





THE 6TH CYBERSECURITY EDUCATION & RESEARCH CONFERENCE

Cyber Security

In Secondary Education: Empowering Students to Counter.

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Ministry Of Education

الأمن السيبر اني في التعليم الثانوي

في التعليم الثانوي تمكين المتعلمين من المواجهة

الأستاذة منى سالم عوض الموجه الفني العام لمادة الحاسوب بالتكليف

وزارة التربيـــة















THE 6TH CYBERSECURITY EDUCATION & RESEARCH CONFERENCE

الأمن السيبراني في التعليم الثانوي-تمكين المتعلمين من المواجهة.

Cybersecurity in Secondary Education: Empowering Students to Counter.















Introduction

Today, the world is facing great challenges in the field of cybersecurity, so introducing cybersecurity concepts into school curricula and enhancing awareness of their importance to protect systems and data from electronic threats, urging new generations to work in the field of cybersecurity, and developing secure electronic solutions to meet current and future challenges.























INFORMATION















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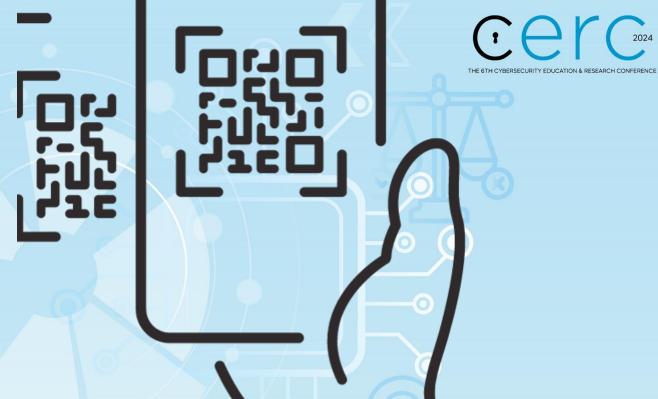








125 عاماً من الشراكة الكويتية البريطانية 125 YEARS OF KUWAITI-BRITISH PARTNERSHIP







Analysis for Incorporating Cybersecurity in Secondary Education to empower students to counter digital threats.

Today, the world is facing great challenges in the field of cybersecurity, so introducing cybersecurity concepts into school curricula and enhancing awareness of their importance to protect systems and data from electronic threats, urging new generations to work in the field of cybersecurity, and developing secure electronic solutions to meet current and future challenges.





















Growing Awareness Technological Integration Young and Adaptable Students



Evolving Threats Digital Divide **Privacy Concerns**











- Lack of Specialized Teachers
- Limited Resources
- Curriculum Gaps



Opportunities

- Career Pathways
- Collaboration with Industry
- **Government Support**











Strengths

- Growing Awareness: Increasing public and governmental recognition of the importance of cybersecurity.
- Technological Integration: Schools are becoming more reliant on technology, making cybersecurity education essential.
- Young and Adaptable Students: Students are generally more techsavvy and can adapt to new concepts quickly.













Strengths







Public Recognition

Governmental Recognition



Cybersecurity Education in Schools



Technological Integration

Increased Technology Use

Essential Education



Young and Adaptable Students

- Tech-Savvy

Quick Adaptation













Weaknesses



Lack of Specialized Teachers

Qualified Educators

Expertise Shortage



Cybersecurity Education Weaknesses



Limited Resources

Funding Issues

Training Materials



Curriculum Gaps

Existing Curricula

Integration Challenges













Overcome weaknesses in MOE



Curriculum Gaps

- IN 10th Grad New curriculum introduction to CS.
 - Cyber Security
 - The main interlocutor of cybersecurity CIA
 - Cybersecurity Cybersecurity concepts
 - Marsat Cyber Security
 - Cyber Security Jobs

















OPPORTUNITIES



Career Pathways 29



Job Security

High Demand

Competitive Salaries



Opportunities in

Cybersecurity Education



Collaboration with Industry

Resources

Real-World Experience

Internships



Government Support

Funding

Grants

Educational Programs









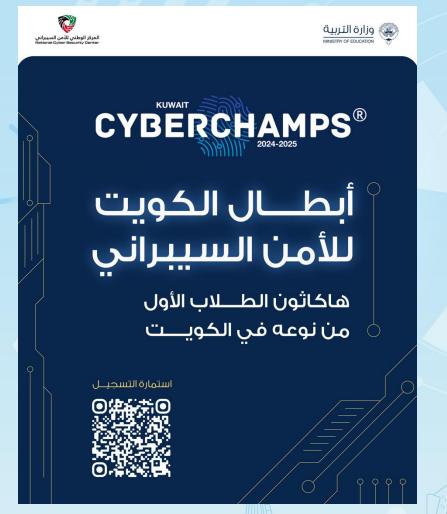






OPPORTUNITIES



















THREATS



Evolving Threats 26



Rapid Pace of New Threats

Need for Continuous Updates



Challenges in Cybersecurity Education



- Disparities in Technology Access
- Internet Connectivity Issues



Privacy Concerns

- Data Privacy Issues
- · Surveillance Concerns

















OUR Strengths in MOE

- Awareness campaign "Be Aware" in cybersecurity.
- Target Segment.
 - Students of educational stages.
 - From fourth to twelfth grade.
 - Nearly 450,000 students in all schools of the Ministry of Education.
- The executing party of the campaign:
 - The number of mentors supervising the campaign in all educational zones is 120 mentors and mentors.
 - 3476 computer teachers and head of the computer department.

















ADDRESSING WEAKNESSES

















Addressing Weaknesses:





Budgetary Prioritization

Allocate sufficient funds for cybersecurity education.



Community Partnerships

Partner with local businesses and organizations to obtain resources and support.

Grant Applications

Explore grant opportunities from government agencies, foundations, or technology companies.













Addressing Weaknesses:



How to integrate cybersecurity education into the curriculum?

Cross-Curricular Themes

Incorporate cybersecurity concepts into various subjects.





Real-World Applications

Use real-world examples and case studies.

Student-Centered Learning

Encourage simulations, roleplaying, and problem-based learning.















Online Resources



Cybersecurity Blogs

Forums

Webinars



Staying
Updated on
Cybersecurity



Continuous Learning

- Threat Awareness

Best Practices



Industry Partnerships

Expert Collaboration

Organizational Partnerships















Bridging the Digital Divide:

- Technology Access: Ensure that all students have access to technology and the internet.
- 2. **Digital Literacy Programs:** Offer digital literacy programs to help students develop essential skills.
- 3. **Community Initiatives:** Partner with community organizations to provide technology resources and training.















Technology Access



Ensure Internet Access

Provide Devices



Bridging the Digital Divide



Offer Training Sessions

Develop Curriculum



Community Initiatives

Partner with Organizations

Provide Resources



















Incorporate Ethical Guidelines

Teach Ethical Principles



Privacy and Ethical Considerations Cybersecurity Education



Data Privacy Training

Educate on Data Privacy Laws

Best Practices Training



Consent and Informed Choice

Importance of Informed Consent

Responsible Use of Technology















How to equip students with cybersecurity knowledge and skills?

Implement Cybersecurity Curriculum

Introduce dedicated courses on cybersecurity.









Conduct Workshops and Seminars

Organize events with industry experts.



Partner for resources and expertise.





Encourage Online Learning

Provide access to online cybersecurity courses.











