

# **Instructional Support and Academic Computing (ISAC)**

## **Institutional Effectiveness Review**

*The purpose of the review is to:*

Help ensure the department's effectiveness. The study will use various measurements to evaluate services provided and to search for strengths and weaknesses in an effort to constantly improve our support role.

*The process will involve the following steps:*

- Perform an analysis of current key services
- Correlate those services with institutional goals
- Perform a needs analysis to determine any unmet areas of service
- Establish goals focused on improving services
- Collect data using various methods to measure attainment of goals
- Analyze data and modify goals.

*Time frames/timeline for the review will be:*

Program/Service: ISAC  
Date of Review: March 2008  
Review Participants: ISAC Staff (Allan Wamsley – Director)

## **Overview**

*Purpose of the program/service and how it relates to college mission, values, vision:*

Instructional Support and Academic Computing (ISAC) is a department within the Learning Resources Division, which supports the academic programs of the College. As such, the mission of Instructional Support and Academic Computing is to provide the campus community with services that facilitate higher learning and improved educational access through technology. The primary focus is to aid student learning and student success.

The services provided by ISAC include instructional technology research, professional development, policy and procedure maintenance, and instructional technology resources coordination and repair. Services are provided utilizing collaboration and ongoing assessment with stakeholders including administration, faculty, staff and students, to ensure the department's effectiveness. ISAC delivers customer-oriented support that is

appropriate, timely and fiscally responsible toward achieving Jefferson College's mission of quality education.

## **Present Status**

### *Innovative Changes (in last 5 years):*

Instructional Support and Academic Computing became a department on July 1, 2005. Since that time the following major changes have occurred:

#### **Computer Labs and Smart Classrooms**

- A software security program has been installed in all labs and Smart classrooms to preserve the computer software installations.
- A high-capability Fine Arts Graphics lab was implemented.
- 42 Smart classrooms and 25 computer labs have been added at the College for a total of 123 Smart classrooms and 57 computer labs.
- Part-time staff proactively monitors Smart classrooms and key computer labs on a rotational cycle.

#### **Software**

- An annual renewal calendar of software updates was developed.
- Software licensing on academic-use campus computers is monitored.
- A new anti-virus software program was selected and installed.
- Online course videos are being transitioned to a videostreaming format and placed on the Web.
- Choices Planner was moved from a local installation to a STARS web-based version.

#### **Hardware**

- Jefferson College Northwest computers and Smart classroom equipment were purchased and installed.
- Jefferson College Arnold computers and Smart classroom equipment were purchased and installed.
- Computers and Smart classroom equipment from the previous Arnold location were installed at Jefferson College Hillsboro.
- An audiovisual system was permanently installed in the Viking room of the Student Center.
- Traditional CRT monitors are being replaced with LCD monitors.
- Printers were redistributed to ensure proper printing capacity in computer labs.

## **Licenses**

- A volume license agreement was entered into with Microsoft to allow all classrooms, labs, offices and homes of faculty and staff to have the same operating system and version of Microsoft Office.

## **Policies and Procedures**

- Purchasing procedures were modified to accept computer bids from only name brand computer vendors.
- A new computer inventory system was implemented allowing for inventory updates to be taken using a bar code scanner and updating a database.
- Smart classroom instructor computers were placed under a separate set of network policies providing greater bandwidth and flexibility for instructors.

## **Networks and Systems**

- Working with Telecommunication and Network services, an academic network was implemented providing for separate policies and network bandwidth allocation.
- Network traffic on the student segment of the network is proactively monitor for better management of resources.
- The Academic Technical Support Specialist developed and implemented a computer-based emergency alert system for the College at all locations.
- Network hubs were removed from computer labs and replaced with switches for improved network performance.
- Several of the classrooms have had their network wiring upgraded. This is an on-going process.
- Over 14 labs have been networked.
- Several file servers have been added to support instructional activity.
- ISAC staff worked with Administrative Computing to identify and implement a videostreaming server.

## **Help Desk and Support**

- Help Desk night hours were extended and Saturday hours were added.
- Support was improved by allocating a full-time professional staff to support faculty at night in Hillsboro and a part-time temporary position to assist faculty at Arnold.

