In order to provide an optimum network/server infrastructure to all faculty, staff, and students, the standards and policies outlined below will be followed. These procedures will supplement the existing Board Policy on Computer and Internet Use - Number 2.17.

1. General Principles:

1.1 The entire infrastructure of the campus network across the district will be maintained by Technology Services.

1.2 All necessary network infrastructure components will be funded centrally. This includes wiring, switches, and routers.

1.3 The terms of this procedure covers all wiring and electronic devices from the wall outlet inward to the campus core network. In addition, certain devices outside of the wall-outlet-to-core region (e.g., External Internet Connections) are also subject to some restrictions.

1.4 The terms of this procedure covers all servers, software and technology contractual services across the district.

1.5 The infrastructure standards followed by the college will be periodically reviewed to ensure that current "best industry practices" are followed.

2. Wiring:

2.1 Installation and maintenance of all wiring is the sole responsibility of Technology Services. Wiring will not be installed by faculty, staff, or students. Wiring will not be installed by third party contractors hired by any department without the express consent of, and under the direct supervision of Technology Services.

2.2 All new wiring installations will the most current category of wiring to each location.

2.3 Existing wire will be reused, where possible, and brought into full compliance.

2.4 All wiring will be certified as compliant as it is installed or reworked.

2.5 All wiring will utilize industry standard patch panel termination in the wiring closets.

2.6 All wiring will utilize industry standard wall outlets.

2.7 All wiring will be properly labeled.

2.8 In addition to the Main Distribution Frame (MDF), Intermediate Distribution Frames (IDF) are located throughout the campus. Given the critical nature of the equipment located in these areas, this space must be dedicated to use by data communications and telephone equipment. The space must not be used for housekeeping, storage space, or for any other use. Dedicated, secure communications closets are critical to the physical security of the campus network.

2.9 Requests for assistance with the setup and use of PCs or other workstations should be directed to Tech Help (<u>support@sandburg.edu</u> or 309-341-5446).

3. Connections Provided:

3.1 All data outlets will provide switched Ethernet to the end user.

3.2 Gigabit Ethernet links (or latest technology) will be provided from wiring closet switches to central building switches. These building switches will then have Gigabit Ethernet links (or latest technology) to a central, divisional network switch or router. Additional fiber optic cable has been installed as necessary to provide these inter- and intra-building links.

3.3 A Gigabit Ethernet link (or latest technology) will be provided from the divisional network switch or router to the campus backbone switch/router via the College's fiber optic cable plant.

3.4 Future infrastructure upgrades will be implemented when new technologies become available and/or when the lifecycle of the current equipment comes to an end.

4. Monitoring and Repair of Defective Components:

4.1 Technology Services will monitor all routers, switches, and other active network infrastructure components. This will allow for quick problem detection and repair or replacement of failing devices.

4.2 A common point of contact for reporting all network infrastructure problems has been established at the Tech Help Desk. The Help Desk should be contacted during normal college business hours at 309-341-5446 or via e-mail to <u>support@sandburg.edu</u> .

5. Device Connections:

5.1 Users will not be allowed to install switches, hubs, routers, or any other active or passive network device.

5.2 No device may be connected that presents itself as multiple, concurrent IP addresses without the express consent of Technology Services. This includes, but is not limited to, routers, switches, hubs, and wireless access points.

5.3 Users may not contract with any external entity to install network devices without the knowledge of Technology-Services.

5.4 Users may not attach any servers to the network.

5.5 All area networks will be directly attached to the area core router or switch. No devices such as Microsoft Windows servers or workstations, or UNIX/LINUX machines will be allowed to route or bridge network packets.

5.6 No traffic will be routed outside of the area except for IP packets. Other protocols, e.g. AppleTalk, will not be routed onto the campus backbone network.

5.7 Connections may not be made to any agency that is outside of the division without the express consent of Technology Services. This restriction is due to the high potential risk for security problems. This restriction applies to connections to commercial enterprises such as Internet Service Providers (ISPs) and other providers who would need direct access to the college network.

6. Telecommunications:

6.1 All moves/adds and changes of telephones and related communication equipment will be handled by Technology Services.

6.2. Issues related to telephones and related communication devices should be reported to Technology Services.

7. **Distance Learning, Audio Visual and Document Management Equipment:**

7.1 All distance learning; audio visual and document management equipment will be purchased, maintained and upgraded by Technology Services in collaboration with the Copy Center staff.

8. Computers, Printers and Related Technology Equipment:

8.1 All computers, printers and related technology equipment across the college district will be purchased in cooperation with Technology Services according to the technology standards established by the College and maintained by Technology Services. Issues related to technology equipment should be reported to Technology Services through the Tech Help Desk.

8.2 All software purchases across the district will be purchased in collaboration with Technology Services. Technology-Services maintains a centralized license archive of all software licenses and contracts for the entire institution.

9. Related Services:

9.1 Technology Services is responsible for Internet Protocol (IP) address management. This will be done via Dynamic Host Configuration Protocol (DHCP) with static IP addresses assigned as necessary for such things as file servers.

9.2 Technology Services will attempt to satisfy all requests for special network topologies that are needed for research or teaching. This may involve the construction of a private network or, it may involve the implementation of Virtual Local Area Networks (VLAN).

9.3 Creation/deletion and maintenance of user accounts for faculty, staff and students are the sole responsibility of Technology Services, Student Services and Human Resources.