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Computers in the classroom

A Socratic Dialog

By BRENT SILBY

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Background

Socrates is visiting Western Heights School with a view to setting up a philosophy club. Western Heights School incorporates intermediate and secondary level students. Students are aged 11 to 18 years. The school's Principal, Allison Fells, is open to the idea of a philosophy club and is meeting with Socrates to discuss his proposal.

The school's receptionist has delivered Socrates to the Principal's office.

FELLS: Welcome to Western Heights, uh, Mr., uh, sorry, I wasn't given your name.

SOCRATES: That's fine. Your receptionist may have forgotten. Interesting thing about names; they are so quickly forgotten. But we recall faces with great ease. And personality. Because of my background in philosophy and my style of teaching, my colleagues often refer to me as *Socrates*, and honor to be sure. I suppose they consider me less of a 'teacher' and more of a questioner. No matter. I am happy to meet you. You have quite a modern looking school.

FELLS: Yes, we have recently been through a redevelopment. Our classrooms have been refitted to align with modern teaching practice. You'll notice that we have large teaching environments, each of which can accommodate up to 90 children.

SOCRATES: That sounds like a lot of children in a classroom. How does the teacher manage to teach 90 children?

FELLS: There are three teachers in each learning space. We call them *learning communities*. The teachers get to know the needs of children and design learning programmes that meet those needs.

SOCRATES: It must get noisy.

FELLS: Sometimes. But our buildings are designed to minimize the noise. And ideally, the children will be spread throughout the community working either independently or in small groups.

SOCRATES: How does the teaching work? Do the teachers take turns to teach the community? Or do they split them up?

FELLS: The teachers don't teach the entire group at the same time. That would be more like delivering a lecture, which isn't our style. The children would get bored and probably wouldn't learn much. We like to keep them active. Our teachers work with small groups to teach specific skills and then let the children work independently on follow up activities. We try to encourage the children to manage their own learning rather than relying on someone to teach them directly. It's a shift from teacher centered to student centered learning.

SOCRATES: I like the sound of teachers working with small groups. What topics do they teach in small groups?

FELLS: Mainly literacy and numeracy. We have a huge focus on reading, writing, and basic numeracy.

SOCRATES: Those skills are undoubtedly important. But can you tell me about other areas of human endeavor, such as the arts, humanities, and science? Are these also taught in small groups?

FELLS: Sometimes. It depends on the community focus. But our usual approach is to encourage the children to build individual inquiry projects around their areas of interest. They gain access to the full curriculum through their inquiries. So they cover science, social science, languages, health, and the arts.

SOCRATES: Forgive my ignorance. It has been a long time since I have been in a school. If nobody is teaching the children about these fields, then how do they learn?

FELLS: All our children have devices. They can access anything they need through their device.

SOCRATES: Devices? I'm sorry. Again, my ignorance is revealed. What do you mean when you say 'devices'?

FELLS: Tablets. Or laptops. It's up to the students. They bring their preferred device.

SOCRATES: Tablets? Laptops? These are types of computer, are they not?

FELLS: Yes, they are computers!

SOCRATES: Thank you. I know that term. Do all your students have a computer?

FELLS: Yes, we have a *'bring your own device'* programme in place at Western Heights. All children are required to bring a computer. We are embedding computers into all aspects of classroom learning.

SOCRATES: Things certainly have changed over the years. May I ask: why have you embedded computers into learning? If I'm not mistaken, computers are a relatively new invention in relation to the history of education. Why do you place so much importance on them? Are children unable to learn without computers?

FELLS: Children are different nowadays. This is the 21st Century. Our children are what we call 'digital natives'. They are brought up with technology. They are surrounded with computers their whole lives. They seek information differently compared to how they did in the past. They learn differently.

SOCRATES: It sounds to me that children these days find computers very easy to use.

FELLS: Yes. Sometimes our teachers have to get children to help them with computer problems.

SOCRATES: I must admit that I find it difficult to believe that children have changed so much over the last 2500 years. The world is certainly different, but in essence children seem much the same as they were back in the days of Plato's Academy.

FELLS: What do you mean?

SOCRATES: What I'm wondering is this: do children learn differently because their nature has changed, or do they learn differently because we teach them to learn differently?

FELLS: Our society has changed. So we have to teach differently in order to prepare children for the real world. Computers are a massive part of the world so it is our responsibility to integrate them into the classroom. It's all about readiness. If we didn't have computers in school, these children wouldn't be ready for the real world.

