A NEW MIND FOR THE NEW MILLENNIUM

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Presented by the Illinois Mathematics and Science Academy
and the 21st Century Learning Initiative at the State of the World Forum,
October 3, 1999.

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INTRODUCTION

by Dr. Stephanie Pace Marshall President, the Illinois Mathematics and Science Academy

When Dr. Jim Garrison, President of the State of the World Forum, first asked John Abbott and I to present a plenary session on Learning in the 21st Century, we were quite excited. Having spent all of our adult lives as teachers and administrators working relentlessly to transform the current paradigm of teaching and learning into one that truly liberates the goodness and genius of all learners, we knew we had serious and important research, information, and perspectives to share. However, once we formally began to prepare our comments, we soon realized that prepared speeches, brief panel presentations, and Q and A's could not capture the essence nor the complexity of our arguments. So we decided on a different medium, one more suitable to perturbing the intellect, capturing the imagination, and awakening the spirit.

The play we are inviting you into challenges the beliefs, assumptions, principles, and structures of schooling as we currently know it and offers a different view for educating the minds, hearts, and souls of our children in the next century. Our play will hopefully "expose" a number of perplexing and disquieting consequences of schooling.

But the message that we want you to hear is that in our view, the fundamental purpose of education is not to credential vocational knowledge and skills but to create young people who can think deeply and integratively about the essential questions of human experience. When schools create conditions that enable this mind to emerge, we liberate the goodness and genius of all children and we invite the power and creativity of the human spirit to serve the world -- this is the work of education. Public education cannot be isolated from the needs of human experience. And it cannot serve future generations unless the kind of "mind" we nurture develops our capacity to become more fully human and sees as its work the creation of a compassionate and sustainable world that works for everyone. Devoid of this sustaining human context, public education cannot serve the public good.

We believe it is our work, as "prophets and pioneers," to create a generative paradigm of learning that invites not only the fullness of our students' intellects, but the fullness of their imaginations and the fullness of their spirits. It is also our belief that the current structures of schooling, grounded in false and disabling assumptions of human learning, are not capable of re-igniting the power, courage, and imagination of children *for the world*. They are not big enough to enable children to respond to their real questions about life and they are not spirit-ful enough to enable children to see how they "belong" to the world and one another.

While this may seem disheartening at first, the hopeful story is that together we can imagine, create, and then live into a new and more generative paradigm of learning, a story that enables us to create vibrant, dynamic, and soulful learning communities that honor and celebrate the breadth, color, and texture of every child's life and that reconnect us and our children to what we have lost.

And what have we and our children lost that must be regained through a new paradigm of learning? Here's what I think:

- The appreciation and understanding of context;
- The acquisition of wisdom and the power of discernment;
- Compassionate use of knowledge;
- Integrative ways of knowing and sensing;
- Concern for human and community prosperity and moral action in the world;
- Commitment to ecological sustainability and the acceptance of nature as a sacred dimension of our lives;
- Willingness to engage slowly, around issues of long-term consequence;
- Deep awareness of and appreciation for our connection to the Web of Life; and
- The understanding that deep learning comes slowly, through the construction of meaning, the recognition of patterns, the creations of relationships, and the deep study of essential questions.

It is these attributes of a generative learning paradigm that create a framework for a new epistemology, a new pedagogy, and a new learning community -- all of which offer us the possibility to invite the creation of a "new global mind," a mind capable of imagining and creating a compassionate and sustainable world that works for everyone.

Poised at the juncture of the new millennium, we confront two life-defining challenges:

- How to solve the deeply human problems facing us as a global civilization, problems for which our current system of education does not provide adequate context, vibrancy, practice, or affirmation;
- And how to create learning conditions that liberate the goodness and genius of all children for the world.

The promise of this time in human evolution is that by unleashing the unprecedented capacity and power of the human mind and spirit for the world, we set in motion the possibility of creating a world that works for everyone.

"What will you teach your children?" Chief Seattle asks us.

"Will you teach them what we have taught ours?

"Will you teach them that the earth is our mother, that what befalls the earth, befalls the sons of the earth. That the earth does not belong to man, but man belongs to the earth. That all things are connected. That man did not weave the web of life but is merely a strand in it. And that what he does to the web he does to himself."

