

GRADES 9–12 · AGES 14–18 · 60 MINUTES · STRUCTURED DEBATE

Will AI take the jobs worth having?

THE PROPOSITION

"Within a decade, AI will eliminate more good jobs than it creates."

An evidence-driven debate on labor displacement that forces students to define 'good job,' weigh historical precedent against what is different now, and confront the question personally: what should a sixteen-year-old do about it?

STUDENTS WILL BE ABLE TO

- Distinguish task automation from job elimination and explain why the difference matters.
- Argue an assigned side with historical and current evidence, and steelman the opposition.
- Write a defensible personal position that concedes one real cost.

VOCABULARY FROM THE FIELD GUIDE

Labor displacement & augmentation · Automation · Copilot · AI agent · Inference cost

WHAT'S IN THIS PACK

- Teacher guide: background, vocabulary, agenda, format, positions, questions, roles, rubric.
- Student handouts (photocopy one per student): position organizer, sentence starters, exit ticket.
- Standards: CCSS ELA SL.9–10.1 / SL.11–12.1; CCSS ELA SL.9–10.3 / SL.11–12.3 (evaluate point of view, reasoning, evidence); CCSS ELA W.9–10.1 / W.11–12.1 (argument); C3 Framework D2.Eco.1 (economic decision-making).

PRINT

US Letter, plain paper, duplex. Teacher pages once; student pages one per student. Free to photocopy for classroom and homeschool use. Not for resale.

Background for the teacher

Read this before class. Students get a version of the same facts on their handout; you get the framing and the traps.

Automation has eliminated jobs before – telephone operators, typesetters, most farm labor – and total employment kept rising because new work appeared. Economists call the pessimist error the 'lump of labor fallacy': assuming there is a fixed amount of work. That is the strongest historical argument that AI will not cause mass unemployment.

What may be different: previous automation replaced muscle and routine; language models act on judgment, writing, and analysis – the tasks that defined 'good' white-collar jobs. Early studies show large productivity gains for junior workers using AI copilots, which can mean fewer juniors hired, and that is exactly the rung a graduate steps onto. Agents that complete multi-step tasks push the same trend further.

The honest answer is that nobody knows the net, and the debate lives in the distribution – who gains, who loses, how fast, and whether the transition is managed. Push students past 'jobs will change' to specifics: which jobs, which tasks, which people.

RUNNING DISCUSSION IN GRADES 9–12

Stakes are real: college, jobs, creative work, civil rights. Students can steelman, cross-examine, and write policy.

- Insist on the steelman. Before rebutting, a speaker restates the other side's best version until they say 'yes, that's it.'
- Cross-examination is a question period, not a speech. Two minutes, questions only, no editorializing.
- Push past 'it depends.' Ask: depends on what, exactly – and who decides?
- Close with a written position. Speaking is the practice; the paragraph is the assessment.

Vocabulary

Pulled from the Hi, Bot AI concepts field guide (hibot.space/learn/concepts). Read each card aloud, then have the class rewrite it in ten words or fewer.

Labor displacement & augmentation

Will AI replace jobs, change them, or create new ones – and for whom?

Economic debates distinguish automation that replaces tasks from tools that augment workers. Historical pattern: technology shifts job mix rather than eliminating work entirely, but transitions are uneven and painful. Policy arguments focus on retraining, wages, and which roles get deskilled vs. upskilled.

WHERE PEOPLE ARGUE

"Augmentation" vs. "replacement" is often ideological before it's empirical – both happen in different sectors simultaneously.

Automation

Software doing a whole task chain with minimal human steps.

Automation replaces or compresses repetitive human work – invoicing, ticket routing, report generation. AI automation often means models plus rules plus integrations. The design question is not "can it do it?" but "what happens when it misfires, and who is accountable?"

Copilot

AI embedded in a tool you already use – suggest, don't decide alone.

Copilot-style features sit inside IDEs, office suites, or CRMs and propose drafts, formulas, or code. The human remains the editor and approver. That posture differs from full automation: speed with supervision, not unsupervised agency.

AI agent

A system that plans steps and uses tools – not just one chat reply.

An agent loops: observe a goal, decide actions, call tools (search, email, code execution, calendars), read results, and continue until done or stopped. Agents can automate workflows but multiply risk – each tool call is a place to go wrong. Serious deployments keep humans in the loop for high-stakes actions.

WHERE PEOPLE ARGUE

Marketing uses "agent" for anything with two prompts in a row. Engineers mean systems with tool use, memory, and multi-step planning – and argue about how much autonomy is safe.