## **Bandwidth**

- The College's bandwidth has been upgraded and is in the process of being upgraded again to meet increased usage demands.

## **Training**

- All new full and part-time faculty receive training on STARS, Blackboard and Smart classroom technologies.
- Faculty who request it are trained and supported on the use of the Student Response Systems on campus.

## **Consortium**

- An Educational Technology Conference was offered for the Gateway Community College Consortium. In 2007, its second year, there were 100 participants.

## **Faculty/Staff** (Degree to which faculty/staff are qualified, effective, and supported. )

<b>Name</b>	<b>Title</b>	<b>Degree</b>	<b>Years Service</b>
Allan Wamsley	Director	Masters in Education BA Business Administration	9. 5
Vickie Morgan	Senior Instructional Designer	BA Interdisciplinary Studies & 21 credit-hours towards Master's in Education	15
Jim Bianco	Academic Technical Support Specialist	59 credit-hours towards Associate of Applied Science with a focus on computers and electronics	26. 5
Dan Smith	Academic Computer Support Specialist	BS – Information Technology	5
Karen Hester	Instructional Support Specialist	AA – Business Administration	6. 5
Chris DeGeare	Academic Computer Technician	BS – Information System Security	2. 5
Matt Price	Academic Computer Technician	AAS - Microcomputers and Networking	2

**Allan Wamsley** – *Training:* Cisco CCNA Network I. *Conferences:* WebCT 2006 Annual Users Conference, Higher Learning Commission Annual Conference (2007 and 2008). *Miscellaneous:* Adjunct Instructor - Computer Information Systems Jefferson College and St. Charles Community College.

**Vickie Morgan** – *Education:* Working toward Master's Degree in Educational Technology. *Conferences:* WebCT Annual Users Conference 2006. *Training:* Cognos Reporting Software Training 2006, MS Access Continuing Education (CE) class. *Miscellaneous:* Adjunct Instructor - Computer Information Systems Jefferson College.

**Jim Bianco** – *Training:* Cisco CCNA Network I.

**Dan Smith** - *Certifications:* Network+, A+. *Training:* Cisco Certified Network Associate (1-4), Certified Network Defense Architect (January 2008), Cognos Reporting Software. *Miscellaneous:* Adjunct Instructor - Computer Information Systems Jefferson College.

**Karen Hester** – *Training:* PC Security CE, Introduction to PC Troubleshooting CE, Introduction to Sociology, and FERPA internal training.

**Chris DeGeare** – *Certifications:* CompTIA A+, CompTIA Network +. *Training:* CCNA Network I. *Conferences:* MOREnet HELIX 2008. *Miscellaneous:* Adjunct Instructor - Computer Information Systems Jefferson College.

**Matt Price** – *Certifications:* Comp TIA A+. *Miscellaneous:* Adjunct Instructor - Computer Information Systems Jefferson College.

**Students/Constituents** (The degree to which student/constituent needs are met.)

### **Students**

The department of Instructional Support and Academic computing is a relatively new department of the College. We are now completing the third year of existence. The following surveys are a measure of our effectiveness in supporting student needs.

Student needs have been primarily measured through the use of four different survey instruments. They are the Student Assessment of the College Environment (SACE) survey implemented in 2008 (177 participants), the Graduating Students Opinion Survey implemented in Fall 2007, the Introduction to Business Class SWOT analysis, and an Academic Computing Survey which was implemented online in March of 2008 (287 participants).

The **SACE survey** is a standardized instrument developed by North Carolina State University. It is meant to be an indicator of the health of a campus' climate. "The

quality of computer labs” and “The quality of computer services” questions ranked among the highest-rated services in the survey of 58 items, with ratings of 4.18 and 4.11 respectively. In comparison, the highest rated item in the survey received a 4.32 rating, the lowest rated item a 2.98 rating, and the overall mean was a 3.94 rating.

The **Graduating Students Opinion Survey** of Fall 2007 provides a rating of College services. “Computer labs” is one of the services rated. Computer labs received the second highest marks in the “Outstanding” category out of 19 services rated, and a 95.7% overall favorable rating.

