



WOLCOTTLYNCH
STEPS FOR BETTER THINKING

HIGHER-LEVEL ACCOUNTING COURSES: How to Help Your Students Become Better Critical Thinkers

Live webinar

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Panelists



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- Overview: Design of Assignments
- Examples for Courses:
 - Cost Accounting
 - Intermediate II
 - Auditing
- Discussion/Questions



KEY Beliefs That Hinder Critical Thinking

Excerpts adapted from Figure 4,
Guide p. 9



- All problems are “black and white”
- The student’s job is to find the correct answer as provided by experts

- Open-ended problems cannot be solved by anyone, including “experts”
- It is sufficient to generate arguments to support one’s own position

- Supporting one conclusion denies the legitimacy of other valid viewpoints

- Open-ended problems can be solved tentatively and pragmatically based on available information
- No generalized principles or procedures exist for further investigation/improvement

Most Introductory & Many Intermediate Accounting Students

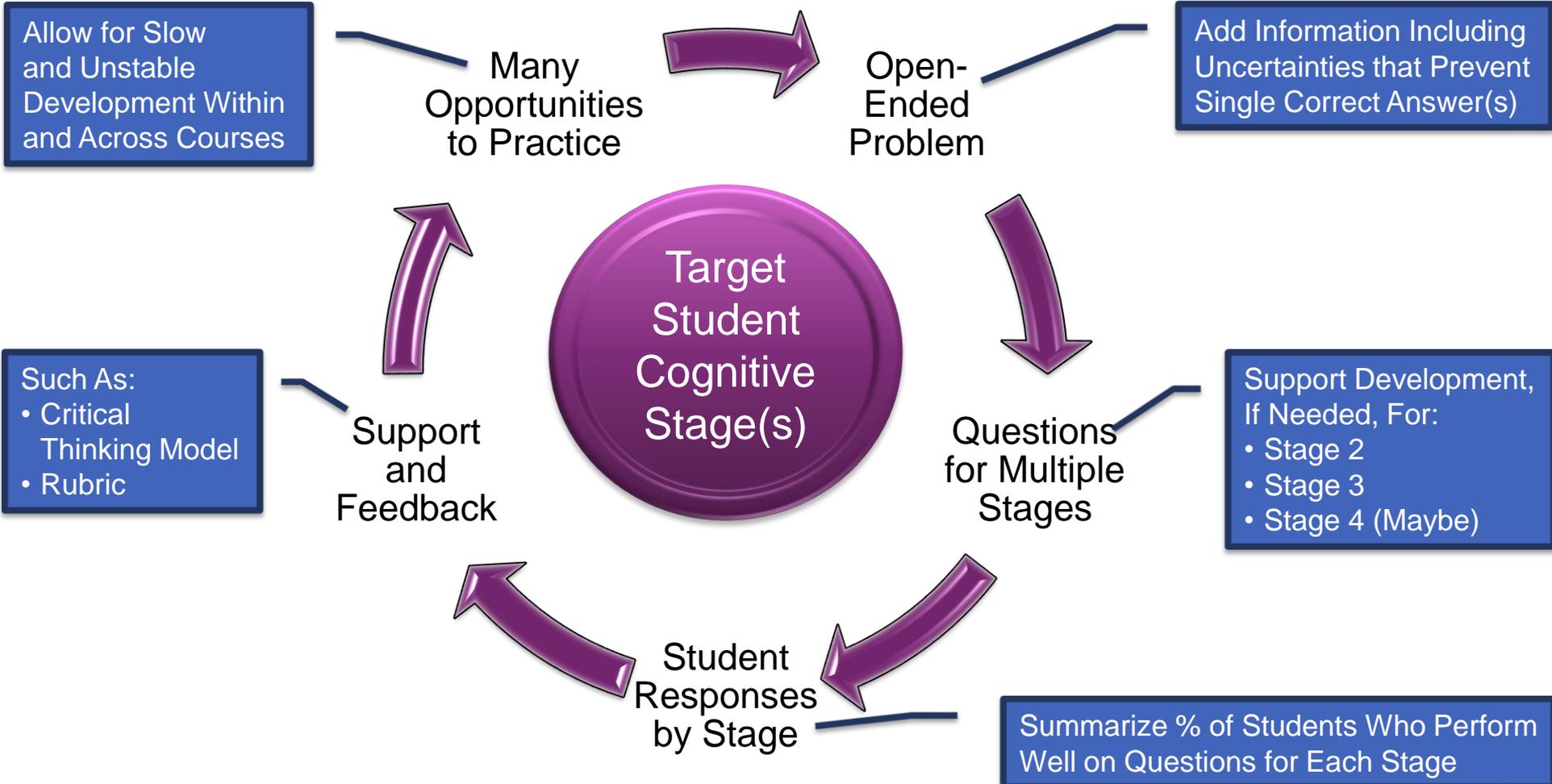
Most Graduating Students

Entry Workplace Requirements

How Can We
Achieve Faster
Critical Thinking
Growth?



