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## International Baccalaureate, Theories of Knowledge, and Misinformation Spotting in the High School Classroom

*An interview with Martee Lopez-Schmitt, English Teacher and  
Coordinator of the International Baccalaureate Program,  
Capuchino High School*

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*In this interview, a veteran high school educator and first generation American with Mexican ancestry details how International Baccalaureate (IB) programs—and particularly their Theory of Knowledge classes—provide a rich epistemological framework for high school students to consider truth, perspective, authority, and agency. Particularly for her diverse group of students, Lopez-Schmitt argues that IB helps provide a global, interdisciplinary, civic, and rhetorical framework that supports students in acts of critical questioning about how we come to know, understand, and respond to the words and worlds around us.*

Tara Lockhart: Welcome, Martee! Can you tell us a little bit about yourself and your work?

Martee Lopez-Schmitt: I teach at Capuchino High School in San Bruno, California, and I am the International Baccalaureate (IB) Coordinator. IB programs were created fifty years ago for diplomats' children around the world. Because the diplomats were moving around, they were discovering that their kids weren't getting consistent education; they were finding gaps in their kids' schooling. In response, they created a consistent program that is now pretty much in every country in the world outside of the US. Most IB schools are private schools here in the US, whereas most IB schools abroad are public schools.

Lockhart: How does IB differ from Advanced Placement (AP) programs or other kinds of college track courses?

Lopez-Schmitt: IB classes are generally two years long, so they require more time and result in more depth. In terms of testing or evaluation, IB scores are composite scores; as opposed to a single test, there are two to three actual exams. IB exams also generally have some kind of oral component or presentation. And finally, there is a component that is scored by the teacher, and the score is reported to IB as part of the composite score.

The IB program also offers the opportunity for students to get the IB diploma, which is typically a full two years of coursework in both core subjects and electives. Those students who are completing the most rigorous IB courses for the diploma will also complete a course called Theory of Knowledge, which is the course that I teach in the IB program. In the Theory of Knowledge course, students complete a 4,000-word research paper on a topic of their own choosing alongside a faculty advisor. They complete community service and activity hours, as well; and they do all that in the span of two years. IB offers a lot of opportunities to get college credit or to branch out and take different electives, while also offering the additional bonus of getting a diploma that is recognized around the world.

Lockhart: How would you characterize the growth of IB in the United States?

Lopez-Schmitt: It's been slow. Before I came to my school, I'd never heard of it before. We've now had an IB program for fourteen years, and in those fourteen years, I've witnessed colleges becoming more and more aware of the program and allowing for more and more credit for students' scores. That causes the broader public to become more and more aware of it, as well. My school has gotten larger in the last fourteen years, and that's not just necessarily because the area is growing. We're also getting students from private schools who traditionally would have continued there but chose to take IB instead.

Lockhart: As a teacher, what do you value about the IB program? What benefits do you see, perhaps in relationship to programs like AP that college teachers and parents are more familiar with?

Lopez-Schmitt: Well, I always go to my experience: I was an AP student, I took probably five or six AP classes in my junior and senior years, I was the top of my class or close to it. I went on to community college, and the thing about AP for me was that I didn't do well when I got to college; I had the intellect—I had the smarts for it—but I didn't know how to be a student because AP at my school back then was focused on, you know, getting a good score for an exam.

Comparing this to IB, students take two years per course, and this not only allows for more depth; it also allows for the training, so to speak, in real critical thinking and in how students can be advocates for themselves. They go into college knowing even what seem like simple, basic things, but which are crucial—such as knowing how to write and knowing how to ask questions.

We have an annual event at our school where we bring our recent grads back in December after a

semester of college, and we ask them: How did IB work for you in college? And the thing we hear most often is that, for them, college is easy. Students say, “I’m the one who knows how to do X, Y, or Z in class, and nobody knows how to do that.”

Lockhart: Just to pick up on one thing you said about having stronger writing skills going into college, what would you say the key differences are between IB programs and other English courses? Is it primarily differences in pedagogy, or maybe it’s just a difference in practice, or being in IB coursework for two years? What observations have you made?

Lopez-Schmitt: Every IB class has a writing component to it somewhere, including our math classes—they include a research paper about math. There’s no way you’re in an IB class and you don’t gain writing skills—written and oral communication are foundational to IB.

