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DIGITAL SECURITY IN CHINESE UNIVERSITIES

The current trend of digitalization of higher education in China includes typical scenarios: blended learning, cloud-based collaboration in scientific research, student information systems (course selection / grades), access to academic databases, learning and interaction on social platforms. The share of online courses in universities worldwide exceeds 60% (according to UNESCO, 2023); the level of “smart campus” implementation in Chinese universities exceeds 90% (data from the Ministry of Education, 2022). The main threats in Chinese universities can be identified as technical vulnerabilities: untimely system updates (for example, the risk of SQL injections in outdated learning platforms), weak or default passwords (vulnerability of student accounts to brute-force attacks). Human negligence: clicking malicious links (phishing emails disguised as “academic notifications”), shared use of accounts (several people using one account, which complicates activity tracking). Malicious attacks: ransomware (encryption of educational materials with ransom demands), DDoS attacks (paralysis of course selection systems during peak periods). Data misuse: third-party platforms illegally collect students’ behavioral data (for example, tracking viewing history in educational applications for commercial purposes).

Fundamentals of digital security: technical protection through the creation of a robust “firewall.” Basic measures include regular system patch updates, deployment of firewalls and intrusion detection systems (IDS), and encryption of confidential data (for example, AES-256 for student ID numbers). Training: anti-cheating technologies for online examinations (facial recognition + screen monitoring), private cloud storage, and access rights differentiation. Politics: implementation of the “Campus Network Security Regulations” and “Standards for the Use of Student Data,” based on the principles of “the collector is responsible” and “minimum

necessary volume.” Process control: key operations (file deletion, access granting) require multi-level approval; regular security audits of information systems. A combined case of “technology + management.” For example, one university reduced account theft by 80% through the introduction of two-factor authentication (password + SMS code); a scientific data-sharing platform uses “watermarks + access logs” to prevent leakage of research results.

Practical Approach: Multilateral Model of Shared Governance. • **At the university level:** creation of a "Cybersecurity and Ethics Committee" (involving the information center, academic department, student affairs office, and faculty representatives). • **At the faculty level:** the role of the "primary responsible person" (emphasizing the need for originality in student work and guiding safe data handling in laboratories). • **At the student level:** establishment of the "Digital Security Volunteer Association" to spread knowledge through peer-to-peer education (e.g., posters with "Anti-Fraud Guidelines").

Specific Action Proposals: • **Short-term:** holding a university-wide "Digital Security Month" (lectures, competitions, rewards for vulnerability reports); mandatory training for first-year students (access to systems only after passing a test). • **Long-term:** inclusion of digital ethics in the comprehensive assessment of students' quality (records of academic integrity influence awards and incentives); collaboration with IT companies to develop specialized security tools, such as lightweight encryption plugins for scientific data.

Recommendations on technical tools: password managers (Bitwarden), VPNs (protection during off-campus access), AI-content detection tools (updated Turnitin). Education: interactive platforms (CyberSecurity Lab with simulated hacking attacks), micro-courses (“How to recognize a phishing email in 5 minutes”).

The information environment of higher education is not only a technological system, but also a digital ecosystem that transmits knowledge and shapes personality. Every teacher and student is a participant in this process; the transition from “passive protection” to “active preservation” of the integrity of the educational space in the digital era.