



Pedagogical Practice Plan

Institution: XXXX	CEFR: B1.1	
Teacher: XXXXX	Level: 12 th	
English Oriented to Electromechanics	Scenario: Control and Automation Systems	Time: June 16 Hours
Essential Question: How can electro-pneumatic systems help modern industries and leading manufacturers improve automation, safety, and efficiency?	Theme: Electro-Pneumatics	
Essential Competence: Empowerment	New Citizenship Axis: Strengthening of Planetary Citizenship with Identity	

Goals	Task Mediation Activities	Indicators
Essential Competence: Empowerment	Decision-Making Circle: In rotating roles (facilitator, technician, safety officer, reporter), students identify a real or simulated electro-pneumatic problem, compare alternatives, and agree on a safe solution.	Assumes an active role and fulfills agreed responsibilities during collaborative work.



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	• Problem–Solution Matrix: Teams interpret a short workplace case, record causes, risks, available resources, and two possible solutions, and justify their preferred option. • Mini Pitch / Project-Based Learning: Each team presents its circuit proposal, explains the choices made, receives feedback, and states one improvement it will implement.	• Makes informed decisions by considering technical information, safety, efficiency, and available resources. • Communicates ideas assertively, listens to feedback, and negotiates agreements respectfully.
New Citizenship Axis: Strengthening of Planetary Citizenship with Identity	• Eco-efficiency Jigsaw: Students analyze brief data and recommendations on compressed-air leaks, energy use, noise, maintenance, and	• Relates electro-pneumatic technology to safe, efficient, and responsible production. • Identifies actions that reduce air leaks, energy waste,



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	responsible production in Costa Rican industry. Local Action Proposal: Teams select one sustainability issue, agree on preventive actions, and prepare a bilingual safety-and-efficiency recommendation for a local workshop or company.	noise, and unnecessary consumption. Proposes a feasible action that supports local industry while considering global environmental responsibility
Oral and Written Comprehension	Task-Building Process: The teacher checks attendance, greets learners, reviews class agreements, presents the Essential Question and Can-Do statements, activates prior knowledge, and closes each lesson with an exit ticket. Pneumatics, applications, and basic components (4 hours)	
Listening: Follow a lecture or talk about pneumatics, its applications, and components.		
Reading: Find and understand relevant		



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information about pneumatic power.	Pre-Task: <i>Schemata building</i>	
Oral and Written Comprehension	L/SI – See–Think–Wonder (Visual Thinking Routine): Students observe compressors, cylinders, valves, gauges, hoses, fittings, industrial machines, and robots; they activate prior knowledge by describing what they notice and predicting uses and safety considerations.	<i>See-Think-Wonder:</i> Identifies visible components, describes relevant characteristics, and predicts their industrial use and safety considerations.
Spoken Interaction: Start a conversation and help keep it going by asking relatively spontaneous questions about the functions of a pneumatic quick-connect fitting and its schematic symbol.	R – Picture–Word Matching (Vocabulary Mapping): Students infer and confirm the meaning of compressor, air tank, filter, regulator, lubricator, valve, cylinder, hose, fitting, gauge, actuator, pressure, and flow by matching photographs, terms, and schematic symbols.	<i>Picture-Word Matching:</i> Infers and confirms the meaning of key vocabulary by matching photographs, terms, and schematic symbols.
Spoken Production: Explain the main points and crucial aspects to consider in circuit connections.		



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Writing: Present a topic in a short report or poster, using photographs and short blocks of text about pneumatic circuits	Task Rehearsal: <i>Authentic input, language focus, and controlled practice</i> L/R – Expert Jigsaw: Students listen to or read authentic/adapted technical cards, catalog extracts, or a manufacturer video and complete a chart with definitions, applications, advantages, disadvantages, and basic components. R/W – Language Focus / Noticing: Students identify functions for defining, classifying, and describing purpose; discourse markers such as for example, however, and therefore; the present simple/passive voice; and Theme vocabulary.	<i>Expert Jigsaw:</i> Extracts and organizes definitions, applications, advantages, disadvantages, and basic components from oral and written technical sources. <i>Language Focus:</i> Recognizes and uses functions for defining, classifying, and describing purpose; comparison/contrast markers; and the present simple/passive voice.



