neither Agree/Disagree: 3.4%	

When asked whether their experience with the course was excellent, student responded

Disagree: 50%	Agree: 1.7%
Strongly Disagree: 41.4%	Strongly Agree: 0%
Neither Agree nor disagree: 6.9%	

And, finally, when asked if using the Blackboard system increased their quality of learning, students responded:

## Learner-Centered Education Grants

Disagree: 34.5%

Agree: 0%

Strongly disagree: 24.1%

Strongly agree: 3.4%

Neither agree nor disagree: 34.5%

In order to understand these responses, I analyzed the survey data (Goal #2).

*Goal #2. To analyze the survey data to determine if the current state of affairs promotes Learner-Centered Education goals in terms of interaction, learning, and flexibility.*

I used Arthur Chickering and Zelda Gamson's "Seven Principles for Good Practice in Undergraduate Education" in order to evaluate the extent to which the current use of the Blackboard framework in Writing Program courses meets learner-centered education goals. These principles are as follows (as quoted from the authors):

"Good practice in undergraduate education:

1. encourages contact between students and faculty,
2. develops reciprocity and cooperation among students,
3. encourages active learning,
4. gives prompt feedback,
5. emphasizes time on task,
6. communicates high expectations, and
7. respects diverse talents and ways of learning."

([http://www.abor.asu.edu/4\\_special\\_programs/lce/ugprinciples\\_lce.htm](http://www.abor.asu.edu/4_special_programs/lce/ugprinciples_lce.htm))

I have grouped the survey responses into those seven categories in order to provide a map of the current success of our program in meeting those goals. (135 participants responded to the survey.)

*1. Contact between students and faculty:*

Overall, students' responses suggested they were dissatisfied with the amount of interaction with their instructors:

"There were sufficient opportunities to interact online with my instructor."

Disagree: 36.2%

Agree: 5.2%

## Learner-Centered Education Grants

Strongly disagree: 48.3%

Strongly agree: 0%

Neither Agree/Disagree: 6.9%

84.5% of the students were, therefore, disagreed or strongly disagreed with the question.

When asked to compare the amount of interaction they had with the instructor in their online experience to their traditional classroom experiences, the students responded as follows:

“The amount of interaction you had with the professor in this course”?

Lower: 19.0%

Higher: 24.1%

Much Lower: 6.9%

Much Higher: 24.1%

About the Same: 22.4%

25.9% of the students rated their interaction with their instructor in online and hybrid courses as lower or much lower than in f2f courses; 48.2% rated their interaction in online and hybrid courses as higher or much higher than in f2f courses. While 84.5% of the students reported having insufficient contact with their instructors, 48.2% still said that the contact they did have was more than they had experienced in f2f courses.

In their responses to the open-ended questions, a majority of students reflected that while they were used to seeing their instructor f2f more often, they actually had more interaction with their instructor in the online and hybrid courses. Students wrote:

“I think there was more interaction with other students and the instructor in this hybrid course. In a traditional class I generally interacted less than I did using the myASU format.”

“The teacher is more willing to answer your questions because there is not a limited time amount on the online course.”

“I learned to ask more questions because I wasn’t face-to-face with my instructor.”

“I liked it because the teacher actually knew who I was and cared if I was there or not. I really enjoyed this course and I think that it was very successful. I think that it is so much more enjoyable and effective than a normal traditional face-to-face classroom experience.”

“The hybrid course is great because it challenges the student to be independent, but at the same time have the ability to interact with the instructor.”

## Learner-Centered Education Grants

However, some students did not feel that the interaction in the online and hybrid courses were strong enough:

“It (the online course) was different because I felt that I did not have as much of a connection or interaction with the teacher and other students in the class, like I would of in a normal classroom environment.”

“I think I had a better relationship with my face-to-face professor as opposed to the online one.”

“I liked the teacher; however, I didn’t like the class. I feel that some students need more one on one approach in order to do well in a course. I am pretty sure I am one of those students.”

What these combined findings suggest, then, is that while students would like more interaction with their instructors, the online and hybrid formats afforded many of them with new opportunities for interaction that weren’t present in face-to-face courses.