SOCRATES: I think I understand your point. The idea is that because computers are a significant part of life, their use must therefore be embedded into classroom learning.

FELLS: Yes. That's the main argument.

SOCRATES: Forgive me if I ask another question. I am trying to understand this position. Consider that automobiles are a significant part of life. Would it therefore follow that automobiles must be embedded into classroom learning? I don't see many cars here at Western Heights.

FELLS: *(fake laughs)* That is kind of funny.

SOCRATES: I'm not trying to be funny.

FELLS: Look, there is a difference. Kids need to learn how to use computers. When they leave school they will need to know how to use computers for pretty much any job or career. Virtually all work places are becoming computerized and schools have a responsibility to prepare children for life in the real world.

SOCRATES: So, it's not so much that children learn differently (though they will if we teach them differently) but that schools must integrate computers into teaching and learning because students need to learn how to use them in order to be ready for the workplace—just like they need to learn literacy and numeracy.

FELLS: That's right.

SOCRATES: I'm still a little confused. You said earlier that children often have to help teachers with computer problems.

FELLS: Yes, that's right. It happens all the time. The children seem to naturally know how to use the technology whereas staff (particularly older staff) find it difficult to keep up.

SOCRATES: So presumably the teachers are not teaching the children how to use computers. They are picking it up elsewhere. You said that computers are everywhere. They are in people's homes, shops, and movie theatres. I would guess that children learn how to use computers at a very early age. Is it possible that they bring to school the computer skills that they learn outside of school?

FELLS: That's entirely possible. And if you are suggesting that we therefore don't need to teach kids how to use computers, then you may be right—to a degree. But don't you think that they need to use computers with the changing look of education? Schools are a lot different now. Education has changed.

SOCRATES: Isn't this circular? If I am to summarize, the claim is that computers are needed in education because education is changing. But it seems to me that education is changing because of the insistence that we bring computers into the classroom.

FELLS: I'm not sure how we have moved to this point. You wanted to start a philosophy club, right? I am open to the idea, but you need to accept that we do things a certain way.

SOCRATES: I apologize for my apparent obtuseness. I am a beginner and am trying to learn about your system. My style has been known to annoy people. But that is not my intention. I am eager to learn.

FELLS: Perhaps it would help if you saw a classroom in action. Would you like to visit a classroom? I have some available time. Shall we go for a tour?

SOCRATES: Yes, I would like that very much. Thank you.

Ms. Fells leads Socrates to a nearby learning community. As they enter, she introduces Socrates to Paul Patterson, one of the teachers in the community.

FELLS: Hi Paul, this is, oh, I've done it again. Sorry, I have forgotten your name...

SOCRATES: That's fine. I am quite forgettable. I'm pleased to meet you, Paul. I am very interested in seeing how things work here. I have been talking with Ms. Fells about setting up a philosophy club at Western Heights.

Paul Patterson seems a bit distracted. He is making some entries into his laptop.

PP: Oh, right. I'll be right with you.

He closes his laptop

PP: Sorry. Karen and Sue have taken a group of students out, so I'm looking after the rest of the community today. Things get a little crazy sometimes. Lots to do. What exactly are you interested in looking at? I don't think we have any students doing projects on philosophy at the moment.

FELLS: We have been discussing the use of computers in education. Did you say your name is Socrates?

SOCRATES: It is a name that describes me well.

FELLS: Socrates is interested in how we integrate computers into our teaching and learning programmes.

PP: Okay. Well, as you can see, most of the students are working on their devices.

Paul gestures to some nearby students, who are indeed using laptops.

SOCRATES: What is it they are doing? Are the computers *teaching* them?

PP: *(laughs)* That depends on what you mean when you say "teaching". The students are using the computers to learn. They each have an inquiry project underway and they're looking for information on the Internet.

SOCRATES: I have heard the term 'inquiry project' a few times, but I don't know what it is.

FELLS: Students each decide upon a topic of interest and then build a research project around that topic.

SOCRATES: So you do not supply the topics?

FELLS: No. It has to come from the students.

SOCRATES: I suppose, then, that students pick topics they already know something about. They can't pick a topic they've never heard of. How do they learn anything new?

PP: The idea is that they springboard from their projects into new projects. As they learn, they encounter new ideas that might lead to new interests and therefore new projects.

SOCRATES: This is an interesting approach to schooling. I can see that a computer would be quite essential to this process. I assume that the 'Internet' to which you refer is something like a library.

PP: You could say that. But it is bigger than any traditional library. It contains all of humanity's knowledge.