These truths created a powerful field for Native American beliefs and stories. We, too, have created a powerful field of beliefs and assumptions but they are profoundly different, and when manifest in schools they create conditions that inhibit deep understanding, integrative ways of knowing, and the relevance, power, and place of the human spirit in learning.

What are the beliefs and assumptions that we have put forward for our children's learning in school? What are the lessons we are teaching them? Here's what I think they are:

- Emotion, passion, and the spiritful dimensions of who we are -- such as wonder, awe, amazement, and joy -- are not welcome in school, because they are detractors to rigorous scholarship.
- Schooling is to be endured as a necessary "rite of passage" -- but it is not where deep learning and inquiry occurs.
- Passionate personal inquiry and the pursuit of questions that truly matter are interferences or threats to the prescribed time allocation or content to be covered.
- Only that which can be quantitatively and simply measured is true knowledge.
- Cleverness, not wisdom, is the appropriate aim of learning.
- There is no subjective relationship between the knower and the known (serious knowledge if disembodied from the learner).

• What happens in school is totally unrelated to what happens in life.

Seemingly obsessed with what could be tangibly and precisely counted and efficiently measured, we produced learning disable and anorexic institutions that inhibit integrative learning, distort the learner's identity and competence as a learner, and discourage inventiveness, inquiry, and complex cognition.

It is clear that the current story of learning which is grounded in false and disabling assumptions about intelligence potential, community, and the human mind is casting a malignant shadow over the human spirit. In honoring only the objective, the analytic, the algorithmic, the predictable, and the experimental ways of knowing, we have ignored and demeaned the deeply integrative, creative, adaptive, imaginative, evolving, and dynamic patterns of life itself. We must reconnect to the most sacred truths held by indigenous people: "All is One!"

The German poet Schöpenhauer captures our taks exquisitely: "Our task is not so much to see what no one yet has seen but to think what nobody yet has thought about that which everybody sees."

Thank you, and enjoy the play.

Stephanie Pace Marshall, PhD October 3, 1999

CAST OF CHARACTERS

TEACHER - mid-forties. Male. A good man and an honest one who knows the good of his system and continues to believe in it. But he is intelligent and judicious enough that he is still ultimately able to recognize its flaws.

PROSECUTOR - early thirties. Asian Female. Occasionally harsh, but fair and sympathetic. The voice and the catalyst for change.

TED MUIR - late twenties. Male. Confused, angry, and very bitter. He touches us -- and the Teacher -- because we can still see signs of the decent and sensitive young man he used to be, and which still makes occasional bids for control of his personality.

KERRY MORRIS - late twenties. Female. Smart, professional, and shallow.

DENIS DIDEROT -- The thought of Denis Diderot (1713-1784) typifies the rationalism and intellectual optimism of the European Enlightenment. As editor of *L'Encyclopédie*, he worked to organize the rational knowledge of humanity; as a defender of deism and atheism, he was deeply suspicious of established spiritual authority. His work had a significant impact on the revolutionary movements of the late 18th Century.

THOMAS GRADGRIND, SR. - One of Dickens' greatest characters, from one of his finest novels (*Hard Times*, 1854). The name Gradgrind has come to exemplify the potential evils of pragmatism and rationality unchecked by warmth and compassion -- much as the name Scrooge has come to stand for all that is mean and selfish and miserly. He teaches his children, Tom and Louisa, to suppress their imaginations and embrace only cold facts -- and in the process secures the downfalls of both. In the end it is the heartless crimes of his son and the soulful despair of his daughter -- and his realization that he shares some blame for both -- that lead him ultimately to some hope of redemption.

LOUISA GRADGRIND - a cameo role, but one which must make an indelible impression. She speaks most eloquently as a victim of the sort of age-old system the Prosecutor is trying to change.

BANK OFFICIAL - fifties. Male. A pretty typical financial bureaucrat.

NOTES ON PRODUCTION

We open with a series of recent news clips, centering on the financial crises in East and Southeast Asia in the late 1990's. We will place particular emphasis on two events: the arrest of Nicholas Leeson (and the fall of Barings) and the Indonesian monetary crisis and riots in the summer of 1998. It is important to emphasize that such footage will be recognized by the

audience; it sets the stage for the first scene but is not intended to be an illustration of the events of that scene.