For the last two semesters, the **Introduction to Business** classes of instructor Mary Baricevic have completed a SWOT analysis of campus services. Strengths of the college listed in the Spring of 2008 include “State-of-the-art” technology. Weaknesses included “Wireless Internet is not adequate for students’ needs.”

Although the SACE and Graduating Students Opinion Surveys give us some idea of students’ overall satisfaction, the **Academic Computing Survey** provides a more thorough evaluation of department services.

Following is a summary of the Academic Computing Survey:

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<u><b>Survey Items</b></u>	<u><b>Favorable Rating</b></u>
<b>Quality of the computer hardware</b>	<b>95. 2%</b>
<b>Computers in good working order</b>	<b>95. 9%</b>
<b>Appropriate software available for student use</b>	<b>96. 2%</b>

*When asked what additional software students would like on computers, many of the students requested software that was already installed in the open labs. It was determined that a better way to communicate with students regarding the location of installed software was needed. This is addressed in the goals section. Also, some items were requested that are not installed. This is also addressed in a goals statement.*

<b>Network speed</b>	<b>91. 5%</b>
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*Network speed was generally considered favorable; however, it was indicated that the speed of the network connection at Northwest needed improvement. Additionally, it was requested in several places to increase the speed of the wireless network and to provide more wireless access points on campus. Specifically, the AS II building was mentioned.*

<b>Sufficient help in the open computing labs</b>	<b>98.0%</b>
<b>Effectiveness of the classroom instructional technologies (examples Smart Boards and Course Websites) in the student learning experience</b>	<b>84.8%</b>

*This was the lowest ranked item on our survey. Comments provided by students indicate students' desire for more instructors to use the course websites. Specific statements requested use of the online grade book and posting handouts and notes. Students have these features made available to them in some sections but not others. Also, specific statements requested that instructors be better trained using the Smartboard equipment.*

<b>Was your problem or question resolved when calling the help desk?</b>	<b>85.1%</b>
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*This question had two parts - one was asking if the student had ever used the help desk services. Approximately 1 in 5 responders indicated using the help desk at least one time. The second part of the question was for those who had used the help desk service. Fifty-four students responded to the second part of the question. Of those, 3 people indicated their question was not answered.*

*A comments section was provided related to the help desk. There were no negative comments relating to help desk staff or their assistance of students. There were, however, several positive comments including "wonderful," "really helps," "great job," "extremely helpful," and "prompt and kind."*

*The suggestions made in the comments were for longer help desk hours of availability (24/7) and availability of STARS late nights and weekends for online course users. This area was highly rated by the evaluation of comments, but the survey design for this question was different than the others. The design difference gave the question an apparent low rating which was not reflected in the comments.*

<b>Overall computer use experience</b>	<b>98.9%</b>
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## **Faculty**

The ISAC department director met with Program Coordinators, Associate Deans, the Director of the Area Technical School and the Director of Arnold and Northwest. Seven open-ended questions were asked. The survey was meant to aid us in determining how

well-supported faculty are in their use of instructional technology. Fifteen people were interviewed. Most interviews took a half hour to complete. The questions included:

- Are your program's uses of instructional technology well supported?
- Is the ISAC staff professional and knowledgeable?
- What is our greatest weakness?
- What is our greatest strength?
- What should we be doing that we currently are not doing to support your area?
- Do you foresee challenges in the future for us through external forces?
- What is the most innovative change in the past two years?
- Overall Comments?

Several themes emerged from the survey:

### **Staff**

- Staff are friendly, professional and knowledgeable.
- On important, urgent requests staff are very quick to respond and effectively resolve problems.
- Staff were often mentioned by name, and examples were given of how instructors were recently assisted in a meaningful way.
- Instructors used descriptors such as "a can-do attitude", "solution finders", "very responsive", "go out of their way", "flexible", "a real asset", "pleasant and helpful", "always there" and "patient" to reference the work of the staff.
- The service of the staff is seen as valuable to instructors in their daily work. They often asked if staffing was sufficient for the services provided.

### **Support**

- It was often mentioned that the new night-time support at Hillsboro and Arnold has been helpful, especially to the College's adjunct faculty.
- An appreciation for the support in developing online courses and assistance with their on-going maintenance was a common theme.