SOCRATES: Knowledge? I admit that I am unfamiliar with how the Internet works, but I am not sure it would be accurate to suggest that a library contains *knowledge*.

PP: What do you mean?

SOCRATES: Knowledge requires a *knower* in the same way as thought requires a thinker.

PP: I suppose.

SOCRATES: Does the Internet *know* that which it contains?

PP: Of course not. But I don't think it matters. Thoughts can be recorded. People write their thoughts on paper or online in blog posts. Knowledge can surely be recorded.

SOCRATES: Information about thoughts can indeed be recorded. Information about knowledge can also be recorded. Perhaps, therefore, it would be accurate to suggest that the Internet contains information *about* knowledge.

PP: This is all very deep and interesting, but it's really just semantics. I think you know what I mean when I say the Internet contains humanity's knowledge. Kids can use their devices to learn anything they want. It's all there at their fingertips. This is the beauty of giving children access to the Internet and the freedom to explore anything they want without having it filtered or selected by a teacher.

SOCRATES: That is true. But if a teacher had selected just the right information, perhaps the rest wouldn't matter. Tell me, does this work? Do students learn more effectively this way?

FELLS: We believe so, but others think it's too early to tell. You may have heard of the recent report from the OECD. The report indicated that there are not yet any noticeable improvements for students in schools with high computer use. But there's a lot of work to do. For one thing, many teachers are not using the technology correctly.

SOCRATES: That may not be a problem if, as you said earlier, the students already know more about the technology than the teachers.

FELLS: No, I mean that many teachers are not implementing it in the classroom correctly. Perhaps when teachers are using the technology more effectively, results will improve.

SOCRATES: That's an interesting hypothesis. It's a pretty safe hypothesis too. You can never be wrong with a hypothesis like that. It seems to me that if results don't improve, the conclusion will be that teachers are doing something wrong, thus confirming your hypothesis. On the other-hand, if results *do* improve, your hypothesis will also be confirmed.

What if results never improve? Will it always be concluded that teachers are doing something wrong? Are you not assuming that computer use in the classroom *must* improve outcomes, and any evidence to the contrary is evidence of failure elsewhere?

Imagine that engineers have designed and built a new type of airplane, but nobody has ever seen it fly. Imagine that many pilots have tried to fly the plane, but it has never worked. Despite this, the manufacturers insist that the plane *will* fly. Furthermore, they claim that the reason it doesn't fly is because the pilots aren't using it correctly.

In such a case, do you think the blame sits with the pilots? What other reason could explain the plane's failure to fly?

PP: The plane doesn't work?

SOCRATES: That is indeed a possibility, is it not?

FELLS: Sure, I see what you're saying. I think we need to run the experiment for longer before we draw conclusions. Besides, wouldn't you agree that giving students open access to information is a good thing? It's wonderfully democratic. Students can explore their interests freely without being constrained by the knowledge of the teacher. Traditional teaching is one-directional. It's the transmission of knowledge from teacher to learner. We want students to be more engaged…more active in their learning. And teachers can't know everything, so in allowing students to build their own inquiries, and do their own research, we are giving them the freedom to learn whatever they want. It's a robust process. The children need to settle on a driving question, figure out where to collect the information, and then assemble it. The information doesn't necessarily need to be found online either. For example, they could go out to visit an expert. After they've gathered the information, they need to do something with it—perhaps write an article, or make a presentation.

PP: That's what most of these children are currently working on. They've collected knowledge, or information, whatever you want to call it, and are now building their presentations. They'll present their completed projects to the class.

SOCRATES: When they present to the class, are they not, in effect, attempting to teach the class?

PP: Well, yes Socrates. Isn't that fantastic. Children can surely teach other children.

SOCRATES: But did you not tell me earlier that you wanted to move away from that model of teaching?

PP: What do you mean, Socrates?

SOCRATES: You indicated that the model of teacher presenting information to students is something you wanted to move away from. But here you have children doing exactly that…standing up in front of the class and presenting information. I'm trying to understand exactly what you are trying to do.

Ms. Fells, you said that traditional teaching is a one-directional transfer of knowledge from teacher to student, right?

FELLS: Yes, that is what I said. That's the old model of teacher as expert.

SOCRATES: You seem to be assuming that the traditional model is less engaging for the students. Is that what you are suggesting?

FELLS: That's correct. They are less engaged when listening to a lecture.

SOCRATES: What does engagement look like? Can you give me an example?

FELLS: When they're engaged, they're active. They're seeking information rather than passively listening.

