

# Business Process Reengineering (BPR) Center of Excellence (CoE)

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## U.S. Army Shared Services Center

Socratic Questioning  
November 2018



Version 1.0

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## Course Description

The Socratic Method provides an approach for effective dialog between two or more parties to further understanding and knowledge sharing. In Business Process Reengineering (BPR) or improvement methodology, the Socratic Method provides a standard approach for defining the problem statement, capturing process information, gathering data or measures and discussing ways to remedy a problem or improve a practice.

## Learning Objectives

- Understand the Socratic Method and its common uses
- Brief history of Socrates
- The four communication challenges to effective dialog
- The six types of Socratic Questioning
- Ability to facilitate an effective dialog using the Socratic Questioning approach.

Slide 1



## Socratic Method

### Slide 2

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**Socratic Method – “Curious Questioner”**

**✓ Purpose**

- A basic form of questioning formulated as tests of logic, to help a person or group discover their beliefs, definitions (logos) and generally shared characteristics about a topic.

**✓ Common Uses**

- Challenge definition or problem statement
- Process discovery
- Individual / group change dynamics
- Training / teaching

**✓ Benefits / Pitfalls**

- Exposes the truth
- Creates shared understanding
- Creates simplicity from perceived complexity
- Can irritate the questioned
- Can sow discontent if discovered paths are unexplored
- Must assume open communication is desired

Logos is the logic behind an assertion. It tries to persuade an audience using logical arguments and supportive evidence.

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#### [Introduce]

- As an improvement expert – much interaction occurs with subject matter experts at all levels of an organization
- An important skill is acquiring understanding from various individuals or group to achieve a number of outcomes, e.g.
  - Identifying the problem statement
  - Capturing and assessing the current situation
  - Gathering data – coaching people on what to measure
  - And gathering ideas for improvement actions
- The Socratic Method provides an approach on effective dialog to further understanding

#### [Purpose]

- A basic form of questioning formulated as tests of logic, to help a person or group discover their beliefs, definitions (logos) and generally shared characteristics about a topic.

#### [Common Uses]

- Nearly every tool in the BPR / LSS / CPI tool belt requires gathering information and creating understanding


#### [Benefits / Pitfalls]

- Exposes the Truth
  - The truth is the truth
  - How we talk about the truth is clouded by our intent, knowledge, experience and biases

- The method helps to break down those barriers
- Creates shared understanding through respectful dialog.
- Creates simplicity
  - All topics are complex until a level of understanding is achieved
- Can be irritating
  - Consider someone always asking why, how come, or I don't understand
- Sow discontent: assure everyone is heard and all perspectives are accommodated
- Open to dialog: if someone doesn't participate, this method is not useful

## Socrates Introduction

## Slide 3

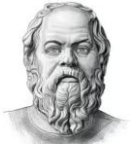


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## Background

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- ✓ **Socrates**
  - Greek philosopher credited as a founder of western philosophy and being the 1<sup>st</sup> moral philosopher.
  - He made no writings and is known through others, including his students Plato and Xenophon.
- ✓ **Socratic Method – applied to Discovery**
  - Often referred to a Socratic Circle or Seminar.
  - Uses dialogue to understand information and further illuminate what may not be known or understood by one or more parties engaging in the discussion.
  - Often creates ‘aha’ moments even for what are considered well known topics.
  - Differs from memorization; leading to deeper understanding of the selected subject.



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Slide 3

## [Introduce Socrates]

- He was born within the period of years ranging 470 to 468 BC in Alopeke and belonged to the tribe Antiochis. His father was a stonemason (sculptor), his mother a mid-wife. He was married and known for an ‘undesirable’ temperament. His wife, Xanthippe, bore him 3 sons.
- He started as a sculptor and frequented workshops near the city squares to talk with the merchants.
- He participated in city government (as part of a civilian council of 500) and was an overseer of debate.
- Eventually falling out of favor with prevailing public opinion and questioning the collective notion “might makes right”, he annoyed enough of and the wrong people in his mission to improve consideration of justice and pursuit of goodness, which may have been the cause of his execution.
- Trial: One day during the year 399 BC, Socrates went on trial and was subsequently found guilty of both corrupting the minds of the youth of Athens and of **impiety** (not believing in the gods of the state), and as a punishment sentenced to death, caused by the drinking of a mixture containing hemlock (a poison).