### **Resources**

- Interviewees were appreciative of the resources available to them, especially the number of Smart classrooms available.
- Instructors liked the Microsoft Office software being up-to-date and having the same versions at work, home, in the classrooms and student labs.
- It was indicated that recent updates of computers in the instructional labs has been of benefit.
- The network bandwidth increases to the labs and classrooms as well as the use of "Symposiums" in larger lecture rooms were indicated as being helpful.



### **Suggestions for Improvement**

- Evaluate the need for additional staff
- Provide additional computer labs
- Extend the training opportunities for existing and new technologies
- Provide online training sessions
- Provide software in the labs to allow instructor management of student Internet use
- Provide a way for instructors in the classroom to contact the help desk
- Provide a newsletter to better communicate what the ISAC is doing

In addition to the one-on-one interviews conducted by the Director, the Senior Instructional Designer conducted a ***Faculty Training Survey***. All new full-time and adjunct faculty receive training in the use of STARS and Smart classrooms. Of the 56 faculty trained by ISAC, 29% responded to a quality survey. The outcome of the survey was very positive as indicated by a 100% favorable rating on the “overall STARS training experience”.

**Curriculum/Services** (The degree to which curriculum/services are thorough, current, and supported.)

### **Instructional Design**

The ISAC department works with faculty to develop and maintain online courses and other instructional websites. This service was stated as being a valuable resource to faculty participating in the study.

### **Training**

The ISAC department provides several training activities. Staff often meet one-on-one with faculty to assist them with particular problems, concerns and needs. Several training opportunities are provided throughout the year on various topics such as MS Office, Smartboards, WebCT, online test preparation software, and STARS. The department coordinates an annual Educational Technology Conference. The 2007 conference hosted at Jefferson College had 100 participants. The 2008 conference is being hosted at St. Charles Community College and is again coordinated by the ISAC department.

Students often request services from open lab workers in how to use software found in the labs. In addition, students will get technical assistance from lab workers in completing Computer Information Systems homework.

### **Computer Maintenance**

Four full-time staff and five part-time staff work to install, update and repair approximately 1,300 computers in the academic area at three locations. Computers are replaced on average every four to five years depending upon their use. Machines are

circulated from high resource need areas to lower resource need areas to aid in fiscal responsibility to the College and to better meet user needs.

### **Tracking Inventory**

All ISAC computers receive an inventory tag at purchase. The tag numbers are placed in a database along with the location of the computer and other important information. The database is updated twice annually and the updates are given to the business office.

### **Procurement**

The ISAC department approves purchases of computing equipment used in support of instruction. The approval process assures compatibility with existing systems and aids in reallocation of existing equipment. The department is annually involved in coordinating software and hardware purchases related to instructional use. There are several examples of this service saving the college thousands of dollars annually.

### **Instructional Technology Research**

The ISAC staff is empowered to remain current on changes in the areas of instructional technology. As indicated above, the department is involved in continuous improvement and training. Staff are regularly involved in the delivery of credit-based courses, which helps us to understand the instructor's perspective of the department services provided. It was stated in the Program Coordinator survey that technology research is a valued service of the department.

### **Documentation**

The department is often involved in writing end-user documentation supporting common instructional technologies on campus. Documentation ranges from simple job aids to more detailed training documentation on the use of Blackboard.

### **Facilitation of Instructional Technology Use**

Faculty commonly request solutions to instructional needs. The department works with faculty to arrive at an acceptable solution and assists with the implementation. The department also demonstrates and promotes new technologies.

### **Audiovisual Services**

The Audiovisual Services arm of the department provides equipment and support for ad hoc activities at the College. This service of the department has a strong community focus. There are over 400 requests annually for these services, many of them serving hundreds of people per event.

## **Help Desk**

The help desk staff works to support Jefferson College students and faculty with questions regarding the STARS campus portal. Requests for STARS assistance may relate to information on how to login, user name and password problems, admissions or registration information, or the process to access student records.

