EFSP Auxiliary ESL Curriculum

Data Analytics and Business Intelligence English

Instructor guide for advanced ESL learners working in data analytics and business intelligence

Audience: data analysts, BI developers, analytics engineers, data scientists, reporting teams, business analysts, and data-driven managers

Focus: A data analytics and BI English curriculum for metric definitions, dashboards, data quality, stakeholder requests, causation, experimentation, governance, and insight presentation.

Designed for advanced ESL learners who already use professional English and need industry-specific terminology, realistic meetings, role-play pressure, careful pushback, and polished workplace outputs.

Teaching stance: this is language and workplace-communication training, not legal, medical, financial, safety, or regulatory advice. Instructors should connect every scenario to the learner's current company policies, local rules, and approved procedures.

Purpose and Course Logic

A data analytics and BI English curriculum for metric definitions, dashboards, data quality, stakeholder requests, causation, experimentation, governance, and insight presentation.

Core language challenge

Advanced learners do not only need vocabulary. They need the ability to ask which standard applies, who owns the decision, what evidence is sufficient, what risk is being accepted, and how to disagree without sounding vague, defensive, or reckless.

Each module trains a realistic workplace pressure point with role-specific terms, decision language, pushback practice, and a written output learners can adapt to their own work.

Course objectives

- Use data analytics and business intelligence terminology accurately in meetings, written updates, handoffs, escalations, reviews, and client or stakeholder conversations.
- Turn vague requests into specific questions about evidence, owner, deadline, constraint, risk, and decision rights.
- Push back on unsafe, unsupported, noncompliant, unrealistic, or poorly scoped proposals while preserving professional trust.
- Handle realistic dialogues from the field, including conflict, uncertainty, documentation gaps, customer or stakeholder pressure, and cross-functional disagreement.
- Produce concise workplace outputs: briefing notes, escalation updates, meeting scripts, risk memos, decision records, and follow-up messages.

Instructor Module Plans

Module 1. Metric Definitions and Business Questions (90 minutes)

Clarify what a number means before reporting it.

Learners should be able to

- Use these terms accurately: metric, business definition, source of truth, owner.
- Explain the workplace tension: Business definition, source table, filter logic, and owner need agreement.
- Respond professionally when a stakeholder says: Pick one quickly for the dashboard.
- Draft a usable metric definition note with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

Two teams use different definitions of active customer.

Pick one quickly for the dashboard.

Business definition, source table, filter logic, and owner need agreement.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.

4. Output lab: draft and revise a metric definition note.

Module 2. Data Quality and Trust (90 minutes)

Discuss data problems without undermining the whole analysis.

Learners should be able to

- Use these terms accurately: data quality, freshness, completeness, pipeline.
- Explain the workplace tension: Freshness, completeness, transformation logic, and upstream changes must be checked.
- Respond professionally when a stakeholder says: Tell users the data are wrong.
- Draft a usable data-quality incident update with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A dashboard shows a sudden drop after a pipeline change.

Tell users the data are wrong.

Freshness, completeness, transformation logic, and upstream changes must be checked.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a data-quality incident update.

Module 3. Dashboards and Executive Reporting (90 minutes)

Design dashboards around decisions, not decoration.

Learners should be able to

- Use these terms accurately: dashboard, KPI, threshold, drill-down.
- Explain the workplace tension: Audience, decision, refresh cadence, and alert thresholds need focus.
- Respond professionally when a stakeholder says: Add all requested charts.
- Draft a usable dashboard requirements brief with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

Executives ask for a dashboard with every possible metric.

Add all requested charts.

Audience, decision, refresh cadence, and alert thresholds need focus.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.

3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a dashboard requirements brief.

Module 4. Causation, Correlation, and Caveats (90 minutes)

Prevent overinterpretation of patterns.

Learners should be able to

- Use these terms accurately: correlation, causation, confounder, selection bias.
- Explain the workplace tension: Seasonality, selection bias, control groups, and other factors need analysis.
- Respond professionally when a stakeholder says: Say the campaign caused the increase.
- Draft a usable causality caveat paragraph with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

Sales increased after a campaign and marketing claims causality.

Say the campaign caused the increase.

Seasonality, selection bias, control groups, and other factors need analysis.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a causality caveat paragraph.