Lockhart: So it sounds like there’s just a stronger commitment to writing and oral communication?

Lopez-Schmitt: Yes, and a more diverse focus on different kinds of tasks other than just the test. However, even the tests are robust: for example, for one test, students have to write three essays in two hours. It’s thus up to the teacher to train students for that rigor in terms of writing strategies, processes, structure, and the like. Across all of our subjects, teachers have had to step up their game in terms of teaching how to write. IB has made all of us writing teachers in ways that regular curriculum or a college prep or AP curriculum didn’t. At my school, IB definitely turned people into communications teachers on top of being content teachers.

Lockhart: Can you talk a little bit about the IB Theory of Knowledge course, and what makes it unique?

Lopez-Schmitt: The best way for me to describe the Theory of Knowledge course is to call it a kind of philosophy class. This is where we discuss questions like, How do we know what we know?—that’s the focus. In that way, it’s a basic epistemology class. We explore more of a critical thinking point of view: understanding that everything we do, everything we’re engaged in—our volunteer work, our writing, what we choose to read, what we choose to watch on TV—all of these things are part of and help you form a worldview, and that every person’s worldview is different, because you each have a different set of experiences. While we all experience certain things in our life—grief, or sadness, or happiness and joy—we all experience them in a different way. The work of the Theory of Knowledge course is to begin to understand the impact such worldviews have when we consider what we know.

We try to define what knowledge is in the first place, and we look to a variety of places to discover that. Then the students work to form their own definition, or working definition, of knowledge. We start examining the ways in which we gather knowledge or information—in Theory of Knowledge, they call these “ways of knowing.” IB has recognized several different ways of knowing, and we fo-

cus on four in my class: sensory perception, language, reason, and emotion. Students tend to focus particularly on language and reason, drawing a lot from their IB English and Media Studies work and bringing that to bear in Theory of Knowledge. This results in a focus on bias and really thinking about who texts are written for. Who is this created for? With the idea of audience so firmly in mind, when we talk about language, it's really a rich, rich time in the class. We look at those ways of knowing and our definition of knowledge, and the discussion that emerges often centers on is a fact always a fact, or is a fact the same thing in your math class as it is in your biology class as it is in your art class, or in your history class? Or does the definition of a fact change? It does? What are the impacts of that?

Once we lay that kind of groundwork, then we start moving into what IB calls “areas of knowledge.” We look at arts—all kinds of art—painting, all different media, all that kind of stuff. We look at ethics, then we look at math, natural sciences, the human sciences, and history. We explore the questions: How do we use language in each of these areas in order to create new knowledge or to understand what's already there? How does our culture—including cultures of home, of our school, of your church, of any other affiliations—affect what you know and how you know it? What are the filters you are using in order to discern if something is true or not?

Building on these ideas, we discuss bias in that bias isn't necessarily a bad thing; it's something that we all have. But an awareness of that fact is necessary to understand that I'm particularly biased, for whatever reason, against this product or idea, or that since I have a particular upbringing, it points me in this direction.

Lockhart: As a teacher, I really love the idea of this class. How has the current climate in the US, including the spread of mis- and disinformation, affected the way that you teach the Theory of Knowledge class? How does it come up in class? What does that look like? Is it different from maybe what that class looked like four or five years ago?

Lopez-Schmitt: It has definitely changed what we talk about in class, but one of the main differences is the students who are the most ambitious and taking the most rigorous courses are all in this class. These students are all now our Twitter users, or at least they follow news outlets, and they follow the president. That is a change; it wasn't like that five years ago.

Some of those connections come from their English classes and their history classes; the kinds of things they're learning in history now parallel what we're teaching. It also comes from their reading of some dystopian novels. It's really interesting that they are now already more hooked into the news and, for some, a constant stream of news sources. I joke with students to put NPR on in the background: if you don't come from a world, for whatever reason, where the news is on, or you're not reading a newspaper, or you're not tapped into what's going on in the world, then you need to get into the habit of it. I want to create students who flourish long term and who are engaged in the world and

in the politics of the world, and I want educated voters out there. That's what I tell them. I tell them I want you in on that. You need to engage in that. And the easiest and cheapest (free!) way to engage is to put NPR on in the background of your day.

Lockhart: What kinds of examples of news or text do they bring into class? Or what kinds of examples or practices do you work with to try to get them to a next level of critical literacy around information?