Inference cost

What you pay – in money and energy – each time a model answers.

Inference cost is compute per query: GPUs, electricity, datacenter overhead. It drives API pricing, context limits, and why "run your own 70B model" is expensive. Training is a giant one-time bill; inference is the recurring meter that scales with users.

Warm-up

6 minutes.

Ask each student to write the job they'd want at 25. Then: list the tasks of that job. Star the ones a language model could do today. Count the stars. Pair-share: is that job still a job?

Agenda - 60 minutes

Minutes	Segment	What happens
0-6	Warm-up	Your job at 25 – task-by-task. Star what a model could do.
6-16	Background + evidence bank	Read the sheet. Each student pulls two pieces of evidence – one historical, one current – onto their organizer.
16-26	Team prep	Assigned sides. Define 'good job' in one sentence (both teams must). Organizer: claim, three warrants, evidence, steelman of the other side.
26-50	Structured debate	Opening 3 · cross-ex 2 (questions only) · rebuttal 2 · open exchange 8 · closing 2. Judges score clash and steelman.
50-60	Written position	Exit ticket paragraph: position, best counter, one cost conceded, one thing you'll do about it.

How structured debate runs

Two teams, assigned sides. Opening statements (2 min each), rebuttal huddle (3 min), rebuttals (2 min each), open cross-fire with hands (5 min), closing statements (1 min each). The audience votes on which side argued better – not which side they agree with.

GROUND RULES – POST THESE

1. Attack ideas, never people. "That claim has a hole" – not "you're wrong."
2. One voice at a time. The listener's job is to be able to repeat what was said.
3. Evidence beats volume. A quiet fact outranks a loud opinion.
4. Changing your mind is winning. Say so out loud when it happens.
5. No rebuttal without a steelman first.
6. Cross-examination is questions only.

The two positions

Starter arguments are scaffolds, not scripts. Strong teams find their own. Assign sides where the format calls for it; students record their real view on the exit ticket.

Affirmative – this time the good jobs go

AI automates judgment and language – the tasks that made jobs 'good' – and it does so faster than new work can appear.

- Previous automation replaced hands; this replaces the entry-level analyst, writer, and coder.
- A junior with a copilot does the work of three. Firms hire one.
- The ladder loses its bottom rungs: no juniors means no future seniors.
- Speed is the problem. Farm labor took a century to fall; this is years.

Negative – work changes, it doesn't vanish

Every automation wave created more and better work than it destroyed, and there is no fixed amount of work to run out of.

- The lump-of-labor fallacy has been wrong for two hundred years.
- Cheaper output means more demand: more software, more analysis, more design gets done, not less.
- Tasks are automated; jobs are bundles of tasks. The bundle re-forms around the human parts.
- The scarce skills shift toward judgment, taste, trust, and accountability – which people still want from people.

Discussion questions

OPENING

1. What makes a job a 'good' job? Pay, meaning, security, status – rank them.

CORE

1. If a model can do 60% of a job's tasks, is the job gone, shrunk, or transformed? Who decides?
2. History says new work appears. What would have to be true for this time to be different?

3. If the total number of jobs stays the same but they're worse, is that a problem for the debate?

CLOSING

1. You are sixteen. Given everything said, what do you do differently on Monday?

Roles

Role	Job
Constructive speaker	Delivers the case: definition of 'good job,' claim, warrants, evidence.
Cross-examiner	Two minutes of questions only. No speeches.
Rebuttal speaker	Steelmans the other side, then answers it.
Closer	Names the central clash and why your side wins it.
Judge panel	Scores on rubric; awards a bonus for the best steelman heard.

Assessment rubric

Share this before the debate. Judges and self-assessors use the same sheet. 'Meets' is the target; note above or below in the margin.

Criterion	Meets
Argument	Claim, warrant, and evidence are explicit and connected.
Steelman	Presents the strongest version of the opposing view before attacking it.
Clash	Rebuttals respond to what was actually said, not a strawman.
Precision	Uses lesson vocabulary accurately and distinguishes is from ought.
Written position	Closing paragraph takes a defensible position and concedes one real cost.

Exit ticket prompts

1. My position (not my assigned side): ____.
2. The best argument against it: ____.
3. One cost I concede: ____.
4. One thing I'll do differently because of this: ____.

Extension

Interview an adult about how their job's tasks changed in the last five years. Which tasks disappeared, which appeared, and did the job get better or worse? Write it up in 300 words.

