### **Appendix D: District Technical Environment**

#### **Network Infrastructure**

* All schools connected via 10Gbps fiber network
* Internet connectivity: 2Gbps redundant connections
* Cisco networking equipment throughout district
* Cloud-based content filtering (Lightspeed Systems)
* District data center with virtualized server environment (VMware)
* Disaster recovery site with 4-hour RPO

#### **End-User Devices**

* Administrative Staff: Windows 11 desktops/laptops (replaced on 4-year cycle)
* Teachers: Dell Latitude laptops with Windows 11 (replaced on 3-year cycle)
* Students grades K-2: iPad tablets (classroom sets)
* Students grades 3-6: Chromebooks (1:1 program)
* Classroom Technology: Interactive displays in all classrooms

#### **Authentication Systems**

* Microsoft Active Directory for staff accounts
* Google Workspace for Education for student accounts
* Azure AD for single sign-on capabilities
* MFA required for all administrative access

#### **Current Software Environment**

* Student Information System: StudentTrack 2012 (on-premises)
* Financial System: Oracle Financial Suite (cloud-based)
* Learning Management System: Canvas
* Assessment System: NWEA MAP
* Communication Platform: ParentSquare
* Library Management: Follett Destiny
* Special Education: PowerIEP
* Email: Microsoft Exchange Online (staff), Gmail (students)

#### **Integration Requirements**

* New system must integrate with:
  + Oracle Financial Suite (via API)
  + Active Directory/Azure AD (for authentication)
  + Google Workspace (roster synchronization)
  + PowerIEP (student services data)
  + ParentSquare (for notifications)
  + State reporting system (via SFTP file exchange)

#### **Security Requirements**

* Data encryption at rest and in transit
* Role-based access control
* Comprehensive audit logging
* Compliance with FERPA, COPPA, and state privacy laws
* Regular security assessments and penetration testing
* Data loss prevention capabilities

#### **Support Environment**

* IT Help Desk staffed 7:30 AM - 4:30 PM on school days
* 4 IT support technicians district-wide
* 1 database administrator
* 2 educational technology coaches
* Change management committee for major system changes