SOCRATES: It seems to me that you are connecting engagement with activity. Is this always the case?

FELLS: Generally, yes I think so.

SOCRATES: Do you agree that people can be engaged in watching a movie?

FELLS: Yes, but that's not learning.

SOCRATES: You don't think it is possible to learn anything from a movie?

FELLS: Well, you can learn from a good movie, but it's just passive one-way delivery. It is not active.

SOCRATES: Okay, so this is not so much about engagement or learning as it is about providing something other than one-way delivery of information.

PP: Actually, Socrates, I think the point is to give students the ability to get actively involved in their learning by seeking information for themselves, rather than have a

teacher deliver it to them. When it is one-way delivery from the teacher to the student, the student is a passive recipient of information. We want them to be active learners.

SOCRATES: You are focusing on the means rather than the ends. You have a preference to move students away from a one-way delivery model, and the solution is to put students online to find information for themselves, right?

FELLS: Yes, that is why we do this.

SOCRATES: Why exactly is your preference to move away from the one-way delivery model? You have agreed that it is possible to be engaged in the one-way delivery of information. Do you think the learning is somehow inferior?

FELLS: As I said, it's passive. We want them to be actively working with their knowledge.

SOCRATES: This sounds interesting. Perhaps you are correct in the assumption that adjusting the means will lead to a better end. What sort of material do the students access on the Internet?

FELLS: Articles. You know, Wikipedia is a good starting point. But they can find anything they want by simply Googling it.

PP: Or online lectures. There are lots of courses online.

SOCRATES: 'Googling'? I'm not familiar with that term. I don't know much about the Internet.

PP: Are you serious? Where have you been? Google is a search engine. You type in a question and Google lists results. You click on the result and get taken to the website that contains the information.

SOCRATES: And Wikipedia is a website?

PP: One of millions of websites.

SOCRATES: When a student reads an article or watches a lecture, is that not one-directional delivery of information? The information moves from the source into the mind of the student. Does connecting students to the Internet really provide an alternative to the one-way delivery model? It seems to me that for students to be actively engaged in their learning, they would need to be discussing ideas—even challenging them. Can they do that with Wikipedia?

PP: Ah, no. Wikipedia is a source. But we teach students to look for a range of sources that cover multiple sides of an issue or question. For example, if a student is looking at a social issue such as whether the wealthy should help the poor, she'll look at arguments on both sides.

SOCRATES: So students learn by watching or reading articles in which people discuss an issue?

PP: Sort of. They read both sides of the issue, or perhaps watch online debates.

SOCRATES: Like watching a movie.

PP: But, of course, it doesn't end there. As I said earlier, the students have to produce a product, or presentation, which demonstrates their learning. The students in this community are currently working on their presentations.

SOCRATES: Let me see if I understand correctly. The students are retrieving information from the computer then using the computer to build their presentations.

PP: Yes.

SOCRATES: Students pull information out of the computer so that they can put it back into the computer?

PP: It's the process we use. The students are searching for information themselves and using that information to make a product.

SOCRATES: And you believe that this model of learning is superior to traditional classroom teaching.

PP: That is correct, Socrates.

SOCRATES: For my entire life I have been driven to better understand the world—I see myself as a student in pursuit of wisdom. I am therefore interested in the nature of learning. When students produce their presentations, your claim is that they have learned the information contained in their presentations.

PP: The presentation is evidence of learning, so yes, it would be fair to say they have learned the material.

SOCRATES: If I teach a parrot how to recite the first paragraph of Einstein's special theory of relativity, would it be fair to say the parrot has *learned* this part of Einstein's theory?

PP: No, of course not. It's just reciting what it heard it doesn't understand what it is saying.

SOCRATES: So this is not what we're talking about when we talk about learning at school. The parrot may learn how to recite information, but it has not learned the information because it does not understand. We would therefore say that the parrot does not *know* what it is saying. It does not *know* the information. Am I correct?

PP: You are correct.

SOCRATES: Learning at school must involve more than recitation then. It must involve understanding. If students do not understand material they read, then they cannot *know* that material.

FELLS: Wait, Socrates. Allow me to step in here. I know that E=MC^2, but I don't understand it.

SOCRATES: Do you *know* it? Or is it more accurate to say that you know that many scientists hold it to be true? I am sure that you understand it to be the case that many scientists agree with the claim E=MC^2. A parrot, on the other-hand, could not even understand this simple proposition. Parrots can only recite information.

