

INTRODUCTION AND RATIONALE FOR THE NETWORK SYSTEMS STRAND

This package is designed to present a basic introductory instructional unit in the fundamentals of **Network Systems Technology** and the construction of a simple peer- to –peer network. Our team included materials to support each unit of instruction but encourages each instructor to seek out and/or prepare additional materials in order to make the curriculum package reflective of each instructor's style of presentation.

We have developed a six-week unit divided under these topics:

Week1 Topics- Safety and History
Week 2 Topics- Types of Networks and Network Topologies
Week 3 Topics- Hardware and Software
Week 4 Topics- Transmission Media and Interference
Week 5 Topic - Lab Work
Week 6 Topic – Final assessment

It was our intention to develop a sample lesson set for introducing the concepts of computer networking through basic peer-to-peer network construction. We considered the varying equipment and operating systems available to instructors in public schools and decided to focus on the Windows 98 operating system. While not a network operating system (NOS) like Windows 2000 Server or Windows NT, we nonetheless felt that the fundamentals of sharing resources over a computer network could be adequately demonstrated using the Windows 98 platform. This platform can also be used on older computers that may be located readily and acquired at little or no charge.

A sample safety test, which each student should pass without error before working on lab activities is included in the package. The source of the material included in the test is cited. It is our recommendation that each instructor prepare a safety exam that reflects general safety issues as well as specific issues that relate to their personal classroom/lab areas.

We also considered the budgetary restrictions that many programs must function under and endeavored to locate materials that could be acquired without cost

We included a number of web site locations that we found useful in preparing our samples. Those sites are cited in the materials being distributed. There are other sites available and our team encourages instructors to search the Internet for additional materials as their time and inclination dictates.

We were in agreement that the introduction of networking principles using the Windows 98 platform was well within the scope of any instructor with even a minimum exposure to networking since the materials found on the Internet were well prepared and easy to understand. The number of how-to articles available on the Internet was also impressive

Finally, a recommended rubric for the final evaluation is included but we purposely omitted a sample written final exam as it is our opinion that each instructor should prepare a document that accurately reflects the material as it was actually presented.