However, when evaluating how important the online technologies were to their interaction with their instructors, students responded negatively:

“Having the myASU communication tools provided easier access to my instructor”:

Disagree: 39.7

Agree: 3.4

Strongly disagree: 39.7

Strongly Agree: 0

Neither Agree/Disagree: 13.8

“How important to your learning was feedback from instructor via e-mail”:

Somewhat important: 1.7%

Not very important: 32.8 %

Not at all important: 53.4%

Did not use 6.9%

“How important to your learning was feedback from your instructor on the discussion board”:

Somewhat important 6.9%

Not very important 34.5%

## Learner-Centered Education Grants

Not at all important: 55.2%

There is clearly a contradiction between the survey statistics and the open-ended responses. Understanding these contradictory findings will require that the survey be revised so that students can be asked why these uses of the online technology are not perceived as useful.

### *#2: Reciprocity and Cooperation among Students:*

Students' responses to the survey indicated that they were also dissatisfied with the amount of interaction with their peers:

“There was sufficient opportunity to interact online with classmates:”

disagree: 41.4%

Agree: 3.4%

strongly disagree: 43%

Strongly agree: 1.7%

Neither Agree/Disagree: 6.9%

84.5% of students, then, reported insufficient opportunities to interact with their peers in the online environments. However, much like the responses to the questions about their instructors, a significant number of them rated their interactions with fellow students in the online classroom higher than in the f2f courses.

“The amount of interaction I had with classmates in this course compared to f2f courses”:

Lower: 20.7%

Higher: 20.7%

Much lower: 6.9%

Much higher 22.4%

About the same: 25.9%

27.6% reported having lower/much lower interaction with their peers while 43.1% reported having higher or much higher interaction with their peers. And interestingly, a fourth of the students (25.9%) reported having about the same amount of contact with their peers. Therefore, 68.9% of them had about the same or higher interaction with their peers in the online and hybrid courses.

Despite this, students, however, did not see computer-mediated interaction as important to their learning:

“I communicated more with my classmates because of the myASU course website”:

Agree: 6.9%

Disagree: 25.9%

## Learner-Centered Education Grants

Strongly disagree: 34.5%

Strongly Agree: 0

Neither Agree/Disagree: 29.3%

Over half of the students reported that they disagreed or strongly disagreed with this statement, suggesting that the course website did not encourage greater interaction. However, when asked in open-ended questions what features of the course most contributed to their learning, students frequently pointed to their interactions with their peers:

“The discussion board contributed to my learning by allowing me to connect with other classmates outside of class.”

“The threaded discussions did. They helped a lot because you could see what your peers were submitting which gave you a direction.”

“Being able to discuss the assignments with other students through the discussion board definitely contributed to my learning. It was very useful to talk with other students about their difficulties and help each other whenever necessary.”

These comments are indicative of many made by the students in their open-ended responses. Their written reflections contradict the percentage of students who reported that the technologies helped their learning because their comments suggest that the features unique to blackboard—the threaded discussion board in particular—provided them with opportunities to have more contact rather than less.

A further contradiction was noted. Even when they acknowledged that the technologies allowed them to connect with their peers in ways that were not allowed in the f2f classroom, they still did not deem that interaction to be important to their learning:

“How important was feedback from your classmates in e-mail”:

Very Important 1.7%

Important 6.9%

Somewhat Important 8.6%

Not Very Important 34.5%

Not at all Important: 22.4%

Did not use: 22.4%

## Learner-Centered Education Grants

Only 8.6% of students of those who received feedback from their peers on email felt that this feedback was important while 56.9% felt that it was not very important or not at all important.

“How important was feedback from classmates on discussion board”:

Very Important: 1.7%

Somewhat Important: 17.2%

Not Very Important: 27.6%

Not at all Important: 50%

Even though students regularly commented in their responses to the open-ended questions that the threaded discussions were useful because of the feedback they received from their peers, 77.6% of them still rated that feedback as not very important or not at all important.

These contradictions need to be resolved by reframing the survey questions in order to determine why the discrepancies exist. Clearly, students value the interaction they get through Blackboard, but the impact of it to their learning is indeterminate.

### *#3 Encourages Active Learning:*

One main question on the survey asked students if the online and hybrid courses encouraged them to be more active learners:

“I felt more actively involved in this course because of the tools, activities, assignments, and materials available on myASU course website”:

Disagree: 25.9%

Agree: 5.2%

Strongly Disagree: 34.5%

Strongly Agree: 0%

Neither agree nor disagree: 29.3%

60.4% of students reported that they did not feel more actively involved in the course because of the technologies. However, in their responses to the open-ended questions, students frequently noted that the online format encouraged them to be more independent learners:

“I like the online course better because it made me feel more independent and made me feel like I was accomplishing things on my own.”