Module 5. SQL, Models, and Transformation Logic (90 minutes)

Explain technical logic to nontechnical partners.

Learners should be able to

- Use these terms accurately: SQL, data model, grain, join logic.
- Explain the workplace tension: Join logic, grain, filters, and reconciliation need transparent review.
- Respond professionally when a stakeholder says: Fix the number silently.
- Draft a usable reconciliation explanation with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A finance report differs from the warehouse model.

Fix the number silently.

Join logic, grain, filters, and reconciliation need transparent review.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.

3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a reconciliation explanation.

Module 6. Experiment Readouts and Statistical Thinking (90 minutes)

Present test results with practical and statistical context.

Learners should be able to

- Use these terms accurately: sample size, effect size, confidence interval, guardrail.
- Explain the workplace tension: Sample size, effect size, confidence, guardrails, and cost should guide decisions.
- Respond professionally when a stakeholder says: Recommend full rollout.
- Draft a usable experiment readout slide with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A test shows a small lift with uncertain confidence.

Recommend full rollout.

Sample size, effect size, confidence, guardrails, and cost should guide decisions.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a experiment readout slide.

Module 7. Data Governance and Privacy (90 minutes)

Set data-use boundaries professionally.

Learners should be able to

- Use these terms accurately: data governance, privacy, access control, retention.
- Explain the workplace tension: Purpose limitation, access control, retention, and privacy rules need confirmation.
- Respond professionally when a stakeholder says: Send the extract.
- Draft a usable data access response with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A team requests customer-level data for broad exploration.

Send the extract.

Purpose limitation, access control, retention, and privacy rules need confirmation.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.

3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a data access response.

Module 8. Insight Storytelling and Recommendations (90 minutes)

Move from analysis to action without overstating certainty.

Learners should be able to

- Use these terms accurately: insight, recommendation, assumption, next best action.
- Explain the workplace tension: Uncertainty, tradeoffs, assumptions, and next tests need visible framing.
- Respond professionally when a stakeholder says: Hide limitations to make the story clear.
- Draft a usable insight recommendation memo with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A stakeholder wants a simple recommendation from messy data.

Hide limitations to make the story clear.

Uncertainty, tradeoffs, assumptions, and next tests need visible framing.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a insight recommendation memo.

Nomenclature and Jargon

These are classroom working definitions. Learners should adapt wording to their organization's policies, systems, and local regulatory environment.

Metric Definitions and Business Questions

Term	Working meaning
metric	Working data analytics and business intelligence term used in metric definitions and business questions; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
business definition	Working data analytics and business intelligence term used in metric definitions and business questions; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
source of truth	Working data analytics and business intelligence term used in metric definitions and business questions; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
owner	Named person or role accountable for a decision, action, deliverable, or risk.

Data Quality and Trust

Term	Working meaning
data quality	Working data analytics and business intelligence term used in data quality and trust; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
freshness	Working data analytics and business intelligence term used in data quality and trust; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
completeness	Working data analytics and business intelligence term used in data quality and trust; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
pipeline	Working data analytics and business intelligence term used in data quality and trust; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Dashboards and Executive Reporting

Term	Working meaning
dashboard	Visual summary of selected measures used to monitor status, performance, or risk.
KPI	Key performance indicator used to monitor progress against an important objective.
threshold	Working data analytics and business intelligence term used in dashboards and executive reporting; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
drill-down	Working data analytics and business intelligence term used in dashboards and executive reporting; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Causation, Correlation, and Caveats

Term	Working meaning
correlation	Working data analytics and business intelligence term used in causation, correlation, and caveats; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
causation	Working data analytics and business intelligence term used in causation, correlation, and caveats; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
confounder	Working data analytics and business intelligence term used in causation, correlation, and caveats; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
selection bias	Working data analytics and business intelligence term used in causation, correlation, and caveats; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

SQL, Models, and Transformation Logic

Term	Working meaning
SQL	Working data analytics and business intelligence term used in sql, models, and transformation logic; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
data model	Working data analytics and business intelligence term used in sql, models, and transformation logic; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
grain	Working data analytics and business intelligence term used in sql, models, and transformation logic; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
join logic	Working data analytics and business intelligence term used in sql, models, and transformation logic; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Experiment Readouts and Statistical Thinking