The screen goes black, then indicates the first date below (ideally, we would have a screen on the stage that can be retracted). A series of VOX news reports begins; at least three different voices (two female, one male). While each individual segment is distinguishable, the end of each should fade into the beginning of the next. The dates are not read, but advance on the screen. In addition, a sound effects track must accompany the reports.

The play should move with the logic and fluidity of a dream; transitions should be accomplished through lighting alone and not the movement of set pieces. The setting should be abstract and minimal. The opening sequence is a multimedia montage, a collage of sounds and images that presents its information clearly and economically; from there the pace becomes more deliberate and contemplative, punctuated by moments of angry confrontation and ironic humor. The play is a polemic, but still a PLAY -- the characters should be embodied with as much reality and honesty as can be found in them. On the other hand, production techniques derived from agitprop or Brechtian traditions are not inappropriate. Literary and historical figures like Diderot and Gradgrind should be costumed in their particular periods.

The central characters are the Teacher and the Prosecutor: their relationship is perhaps best described as antagonistic without being adversarial; they are not enemies, and they each must ultimately come to see the value of the other's argument. It is also imperative that each be profoundly sympathetic. And while they are both symbols, they should not be ciphers. Their considerable individual intellects must be respected, but so must their capacity for deep feeling. The emotional force of the piece may be muted, but it is genuine and must be played honestly. As a general rule, the simplest approach will be the most effective.

SCENE 1: THE CRIME

A blank screen, upon which appears a date:

OCTOBER 15, 1999

Then, in the darkness:

VOICE 1

Some instability in Asian markets today; major Asian currencies suffered significant losses. The governments of Indonesia, Thailand, South Korea, and Malaysia have all taken steps to defend their currencies, but speculation continues....

Another legend, and another voice:

OCTOBER 17, 1999

VOICE 2

More financial trouble in East and Southeast Asia; skittish investors, alarmed over recent losses, have begun to flee the economies in the region. American, European, and Japanese central banks have joined regional governments in their efforts to intervene. IMF Officials fear that the region's recovery of the last year may be threatened....

The presentation continues in this fashion:

OCTOBER 20, 1999

VOICE 3

A deepening of the new Asian financial crisis; foreign investment capital continues to flow out of the region; currency devaluation and significant industrial disruption may result. In addition, rumors of illicit currency speculation have prompted international trading institutions to investigate....

The lights come up onstage as the segment fades into the next to reveal the TEACHER sitting in an armchair watching a television set and reacting to the above broadcasts. He will continue to react through the next broadcast:

OCTOBER 24, 1999

VOICE 2

New developments in the Asian financial crisis; investors have uncovered evidence of unauthorized predatory trading carried out on a massive scale by employees of several prominent international investment firms. In addition, charges of attempted bribery of regional financial officials have surfaced and....

OCTOBER 29, 1999

VOICE 1

The government of Australia shocked the world today by agreeing to the extradition to Singapore of Mr. Theodore Muir and Ms. Kerry Morris, American citizens and international currency traders.

The TEACHER in his armchair reacts with shock.

VOICE 1

Mr. Muir and Ms. Morris have been implicated in the recent Asian financial scandal; they are two of eighteen figures accused of conspiracy and unauthorized trading. While the other figures implicated in the scandal have been charged in their home countries, Mr. Muir and Ms. Morris were apprehended in Sydney by Australian authorities after fleeing arrest in Kuala Lumpur, the Malaysian capital, on additional charges of attempted bribery of state officials. The United States government has filed a protest at the extradition proceedings.

VOICE 2

Some background on the extradited American nationals: Theodore Muir and Kerry Morris are both residents of New York City; both were raised and educated in Park Ridge, Illinois, and attended Yale University. Mr. Muir and Ms. Morris are traders with the New York firm of Street, Johnson, and Mooney, but that firm has denied any knowledge of their actions in this affair and made it clear that these actions were unauthorized. While the two have not yet been made available to the media for questioning, Mr. Muir did respond briefly to a shouted inquiry about his motivations:

TED and KERRY are seen being escorted to an airplane by authorities.

TED

...No, I don't feel that I've done anything wrong. I gambled and I lost...