## Learner-Centered Education Grants

“I enjoyed the discussion boards in which we responded to questions and had discussions about readings. These discussions allowed each person in the class to express their opinion which entails greater involvement from each and every student than a traditional class (it is impossible to achieve this amount of input from EVERY student in a standard classroom environment).”

“I think that I learned so much more in this online course. I was more willing to put in the work and time to get my work completed and had more interaction.”

“They have made me more independent in my homework for class and research.”

“Personally I liked the online course much better. I preferred not having an instructor nag me about research papers and whatnot. I liked the responsibility of doing the work on my own and handing it in when it was due, with no prompting from a professor.”

“I was more likely to send an e-mail to the teacher when I had a question instead of not asking the question.”

The open-ended responses provided more sense of how active learning can be online, giving us a better picture of the learner-centered aspects of these course environments. The independence the course environments required of the students meant that students had to take more responsibility for their learning. Some students found that this was disconcerting because they would have preferred to have more direct one:one contact with their professors and felt their learning suffered because they did not have that contact. These findings suggest that perhaps, as Cynthia Selfe argues, not every student will be well suited to the new learning environments. We need to explore the learning styles/profiles that best succeed in online course environments.

### *#4 Prompt Feedback:*

A crucial part of any writing course is the instructor’s prompt written feedback on students’ writing. This feedback becomes even more important when students never meet their instructors f2f since written responses to their writing become one of the primary (if not *the* primary) modes of learning and interaction.

When you asked the instructor a question online, when did you typically receive feedback? Of those who asked for help (15.5% reported that they did not ask for help), here are the responses given:

Immediately (less than 4 hours): 27.6%

Never: 1.7%

Less than a day (5-24 hours): 41.4%

Two days: 3.4%

## Learner-Centered Education Grants

3 or more days, but less than a week: 6.9%

Note that 69% of students reported receiving feedback within 24 hours—which is certainly considered timely by current literature about distance education. Certainly timely feedback is one crucial factor for the success of an online course and the instructors in this survey responded well within the range of acceptability.

However, students were dissatisfied with the time lag between the question and the response. While some valued the online office hours because they made the instructor more accessible, many others felt that it took too long for the instructor to send feedback.

"The other thing to that is that the course was sort of difficult because I was only able to speak to my teacher once a week and email isn't really that fast when you have an urgent question."

One student identified the following difficulty: "Not having a teacher several times a week to explain things more in depth instead learning it more on your own."

"Questions that occurred couldn't be answered as often. Because we only meet once and out instructor only checks email on office hours we were stuck if a question arose between due dates."

Further, waiting for the feedback was disconcerting because some students did not know how to proceed with the assignment until they received the feedback and, at times, they did not even know if the instructor had received the e-mail request.

### *#5 Time on Task:*

Many students reported putting in about the same or more effort, time, and participation in the online and hybrid courses as they did in f2f courses.

"The amount of effort you put into this course":

Lower 1.7%

Higher: 19.0%

Much lower: 6.9%

Much higher: 15.5%

About the same: 55.2%

Over half (55.2%) of the students put the same amount of effort into courses in online and hybrid environments as they did in f2f courses. 34.5% put higher or much higher effort into these courses.

"The amount of time you put into this course":

## Learner-Centered Education Grants

Lower: 3.4%

Higher: 15.5%

Much lower: 5.2%

Much higher: 12.1%

About the same: 60.3%

60.3% of students put about the same amount of time into the online or hybrid course as they did in their f2f courses. 27.6% put a higher or much higher amount of time into the online or hybrid courses.

“The level of your participation in the course”:

Lower: 3.4%

Higher: 24.1%

Much lower: 5.2%

Much Higher: 24.1%

About the same: 39.7%

39.7% participated at the same level in the online and hybrid courses as they did in f2f courses while 48.2% of student participated at higher or much higher rates:

However, students reported that the use of the technologies did not increase the efficiency of their learning.

“Using the myASU system improved the efficiency of my learning (the amount of work I can complete in a given time)”:

Disagree: 34.5%

Agree: 1.7%

Strongly disagree: 25.9%

Strongly Agree: 1.7%

Neither agree/disagree: 31.0%

Responses to the open-ended questions, however, suggested that they valued the ability to determine when they could work on the course material, even if their efficiency suffered. For many students, the flexibility afforded by the course outweighed the lack of efficiency:

“It is very nice to be able to do the work at my own pace. That was probably my favorite aspect of the course. Being online gave me time to think of more thoughtful and intelligent responses to my peers.”