The help desk also provides WebCT support to faculty, staff and students of Jefferson College as well as other colleges affiliated with the Gateway Community College Consortium, including East Central College and Mineral Area College. WebCT questions may involve help with login assistance; use of course tools such as email or discussion board, quiz features or problems; or trouble with computer browser, security or machine settings.

In addition, the help desk staff assists in troubleshooting technical problems with Smart classroom equipment and dispatching technical specialists as needed.

The help desk has three incoming lines and is staffed Monday through Saturday, with evening hours until 9 p.m. Monday through Thursday. Help desk staff have answered over 1,000 calls since October 2006. Approximately 1 in 5 students from the Academic Student Survey reported using the help desk services.

**Community** (The degree to which the program contributes to the community and responds to community needs)

The Instructional Support and Academic Computing department responds to community needs and supports Jefferson College outreach into the community in many ways, including the following:

- ISAC assists faculty with technology in the implementation of Service Learning projects.
- The staff provides audiovisual support for outside groups hosting events at Jefferson College. Examples include GED Graduation, Mastodon Science Fair, Friday Speaker Series, A+ Open House, Nursing Pinning Ceremony, Commencement, and the Cultural Diversity Luncheon.
- Technical support is provided for Continuing Education offerings at Jefferson College.
- ISAC provided Internet literacy training in using e-mail and browsing the Internet for a retirement facility in Crystal City serving dozens of people.
- Open labs at the College support community access.
- The staff often provides technical assistance to the local Career Centers.

## **Cost**

The ISAC department expends funds from several sources, including a Consortium fund and an ISAC fund. The Director is charged with making expenditures for software, hardware, and services for the support of the entire academic program and to ensure that choices made are fiscally and organizationally sound.

## **Summary (SWOT)**

<p style="text-align: center;"><b>Strengths (Internal)</b></p> <ul style="list-style-type: none"><li>• Staff capabilities and strong desire to serve constituent groups</li><li>• Administrative and faculty support of the department</li><li>• Extended hours of service</li><li>• Breadth of services</li><li>• Strong ratings of satisfaction by constituent groups</li><li>• Quantity of instructional technology resources available to students and faculty</li></ul>	<p style="text-align: center;"><b>Weaknesses (Internal)</b></p> <ul style="list-style-type: none"><li>• Aging Smart classroom equipment in Hillsboro</li><li>• Communication regarding availability of services</li><li>• Occasional deferred or delayed response to less urgent requests</li><li>• Wireless speed and availability of access points</li><li>• Student ratings as to the effective use or non-use of Smart classroom and website resources by some faculty</li></ul>
<p style="text-align: center;"><b>Opportunities (External)</b></p> <ul style="list-style-type: none"><li>• Continued increase in acceptance of Distance Learning as a valuable form of educational delivery</li><li>• Increased computer literacy of constituents</li><li>• Increase bandwidth availability to home users</li><li>• Availability of quality, externally developed multi-media instructional materials</li></ul>	<p style="text-align: center;"><b>Threats (External)</b></p> <ul style="list-style-type: none"><li>• Strong reliance on part-time staff and high turn-over rates</li><li>• High reliance on external funding for computer upgrades</li><li>• Aging campus design and infrastructure for support/addition of classroom technologies</li></ul>