## [History of the Socratic Method]

- In the second half of the 5th century BC, sophists were teachers who specialized in using the tools of philosophy and rhetoric (speaking with the intent to convince or persuade) to entertain, impress, or persuade an audience to accept the speaker's point of view.
- Socrates promoted an alternative method of teaching focused on “the curious questioner” – which became known as the Socratic Method.



[Socratic Circle or Seminar]

- A Socratic circle or seminar is a teaching approach based on the Socratic Method.
- It uses dialogue to understand information – utilizing a systematic approach to examine a topic through Q&A
- It is not a debate, it's belief is all thinking comes from asking questions
- Its goal is to connect prior knowledge to new knowledge helping participants work together to construct meaning and arrive at a conclusion.

Reference

<https://en.wikipedia.org/wiki/Socrates>

[https://en.wikipedia.org/wiki/Socratic\\_method](https://en.wikipedia.org/wiki/Socratic_method)

[https://en.wikipedia.org/wiki/Socratic\\_questioning](https://en.wikipedia.org/wiki/Socratic_questioning)

[http://changingminds.org/techniques/questioning/socratic\\_questions.htm](http://changingminds.org/techniques/questioning/socratic_questions.htm)

<https://www.slideshare.net/ecemkaragulle/socratic-questioning-46767878>

Socratic circle: [http://www.corndancer.com/tunes/tunes\\_print/soccirc.pdf](http://www.corndancer.com/tunes/tunes_print/soccirc.pdf)


<https://pressbooks.bccampus.ca/criminalinvestigation/chapter/chapter-9-interviewing-questioning-and-interrogation/>

## Effective Dialog Challenges

### Slide 4

Communication Challenges

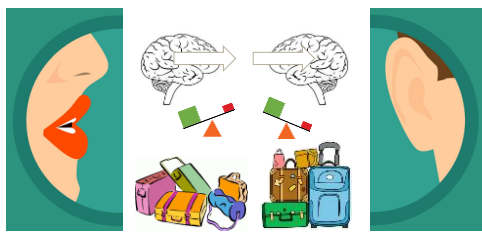
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 ✓ **Intent:** purpose, objective, goal – what are we attempting to accomplish?

✓ **Knowledge:** facts, information, skills – what understanding have we internalized?

✓ **Experience:** mastery, practice, outcomes – what examples have we acquired in applying our knowledge?

✓ **Bias:** prejudice (pre-judging) – what prior conclusions do we have?



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#### [Introduce]

- Our method is based on two or more parties having a dialog.
- Let's explore some filters or barriers that can hinder and help the dialog.

#### [Challenges]

- Intent – often referred to as an agenda; everyone has a purpose they're striving to achieve during a dialog. The purpose may be explicit or implicit. We or they may be trying to not have an intent – however the conversation is being had for a purpose.
- Knowledge – our education and things we've read or gleaned bring knowledge that can be useful in furthering the discussion or cloud our interchange.
- Experience – we bring lessons learned around the topic. If not specific to the topic, we often think in metaphors or like experiences.
- Bias – Stereotypes, categorization and/or opinions can be useful to shorten learning time. They can also be destructive and stand in the way of a healthy exchange. Bias isn't necessarily bad – it's always better to recognize our biases and bring them to the surface to demonstrate transparency and a willingness to learn.

#### [Images]

Speaking/Listening (Split and Cropped): <https://pxhere.com/en/photo/1448083> - CC0 Public Domain, Free for personal and commercial use No attribution required

Luggage Clipart: <https://melbournechapter.net/explore/luggage-clipart-heavy-suitcase/> - free clipart;  
<http://greentrail.com/luggage-clipart-history-clipart/luggage-clipart-pretty-luggage-clipart-free-travels-clipart-clipart-panda-free-clipart-for-teachers/> - free clipart

Brain: <https://mbtskoudsalg.com/explore/brain-clipart/> - Free download

Balance Bar: generated within this PowerPoint.