Design an Assignment for Critical Thinking



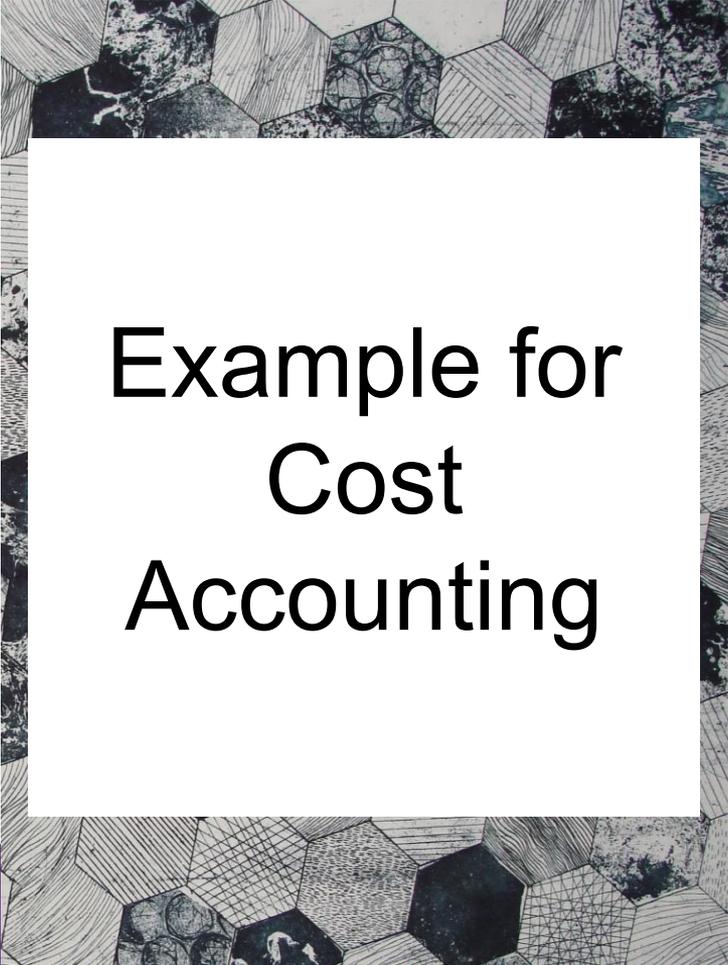
Focus Questions on **Essential New Skills** for Each Stage

Critical Thinking Model	Stage 1 Confused Fact-Finder	Stage 2 Biased Jumper	Stage 3 Perpetual Analyzer	Stage 4 Pragmatic Performer
Identify	<ul style="list-style-type: none"> Recites purpose as given, or Identifies an inappropriate problem 	<ul style="list-style-type: none"> Identifies the clearly-evident problem Recognizes that the problem is open-ended/ambiguous Distinguishes between relevant and irrelevant information 	<ul style="list-style-type: none"> Identifies the main purpose Thoroughly identifies relevant information including stakeholders and their possible goals/ preferences 	In addition to Stage 3: <ul style="list-style-type: none"> Identifies important embedded, subsidiary problem(s)
Analyze	<ul style="list-style-type: none"> Applies calculations, definitions, or other “textbook” concepts Presents irrelevant information Misinterprets calculation(s) and/or concept(s) 	<ul style="list-style-type: none"> Applies and describes the effects of relevant calculations and/or concepts Partially analyzes alternatives, focusing on relevant information supporting own viewpoint Discounts other viewpoint(s) 	<ul style="list-style-type: none"> Thoroughly and objectively applies and interprets relevant calculation(s) and concept(s) Explores causes, stakeholder effects and interrelationships Questions the quality of information and assumptions Thoroughly discusses the pros and cons of viable alternatives 	<ul style="list-style-type: none"> Objectively analyzes the most important relevant information, implications, consequences and viewpoints Evaluates the quality of information and assumptions, and adapts interpretations (as needed) Summarizes the most important pros and cons of viable alternatives
Conclude	<ul style="list-style-type: none"> Instead of a conclusion, provides facts, definitions, or other “authoritative” statements 	<ul style="list-style-type: none"> Reaches a biased conclusion that is consistent with analyses 	<ul style="list-style-type: none"> Reaches no conclusion, or Provides a conclusion with little or no justification 	<ul style="list-style-type: none"> Identifies/develops appropriate criteria, and uses the criteria to reach convincing conclusion(s) If appropriate, provides value-added advice (e.g., identifies implementation issues)

