

ERGONOMICS LESSON PLAN

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Lesson Title: Workplace Ergonomics	Date: April 18, 2024
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Grade Level: 9	Subject/Strand: BTT10
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Topic: Introduction to Workplace Ergonomics	Length of Period: 75 minutes
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Lesson Plan Description

This lesson will introduce students to basic information about the study of ergonomics, the importance of it within the workplace, what types of ergonomic issues exist, and how it can be prevented.

CURRICULUM CONNECTIONS

Ontario Curriculum Overall Expectations <ul style="list-style-type: none">Assess the impact of information and communication technology on personal health and the environment.	Ontario Curriculum Specific Expectations <ul style="list-style-type: none"><i>Describe an ergonomically correct work environment.</i><i>Assess the personal health risks associated with the use of information and communication technology (e.g., musculoskeletal injuries, eye strain).</i>
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Learning Goals Discuss with learners: <i>What will I be learning today?</i> <i>We are learning ...</i> <ul style="list-style-type: none">What an ergonomically correct work environment looks like.The types of ergonomic furniture, technology, and accessories that are available.Why businesses should take ergonomics seriously.The risks associated with ergonomically poor work environments.	Success Criteria Discuss with learners: <i>How will I demonstrate what I have learned?</i> <i>I can ...</i> <ul style="list-style-type: none">Explain what ergonomics isExplain what a proper ergonomic work environment looks like.Demonstrate how to setup an ergonomic desk layout.
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ASSESSMENT

Indicate purpose of the assessment: FOR AS OF

Indicate Achievement Chart categories being assessed:

Knowledge and Understanding [] Thinking Application [] Communication

Indicate Assessment

Mode: Performance –
Using a brochure to
demonstrate
understanding of
ergonomics terms, risks,
solutions, etc.

Indicate Assessment

Strategy: What will
learners do to
demonstrate their
learning?

AS: Create a brochure
using Microsoft Word to
advertise what
ergonomics is, its risks, as
well as potential
solutions.

Indicate Assessment Tool:

Instrument used to record results/
document learning.

AS: A checklist will be used to ensure
required assignment components and
learning expectations are achieved.

CONSIDERATIONS FOR PLANNING

Review:

What prior experiences, knowledge and skills do the learners bring with them to this learning experience?

- Students have no previous known experience or exposure to ergonomics other than their everyday experiences and will be learning from scratch.

Resources / Materials:

- Computer for each student
- PowerPoint presentation for lesson

THREE PART LESSON

Introduction (5 minutes)

- Using a chair, sit in it in a non-ergonomic way such as slouching, leaning back, etc.
- Then, ask the students “what is wrong with this picture?”
- Wait for a few responses such as that you are slouching, it’ll hurt your back, etc.
- Once a few answers have been gathered, change to picking up a lighter object using your back (if possible). Repeat a few times. Ask the same question: “What is wrong with this picture?”
- Wait for a few responses such as that you should lift with your legs, doing it over and over is not good

Key Questions to Engage Learners.

- *What am I doing wrong?*
- *How can I do this better?*
- *Will this hurt me at all?*
- *Do any of you do this?*

<p>for you, etc.</p>	
<p>Lesson / Assignment (65 minutes)</p>	
<p>Presentation:</p> <ul style="list-style-type: none"> • Present the PowerPoint on ergonomics. • Throughout the lesson and presentation, be sure to engage the learners by: <ul style="list-style-type: none"> ○ Demonstrating how to sit properly. ○ Asking the students to show YOU how to sit properly. ○ Asking the students to adjust their monitors (if class is in a computer lab) to the correct eye level. ○ Asking the students if they have done any of these ergonomically poor things such as bad posture, sitting too close to the screen, etc. <p>Assignment:</p> <ul style="list-style-type: none"> • Prior to the start of the lesson, upload the brochure assignment to D2L, Edsby, Google Classroom, etc. • Go through the assignment instructions with the students all at once to ensure that everyone is on the same page or at the very least has heard the instructions. • Once the students begin working, float around the classroom as needed to ensure that students are on-task and completing the work as expected. • Make adjustments to the assignment as necessary on-the-fly (things such as clarifying an instruction, setting an exact number of points to list, etc.) 	<p>Key Questions to Engage Learners.</p> <p><i>Why might a business want to ensure that their employees have ergonomic workstations?</i></p> <p><i>How might ergonomics affect productivity or success?</i></p> <p><i>What are some long-term effects of poor posture, repetitive motions, etc.?</i></p>
<p>Conclusion (5 minutes)</p>	
<p>Summary:</p> <ul style="list-style-type: none"> • Summarize the content learned and check-in with students on the progress of their ergonomics brochures. 	<p>Key Questions to Engage Learners.</p> <p><i>What is one thing about ergonomics that you learned today?</i></p> <p><i>When can you use this in the future?</i></p>

Differentiated Instruction

- Main lesson will be taught in chunks letting students follow along. The teacher will go through the presentation and assignment instructions on the projector screen for students to see and hear (auditory/visual).

Rationale & Purpose:

- This lesson covers the ergonomics and work-related health concerns from the Ontario Secondary Business Curriculum for BTT1O.

Next Steps

Students will be continuing work on their ergonomics brochures for the next class and as-needed after.