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	SI – Classification Drill / Guided Practice: Using sentence frames, students classify examples as pneumatic, hydraulic, electrical, or manual and justify each choice: It is... because... / It is used to.... Post Task- Meaningful production SP/SI – Think–Pair–Share: Groups answer the Essential Question by presenting two industrial applications, one advantage, and one limitation of electro-pneumatics, and respond to a peer question. Assessment:	Classification Drill: Classifies examples as pneumatic, hydraulic, electrical, or manual and justifies each choice. <i>Think-Pair-Share:</i> Presents two industrial applications, one advantage, and one limitation of electro-pneumatics and responds to a peer question.



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	vocabulary/picture matching sheet, technical-information chart, and oral-performance checklist aligned with the L, R, SI, and SP indicators. Pressure, gauges, regulators, and safety (4 hours): Pre-Task — Schemata building L/SI – Prediction from Visuals: Students inspect gauge photographs and regulator symbols, recall prior knowledge, predict low/normal/high readings, and use the frames The gauge reads... / The pressure is... / This is safe/unsafe because.... Task Rehearsal : Authentic input, language focus, and controlled practice L – Three-Pass Listening: Students follow an	<i>Prediction from Visuals:</i> Reads gauge values, predicts low/normal/high pressure conditions, and explains whether a condition is safe. <i>Three-Pass Listening:</i> Identifies the topic, records component-function



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	authentic/adapted manufacturer demonstration or technical talk. First listening: identify the topic; second: complete component–function notes; third: verify statements and correct inaccurate information. • R – Guided Reading / Graphic Organizer: Students interpret a technical manual excerpt and diagrams about pressure, gauge readings, regulator operation, safety rules, and symbols. • R/W – Language Focus / Noticing: Students examine warning and recommendation functions, if-clauses and modals must, should, and must not, cause–effect markers, numerical expressions, units, and safety vocabulary.	information, verifies statements, and corrects inaccurate information. <i>Guided Reading:</i> Explains pneumatic safety rules and interprets pressure readings, regulator operation, applications, and schematic symbols. <i>Language Focus:</i> Uses warning and recommendation functions, if-clauses, modals, cause-effect markers, numerical expressions, units, and safety vocabulary. <i>Information Gap:</i> Compares gauge



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	SI – Information Gap / Controlled Practice: Partner A has gauge values and Partner B has safe operating ranges. With question-and-answer frames, they determine whether each condition is safe and recommend an action. Post-Task : Meaningful production SP/SI – Case-Based Learning: Teams solve a workplace safety case involving excess pressure, an air leak, a damaged hose, a missing regulator, or an unsafe connection; they explain the hazard, recommend action, and justify it. Assessment: listening notes, reading organizer, gauge-reading record, and	values with operating ranges, determines whether each condition is safe, and recommends an appropriate action. Case-Based Learning: Explains a workplace hazard, recommends corrective action, and justifies the recommendation with technical evidence. Fittings, circuit branches, cylinders, and DCVs



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	analytic safety-case rubric aligned with the L, R, SI, and SP indicators. Fittings, circuit branches, cylinders, and DCVs (4 hours) Pre-Task: Schemata building • R/SI – Realia Exploration / KWL: Students handle or observe quick-connect, tee, and cross fittings and inspect circuit symbols. They record what they know, want to know, and predict about each component's function. Task Rehearsal : Authentic input, language focus, and controlled practice • R – Symbol Scavenger Hunt: Using an authentic/adapted pneumatic diagram, students locate and label fittings, branches,	Realia Exploration/KWL: Records prior knowledge, questions, and predictions about quick-connect, tee, and cross fittings and their symbols. Symbol Scavenger Hunt: Locates and labels fittings, branches, cylinders, regulators, and DCVs and traces airflow through a pneumatic diagram.



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	cylinders, regulators, and DCVs and trace airflow through the circuit. • L/R – Language Focus / Guided Discovery: Students notice question forms, expressions for function and application, relative clauses, port/position terminology, and sequence markers first, next, then, and finally. • SI – Role Play / Controlled Practice: In technician/trainee roles, students use cue cards and sentence frames to start and sustain a conversation about quick-connect fittings, functions, applications, and symbols. • SP – Guided Demonstration: Following a model, students explain	Guided Discovery: Recognizes and uses question forms, expressions of function/application, relative clauses, port-position terminology, and sequence markers. Role Play: Starts and sustains a technical conversation about quick-connect fittings, functions, applications, and schematic symbols. Guided Demonstration: Describes cylinder function, classifies DCVs by ports and positions, and explains