Term	Working meaning
sample size	Working data analytics and business intelligence term used in experiment readouts and statistical thinking; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
effect size	Working data analytics and business intelligence term used in experiment readouts and statistical thinking; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
confidence interval	Working data analytics and business intelligence term used in experiment readouts and statistical thinking; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
guardrail	Working data analytics and business intelligence term used in experiment readouts and statistical thinking; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Data Governance and Privacy

Term	Working meaning
data governance	Working data analytics and business intelligence term used in data governance and privacy; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
privacy	Working data analytics and business intelligence term used in data governance and privacy; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
access control	Working data analytics and business intelligence term used in data governance and privacy; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
retention	Working data analytics and business intelligence term used in data governance and privacy; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Insight Storytelling and Recommendations

Term	Working meaning
insight	Working data analytics and business intelligence term used in insight storytelling and recommendations; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
recommendation	Working data analytics and business intelligence term used in insight storytelling and recommendations; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
assumption	Working data analytics and business intelligence term used in insight storytelling and recommendations; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
next best action	Working data analytics and business intelligence term used in insight storytelling and recommendations; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Industry-Specific Meeting Moves

Situation	Useful language
Metric Definitions and Business Questions	Before we commit, I want to confirm metric, business definition, the owner, and the evidence behind the decision. If business definition, source table, filter logic, and owner need agreement., I recommend we document the risk and agree on the next step.

Situation	Useful language
Data Quality and Trust	Before we commit, I want to confirm data quality, freshness, the owner, and the evidence behind the decision. If freshness, completeness, transformation logic, and upstream changes must be checked., I recommend we document the risk and agree on the next step.
Dashboards and Executive Reporting	Before we commit, I want to confirm dashboard, KPI, the owner, and the evidence behind the decision. If audience, decision, refresh cadence, and alert thresholds need focus., I recommend we document the risk and agree on the next step.
Causation, Correlation, and Caveats	Before we commit, I want to confirm correlation, causation, the owner, and the evidence behind the decision. If seasonality, selection bias, control groups, and other factors need analysis., I recommend we document the risk and agree on the next step.
SQL, Models, and Transformation Logic	Before we commit, I want to confirm SQL, data model, the owner, and the evidence behind the decision. If join logic, grain, filters, and reconciliation need transparent review., I recommend we document the risk and agree on the next step.
Experiment Readouts and Statistical Thinking	Before we commit, I want to confirm sample size, effect size, the owner, and the evidence behind the decision. If sample size, effect size, confidence, guardrails, and cost should guide decisions., I recommend we document the risk and agree on the next step.
Data Governance and Privacy	Before we commit, I want to confirm data governance, privacy, the owner, and the evidence behind the decision. If purpose limitation, access control, retention, and privacy rules need confirmation., I recommend we document the risk and agree on the next step.
Insight Storytelling and Recommendations	Before we commit, I want to confirm insight, recommendation, the owner, and the evidence behind the decision. If uncertainty, tradeoffs, assumptions, and next tests need visible framing., I recommend we document the risk and agree on the next step.

High-pressure pushback frames

- I understand the urgency. The risk is that we move faster than the evidence or process supports.
- I am not blocking the goal. I am naming the condition we need before the decision is safe and credible.
- If we accept this risk, we should name the owner, document the assumption, and define the trigger for escalation.
- That may be possible, but not under the current scope, timeline, or approval path.
- Let's separate what we know, what we assume, and what still needs confirmation.

Assessment and Coaching

Performance rubric

Skill	Developing	Proficient	Strong
Terminology	Recognizes terms but uses them loosely.	Uses field terms accurately in context.	Defines terms, connects them to evidence, and explains decision impact.
Pushback	Disagrees vaguely or avoids disagreement.	Names concern with evidence and next step.	Balances urgency, relationship, risk, owner, and decision rights.
Scenario judgment	Focuses on one stakeholder's preference.	Identifies constraint, risk, and process.	Guides the group toward a documented, realistic decision.
Written output	Writes general summaries.	Produces clear notes with facts and owner.	Creates concise, decision-ready workplace communication.

Source orientation

- Company data governance and privacy policies.
- Analytics definitions and semantic-layer documentation.

- Experimentation and dashboard standards.
- The learner's own company policies, SOPs, contracts, systems, templates, and approved communication standards.