Focus Questions on **Essential New Skills** for Each Stage

Revised Bloom's Taxonomy (2001):	Stage 1 Confused Fact-Finder	Stage 2 Biased Jumper	Stage 3 Perpetual Analyzer	Stage 4 Pragmatic Performer
Apply Carry out or use a procedure in a given situation	Carry out a well-defined procedure in a familiar setting	Use relevant information to carry out a familiar procedure	Use relevant information to carry out a procedure in an unfamiliar setting	Efficiently carry out a procedure in a highly unfamiliar setting
Analyze Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose	Locate information and viewpoints in a well-defined problem	Distinguish between relevant and irrelevant information; focus on support for own viewpoint	Thoroughly and objectively explore relevant information, viewpoints, and assumptions; outline evidence for and against alternatives	Distinguish between important and unimportant parts; thoroughly and objectively integrate important information and viewpoints
Evaluate Make judgments based on criteria and standards	Detect correct solutions/conclusions for a well-defined problem	Determine own viewpoint/conclusion	Detect reasoning within individual viewpoints; discover limitations; delay or avoid concluding across viewpoints	Determine and apply overarching criteria/priorities for drawing conclusions; detect key limitations
Create Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure	Reorganize procedures (e.g., rearrange a spreadsheet) when performing a well-defined task	Generate a work plan based on own preferences	Generate new hypotheses to explore observations or results	Develop new criteria or methods for distinguishing between hypotheses or selecting among alternative models or procedures

Relevant Information for
Decisions



Example for
Cost
Accounting

Tennant Vintage Trucks

Tennant Vintage Trucks produces and sells to retailers a line of 25 collectible metal toy trucks that are vintage truck replicas. Sales have deteriorated during the economic recession resulting in negative cash flows, and the company's managers are seeking ways to increase sales. One proposal is to launch a series of limited-edition trucks to increase sales to collectors.

The first limited edition would consist of 200 Ready Red classic fire trucks for a wholesale price of \$150 each. Manufacturing costs per unit are as follows:

Direct materials	\$25
Direct labor	45
Variable overhead	20
Fixed overhead	65

The per-unit costs include variable overhead licensing fees of \$13 for use of the Ready Red name. Fixed overhead includes \$55 per unit for truck design, manufacturing specifications, and customized die-cast molds. Traditionally, the company has used each die-cast mold set to manufacture only one product.



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Requirement for Well-Defined Problem (Typical Textbook Question)

Should the company launch the limited edition of Ready Red trucks? Provide appropriate calculations and explain your answer.



Promote Stage 2 Thinking: For each component of your calculations, identify and briefly explain at least one reason why actual results might differ from the estimate.

Promote Stage 3 Thinking: The company is in a small town and views employees as part of the “family.” Accordingly, the company has a no-layoff policy and guarantees production workers a fixed work schedule. The production manager estimates that the 200 Ready Red trucks can be produced using currently idle labor. However, the production manager warns that direct labor could increase to \$66 per unit (including overtime) if demand increases for existing products. Discuss whether direct labor costs are relevant for this decision.

Promote Stage 3 Thinking: Based on the advice of five long-time customers, the marketing manager established an initial wholesale price of \$150. These five customers also made preliminary commitments to purchase 50 limited-edition Ready Red trucks. The marketing manager is confident that the remaining 150 trucks can be sold easily. Discuss the reasons for and implications of possible bias in setting the wholesale price for Ready Red.