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	cylinder function, classify DCVs by ports and positions, and rehearse the operating sequence of a 5-port, 3-position DCV. Post-Task: Meaningful production • SI/SP – Collaborative Problem Solving: Teams select tee or cross fittings for a workplace circuit, defend their choice, explain airflow and DCV operation, and answer spontaneous questions from another team. Assessment: labeled circuit, spoken-interaction checklist, and oral-explanation rubric aligned with the R, SI, and SP indicators. Circuit design, revision, and final presentation (4 hours)	the sequence of a 5-port, 3-position DCV. Collaborative Problem Solving: Selects an appropriate fitting, defends the choice, explains airflow and DCV operation, and answers spontaneous questions.



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	Pre-Task: Schemata building R/SI – Model Analysis / Gallery Walk: Students examine sample circuit posters and reports, activate previous learning, and identify purpose, components, diagram, procedure, pressure settings, safety, troubleshooting, and conclusion. Task Rehearsal: Authentic input, language focus, and controlled practice R – Mentor Text Analysis: Students analyze an authentic/adapted procedure or maintenance guide and identify its organization, action verbs, warnings, labels, and visual support. W – Language Focus / Joint Construction: The class reviews imperative forms, passive voice, sequence and	Model Analysis/Gallery Walk: Identifies purpose, components, diagram, procedure, pressure settings, safety, troubleshooting, and conclusion in sample products. Mentor Text Analysis: Identifies organization, action verbs, warnings, labels, and visual support in a procedure or maintenance guide. Language Focus/Joint Construction: Uses imperatives, passive voice, sequence and cause-effect markers,



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	cause–effect markers, conditionals for troubleshooting, technical vocabulary, and concise poster/report conventions. • W – Process Writing / Guided Practice: Teams draft the objective, component list, connection sequence, pressure adjustment, inspection, test, likely fault, solution, and sustainability recommendation for their circuit. • W/SI – Peer Review / Two Stars and a Wish: Partners apply the project rubric, provide specific feedback, and revise technical content, organization, language, visuals, and safety information. Post-Task: Meaningful production	conditionals, and technical vocabulary appropriately. Process Writing: Writes the objective, component list, connection sequence, pressure adjustment, inspection, test, likely fault, solution, and sustainability recommendation. Peer Review: Provides specific rubric-based feedback and revises technical content, organization, language, visuals, and safety information.



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	SP/SI – Project-Based Learning / Technical Briefing: Teams present their completed electro-pneumatic solution, explain components and operating sequence, justify safety and eco-efficiency decisions, demonstrate shared responsibility, and answer audience questions. Assessment: final poster/report and technical briefing. Suggested weighting: technical content 30%; communicative goals 30%; organization and language 20%; safety and sustainability 10%; empowerment and teamwork 10%. Integrated Project Developed in class throughout the 16 hours From week 1 onward, teams progressively design a simple	Technical Briefing: Presents the completed circuit solution, explains components and operating sequence, justifies safety and eco-efficiency decisions, and answers questions. Integrated Project: Documents weekly milestones and improvements and



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	electro-pneumatic circuit poster or short report. Week 1: select an industrial need and identify applications/components. Week 2: establish pressure, safety, and eco-efficiency criteria. Week 3: complete the circuit diagram and justify fittings, cylinder, and DCV choices. Week 4: write, peer-review, revise, and present the final product. The teacher monitors each milestone in class and keeps evidence in a project log; the project is not assigned as an isolated homework task. Suggested language support Functions: defining, describing functions, interpreting readings, comparing options, sequencing a process, warning, recommending,	presents a coherent final poster or short report with accurate technical content and visual support.



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	justifying, and troubleshooting. Frames: The component is used to...; The gauge reads...; If the pressure is too high...; First/Next/Then/Finally...; We recommend... because...	
Resources and Observations: Classroom/English laboratory: projector or display, speakers, board, offline/online media, technical cards, glossary, and collaborative workspace. Electromechanics: supervised training board or simulator, compressor, gauge, regulator, hoses, fittings, cylinders, valves, diagrams, symbols, and PPE. Observation: Coordinate demonstrations with the Electromechanics teacher; inspect every circuit before pressurizing it. When equipment is unavailable, use diagrams, videos, or simulation. Differentiate with vocabulary banks, sentence frames, replayable audio, flexible grouping, and extra processing time.		