UNIT 27
EDUCATION AND RESEARCH

Objectives: at the end of the lesson, students will be able to:

1. learn and use topic-related vocabulary;

2. describe various IT educational resources, such as online courses, textbooks, and tutorials;

3. discuss actions that occurred at an unspecified time using the present perfect tense.

Lead-in: Find the name of today's topic

Before the class, prepare a set of questions or prompts related to different educational and research tools or concepts. For example:

Q 1: What kind of tool is used for writing and taking notes? (Answer: Notebook or digital note-taking app)

Q 2: Where do you go to learn and study? (Answer: Library)

Q 3: What device does help you access online information? (Answer: Computer or smartphone)

Q 4: What term describes a detailed study on a specific topic? (Answer: Research paper or report)

Let's Talk!

1. What topics can people research online?

2. How can information technology combine business and education?

Vocabulary Building

Key Terms

VPN – (Virtual Private Network) is a way to encrypt a connection when you use remote access

EZproxy – is a library server program that allows remote users to access the library's electronic materials

License restriction – limits who can use a library's electronic resources

Boolean operator – narrows a database search with words like "and", "or" and "not".

Index – is a categorical list of books in a library

Subscription – is an agreement to use something, often requiring a fee

Remote access – is the ability to use online library resources from outside the library

Activity: Game "Guess the word"

Divide the students into two groups. Form two lines from each group member to stand in a row. The first students in each row should take a piece of paper from the box. Ask the other team members to come up with a definition for their team so that they can find the target word written on the paper. After guessing and finding the word, the student who chose another word to identify it must be replaced by another student from his team. Words can be terms/vocabularies related to previous topics. The winning team is the team that can identify all the target words first.

Grammar Focus: Present Perfect Tense

The present perfect tense is used to talk about actions that happened at some indefinite time in the past but are relevant to the present moment.

Affirmative (+)	Negative (-)	Question (?)
S + have/has + past participle *I have completed the project.*	S + have/has + not + past participle *I have not completed the project.*	Have/Has + S + past participle? *Have I completed the project?*

When to Use the Present Perfect
1. To Talk About Experiences:
Example: I have worked on several programming languages.

This means at some point in the past, you worked on different languages, and it's relevant now because it shows your experience.

2. To Talk About Actions That Started in the Past and Continue Now:
Example: "I have been using this software for two years."

This means you started using the software two years ago and you are still using it.

3. To Talk About Actions That Happened Recently with a Result in the Present:

Example: "I have updated the system, so it should work better now."

This means you updated the system recently, and this update has a current effect.

Activity: Write the correct form of the verbs to complete the sentences.

1. They (to develop) the new software. 2. He (not/to install) the updates yet. 3. Have you (to test) the application? 4. I (to attend) several coding workshops. 5. They (to fix) the security issue. 6. We (not/to complete) the database migration yet. 7. Has she (to submit) the report?

Reading
Think Tank online library

No library holds every single book, periodical and academic journal in the world. The Internet can change that. That's why you need the Think Tank Online Library. With ThinkTank, your library could access millions of online resources.

Subscription to our service opens your library to a huge catalog of content. Browse the easy to use index for ebooks and ejournals. Search for any topic users can think of, Search media like images, newspapers, magazines and audio files. Simple Boolean operators help narrow the search. Users can always find just what they're looking for.

People who visit Libraries can't always get to one. Remote to access lets our clients use ThinkTank from home. Users with a site license access ThinkTank through an Ezproxy server. The VPN encryption secures the connection. All users need is a library card.

Our license restriction gives access to copyrighted works. Users won't find these kinds of resources through normal search engines. Use of the service for commercial reasons is prohibited.

Activity: Read the ad about online subscriptions. Then, choose the correct answer.

1. What advantage does ThinkTank Online Library offer compared to traditional libraries?

A) It holds every single book, periodical, and academic journal in the world.

B) It provides access to millions of online resources that traditional libraries may not have.

C) It replaces physical libraries entirely.

D) It only offers access to physical books.

2. How can users access ThinkTank if they are unable to visit a library in person?

A) By calling a customer service number.

B) Through remote access using a site license.

C) By visiting a physical ThinkTank office.

D) By using public computers in the library.

3. What is required for users to access ThinkTank through an Ezproxy server?

A) A personal subscription to ThinkTank.

B) A library card.

C) A university degree.

D) A separate VPN service.

4. How does VPN encryption benefit users of ThinkTank?

A) It allows users to bypass library card requirements.

B) It provides a secure connection for accessing ThinkTank.

C) It enables users to access physical books from remote locations.

D) It eliminates the need for a library card.

5. What kind of resources might users NOT find through normal search engines but can access via ThinkTank?

A) Public domain books.

B) Copyrighted works.

C) Free online articles.

D) Government reports.

Speaking

Group Work Activity: Survey and discuss

Divide the students into 4 groups. Provide each group a set of resource descriptions Have them discuss the questions of the survey in

a group. Then, ask them to mingle in the class to survey the other groups.

IT Resources with Simple Descriptions

1. **Codecademy**

Description: Codecademy is a website where you can learn programming by doing interactive exercises. It offers courses in languages like Python, JavaScript, and HTML/CSS.

Best For: Beginners who want hands-on practice with coding.

2. **Khan Academy**

Description: Khan Academy provides free video tutorials and practice exercises on various topics, including basic programming, computer science, and more.

Best For: Students who prefer learning through videos and interactive exercises.

3. **W3Schools**

Description: W3Schools is a website with easy-to-follow tutorials on web development technologies like HTML, CSS, and JavaScript. It includes code examples and exercises.

Best For: Beginners looking to build and design websites.

4. **"Python Crash Course" by Eric Matthes**

Description: This is a book that introduces programming with Python. It starts with basics and includes projects to practice coding skills.

Best For: Learners who prefer reading a textbook and working on practical projects.

5. **Coursera**

Description: Coursera offers online courses from universities on many topics, including IT and computer science. Some courses include video lectures, quizzes, and assignments.

Best For: Students who want structured courses with a mix of videos and assignments.

6. **Udemy**

Description: Udemy is a platform with a wide range of courses on different IT topics, including programming, cybersecurity, and data analysis. Courses often include video lectures and quizzes.

Best For: Learners looking for specific, practical skills and a variety of course options.

7. **Pluralsight**

Description: Pluralsight provides tech and IT training through video courses on topics like cloud computing, programming, and data science. It is used by professionals for skill development.

Best For: Learners who are interested in advancing their technical skills for professional purposes.

Questions	Group #1	Group #2	Group #3
Which resource is best for someone who learns by doing?			
Which resource would you recommend for a student who likes to watch videos and do exercises?			
If someone wants to learn web design, which resource is most suitable?			
Which resource is best for someone who prefers structured, university-style courses?			

The answers might be Codecademy, Khan Academy, W3Schools, and Coursera.

Home assignment

Choose one IT educational resource.

Write a brief evaluation of the chosen resource. Your evaluation should include:

• **Description:** What is the resource about? What topics or skills does it cover?

• **Features:** What are the main features of this resource? (e.g., video lectures, interactive exercises, quizzes)

• **Target Audience:** Who is this resource best for? (e.g., beginners, advanced learners, specific professionals)

• **Pros and Cons:** What are the advantages and disadvantages of this resource?