## Effective Dialog Approach

### Prepare for the Discussion

#### Slide 5

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### Preparing for the Discussion

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- ✓ **Research your Topic**
  - A little knowledge of the topic can provide focus
- ✓ **Know your Audience**
  - Gathering knowledge about the participants' background, knowledge and experience can yield
    - Easily-established trust
    - Efficiency by saving discovery time
    - Create synergy or momentum more quickly
    - More productive outcome
- ✓ **Establish a Goal**
  - What is the point of the dialog
    - Gather information
    - Identify shared understandings
    - Create trust
    - Achieve a learning outcome
    - Others?

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#### [Research]

- Always do the homework before the dialog
- Consider what can be learned in advance?
  - What do you know about the topic
  - Do you have shared knowledge or background?
  - What sources can be read in advance?
  - What can be provided from others participating in the dialog?

#### [Gauge the Audience]

- Research your audience – what can you learn in advance, e.g. LinkedIn, milSuite, etc.
- Establish common ground via shared experiences, skills, goals, etc.
- Benefits: discuss the bullets


#### [Discussion Goal]

- Some common discussion purposes are described in the bullets.
- Solicit other goals from the class and discuss

## Use Socratic Questions during the Discussion

## Slide 6


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### Socratic Questioning

- ✓ **Conceptual or Clarification**
  - "Tell me more"
- ✓ **Understand Assumptions**
  - "Why do you think that assumption applies to this topic"
- ✓ **Understand Rationale**
  - "Why do you say that"

- ✓ **Question Perspective**
  - "Is there another way to see this"
- ✓ **Discuss Implications**
  - "If x happens, what result would occur"
- ✓ **Question the Question**
  - "Why do I ask xyz"



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## [Introduce]

- Introduce the types of questions that can be asked
- We will offer more questions by type in the next few slides

## [Conceptual]

- Getting others to clarify their thinking and explore the origin of their thinking
- 'Why do you say that?', 'Could you explain further?'

## [Assumptions]

- Challenging others' assumptions
  - 'Is this always the case?', 'Why do you think that this assumption holds here?'

## [Rationale or Reasoning]

- Providing evidence as a basis for arguments
  - 'Why do you say that?'
  - 'Is there reason to doubt this evidence?'

## [Perspective]

- Discovering alternative viewpoints and perspectives and conflicts between contentions
  - 'What is the counter-argument?'
  - 'Can/did anyone see this another way?'

## [Implications &amp; Consequences]

- Exploring implications and consequences
  - 'But if...happened, what else would result?'
  - 'How does...affect...?'

## [Questioning the Question]

- Questioning the question
  - 'Why do you think that I asked that question?'
  - 'Why was that question important?'
  - 'Which of your questions turned out to be the most useful?'

## [Image]

<https://www.slideshare.net/ecemkaragulle/socratic-questioning-46767878>

## Conceptual Questions

## Slide 7

**Conceptual Questions**

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✓ **Leading questions designed to provide context. They paint the dialog fabric with details to help clarify and explain the concept under study.**

- Why are you saying that?
- What exactly does this mean?
- How does this relate to what we have been talking about?
- What is the nature of ...?
- What do we already know about this?
- Can you give me an example?
- Are you saying ... or ... ?
- Can you rephrase that, please?

Concept Map Example

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## [Describe]

- A meaningful exchange starts with a mutually understood context (or frame) for the discussion.
- Work to create the context 'picture' using the bulleted list of questions.

## [Example]

- Use an audience appropriate 'context' to make the point, i.e. a shared experience, or the topic for the discussion, etc.
- Ask and answer one or more questions to give the students a flavor of what they might be looking to learn.

Image:

<http://www.csiro.au/education/crestquiz/concept.html>

## Understand Assumptions

## Slide 8

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### Understanding Assumptions

✓ **Leading questions to cultivate an understanding of presuppositions and unquestioned beliefs. Questioning in this area can be sensitive, be kind and aware.**

- What else could we assume?
- You seem to be assuming ... ?
- How did you choose those assumptions?
- Please explain why/how ... ?
- How can you verify or disprove that assumption?
- What would happen if ... ?
- Do you agree or disagree with ... ?