The News Report fades into a muffled background buzz as the TEACHER rises, eyes on the TV screen, which now shows the PROSECUTOR:

PROSECUTOR

(to reporters)

Mr. Muir and Ms. Morris will be prosecuted to the fullest extent of the laws of Singapore.

TEACHER

What a waste. What a damned waste!

Fade to black.

[END SCENE 1]

SCENE 2: THE DREAM

The TEACHER stands there for a moment, then addresses the house.

TEACHER

How could this have happened?

(beat)

We had such high hopes. Such honorable intentions. We thought we could dream a future that was as noble and bright as our hopes for it. We were captivated by our own potential as educators, by all those young faces looking to us with such wonder and curiosity. They wanted our wisdom. They wanted to be taught. And we knew just what to teach them.

(beat)

Yes, we said. We had the knowledge, the power. We even had the will. We were going to change the world, make it better, make it... WORK.

(beat)

How could this have happened?

The PROSECUTOR appears near the end of the speech, just a little upstage.

PROSECUTOR

Don't overdramatize.

TEACHER

But it's such a waste.

PROSECUTOR

Yes.... It is.

TEACHER

And I feel like it's my responsibility.

PROSECUTOR

To a point.

TEACHER

I had a duty. An obligation.

PROSECUTOR

Undoubtedly.

TEACHER

I feel like I've failed.

PROSECUTOR

Did you? I'm not so sure. You may have succeeded a little too well. It depends on your intentions -- what were you trying to do?

TEACHER

I'm a good teacher. I really am.

PROSECUTOR

Oh, I'm sure. I'm certain that you've always accomplished exactly what you set out to do.

TEACHER

This thing that's happened.... It seems like everything's different.

PROSECUTOR

(sarcastically)

Things change. It was what you wanted. Wasn't it? Your students are famous and accomplished!

TEACHER

This wasn't the way they were supposed to do it.

PROSECUTOR

Well YOU didn't hurt anybody, did you?

TEACHER

Then why do I feel so guilty?

PROSECUTOR

(beat)

Ah. Guilt. That's a different matter. And, as it happens, one with which I am not entirely unacquainted.

TEACHER

Have you come here to accuse me, then?

PROSECUTOR

No. I'm here to help you do it.

TEACHER

(aware of the absurdity of the situation)

How did you get here anyway? What's going on?

PROSECUTOR

(a shrug, perhaps a slight smile)

It's your fantasy. You tell me.

TEACHER

That's not fair.

PROSECUTOR

Well, whether you believe it or not, I actually am here to help you.

TEACHER

This is all so crazy -- I'm talking to an image from a television screen.

PROSECUTOR

You're listening to a viewpoint you need to hear, regardless of its source. When was the last time you ever consciously questioned your assumptions about learning and teaching, about the way you have been trained to teach? Has it ever occurred to you that things must change, that the world now requires a new system of education?

TEACHER

Change what? Who the hell are you to challenge what I do?

PROSECUTOR

You're the one who called me -- why don't you tell me? You said before that you felt guilty. I'm here to determine just how guilty you actually are. Think of me as Jiminy Cricket.

TEACHER

(sarcastically)

My conscience?

PROSECUTOR

In a manner of speaking. Let's just say that I'm a blend of your personal doubts and some perspectives that may be new to you. However, there are others who, like you, believe that you and the educational system you represent share some complicity in what's happening right now, Out There. People who would like to see you and your system held accountable. I also represent their interests.

TEACHER

That's unjust -- I'm not responsible for the actions of other individuals, and it took a lot more than school to ruin those kids.

PROSECUTOR

(dismissive)

Justice is a relative term. They were, after all, your students. And you yourself have stated that you feel responsible, even guilty. You and the system, the educational culture you represent, have maintained a community of belief that has damaged MY community, my country, my world. By consistently fostering the pursuit of individual goals, intellectual or material, without consideration of the larger consequences, that community of belief has done great harm. And MY community demands JUSTICE.

TEACHER

So you're putting my profession on trial, and I'm to represent not only myself but all educators? That's a witch-hunt.

PROSECUTOR

No, not a witch-hunt. Retribution on behalf of the community. The WORLD community.

TEACHER

Don't you think that it's a little arrogant to attack a system that has been developing over hundreds of years, that has its roots in some of the oldest and most venerated philosophies and ideologies of Western Civilization?