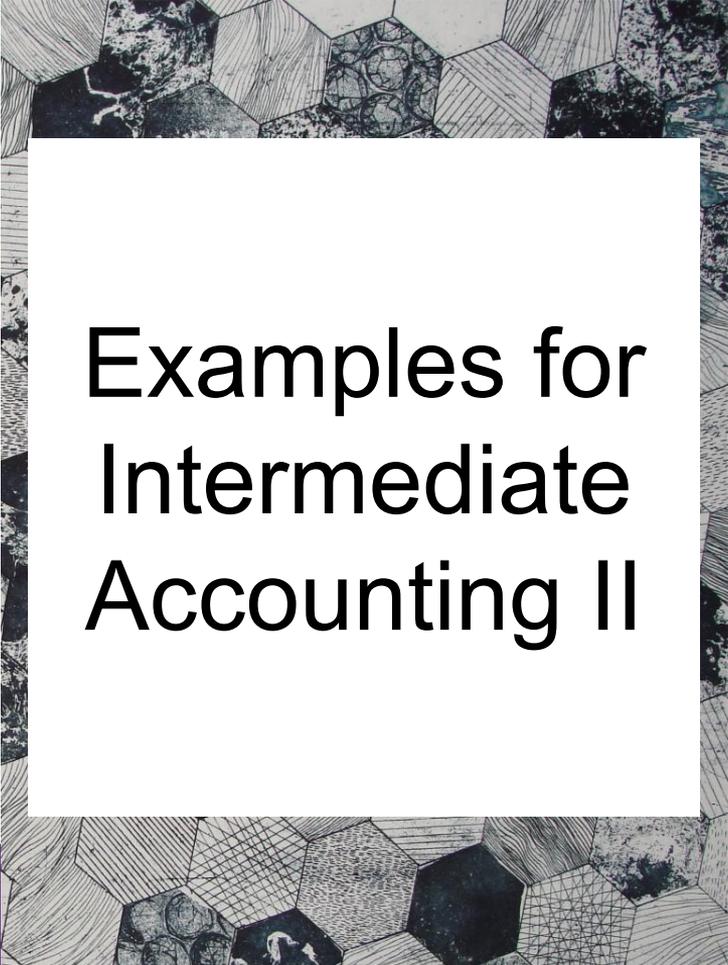
Promote Stage 4 Thinking: Company managers believe that vintage truck replicas are more important to the company’s customer-oriented strategy than the company’s existing lines of metal toy trucks. Discuss whether this information affects the decision criteria in the Ready Red decision.

Too High??

Tenant Vintage Trucks:
Additional Information and Open-Ended Questions



Earnings Manipulation



Examples for
Intermediate
Accounting II

American Movieplex — Spiceland, 9e

American Movieplex, a large movie theater chain, leases most of its theater facilities. In conjunction with recent operating leases, the company spent \$28 million for seats and carpeting. The question being discussed over breakfast on Wednesday morning was the length of the depreciation period for these leasehold improvements. The company controller, Sarah Keene, was surprised by the suggestion of Larry Person, her new assistant.

Keene:

Why 25 years? We've never depreciated leasehold improvements for such a long period.

Person:

I noticed that in my review of back records. But during our expansion to the Midwest, we don't need expenses to be any higher than necessary.

Keene:

But isn't that a pretty rosy estimate of these assets' actual life? Trade publications show an average depreciation period of 12 years.

Required:

- 1) How would increasing the depreciation period affect American Movieplex's earnings?
- 2) Does revising the estimate pose an ethical dilemma?
- 3) Who would be affected if Person's suggestion is followed?



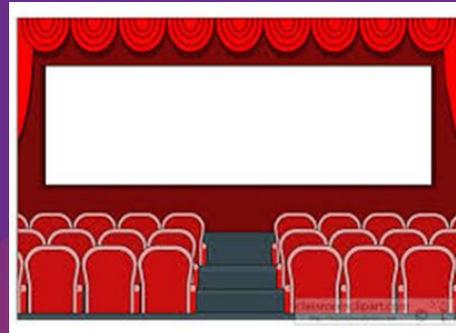
Promote Stage 2 Thinking: The current problem requirements promote Stage 2 Thinking.

Promote Stage 3 Thinking: Have students research movie industry depreciation policies in annual SEC10-K reports. Write a memo regarding your findings and your recommendation on how many years the leasehold improvements should be depreciated.

Promote Stage 3 Thinking: Have students investigate who Sarah Keene should go to if she gets pressure to depreciate the leasehold improvements for a longer period than she is comfortable. Discuss the implications of Sarah not supporting other management.