REASONING  
REASONING  
REASONING  
REASONING  
ASSUMPTIONS

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## [Describe]

- Understanding assumptions is a difficult area to probe.
- If done well, it can lead to a deeper understanding of ‘what’s underneath the topic’
- If done poorly, it could result in a very short conversation.
- Always reinforce what you hear from the participants to demonstrate you understand what they’re saying.
- Use Covey’s 5<sup>th</sup> habit – seek to understand, then to be understood. Focus on the “seek to understand” portion.

## [Example]


- Use the example from the Conceptual questioning and extend.
- Ask and answer one or more questions to give the students a flavor of what they might be looking to learn.
- Don’t be afraid to show your own biases.

## [Image]

Reasoning Stack: Assumptions in Critical Thinking, <https://www.youtube.com/watch?v=tfM5-pY5YXs>

## Discover Rationale

## Slide 9




### Disclosing Rationale

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✓ **Leading questions to uncover reasoning. Often we use 'non-thought-through' or 'weekly understood' reasoning to create assertions.**

- Why is that happening?
- How do you know this?
- Show me ... ?
- What do you think causes ... ?
- What is the nature of this?
- Are these reasons good enough?
- Would it stand up in court?
- How might it be refuted?
- How can I be sure of what you are saying?
- Why is xyz happening?
- Why? (Keep asking it -- you'll never get past a few times)
- What evidence is there to support what you are saying?
- On what authority are you basing your argument?



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Slide 9

[Describe]

- We rationalize information to support our assertions – hence creating an important need to expose such reasoning.

[Consider]

Aesop's "Fox and the Grapes" fable:

[https://en.wikipedia.org/wiki/The\\_Fox\\_and\\_the\\_Grapes](https://en.wikipedia.org/wiki/The_Fox_and_the_Grapes)

The fox who longed for grapes, beholds with pain  
 The tempting clusters were too high to gain;  
 Grieved in his heart he forced a careless smile,  
 And cried, 'they're sharp and hardly worth my while.'

Cognitive dissonance

Rather than admit his failure to reach the grapes, the fox rationalizes that they are not really desirable. One commentator argues that the story illustrates the state of cognitive dissonance. The fox is taken as attempting to hold incompatible ideas simultaneously, desire and its frustration. In that case, the disdain expressed by the fox at the conclusion to the fable serves at least to reduce the dissonance through criticism. Jon Elster calls this pattern of mental behaviour "adaptive preference formation".

[Questions]

- Select a few questions to discuss and/or provide examples

[Image]

"My teacher hates me" - <https://www.instituteofclinicalhypnosis.com/rationalization/>



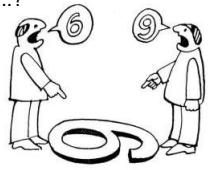
## Gain Perspective

## Slide 10

**Questioning Perspective**

✓ **We see the world through our own lens. It is important to expose and question ours and other's perspectives to drive common understanding and/or agreement.**

- Another way of looking at this is ..., does this seem reasonable?
- What alternative ways of looking at this are there?
- Why it is ... necessary?
- Who benefits from this?
- What is the difference between... and...?
- Why is it better than ...?
- What are the strengths and weaknesses of...?
- How are 'your example' and similar?
- What would ... say about it?
- What if you compared ... and ... ?
- How could you look another way at this?



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Slide 10

## [Describe]

- Self-awareness is a key to best utilizing the line of inquiry
- Helping people understand that we see the world through our own eyes or lens is a good step to deeper understanding
- If you are familiar with the 6 sigma concept of a Measurement System Analysis (MSA), it's a good way to help people understand the notion.
- MSA is built to assess our ability to trust the measurement system we're using to make decisions.
- It builds on the idea, that there is the Truth, and our ability to see the Truth, e.g.
  - When a speed sign tells us we're traveling at 35 mph, is that accurate? Does it match what is on our speedometer?
  - And if both instruments are inaccurate, or not precise, we may be traveling at a different speed altogether.
- We use our lens like a measurement instrument in interpreting the situation around us, i.e. seeing the Truth.

## [Example]

- Use the example from the Conceptual questioning and extend.
- Ask and answer one or more questions to give the students a flavor of what they might be looking to learn.