PROSECUTOR

I think that those "venerated ideologies," as you put it, need to be re-examined. Deep down, you think so too. After all, whose conscience are we rummaging around in, anyway?

TEACHER

But I am only myself! I can speak only for myself. I will not do so for my entire profession. And I will not even attempt to justify the educational paradigm of which I am both a product and a proponent.

PROSECUTOR

Then you have done my work for me. By refusing to justify your assumptions, you help to invalidate them.

TEACHER

This is unbelievable.

PROSECUTOR

Believe it.

(stepping downstage to address the audience)

We are here to expose a crime. I say expose because it is an insidious crime, one with which you are, most probably, unfamiliar. It is a crime like a disease, like an infection that does not kill quickly, but, instead, lingers, sapping strength and passion and spirit. It is a crime that has accomplished a great deal while it has done its damage quietly, going virtually unnoticed by the vast majority of people who have been, ironically, among those most hurt by it. Worse, it is a crime that has been quietly sanctioned and even openly championed by the very people who have the power -- indeed, some would say the obligation -- to change it, because of its great accomplishments. Western education has achieved a great deal, but students -- and the world -have paid a great price for that achievement. By celebrating rational analysis over all else, the western approach to education has emulated, and supported, a scientific world view that has clearly yielded great fruit. However, in doing so, that educational philosophy has neglected the intuitive aspects of humanity -- the wondrous, the aesthetic, the moral, the ethical. By emphasizing the discreteness and separateness of disciplines, the western approach to education has ordered knowledge and prepared students to participate in a productive, ordered, industrial society. However, in doing so, it has fragmented human thought and impaired students' ability to view their ideas -- and their actions -- in broad human or global contexts. Finally, by emphasizing competition and individual achievement, the western approach to education has produced enterprising, successful human beings. However, in doing so, it has helped to create a dominant culture in which the blind pursuit of individual success and individual wealth is glorified at the expense of the human community and the natural world.

(to the TEACHER)

I'm finished, for the moment.

TEACHER

Is it my turn?

PROSECUTOR

Go ahead.

TEACHER

(haltingly at first, to the audience)

I... don't know where to start. I don't know what to say. Which I must confess is unusual for me. I always thought I was at my best at the front of the class. Telling kids the truth, giving them something they can use, getting them ready to go -- out THERE. Do you think that's easy, getting them ready for the world? I don't know anymore. The point is, I'm a teacher. It's all I've ever been, all I really know how to do. I'm not a lawyer -- speaking of professions that need to go on trial -- and I don't know how to talk to you like one. I'm not sure I want to anyway. And I'm certainly not qualified to stand in solitary defense of my profession, which I always believed was an honorable and even a noble one.

(beat)

But now, they're saying that students have been robbed of something essential. That in seeking to develop individual achievement, we have unwittingly done harm to the very children we were charged with protecting and preparing, not to mention harming the world itself. But I'll tell you

truly: I don't believe it. I cannot and will not speak to the intentions of others, but I can tell you that I never meant to hurt anyone, and that my efforts, PROPERLY RECEIVED, could not have. Furthermore, regardless of how my teaching was received, I am not responsible for the actions of others. In the end, I stand on the rights of the individual -- to speak his mind, and to make his or her own choices

(beat)

I was a good teacher. And not just because I was smart and knew my material. I liked my kids -- even loved some of them. And they learned from me, I know they did. They left my classroom a little better equipped to survive in the world. It's the only gift I had to give them.

(beat)

And now, two of them have gone out and done something stupid. Something harmful and selfish and greedy and stupid. And no one is sorrier for that than I am. But I never told them to do it. *He stops, as though unsure of how to continue. There is brief pause.*

PROSECUTOR

Are you finished?

TEACHER

I think so. Why?

PROSECUTOR

I want to react to your little lecture.

TEACHER

Excuse me. Opening statement.

PROSECUTOR

Have it your way. But I'm curious: why do you do what you do in the classroom?

TEACHER

For the kids. To get them ready. For life.

PROSECUTOR

(sarcastic)

Life? The details of the Treaty of Westphalia? The intimate lives of sporophytes and gametophytes? Class rankings? How often do those come up in YOUR life? How about some REAL problems, problems that involve real people?