American
Movieplex

Additional
Questions



Mayberry-Cleaver (Ethics) – Spiceland, 9e

You are in your second year as an auditor with Dantly and Regis, a regional CPA firm. One of the firm's long-time clients is Mayberry-Cleaver Industries, a national company involved in the manufacturing, marketing, and sales of hydraulic devices used in specialized manufacturing applications. Early in this year's audit, you discover that Mayberry-Cleaver has changed its method of determining inventory from LIFO to FIFO. Your client's explanation is that FIFO is consistent with the method used by some other companies in the industry. Upon further investigation, you discover an executive stock option plan whose terms call for a significant increase in the shares available to executives if net income this year exceeds \$44 million. Some quick calculations convince you that without the change in inventory methods, the target will not be reached; with the change, it will.

Required:

- 1) Do you perceive an ethical dilemma?
- 2) What would be the likely impact of following the controller's suggestions?
- 3) Who would benefit?
- 4) Who would be injured?



Promote Stage 2 Thinking: The current problem requirements promote Stage 2 Thinking.

Promote Stage 3 Thinking: Have students identify the goals of the different stakeholders. List who should be made aware of your findings and write a memo regarding your concerns.

Promote Stage 3 Thinking: Have students investigate who they should inform if they get pressure to ignore their concerns. Discuss the implications of not supporting company management.

Mayberry-
Cleaver

Additional
Questions



Independence Issues and New Client Decision



Examples for Auditing

Independence Decision – Whittington, 20e

Required:

For each case, you are to:

1. Set forth arguments indicating that the firm's independence has *not* been impaired.
2. Set forth arguments indicating that the firm's independence *has* been impaired.
3. Express your personal opinion. Identify those arguments from part (a) or part (b) that you found most persuasive. If you believe that the firm's independence has been impaired, make suggestions about how the problem might be resolved.



Promote Stage 2 Thinking: Divide the class into two groups and have one group support that independence has been impaired and the other group support that independence has not been impaired.

Promote Stage 3 Thinking: After hearing both sides of the impairment issue, have the students individually make a decision on where they stand on the issue if they are the Partner-In-Charge of the firm. Write a memo for the company files with your decision and support.

Promote Stage 3 Thinking: Have students identify the consequences of making the wrong decision. Discuss the implications of making the wrong decision.

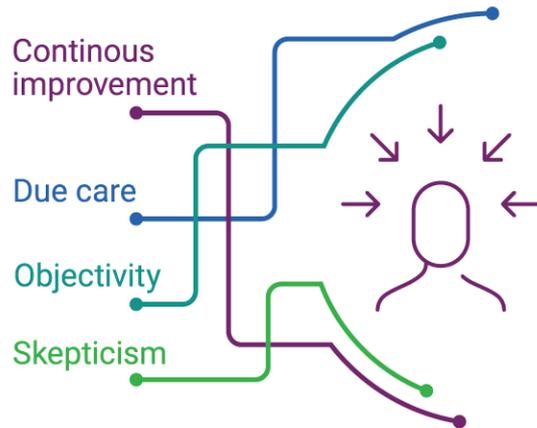
Independence

Additional
Questions



Critical Thinking Model

Mindset



01

Identify

- Identify the main purpose plus embedded, subsidiary problem(s).
- Recognize open-ended/ambiguous problem(s).
- Identify relevant information for analysis (e.g., accounting knowledge, concepts, techniques, stakeholder(s) and goals/preferences).

02

Analyze

- Apply and interpret relevant knowledge, concepts and techniques.
- Explore potential causes, stakeholder effects and interrelationships.
- Question the quality of information and assumptions.
- Summarize pros and cons of viable alternatives.

03

Conclude

- Identify/develop appropriate decision criteria, and use the criteria to reach convincing conclusion(s).
- If appropriate, provide additional advice (e.g., identify implementation issues).



Figure 2, Guide p. 6

Communications



Beliefs About Knowledge (i.e., Epistemological Beliefs)

Stage 1 Confused Fact-Finder	Stage 2 Biased Jumper	Stage 3 Perpetual Analyzer	Stage 4 Pragmatic Performer
<ul style="list-style-type: none"> • All problems are “black and white” • The student’s job is to find the correct answer as provided by experts 	<ul style="list-style-type: none"> • Open-ended problems cannot be solved by anyone, including “experts” • It is sufficient to generate arguments to support one’s own position 	<ul style="list-style-type: none"> • Supporting one conclusion denies the legitimacy of other valid viewpoints 	<ul style="list-style-type: none"> • Open-ended problems can be solved tentatively and pragmatically based on available information

Mindset Rubric (Skepticism, Objectivity, Due Care, Continuous Improvement, etc.)

