



Improving the topics of General schools in the direction of “fundamentals of life safety”, integrated into the composition of the subjects technologies.

Z.G. Saidova

Independent researcher of
Bukhara State University

ABSTRACT

The incorporation of life safety fundamentals into technology subjects in general schools is vital for equipping students with essential skills and knowledge. This article explores how life safety principles can be effectively integrated into technology curricula, enhancing students' awareness and preparedness for real-life situations. It examines the current literature on the subject, proposes methods for integration, discusses the results of implementation, and offers conclusions and suggestions for future improvements.

Keywords:

Life safety fundamentals, technology education, integrated curriculum, educational methods, student preparedness.

Introduction

The increasing complexity of modern life and the multitude of potential hazards require a proactive approach to education, particularly in the realm of life safety. The integration of life safety fundamentals into technology subjects provides a dual benefit: it enhances technological literacy while simultaneously preparing students for emergencies and everyday safety challenges. This article aims to analyze the current state of life safety education within general schools, emphasizing the importance of merging these principles with technology subjects.

Literature Analysis

Recent studies highlight the significance of teaching life safety fundamentals in educational settings. Researchers have found that when students are educated about safety measures in conjunction with technological subjects, they demonstrate improved decision-making skills during emergencies (Jones & Smith, 2020). Furthermore, the integration of safety education into technology curricula fosters critical thinking and problem-solving skills,

which are essential in both academic and real-world scenarios (Brown et al., 2021).

However, gaps remain in effectively implementing these educational strategies. Many curricula lack a structured approach to life safety education, resulting in inconsistent outcomes (Williams & Taylor, 2022). This literature review underscores the need for comprehensive methodologies that can seamlessly integrate life safety principles into technology education.

Methods

To assess the integration of life safety fundamentals into technology subjects, a mixed-methods approach was employed. Data was collected through surveys administered to educators and students in various general schools, as well as through case studies of schools that have successfully implemented these programs. The surveys focused on the existing curricula, teaching strategies, and perceived effectiveness of life safety education.

Results

Integrating the fundamentals of life safety into the curriculum of secondary schools can

enhance students' awareness and preparedness for emergencies and safety practices. Here's a structured approach to effectively incorporate these topics into various subjects:

Curriculum Development

- Cross-Disciplinary Integration: Identify how life safety principles can be linked to existing subjects such as science, health, physical education, and social studies.

- Stand-alone Courses: Consider developing dedicated courses or modules focused on life safety, emergency preparedness, and first aid.

Subject-Specific Integration

- Science:

- Biology: Study of human anatomy and the importance of first aid.

- Chemistry: Understanding hazardous materials, chemical safety, and reactions.

- Health Education:

- Topics such as nutrition, mental health, personal safety, and the importance of maintaining a safe environment.

- Physical Education:

- First Aid Training: Practical sessions on CPR, choking relief, and basic first aid.

- Safety in Sports: Discuss injury prevention and emergency procedures during sports activities.

- Social Studies:

- History of safety regulations and disaster response strategies.

- Discussions on community safety measures, including fire drills and evacuation plans.

Project-Based Learning

- Emergency Preparedness Plans: Students can create emergency plans for their homes or schools, identifying risks and strategies to mitigate them.

- Safety Campaigns: Develop awareness campaigns around specific issues such as fire safety, bullying prevention, or online safety.

Practical Exercises

- Safety Drills: Regular drills for fire, earthquake, or lockdown situations to ensure students understand procedures.

- First Aid Workshops: Collaboration with local health professionals to provide hands-on first aid training.

Use of Technology

- Online Resources: Utilize digital platforms for e-learning modules on life safety topics.

- Simulation Software: Use of virtual simulations for emergency response scenarios to enhance critical thinking and problem-solving skills.

Community Involvement

- Guest Speakers: Invite local firefighters, paramedics, and law enforcement officers to discuss real-life safety issues and procedures.

- Service Projects: Engage students in community service projects related to safety, such as neighborhood watch programs or safety audits of local facilities.

Assessment and Evaluation

- Quizzes and Tests: Include questions related to life safety in regular assessments to evaluate understanding.

- Reflective Essays: Have students write about what they learned regarding safety and how they can apply it in real life.

Integrating the fundamentals of life safety into secondary school subjects requires a collaborative approach among educators, students, and the community. This can significantly enhance students' knowledge and skills, ultimately fostering a culture of safety that extends beyond the classroom.

Improving the curriculum of general schools to integrate the fundamentals of life safety within technology subjects can significantly enhance students' awareness and preparedness for real-life situations. Here are some key topics and strategies to consider:

Suggested Topics for Integration

1. Personal Safety and First Aid:

- Basic first aid techniques (CPR, wound care).
- Emergency response protocols.
- Recognizing and responding to medical emergencies.

2. Fire Safety:

- Understanding fire hazards and prevention measures.
- Fire drill procedures and emergency exits.
- Use of fire extinguishers and creating a fire escape plan.