TEACHER

You're missing the point. Those are only details. The whole thing works when you put it all together. It's about teaching kids to command knowledge, to compete in a competitive world.

PROSECUTOR

Yes, it does work. It provides a useful way of ranking kids in some perverse order. Has it ever occurred to you to ask just what you were really preparing them for? Are you preparing them or packaging them? Do you want them only to be useful to someone -- or someTHING -- else, or do you want them also to think for themselves? Have you ever tried to teach them to cooperate in a COLLABORATIVE world? To become stewards rather than opportunists?

The teacher stares at her silently for a moment. BLACKOUT.

[END SCENE 2]

SCENE 3: THE TRIAL

We join the trial of KERRY MORRIS in Singapore, already in progress. A prominent Asian financier is on the witness stand, confronted by the PROSECUTOR. The TEACHER stands across the stage, watching as if on television.

PROSECUTOR

And who approached you first?

BANK OFFICIAL

Kerry Morris. She came to me at a social event in the Japanese Embassy and told me that she and her associates wished to include me in an enterprise.

PROSECUTOR

And your response?

BANK OFFICIAL

I explained that since I was an official of the Central Bank, with influence on monetary policy, I was not free to engage in any investments.

PROSECUTOR

Did you express any interest in the scheme?

BANK OFFICIAL

Not at first, no. I held to my convictions.

PROSECUTOR

(acidly)

When did your "convictions" give way?

BANK OFFICIAL

They told me that the attack on the currency would take place regardless of my actions -- they said that I would be ruined either way -- my only hope would be to join them. They promised me a large sum and a safe haven.

TEACHER

(watching; to himself)

I don't believe this is happening. A whole country! How could they be so foolish, so greedy? On the other hand, they certainly thought BIG.

PROSECUTOR

(behind him)

Oh, yes -- they are the epitome of daring and boldness -- heroes.

TEACHER

I didn't say that.

PROSECUTOR

As long as you are so proud of them, I've got one with me.

She indicates KERRY, on the "stand". The TEACHER takes a moment to absorb the fact of his wayward student's presence; then he approaches her, thoughtfully, and dives right in.

TEACHER

I don't understand. How could you do this? With your education and your background, how could you get mixed up in this competitive, destructive, self-serving --

KERRY

What, are you kidding? This is entirely consistent with my education. It fits in with everything I've ever been taught.

TEACHER

No. You're deliberately misinterpreting. You were taught in some of the best schools in the country, and you had chances that most people would give their lives for. You were exposed to all the grandeur of the Western tradition, and some of it should've rubbed off -- you should have acted with a little altruism, a little... enlightenment.

KERRY

That was never the point of my education.

TEACHER

I don't understand. You guys were so smart. We taught you so much.

KERRY

Yes, you did. It worked. I was a winner through the whole thing: college, GMAT's, Grad School. I led the pack the whole way and came out on top.

TEACHER

What are you talking about? Winning is not the point. Don't turn this into a race. I'm talking about being part of a grand tradition. What are you talking about?

PROSECUTOR

(to the TEACHER)

She's talking about class ranks, the Treaty of Westphalia, sporophytes and gametophytes. She's talking about commanding facts, memorization, and grade-point averages. She's talking about what your system taught her -- and DIDN'T teach her.

TEACHER

I didn't teach her to be corrupt.

PROSECUTOR

No. But there are corrupt people in the world. And her whole education aimed at teaching her to beat those people in their own game, to measure herself by the very standards they use to win. During this exchange, KERRY silently departs the stage and is replaced by TED, her male counterpart. The TEACHER's attention is focused on the PROSECUTOR and so he does not notice.

TEACHER

That is the most ridiculous, grandiose statement I have ever heard. How can you generalize about a whole system of education? Just because one bright student WENT astray doesn't mean she was LED astray. You're blaming a system for the flaws of an individual.

PROSECUTOR

What if the system nurtures those flaws? What if the system unconsciously -- but insidiously -- fosters a destructive level of competition and a lack of concern for the wider consequences of one's own "success"? What if the system actually denigrates the kind of thinking that might mitigate such corruption?

TEACHER

I don't think that any teacher would do such a thing.