## [Image]

<https://tbkconsult.com/practical-guide-personal-freedom/assumption/>

## Expose Implications and Consequences


## Slide 11

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**Discover Implications & Consequences**

✓ **Leading questions to expose impact or risk. Often thinking through to the outcomes or consequences can sharpen understanding.**

- Then what would happen?
- What are the consequences of that assumption?
- How could ... be used to ... ?
- What are the implications of ... ?
- How does ... affect ... ?
- How does ... fit with what we learned before?
- Why is ... important?
- What is the best ... ? Why?



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## [Describe]

- Impact (usually positive) and consequences (usually negative) is a good way to explore a topic by taking it to its logical conclusion.
- If appropriate, using the WIFM (what's in it for me) concept can be useful. It helps to personalize the discussion to the participants every day understanding.

## [Example]

- Use the example from the Conceptual questioning and extend.
- Ask and answer one or more questions to give the students a flavor of what they might be looking to learn.

## [Image]

<https://totaluptime.com/minimize-risk-maximize-availability/>

## Question the Questions


## Slide 12

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**Questioning the Questions**

✓ **When asked a question, it is important to understand why the question is being asked. Often the question can have little relevance to the real desired knowledge.**

- What was the point of asking that question?
- Why do you think I asked this question?
- Am I making sense? Why not?
- What else might I ask?
- What does that mean?



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## [Describe]

- How often have you been asked a question that has nothing to do with what people really want to learn?
- These questions explore why the person is asking the question in the first place.
- What are they really asking?

## [Example]

- Use the example from the Conceptual questioning and extend.
- Ask and answer one or more questions to give the students a flavor of what they might be looking to learn.

## [Image]

<https://www.makeuseof.com/tag/create-security-question-guess/>

## Discussion Tips

## Slide 13



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**Discussion Tips**

- ✓ Begin only after sufficient preparation
- ✓ Listen to understand; clarify as needed (be polite)
- ✓ Do not stay confused; ask for clarification
- ✓ Stick to the point currently under discussion; make notes about ideas you want to return to
- ✓ Discuss ideas rather than each others' opinions

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## [Emphasize]

- Sufficient preparation; it is always a good idea to do your “homework”. The better prepared, the more likely the discussion will be successful.
- Habit 5; as mentioned earlier, see to understand by giving back to the originator what you heard so that she agrees that you understand.
- Always clarify; if you’re confused, most likely others are as well. Clarify so that everyone understands to the same level.
- Single thread; people will take you down many rabbit holes, try to stay on a thread. If its impossible, take good notes so that you can explore each thread as completely as possible.
- Not personal; don’t make comments about the originator or you – stay focused on the idea or perspective (that is based on something outside of the originator’s mind) and stay away from “my opinion” or “my conclusion”.

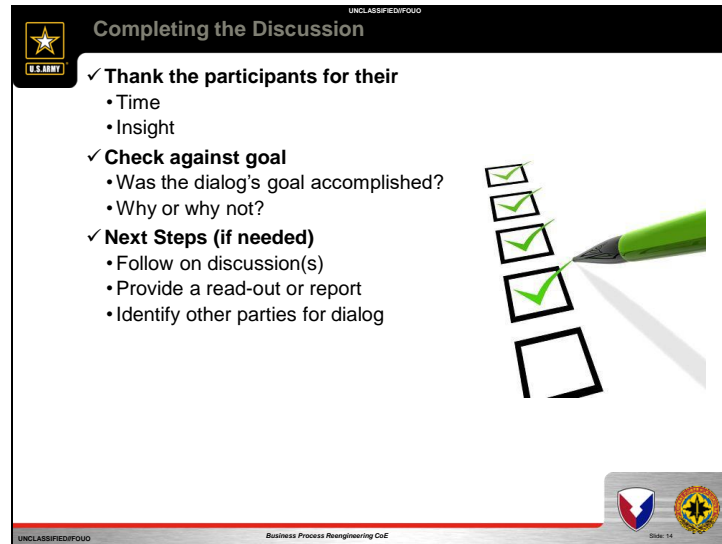
## [Image]

Source image linked to a dead site. The image was discovered using Bing search:

<https://www.bing.com/images/search?q=tips&qft=+filterui:license-L1&FORM=IRFLTR>

## Complete the Dialog

## Slide 14



## [Wrap Up the Discussion]

- Be aware of and grateful for the participant's contributions.
- Check in to see if the planned goal was accomplished – learn from the experience.
- If follow ups are needed, schedule them.
- Provide documentation so that others' can read about the experience.