Lopez-Schmitt: A primary thing we talk about is authority: Who do we believe, and who do we trust, and why do we trust these people? Let's go all the way back to when you first knew you believed something—whether that's Santa Claus or the boogeyman—whatever it was, go back to those moments, and then take yourself through that thought process: How did you come to the point where you couldn't believe anymore? And how could you still believe your parents if they lied about Santa Claus?

We start with those basic questions, and then we start talking about people of authority who have fallen from grace in some way or who have come out to be unethical or liars or sexual abusers in some way. Students really connected with the #MeToo movement, and when it began, students were talking a lot about Louis C.K. Students would bring him up in the class every so often, not only because he has a particular political view, but also because he has a particular view about race; he's Mexican and he's Jewish. Students were interested in talking about him as an example of authority, and so when he admitted to being a person who abused his power for sex, the discussion centered on questions like, "Then now how do you or how do we trust him? Maybe you don't want to watch his shows on TV, but if he wrote an article, and *The New York Times* published it, would you be okay with that? How could you trust him? How could you believe?"

So much of this conversation returned to bias: understanding that not only do we have our biases, but everyone else out there has them too, right? Even if I'm reading an article or an op-ed piece in *The New York Times* by Frank Bruni, not only do I have to understand that I'm coming at it from a particular place, but they're writing from a particular place as well. Essentially, how do I know that it's okay to believe who I believe? At what point do we call someone an expert? Theory of Knowledge gets students to grapple with those kinds of questions from the very beginning—exploring ideas about believing in something or knowing something. Students feel the push and pull between believing and knowing. For example, if in order to qualify something as knowledge, it has to have evidence, and if you don't have evidence, how do you justify having a belief? What is then really interesting is when students bring in their religious backgrounds and experiences like that. A lot of students at Capuchino High come here from a previous private school or parochial school perspective; they come to the IB program with specific views from a Catholic perspective or a Christian perspective. And so they play tug of war with these ideas.

Lockhart: Right. I know that Capuchino is a pretty diverse school, so I wonder how teaching not just a rhetorical approach, but a rhetorical approach within a larger epistemological framework like IB, intersects with student diversity. If you're engaging those approaches with a really diverse group of students, how does that diversity even further enrich that conversation?

Lopez-Schmitt: The range of experiences we are able to talk about is really quite fascinating and rich. In my class right now, I have several students who went on missions last summer—religious missions or worked for nonprofit organizations—in countries like Ecuador, the Dominican Republic, the Philippines. These are kids who weren't from those countries—they are American or first generation American—coming back from places with the experience of teaching kids how to speak English, living where there isn't running water, or they have an outhouse, right? Many students already have diverse experiences to draw on, just by the nature of being first generation Americans, or by the fact that they are from Turkey, or from other Middle Eastern countries.

That diversity and how students are exploring negotiating identity prompts us to talk about things like "being the only one." Have you ever been the only girl in the room, the only black person in the room? How do our identities then come to bear on the idea of responsibility? I talk about it from my own experience—I'm a first generation American; my parents are both from Mexico, and I talk particularly to my Latino students about this a lot: that you don't get to quit things, you don't get to not go someplace, because it's all white. You have a responsibility, because it's not going to *not* be all white until the browns come in and start doing something—start disrupting that status quo.

Those kinds of conversations are just fascinating. I'm an English teacher, so I love the kind of rich discussion we have in English classes. However, the discussions that happen in the Theory of Knowledge class are so much more personal, they're so much more global, because the students are allowed in this class—and actually *required* in this class—to bring the breadth of their own experience to bear. It's such a treat.

Lockhart: What connections can you make between the IB focus on those values of ethics and community activism, and how we think of or define truth, or how we combat misinformation?

Lopez-Schmitt: There's this thing in IB called the learner profile: it's the attributes that IB is striving for. The first thing on the learner profile is inquiry—being a student who can ask questions and who is curious about things in the world. A second attribute is being principled; to have some kind of moral code to live by, however you come about that code.

When we talk about a worldview, when we talk about how we build it, the idea of truth comes into play with belief and with knowledge. Because if, again, if we're saying that to know something means that you have proof of it happening, what is the tension between knowing and believing? How can you speak truth and, at the same time, speak your own truth if there is a difference between the two?