Stage 1 Confused Fact-Finder	Stage 2 Biased Jumper	Stage 3 Perpetual Analyzer	Stage 4 Pragmatic Performer
<ul style="list-style-type: none"> • Assumes there is a single “correct” answer • Seems unaware that “facts” are not fully known • Trusts information and answers from “experts” 	<ul style="list-style-type: none"> • Discounts or ignores viewpoints that disagree with own opinion • Partially analyzes relevant information • Exhibits bias toward and/or overconfidence in own opinion 	<ul style="list-style-type: none"> • Uses tone and language to convey open-mindedness and skepticism • Questions assumptions and information quality • Delays judgment while performing additional (and potentially excessive) analyses • Seeks continuous improvement, including methods for identifying and removing bias 	<ul style="list-style-type: none"> • Identifies and applies priorities for deciding which information, assumptions, and issues require further investigation • Seeks practical and reasonable solutions for the circumstances

Accepting a New Client – Whittington, 20e

Tammy Potter, a new partner with the regional CPA firm of Tower & Tower, was recently appointed to the board of directors of a local civic organization. The chairman of the board of the civic organization is Lewis Edmond, who is also the owner of a real estate development firm, Tierra Corporation.

Potter was quite excited when Edmond indicated that his corporation needed an audit and he wished to discuss the matter with her. During the discussion, Potter was told that Tierra Corporation needed the audit to obtain a substantial amount of additional financing to acquire another company. Presently, Tierra Corporation is successful, profitable, and committed to growth. The audit fee for the engagement should be substantial.

Accepting a New Client (*continued*) – Whittington, 20e

Since Tierra Corporation appeared to be a good client prospect, Potter tentatively indicated that Tower & Tower wanted to do the work. Potter then mentioned that Tower & Tower's quality control policies require an investigation of new clients and approval by the managing partner, Lee Tower.

Potter obtained the authorization of Edmond to make the necessary inquiries for the new client investigation. Edmond was found to be a highly respected member of the community. Also, Tierra Corporation was highly regarded by its banker and its attorney, and the Dun & Bradstreet report on the corporation reflected nothing negative.

As a final part of the investigation process, Potter contacted Edmond's former tax accountant, Bill Turner. Potter was surprised to discover that Turner did not share the others' high opinion of Edmond. Turner related that on an IRS audit 10 years ago, Edmond was questioned about the details of a large capital loss reported on the sale of a tract of land to a trust. Edmond told the IRS agent that he had lost all the supporting documentation for the transaction, and that he had no way of finding out the names of the principals of the trust. A search by an IRS auditor revealed that the land was recorded in the name of Edmond's married daughter and that Edmond himself was listed as the trustee. The IRS disallowed the loss and Edmond was assessed a civil fraud penalty. Potter was concerned about these findings, but eventually concluded that Edmond had probably matured to a point where he would not engage in such activities.

Accepting a New Client (*continued*) – Whittington, 20e

Required:

- 1. Present arguments supporting a decision to accept Terra Corporation as an audit client.**
- 2. Present arguments supporting a decision *not* to accept Terra Corporation as an audit client.**
- 3. Assuming that you are Lee Tower, set forth your decision regarding acceptance of the client, identifying those arguments from part (a) or part (b) that you found most persuasive.**



Tierra Corporation

Additional Questions

Promote Stage 2 Thinking: Divide the class into two groups and have one group support accepting Tierra Corporation as a client and the other group support not accepting Tierra Corporation as a client.

Promote Stage 3 Thinking: After hearing both sides of the issue, have the students individually make a decision on where they stand on the accepting Tierra Corporation as a client. Write a memo for the company files with your decision and support.

Promote Stage 3 Thinking: If Tierra Corporation is accepted as a clients, have the students address how this should affect the Audit Plan. Discuss the skepticism that needs to be addressed when developing the Audit Plan.



Resources: <https://linktr.ee/AICPA>

Email Susan: swolcott@WolcottLynch.com



How to help your
students become
better critical thinkers

Additional Questions and Discussion





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Thank you

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