## [Image]

Public domain license, search for 'check list':

<http://completetri.com/wp-content/uploads/checklist.jpg>

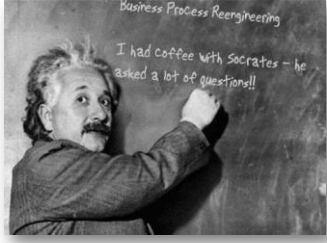
## Learning Check-in


Slide 15


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### Did we learn something?

- ✓ **Socratic Method**
  - Who recorded the Socratic Method?
  - Why is this method better than simple memorization or rote responses?
  - What are the types of questions?
  - How do you know a good dialog was accomplished?
- ✓ **Related Tools**
  - Brainstorming
  - Nominal Group Techniques
  - Value Stream Mapping



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[Summarize the Session]

### Socratic Method Summary

- Who recorded Socrates' method(s)
  - Plato and Xenophon
- Why is this method better than simple memorization or rote responses?
  - Provides deeper learning and understanding
- What are the types of questions?
  - Conceptual or Clarification
  - Understanding Assumptions
  - Understanding Rationale or Reasoning
  - Questioning Perspective
  - Discussing Implications and Consequences
  - Questioning the Questions
- How do you know a good dialog was accomplished?
  - Accomplished the dialog goal

[Thank You]

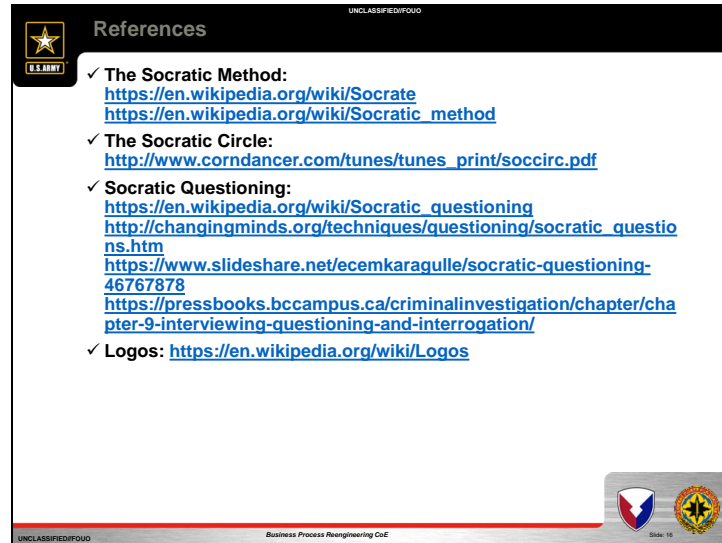
- Thank the class participants for their time
- Circle back on the established learning objective(s)
- Provide time for questions.

Einstein tool

<http://www.hetemeel.com/einsteinform.php>

## References

Slide 16



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**References**

- ✓ **The Socratic Method:**  
<https://en.wikipedia.org/wiki/Socrate>  
[https://en.wikipedia.org/wiki/Socratic\\_method](https://en.wikipedia.org/wiki/Socratic_method)
- ✓ **The Socratic Circle:**  
[http://www.corndancer.com/tunes/tunes\\_print/soccirc.pdf](http://www.corndancer.com/tunes/tunes_print/soccirc.pdf)
- ✓ **Socratic Questioning:**  
[https://en.wikipedia.org/wiki/Socratic\\_questioning](https://en.wikipedia.org/wiki/Socratic_questioning)  
[http://changingminds.org/techniques/questioning/socratic\\_questions.htm](http://changingminds.org/techniques/questioning/socratic_questions.htm)  
<https://www.slideshare.net/ecemkaragulle/socratic-questioning-46767878>  
<https://pressbooks.bccampus.ca/criminalinvestigation/chapter/chapter-9-interviewing-questioning-and-interrogation/>
- ✓ **Logos:** <https://en.wikipedia.org/wiki/Logos>

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