“It was easier to submit papers on Blackboard, rather than printing them out and bringing them to class. Also it saves a lot of time on the days where we had something to do online. You can get the work done quickly.”

## Learner-Centered Education Grants

“I liked the fact that we got more time to complete our assignments and do them on our own time instead of being restricted to just in class.”

“The ability to learn at a time that is good for me. Sometimes in class I don’t pay attention as much as is needed. This way I can read the book when I am in the mood to learn.”

“I like being able to get things done on my own time and not having to be doing pointless lecturing in a class room when I can be at home working more efficiently on my assignments.”

Interestingly enough, almost half of the students (46.6%) did not feel that they had to work as hard in the course:

While the effort, time, and participation in the online and hybrid courses were fairly similar to the effort, time, and participation put into traditional classrooms, the Blackboard interface allowed students to be more efficient with the time they spent. They were able to make better use of their time and to learn more as a result. However, in the future, the contradictions between the statistical findings and the responses to the open-ended questions need to be addressed and potentially resolved through questions on the survey that clarify students’ perceptions.

### 6. *Communicates High Expectations:*

“This course met my expectations”:

Disagree: 48.3

Agree: 1.7%

Strongly Disagree: 46.6

Strongly Agree: 0

Neither Agree/Disagree: 3.4%

“Overall I would rate my experience with this course as excellent”:

Disagree: 50%

Agree: 1.7%

Strongly Disagree: 41.4%

Strongly Agree: 0

Neither Agree/Disagree: 6.9%

94.9% of students reported that the course did not meet their expectations. 91.4% of students disagreed or strongly disagreed that the course was excellent. These numbers

## Learner-Centered Education Grants

are disturbing. In part, they can be explained by students' general confusion with the teachers' expectations of them. Overall, students were not clear about the way the teacher expected them to use the technology and how that use of the technology tied into/affected their grades.

“I was clear about how my instructor expected me to use the online course material”:

Disagree: 41.4%

Agree: 5.2%

Strongly Disagree: 48.3%

Strongly Agree: 1.7%

Neither Agree/Disagree: 5.2%

89.7% of students disagreed or strongly disagreed with the statement, indicating that the instructor did not make her/his expectations clear.

“I was clear about how my participation on the discussion board would be evaluated and affect my course grade”:

Disagree: 41.4%

Agree: 3.4%

Strongly Disagree: 48.3%

Strongly Agree: 1.7%

Neither Agree/Disagree: 3.4%

“I was clear about how my participation in the online group areas would be evaluated and affect my course grade”:

Disagree: 31.0%

Agree: 0

Strongly Disagree: 51.7%

Strongly Agree: 1.7%

Neither Agree/Disagree: 6.9%

91.4% of students were not clear on how their participation in discussion boards would be evaluated, suggesting that they did not know what the instructor expected of them. Likewise, 82.7% of students were not clear on how their participation in the online group areas would be evaluated, indicating again that they were not sure of their instructor's expectations of them. This lack of clarity could in large part explain why they did not feel the course met their expectations.

However, there could also be other reasons for these responses that could be determined when the survey is revised. For example, what are students' expectations of the course and where do they get these from? Questions such as this one need to be incorporated into later versions of the survey. What is clear, though, is that students are unclear about

## Learner-Centered Education Grants

the expectations of them in these online and hybrid courses and, as a result, they are dissatisfied with the course experience.

### 7. Respects Diverse Talents and ways of learning

In this section, I focused specifically on how well the Blackboard and myASU technologies provided opportunities for new types of interaction and learning that are based on learner-centered principles. I wanted to determine what added value the use of these technologies brought to the students' experiences.

Using the myASU system increased the quality of my learning.

Disagree: 34.5

Agree: 0

Strongly disagree: 24.1%

Strongly Agree: 3.4

Neither agree/disagree: 34.5%

Over one third of students (34.5%) reported that the myASU had no impact on their learning while 58.6% of students reported that the system did not increase the quality of their learning.

I would take a course completely online.

Disagree: 22.4%

Agree: 12.1%

Strongly Disagree: 41.4%

Strongly Agree: 5.2%

Neither agree/disagree: 19.0%

63.8% of students would not take an online course while only 17.3% reported that they would do so. Perhaps this negative reaction to online courses can be explained by difficulties they had with the technologies themselves.

“It was easy to navigate through the myASU portal”:

Disagree: 43.1%

Agree: 0

Strongly disagree: 44.8%

Strongly Agree: 1.7%

Neither Agree/Disagree: 10.3%

“It was easy to navigate through the myASU course pages”.