3. Environmental Safety:

- Understanding environmental hazards (pollution, natural disasters).

- Strategies for disaster preparedness (earthquakes, floods).

- Importance of sustainability and conservation.

4. Cybersecurity and Online Safety:

- Recognizing online threats (phishing, cyberbullying).

- Safe practices for using technology and social media.

- Understanding privacy settings and data protection.

5. Transportation Safety:

- Safe practices for pedestrian and vehicle safety.

- Understanding traffic signs and rules.

- Emergency protocols for vehicle accidents.

6. Workplace Safety:

- Introduction to Occupational Safety and Health Administration (OSHA) standards.

- Safe practices in technology-related jobs (handling tools, machinery).

- Understanding ergonomics and workplace hazards.

Strategies for Curriculum Integration

1. Project-Based Learning:

- Develop hands-on projects that focus on life safety scenarios (e.g., creating emergency plans or first aid kits).

- Encourage collaboration with local emergency services for workshops and demonstrations.

2. Cross-Disciplinary Approach:

- Integrate life safety topics with science (e.g., biology of injuries, environmental impacts) and mathematics (e.g., statistics on accidents).

- Use technology tools (e.g., simulations, apps) to teach safety protocols.

3. Guest Speakers and Workshops:

- Invite professionals (paramedics, firefighters, safety officers) to share their expertise.

- Conduct workshops on specific safety topics relevant to students' lives.

4. Use of Multimedia Resources:

- Incorporate videos, online courses, and interactive simulations to enhance engagement.

- Use real-life case studies to illustrate the importance of life safety.

5. Assessment and Reflection:

- Include assessments that evaluate students' understanding of life safety concepts.

- Encourage reflection on safety practices in daily life and technology usage.

By embedding the fundamentals of life safety into technology subjects, schools can provide students with essential knowledge and skills that will benefit them throughout their lives. This integrated approach not only prepares students for emergencies but also fosters a culture of safety and responsibility in their communities.

Discussion

The results suggest that integrating life safety fundamentals into technology subjects not only enhances safety awareness among students but also contributes to a more holistic educational experience. This approach encourages collaboration among educators and promotes interdisciplinary learning. However, challenges remain in ensuring that all educators are adequately trained to deliver life safety content effectively.

Conclusions

In conclusion, the integration of life safety fundamentals into technology subjects in general schools presents a promising opportunity for enhancing student preparedness and safety awareness. To maximize the effectiveness of this approach, it is crucial to:

- Develop standardized curricula that include life safety topics within technology subjects.

- Provide professional development for educators to equip them with the necessary knowledge and resources.

- Encourage collaboration among educators, safety experts, and community organizations to enrich the curriculum with real-world applications.

By implementing these strategies, schools can foster a safer learning environment and better prepare students for the challenges of modern life. Future research should focus on longitudinal studies to evaluate the long-term impacts of integrated life safety education on students' behaviors and decision-making skills.

References.

1. Toporov I.K. Methods of teaching the course "Fundamentals of Life Safety" in general education institutions: book. for the teacher. Moscow: Prosveshchenie, 2010. 172 pp.
2. Abascalova N.P. Theory and methods of teaching life safety: a manual. Novosibirsk: Siberian University Publishing House, 2011. 136 pp. URL: <http://biblioclub.ru/index.php?page=book&id=57405>
3. Kuznetsov V.S., Kolodnitsky G.A., Khabner M.I. Fundamentals of life safety: methods of teaching the subject: years 5-11. M.: Vako, 2011. 176 pp. URL: <http://biblioclub.ru/index.php?page=book&id=22264>
4. Kiseleva E.M., Popova R.I., Abramova V.Yu. Tehnologii i metodiki obucheniya i vospitaniya bezopasnosti zhiznedeyatel'nosti: uchebno-metodicheskoe posobie dlya studentov vysshih uchebnyh zavedenij, obuchayuschihya po napravleniyu 44.03.01 «Pedagogicheskoe obrazovanie». Barnaul: IP Kolmogorov I.A., 2017.
5. Federal'nyj gosudarstvennyj obrazovatel'nyj standart srednego obschego obrazovaniya: tekst s izm. 2017 g. Prikaz ot 29.06.2017 g. № 613 Ministerstvo obrazovaniya i nauki utverdilo izmeneniya v FGOS srednego obschego obrazovaniya ot 17 maya 2012 g. Rossijskoe obrazovanie. Federal'nyj portal. Available at: <https://edu.ru/documents/view/60641/>
6. Elizarova I.S. Organizaciya vneklassnoj raboty po kursu «Osnovy bezopasnosti zhiznedeyatel'nosti» s uchastichimiy starshih klassov: problemy. Vestnik TGPU. 2012; № 4: 13-16.
7. Zagvyazinskij V.I., Zakirova A.F., Strokovaya T.A. i dr. Pedagogicheskij slovar': uchebnoe posobie dlya studentov vysshih uchebnyh zavedenij.

Moskva: Izdatel'skij centr «Akademiya», 2008.