Even the idea of truth isn't as simple as I think it used to be; I think it's far more complex in the last five years. I think even the definition of that word and the context in which we use it has become different and more sophisticated and definitely more complex.

Lockhart: I think that takes us to changes in how information is circulated, including the speed at which it circulates. If we are thinking about the ways that algorithms control information being disseminated, the ways that some people can manipulate information to try to make money or take advantage or influence an election or whatever it may be, what pressures does that put on literacy instructors, and how are our literacy instructors grappling with that and talking about that with their students?

Lopez-Schmitt: I think the more time we can spend talking about bias, authority, and expertise, the better the students are going to be at understanding what those things mean, and how those things can play out when they're googling something, for example. I was just reading an article about how Google has changed a particular kind of literacy. The author described indexical literacy, meaning I used to go to the back of the book and find information I needed by using just that strategy. Now, Google does that for us. So I can skip a whole bunch of information or processing along the way; I know these pieces of information, but they don't necessarily have any context. If, for example, before we had Google, if I wanted to look up the year someone like Bobby Kennedy was elected, I could look that up in a book, and I would also come across some biographical information and other information before I got to the particular fact I was searching for. Now, I can go to Google, and the only thing I get is that one piece of information; all I need is 1968, right? What does that do to how we piece together things in our brains now? How do we work with these random bits of information? In class, we definitely spend a lot of time talking about "speed of light" kind of information. We look at, for example, when Gabby Giffords was shot, and news outlets pronounced her dead, and she hadn't died. We talked again about responsibility: that the information that we have, or that we think we have, can be used as a weapon now, including in ways that it hadn't been before.

Changing from an approach that was purely literature-based to pedagogy that focuses on language and literature, along with taking a rhetorical approach, has helped students to be a little more discerning. From my point of view, I think the kids who are exposed to these questions and debates receive some of the best writing instruction that they can get. They also get the best kind of training in terms of talking about context, talking about truth, talking about and being true critical thinkers.

Lockhart: One thing that I like about the IB program is that there is this common ground; there's a common philosophy that students are experiencing from these different disciplinary endpoints. That makes me think about what common ground looks like in our society right now, and the way that that common ground continues to be fractured. I wonder if that has made it into the classroom as well? Do you feel that fracturing of common ground in our society represented in any way in the

classroom with your students?

Lopez-Schmitt: One example comes to mind from our ethics unit, during the heat of the #MeToo movement. The kids kept tapping back into these fallen heroes; it was kind of like, “all roads lead back to the #MeToo movement.” As they continued to bring this topic up, there was some tension between a couple of the male students and some of the females, particularly in that some of the gentleman did not understand why rape jokes weren’t okay.

Underlying this tension seemed to be that people made the assumption in the class that we were all speaking from the same place; that we all understood that making rape jokes was wrong, or especially in the time that we’re in, that it’s not cool. (I don’t even know what other time it would be okay, but who knows; the kids were having that discussion.) What ensued was a really uncomfortable time in the class where some friendships were actually tested, and I had to bring the wellness counselors in on the conversation. One student had been sexually assaulted in the past and was really upset by this and had gone to the counselors.

The result was that we didn’t have an intervention or anything like that, but it was a conversation that looped us back around to the idea of that worldview in a particular place, and that our own personal experiences lead us to particular ideas or beliefs. We all live in a particular context and so on. It is the sharpest kind of instance I’ve had where the idea of common ground was really fractured. And it wasn’t about politics—which I thought would happen more—but it was still an opportunity for people to make their assumptions more explicit and to actually try to define their worldview and where their beliefs were coming from, which is part of the work of this Theory of Knowledge class.

Lockhart: This is sort of a similar question; I wonder if you would say that changes in our current cultural and political climate, especially around misinformation, have had an impact on you, your work in the classroom, or in your workplace of high school in general?

Lopez-Schmitt: Certainly, it’s so weird. In class we talk some about historical moments, meaning the moments in our lives that we always remember—that change us. In my mind, I go to September 11<sup>th</sup>, whereas my mom felt that way when Kennedy was shot. Each generation seems to have such moments as touchstones. For me, I had never been an anxious person prior to September 11<sup>th</sup>, yet afterwards I became an anxious person. My anxieties are about safety; there’s a little bit of fear that runs in the back of me like a low hum all the time. And this does manifest itself in the classroom for me, almost like this kind of desperate need for me to make sure that my students don’t go out into the world lacking critical thinking skills. I don’t know if that is because that moment in history triggered me to become a better critical thinker, but I want to make sure that my students can go out there and be better thinkers, make better choices, be part of a political world, vote, and all those kinds of things.