SEND HOME

Ask at home: 'What part of your job would you hand to a machine tomorrow? What part would you fight to keep?'

STANDARDS ALIGNMENT

- CCSS ELA SL.9-10.1 / SL.11-12.1
- CCSS ELA SL.9-10.3 / SL.11-12.3 (evaluate point of view, reasoning, evidence)
- CCSS ELA W.9-10.1 / W.11-12.1 (argument)
- C3 Framework D2.Eco.1 (economic decision-making)

More lessons by grade band, and the full AI concepts field guide, at hibot.space/learn/debates. Tell us how it went: hello@hibot.space.

Will AI take the jobs worth having?

"Within a decade, AI will eliminate more good jobs than it creates."

WHAT YOU NEED TO KNOW

Automation has eliminated jobs before – telephone operators, typesetters, most farm labor – and total employment kept rising because new work appeared. Economists call the pessimist error the 'lump of labor fallacy': assuming there is a fixed amount of work. That is the strongest historical argument that AI will not cause mass unemployment.

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The honest answer is that nobody knows the net, and the debate lives in the distribution – who gains, who loses, how fast, and whether the transition is managed. Push students past 'jobs will change' to specifics: which jobs, which tasks, which people.

WORDS WE'LL USE

Labor displacement & augmentation – Will AI replace jobs, change them, or create new ones – and for whom?

Automation – Software doing a whole task chain with minimal human steps.

Copilot – AI embedded in a tool you already use – suggest, don't decide alone.

AI agent – A system that plans steps and uses tools – not just one chat reply.

Inference cost – What you pay – in money and energy – each time a model answers.

MARK IT UP

Underline one sentence you agree with. Circle one you doubt. Write one question in the margin. Bring all three to the discussion.

Position organizer

Proposition: "Within a decade, AI will eliminate more good jobs than it creates."

Name: _____ Side (assigned or chosen): _____

OUR CLAIM, IN ONE SENTENCE

THREE REASONS – AND THE EVIDENCE FOR EACH

Reason 1:

Evidence (a fact, a definition, or a specific example):

Reason 2:

Evidence (a fact, a definition, or a specific example):

Reason 3:

Evidence (a fact, a definition, or a specific example):

WHAT THE OTHER SIDE WILL SAY – AND OUR REPLY

Their best argument:

Our reply:

VOCABULARY I WILL USE CORRECTLY

☐ Labor displacement & augmentation ☐ Automation ☐ Copilot ☐ AI agent ☐ Inference cost

Sentence starters

Use these until you don't need them. The goal is to respond to what was actually said.

- The strongest version of your argument is _____. Here is where it fails: _____.
- Historically ____; what's different now is _____.
- That's a claim about tasks, not jobs. _____
- Under your definition of a good job, _____.
- I'll concede _____, but it doesn't follow that _____.

GROUND RULES

1. Attack ideas, never people. "That claim has a hole" – not "you're wrong."
2. One voice at a time. The listener's job is to be able to repeat what was said.
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HOW STRUCTURED DEBATE WORKS

Two teams, assigned sides. Opening statements (2 min each), rebuttal huddle (3 min), rebuttals (2 min each), open cross-fire with hands (5 min), closing statements (1 min each). The audience votes on which side argued better – not which side they agree with.

YOUR ROLE TODAY

Role: _____

Role	Job
Constructive speaker	Delivers the case: definition of 'good job,' claim, warrants, evidence.
Cross-examiner	Two minutes of questions only. No speeches.
Rebuttal speaker	Steelmans the other side, then answers it.
Closer	Names the central clash and why your side wins it.
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LISTENING TALLY

Keep count while others speak. Claims: _____ Evidence: _____ Questions: _____ Vocabulary used: _____
Minds changed: _____

Exit ticket

"Within a decade, AI will eliminate more good jobs than it creates."

Name: _____ Date: _____

My position (not my assigned side): ____.

The best argument against it: ____.

One cost I concede: ____.

One thing I'll do differently because of this: ____.

SELF-ASSESSMENT

Criterion	Meets looks like	Me today (above / meets / below)
Argument	Claim, warrant, and evidence are explicit and connected.	
Steelman	Presents the strongest version of the opposing view before attacking it.	
Clash	Rebuttals respond to what was actually said, not a strawman.	
Precision	Uses lesson vocabulary accurately and distinguishes is from ought.	
Written position	Closing paragraph takes a defensible position and concedes one real cost.	

TAKE IT HOME

Ask at home: 'What part of your job would you hand to a machine tomorrow? What part would you fight to keep?'