Disagree: 44.8%

Agree: 0

## Learner-Centered Education Grants

Strongly disagree: 46.6%

Strongly Agree: 0

Neither Agree/Disagree: 6.9%

“The myASU webpages typically loaded quickly”:

Disagree: 51.7%

Agree: 6.9%

Strongly disagree: 27.6%

Strongly agree: 1.7%

Neither Agree/Disagree: 12.1%

Consistency of access was also perceived as a problem:

“I was consistently able to access the myASU web pages”:

Disagree: 50%

Agree: 13.8%

Strongly disagree: 22.4%

Strongly agree: 3.4%

Neither Agree/Disagree: 10.3%

“I was consistently able to access the files my instructor has made available to me on the myASU course web pages”:

Disagree: 48.3%

Agree: 6.9%

Strongly disagree: 32.8%

Strongly Agree: 0%

Neither Agree/Disagree: 12.1%

“I was consistently able to access the online discussion board (asynchronous, threaded) in the myASU course pages”:

Disagree: 41.4%

Agree: 0

Strongly disagree: 50%

Strongly Agree: 1.7%

Neither Agree/Disagree: 5.2%

An overwhelming number of students, thus, reported difficulties with the technical aspects of the system. Their frustrations—evident in the statistics above—were also clearly explained repeatedly in their responses to the open-ended questions:

In the open-ended sections, students voiced their dissatisfaction with the myASU and Blackboard systems mostly in terms of the online system being slow to load the pages or,

## Learner-Centered Education Grants

in the worst case, completely down and unavailable. The following comments are representative of many of the responses:

“The technical problems that I experienced were mainly the internet of the school either being down or blackboard not working, and the drop box not getting my files to my teacher.”

“The myasu page was down and so was blackboard. Some pages wouldn’t come up and if they did they were slow. The site was always having problems.”

These technical difficulties interfered with students’ turning in their work on time—a large concern for many of the students:

“Sometimes the server was down and I was not able to access MyASU, this made it extremely difficulty to get my work in on time and caused extreme inconvenience and anxiety about getting my work submitted on time. This was frustrating and discouraged me from taking an online or hybrid course again.”

“The internet would often go down, and I would not be able to access the internet for hours. Also, I had to have smartenforcer, and that often would not allow me to access ASU websites. There was also one period when Blackboard was being worked on when one of my assignments was due, and I could not turn it in on time.”

Some students separated their frustration with the technology from the course:

“MyASU was slow to load, slow to move through, and slow to upload. That is, when it wasn’t completely unavailable. I enjoyed the course and the concept is good, but the web access sucked.”

“I did not experience any technical problems with this course. I however did experience not accessing myASU, but that wasn’t due to this course.”

My satisfaction or success was limited because of technical or equipment difficulties:

Disagree: 17.2%

Agree: 34.5%

Strongly Disagree: 15.5%

Strongly Agree: 8.6%

Neither Agree/Disagree: 24.1%

32.7% of students did not agree that their success was limited by technical difficulties while 43.1% of them did. Even if students did not feel that their learning was inhibited, they were certainly frustrated with the technical aspects of the online systems:

## Learner-Centered Education Grants

The problems with the technology frustrated them certainly, but they were more ambivalent about the impact that these frustrations had on their learning. The technology slowed their efficiency but did not actually prevent them from learning. But it did not increase their learning either, which brings us to ask questions about why we are using these environments. If it is to improve learning through the application of learner-centered principles, the results suggest that we are, at best, having mixed results. If it is to improve accessibility to higher education, then the courses are succeeding.

*Goal #3: To revise the assessment measurement so that it can be used by ASU's Writing Program on an ongoing basis to continue to monitor and improve the impact of the new environments on students' learning.*

Creating the pilot survey required many revisions of my initial plans. In an effort to cast a wide net, I originally wanted to include more types of assessments—independent ratings of selected student papers, attrition rates, and course grades. However, the goal of the tool/instrument was to be a pilot of a measurement that could be used on an ongoing basis in the Writing Program in order to determine the success of over 15,000 students who take fyc courses. In that case, doing independent ratings of papers on an ongoing basis would be too unwieldy. Portfolio assessments have been completed in the Writing Program at various times, but they cannot be done on a continual, semester by semester basis. Yet, “pure” numbers such as attrition rates and course grades did not explain the impact that mediated course environments are having on students' success. Therefore, I decided to drop the independent ratings and the collection of attrition rates and course grades.