As I’m thinking about that, I recall that it wasn’t long after 2001 that I got involved in ERWC (the



Expository Reading and Writing Curriculum; see essay by Shannon M. Pella, this volume). That led me to be able to actually articulate and teach what I meant by critical thinking skills—both to my own students and to fellow high school teachers around the state. That work has had an impact. But I think of the political climate that we’re in now, and fear is real again; it’s just this low hum of anxiety and teachers are going around making sure students are registered to vote and the like. All of us are doing that at our school.

What this brings up for me has to do with the issue of whether you call yourself a school with an IB program, or you call yourself an IB school. What is your focus? In this last year, I’ve started a revolution and said that IB is going to be the thing that is at the center of the school. The learner profile about creating students who are reflective, who are thinkers, who are curious—this is where we should move. Now I’m involved in professional development that’s changing what we do at my school and forcing critical thinking and being a principled person through inquiry—forcing that into the center of what we do. This political climate and my fears around disinformation and misinformation have definitely pushed me in this direction. It’s pushed me not just in the classroom, but it’s pushed me to become a leader on my campus to lead this charge.

Lockhart: I’m thinking about your desire for your students to be armed with critical thinking and how that might somehow keep them safe, or can ease their path or whatever it might be. If you are talking to other teachers about key practices, perspectives, or approaches that society members (formerly our students, now members of our democracy out in the world) need, what is on that list of things? What do you wish every teacher was working on to ensure what you are trying to ensure for your students?

Lopez-Schmitt: Explicit instruction in critical thinking skills. Analysis and evaluation. And also credibility tests, so to speak, of your sources of information. I think that to be reflective is also important: to go beyond the analysis and the evaluation of things, and be able to communicate what you’ve found and what you’re thinking, but also to be able to stop somewhere along the way, step back, and reflect on how you got there. What are the impacts of those actions? And of that thinking; what are the implications? What could this mean for you in a different context? I think that if we can practice this kind of thinking with our kids, we are going to have kids who are “safe” in that regard.

Lockhart: Are these skills or practices different than what we’ve taught in past years? Are they the same? Is there a different intensity or different level of depth that’s needed?

Lopez-Schmitt: I think it’s just a reorganizing that needs to happen. Like this revolution with IB that we’re doing at my school—none of it is new; it’s not different. We’re not bringing all these new strategies into play, or anything like that; what we’re really asking teachers to do is to create a focus that allows students to see exactly not only what they’re being taught, but *how* they’re being asked to acquire that information. In making that explicit, I go back to my colleague in ERWC, Nelson Graff,

and the idea of transfer: that I want students to know how they learned what they learned and how they can use their knowledge elsewhere.

Lockhart: Let's end with pedagogy. Can you give college teachers, or perhaps other literacy workers reading this, an example of an IB or Theory of Knowledge project that exemplifies the skills and strategies that you're hoping students leave that program with?

Lopez-Schmitt: We have two assessments in the Theory of Knowledge course. One is a presentation where the students are asked to take a real-life situation and develop what it called a knowledge question. The purpose is for students to do some research combining not only their academic experience and the academic experience of others, but also their personal experience. They pull that all together to answer their question, but then they also take that thinking and reapply it to other real-life situations. Where else might similar patterns or strategies play out?

Students will ask questions like: To what extent does culture affect the way we interact with people of a different age, particularly those much older than us? The project requires that students both contextualize something—so they've got this real-life situation that's happening in this particular context—as well as decontextualize it. They have to step away from it to consider the knowledge that underlies the situation. Yeah, it's fun. It's hard for them.

Lockhart: Are there any last things that you want to say? Any advice to other teachers or college teachers that you would like to offer?

Lopez-Schmitt: I don't have any particular advice, but I guess I'd say that we at the high school level are working hard on these issues. I think the last few years have given us a better grasp of what the needs are so that we can identify what we need to work on with students. Even twenty years in to my teaching career, I'm hopeful. That's what starting a revolution is about.