Allow me to suggest that the aim is for students to *know* the information they learn. Would you agree that the purpose of school is for students to not simply learn, but to *know* that which they have learned?

FELLS: I think everyone would agree with this Socrates. Perhaps it would be useful for you to take a look at some of the work the students are producing. Paul, can you find us a student to talk to?

PP: Sure. Let's talk with Caitlin. She's been doing some good work on her project about crystals.

(Paul Patterson leads the group to a student)

PP: Hi Caitlin.

CAITLIN: Hi Mr. Patterson, hi Ms. Fells.

PP: This is Socrates. He is setting up a philosophy club here at school. We're showing him around and we thought you might like to share your crystals project with him.

SOCRATES: Good morning Caitlin. It is nice to meet you.

CAITLIN: Hi.

(Socrates looks at Caitlin's computer screen. It displays the layout of a poster containing images of crystals and underground caves with text captions)

SOCRATES: This looks like a detailed project. Can you tell me about it?

CAITLIN: Well I like crystals so I decided to do my inquiry on crystals. I found these pictures on the Internet and I'm arranging them on my poster with myPoster app.

(Caitlin points to a series of images)

This is a geode, and this is what sugar crystals look like. This is a cave where they found … *(she looks closer and slowly reads the caption under the image)* "giant selenite crystals".

And here is what they are made of *(she gestures to a chemical formula:* $CaSO_4 \cdot 2\ H_2O$*)*.

SOCRATES: There is a lot of information here. Can you tell me what you have learned about crystals?

CAITLIN: They can be used for sick people.

SOCRATES: How so?

CAITLIN: *(reads from a caption)* "Crystals act as conduits for healing—allowing positive, healing energy to flow into the body as negative, disease-causing energy flows out".

SOCRATES: Did you find this information on the Internet?

CAITLIN: Yes, there is a website all about crystals.

SOCRATES: Do you think it is true that crystals can heal sick people?

CAITLIN: It was on the Internet. I don't know. I guess it just depends on what you believe.[1]

SOCRATES: Do you think that the truth depends on belief?

CAITLIN: It might be true for some people that crystals can heal, but not true for other people.

SOCRATES: I see. I wonder if we could say the same thing about whether the Earth is flat or round.

CAILTIN: No! The Earth is round. Everyone knows that.

SOCRATES: What if someone thinks that Earth is flat? Isn't it true for them that Earth is flat?

CAITLIN: They might think it is flat, but they're wrong because it's not flat.

SOCRATES: So your think whether the Earth is flat or round doesn't just depend on what you believe.

CAITLIN: Uh, yeah.

SOCRATES: Perhaps, then, whether or not crystals can heal people is not just a matter of belief. This is something you could think about.

I am interested in what crystals are made of. Thank you for showing me that part of your project. But I'm a little dumb. Can you tell me what $CaSO_4 \cdot 2\, H_2O$ means?

CAITLIN: Uh, I'm not really sure. I think H_2O is what water is made of, but that can't be right, can it? Crystals aren't made of water, are they?

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[1] This example is based on a response given by a student when asked to research the question "Can you kill a goat by looking at it?". See Sowey (2013)

SOCRATES: I don't know, Caitlin.

FELLS: Thanks for showing us your stunning looking project Caitlin. You get back to work now.

(The group moves away)

SOCRATES: It seems that Caitlin has learned how to tell us what she has read. She has a lot of information in her project. But what has she learned about crystals? Is she educated in matters concerning crystals?

PP: I think she's doing quite well. She was able to tell you what she's learned.

SOCRATES: If learning is reciting information, then yes, she has told me what she has learned. But what does she *know*? Her project contains information that she has gathered from the Internet. But is learning simply a matter of gathering and reciting information?

PP: No, it is not. I think real learning is about understanding.

SOCRATES: Nicely put Paul. We agree, then, that an item of information, or a proposition, is learned when the student *understands* it. But Paul, if a student understands a proposition can we say the student *knows* that proposition?

PP: What do you mean Socrates?

SOCRATES: Suppose Caitlin understands the proposition that crystals have healing properties. Perhaps through her research she has come to understand that people hold this belief. Is that enough?

PP: I don't know Socrates. Crystals don't heal people.

SOCRATES: Don't they? She got this from the Internet. Are you suggesting that the Internet contains false information?

PP: Certainly. The Internet contains a lot of false information.

SOCRATES: That calls into question its reliability as a library, does it not?

Let us assume that it is false that crystals heal people. Tell me, would we say that Caitlin—although understanding the proposition that crystals heal people—does not *know* that crystals heal people?