I directed my focus on developing a survey instrument that would determine whether the use of technologies in online and hybrid course environments was meeting Learner-Centered Education goals. Student perceptions are crucial to such a study since learner-centered education is specifically trying to encourage students to be more active learners. Asking students about their perceptions is a significant way to determine the state of affairs. Originally I had planned to create and administer two surveys—pre and post—but after writing the questions for the survey, I decided that two surveys were not useful because the purpose of the study was not to measure the change in attitude toward technology/writing caused by the course. Instead, the purpose was to map how technologies were being used and to what effect. Therefore, I condensed the assessment measurement to one survey that was administered over the Internet through my ASU course system near the middle of the semester. By surveying students in the middle of the semester, I am gathering opinions from them at a time when they have had enough experience with the courseware and are very engaged in the daily use of the technology—both conditions contribute to effective responses. Condensing the two surveys into one also makes the assessment instrument easier to use on an ongoing basis in the Writing Programs.

Now that the survey has been piloted once and I have analyzed the state of affairs presented in the survey, it is clear it needs to be revised in order to more effectively and

## **Learner-Centered Education Grants**

efficiently measure the state of affairs. I make recommendations for these revisions later in this report as I outline what I will do next with this project.

### **4. Problems or Issues Encountered:**

1. Trying to determine the reasons for the discrepancies between the statistical data and the open-ended responses.
2. Analyzing whether students' expectations of the course were or were not met because of the mediated environments or because of some essential feature of first-year composition courses.
3. Determining how to categorize the open-ended written responses into usable data.
4. Deciding how to refine/narrow what data was collected throughout the project.
5. Working with Instructional Technology/Instructional Support (IT/IS) at ASU in order to access the survey data. I was never able to attain the statistical analysis from IT/IS even though they were paid from the budget. I had to use my own money to hire a statistician to complete the analysis for me.

### **5. Conclusions, Recommendations and Future Directions:**

1. Revise Survey:
  - Incorporate data from written responses into "fixed" questions
  - Find out why the features of Blackboard were rated "Not Important"
  - Create questions that help to resolve the discrepancies noted in my analysis under Goal #2 above.
2. Map out a training plan for teachers in our department that will address the problems attached to students' perceptions about instructor use of technology. The focus of the training plan should be how to increase instructor presence in online courses and how to adapt teaching methods to multiple learning styles.
3. Create another survey instrument (based on the one piloted in this project) that would be used in 200- and 300-level composition/writing courses in the ASU Writing Program. Connect this survey to the first-year composition survey in a way that helps us to do longitudinal statistical comparisons.
4. Present survey instrument and results to other Writing Programs through national conferences and publications.
5. Collaborate more with offices that provide technical support services on campus to address the technical difficulties faced by students.

### **6. Has this project led to sustainable change in your department/college? Describe:**

Once the pilot survey is revised and more widely distributed, this project will lead to sustainable change. It will provide an ongoing map of the extent to which we are achieving learner-centered goals in our mediated course environments and will shape the kinds of training we need to incorporate into the department. It will also help us

## Learner-Centered Education Grants

make decisions about what types of environments in which to offer writing courses in the future.

### 7. Impact:

a. Have other faculty been affected by this project?

Yes. Many instructors in our department have debated the merits and drawbacks of offering online and hybrid courses at the 100-level. This survey will assess the success of such environments and will, thus, shape our future decisions about what to teach in these environments and how to teach in them as well. The training sessions that will result from the survey findings will help instructors better prepare students for the experiences of taking a course online. Instructors will better understand the learning styles and characteristics of successful online students so that they can help students succeed in their online courses.

b. Number of courses affected/involved.

307 sections of 107/108 (fyc for ESL students), 105 (fyc for honors students) and 101 are being offered in the Fall of 2005.

c. Number of students affected.

15,000 students and that number is rising. ASU requires all students to take ENG 101/102. When enrollments increase, the number of students who take these courses increase.

### 8. Significant Outcome:

What was the most significant outcome based on learner-centered principles that occurred through your project?

The most significant impact of the project was the production of a survey instrument that can be/will be used on an ongoing basis to continue to map the impact that our use of mediated technologies such as Blackboard and myASU is having on the success of our students in first year composition courses. When it is revised, the survey will be concise enough to be easily used each semester and yet it provides enough data for us to get a clear sense of the impact. The results of this ongoing measurement will be that we can determine how successful we are in using technology to implement learner-centered principles so that we can better achieve our departmental goals.