## **Future**

### Proposed Learning and Service Goals and Action Plan

<i>Proposed Learning/Service Goal</i>	<i>Proposed Assessment Measurement/Action</i>	<i>Person(s) to Implement</i>	<i>Timeframe</i>	<i>Resource Implications</i>
<b>Goal 1</b>  Train faculty and transfer courses to Blackboard CE 6. 0.	<ul style="list-style-type: none"> <li>• Communicate implementation timeline to faculty</li> <li>• Provide training in Spring, Summer and Fall 2008</li> <li>• Contact faculty and work with them on individual on-line courses</li> </ul>	Vickie Morgan	April 2008 – December 2008	
<b>Goal 2</b>  Update the Smart classroom quick reference guide.	<ul style="list-style-type: none"> <li>• Observe rooms and technology differences</li> <li>• Update the existing guide</li> <li>• Proof with staff</li> <li>• Publish on web and provide printed copy to all faculty and smart rooms</li> </ul>	Vickie Morgan Patricia Darby	January 2008 - June 2008	
<b>Goal 3</b>  Work with faculty to implement a computer classroom management system.	<ul style="list-style-type: none"> <li>• Research available systems</li> <li>• Pilot in selected classrooms</li> <li>• Develop training materials</li> <li>• Establish an implementation time line</li> <li>• Provide training</li> <li>• Implement System</li> </ul>	Chris DeGeare	May 2008 - August 2009	Software Purchase
<b>Goal 4</b>  Increase the occurrence of faculty training opportunities in the use of Blackboard and Smart board rooms.	<ul style="list-style-type: none"> <li>• Articulate a long-term training plan with approval of Academic Deans</li> <li>• Provide additional on-going training both technical and pedagogical</li> </ul>	Allan Wamsley Sandy Zak Vickie Morgan	July 2008 - Ongoing	
<b>Goal 5</b>  Increase the bandwidth on the Academic Computing Network Segment including wireless allocation.	<ul style="list-style-type: none"> <li>• Contact MOREnet to get pricing</li> <li>• Internal approvals</li> <li>• Implement purchase</li> <li>• Internal network modifications</li> <li>• Monitor usage</li> </ul>	Tracy James Allan Wamsley	March 2008 – July 2008  On-going	On-going annual expense noted in the Technology Planning document

<b>Goal 6</b>  Host Gateway Consortium Blackboard CE 4.1 server by Fall 2008.	<ul style="list-style-type: none"> <li>• Load software on a test machine.</li> <li>• Purchase production server.</li> <li>• Establish detailed time line with East Central and Mineral College.</li> <li>• Transition courses.</li> <li>• Move over to new server.</li> <li>• Bring current production server to Hillsboro to become a pre-production server.</li> </ul>	Jim Bianco	March 2008- August 2008  On-going	Hardware purchase from Consortium budget and on-going support costs.
<b>Goal 7</b>  Increase the number of Wireless Access Points. Increase reliability with Windows Vista.	<ul style="list-style-type: none"> <li>• Meet with Dean of Learning Resources to establish a plan of action</li> <li>• Implement plan to increase number of current access points and functionality of existing points with Windows Vista</li> </ul>	Tracy James  Allan Wamsley	March 2008 – January 2009  On-going	
<b>Goal 8</b>  Establish a bi-annual newsletter for faculty.	<ul style="list-style-type: none"> <li>• Develop outline and article assignments</li> <li>• Collect and proof articles</li> <li>• Publish</li> </ul>	Karen Hester	August 2008 - Ongoing	
<b>Goal 9</b>  Communicate to students what software is loaded on open computer lab machines.	<ul style="list-style-type: none"> <li>• Develop a summary list of software for the open labs.</li> <li>• Post the list on the faculty and student ISAC channel.</li> <li>• Clearly mark the lab machines with variant software.</li> </ul>	Dan Smith	June 2008	
<b>Goal 10</b>  Provide open access lab capabilities in the ASI and CEB Buildings.	<ul style="list-style-type: none"> <li>• Work with deans and program coordinators to identify locations.</li> <li>• Identify proper lab oversight policies and bandwidth.</li> </ul>	Dan Smith Allan Wamsley	April 2008 - March 2009	Student staffing in CEB building.
<b>Goal 11</b>  Load additional software requested in student survey where possible.	<ul style="list-style-type: none"> <li>• Identify location and quantity of additional software based on survey</li> <li>• Purchase and install</li> </ul>	Matt Price Chris DeGeare Dan Smith Jim Bianco	April 2008 – January 2009 Ongoing	Software purchase
<b>Goal 12</b>  Develop an ISAC STARS channel for both the Student and Faculty Tabs.	<ul style="list-style-type: none"> <li>• Identify channel locations and specific items of information</li> <li>• Implement channel and post information</li> </ul>	Karen Hester Allan Wamsley	April 2008 – September 2008 Ongoing	

**Data Needs**

What additional data would be helpful to effectively evaluate the program?

**DISCIPLINE STATUS**

\_\_\_\_\_ Satisfactory  
\_\_\_\_\_ Requires Immediate Attention  
\_\_\_\_\_ Unsatisfactory

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Date