FELLS: Hold on. She wouldn't be able to understand it if it wasn't true anyway, would she? How could she understand it? She would have a *misunderstanding*, right? What I mean is that she might have read a lot of information and understood what she read, but that could lead to the misunderstanding that crystals heal people. Her information may be false. So I think it's fair to say that real understanding is required before you can say you know something.

SOCRATES: You might say that her *belief* that crystals heal people is based on a misunderstanding of how the world works, and her misunderstanding is the result of reading false information. Would it follow that reading information alone is not sufficient justification for a belief?

FELLS: I would agree to that, Socrates.

PP: Then for a student to *know* something, her belief in that thing would need to be based on reasonable information—not false information.

SOCRATES: I couldn't have put it better myself. The question I now have is this: how is a young student to know the difference between false information and true information? Is this something they can figure out themselves?

PP: I don't know, Socrates. Probably not.

SOCRATES: How do you think we could help Caitlin check her information about crystals?

PP: I think it would be essential to talk with her, like you did just then. Reading through her project and asking her questions about it would be a good place to start. I would ask her what she thinks about the material she's read.

SOCRATES: What other questions do you think you could ask?

PP: I'd probably ask where she found the information. I would also ask her if she thinks the information is reliable. She might not know, so perhaps I would ask her if she thinks it sounds believable. She might think it sounds perfectly believable. I could suggest that she look at other sources—maybe even find some for her. I suppose the conversation is important.

SOCRATES: Allow me to clarify, Paul. You would give Caitlin freedom to find information and then ask her questions about its reliability before suggesting (if necessary) that she read something else. You would then help her find additional information. Is that correct?

PP: Yes, then she can include the new information in her presentation.

SOCRATES: And how would she know which information is more likely to be correct? Would you simply tell her?

PP: Perhaps. But I think I would rather try to get her to figure that out herself.

SOCRATES: How?

PP: I'm not really sure, Socrates.

SOCRATES: Let me ask you this: when you read something new, how do you know it is true?

PP: If it comes from a reliable source, I'd probably accept it.

SOCRATES: Suppose I tell you that scientists discovered a new comet. Would you believe me?

PP: I suppose so. New comets are discovered all the time.

SOCRATES: That is true, Paul. There are many comets. They are common throughout the cosmos. Now, suppose I tell you that scientists have discovered an alien base on the dark side of the moon. Would you believe me?

PP: No. I don't think that sounds believable.

SOCRATES: Why not?

PP: It's just not the sort of thing I expect to happen. It's too unusual. No-one has ever seen anything like this before. They probably got it wrong.

SOCRATES: You would need some evidence before believing this proposition, would you not?

PP: I'd need very good evidence, more than a couple of blurry pictures.

SOCRATES: The demand for evidence would be reasonable in this case, because accepting the claim would require a huge change to what you know about the world and how it works. So, as a teacher, how could you help Caitlin decide whether her information about the healing properties of crystals is believable?

PP: By asking her to compare the idea that crystals heal people with the idea that they don't heal people. I would ask her to decide which seems most likely to be true. I'd show her how to weigh the evidence.

SOCRATES: Doing this will make you an active participant in Caitlin's learning process. Through dialog you could encourage Caitlin to remain skeptical of information until she has examined the evidence.

PP: Yes, Socrates. This is the best approach.

SOCRATES: I think I have learned something about teaching. We have agreed, have we not, that leaving a student to simply gather information from the Internet results in learning that is similar to the way a parrot recites information?

PP: Yes, this sounds right Socrates.

FELLS: Yes, Socrates.

SOCRATES: We agree, then, that learning requires understanding?

FELLS: This seems to be true.

SOCRATES: Did I understand our discussion correctly? Have we concluded that a teacher can help a student understand information through careful questioning and dialog?

FELLS: This was our conclusion.

SOCRATES: So, effective learning cannot be achieved by allowing students to simply collect information from the Internet. Is this our conclusion?

FELLS: Certainly, it seems that this is the conclusion we have reached.

PP: I also agree with this conclusion.

FELLS: Now Socrates, time has gotten away from us. If you'd like to set up a Philosophy club, I'm happy for you to proceed. I will organize some information for the next school newsletter. Perhaps we can start next Tuesday after school?

SOCRATES: That sounds good. Parents, teachers, and children are all welcome, so please extend an open invitation.

FELLS: Good. Then we will see you next week.

PP: I think I will come along to the Philosophy club too, Socrates.

SOCRATES: I look forward to it.

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