PROSECUTOR

Really? You might be surprised....

(beat; pointing at TED)

I assume that you know each other.

TEACHER

Very well. I think I know Ted better than any student I have ever taught. That's why I can't figure out how he could get involved in something like this.

TED

(coldly)

Oh, please. Spare me. You saw a hundred of us every day. You didn't really know any of us.

TEACHER

How can you say that? We talked for hours -- about everything.

TED

No -- YOU talked for hours -- about how I should think and make sense of my life. You never saw me as anything but another malleable little mind you could recast in your own image. Was I ever anything more to you than another willing receptacle for all the wisdom and knowledge you could pour into me? And when I had an idea of my own that didn't quite fit into your grand synthesis, you bent over backwards to show me why it was useless. You never gave me a chance to figure out how I fit into what you were telling me.

TEACHER

(beat)

Is that really what you think?

TED

Am I wrong?

TEACHER

Yes! I tried to inform you, to show you how you fit into something greater than yourself. It was never about me or my image. And now you're telling me that everything I stood for, everything I thought I was doing, was an exercise in control.

TED

Hey, don't take it too hard. You've been controlled as much as the rest of us.

TEACHER

And why should I believe you? Why should I accept that what you say is in any way right or true?

TED

Because I am a product of the system of education that you represent and that you are defending. TEACHER

Oh? And could you please enlighten me as to how your education is responsible for your own unethical -- no, wait -- criminal behavior?

TED

Hey, don't rehearse your sarcasm on me, all right? I'm not the one tormenting myself with guilt over this.

TEACHER

(angry)

Fine. But I'm not the one who helped sabotage the economies of half a dozen countries. YOU did that, and no one made you.

TED

Just trying to come out on top. After all, we certainly "thought big."

TEACHER

No. I won't allow that. It's too easy. You end up on trial, but it's not really your fault because we once pushed you to achieve a standard? That's pure grade-A nonsense and you know it.

TED

Oh, so you have no part in it at all, right? Look, do you think I'm here because I just can't get enough of your sterling company? Let me tell you something, I've got plenty going on in my life right now without putting myself through the added headache of answering to your insecurities.

TEACHER

Then why are you here?

PROSECUTOR

Because somebody needs to make you see the flaws in your assumptions, the assumptions you passed on to your students. And because I don't think you'll be able to see them on your own. The thing is, you need to consider the consequences of what you teach and the way you teach it.

(to TED)

Were you aware of the human suffering that might take place because of your actions?

TED

Honestly, I never really thought about it. I know it's a cliché, but it was like a game, it was business. We concentrated on the numbers. We didn't think we would hurt anybody; at least no one outside the financial community.

PROSECUTOR

(to the TEACHER)

You accuse him of unethical and criminal behavior, but did you ever teach him to connect abstract ideas and concrete realities? Ever confront him with a real ethical problem or engage him on a moral level?

TEACHER

I thought I did.

TED

Oh, come on. How many times did you tell me that personal belief had to remain personal, and had no place in a public rational discussion? That mind was separate from soul? Did you ever let us know that part of learning was recognizing the HUMAN mystery of it?

TEACHER

(honestly considering)

I never thought about it in those terms.

TED

Was it ever presented to YOU in those terms?

The TEACHER has no response for this, and so he simply looks back at his student, caught between concern and confusion.

TED

(to the PROSECUTOR)

Are you finished with me?

The PROSECUTOR nods, and TED gets up quietly and walks away. The TEACHER doesn't notice, lost in his own slow realization:

TEACHER

I'm afraid that I really injured that kid.

VOICE

Don't you think you're going a little far there?

TEACHER

What was that?

VOICE

I mean, turning your back on all that you prize. All that you know. Do you want to surrender because of a financial scandal and some nonsense about soul?

TEACHER

(a little peevish)

Who are you?

(looking around)

WHERE are you? Why won't anyone let me get some sleep tonight?

DIDEROT

(emerging)

You SHOULD know me. I stand for all that you treasure -- reason, analysis, the ordering of knowledge. Not to mention the fact that you wrote your thesis about me -- a fascinating work -- personally, I LOVED it.

TEACHER

Denis Diderot.

(to the PROSECUTOR)

That's it -- I'm leaving.

(pause for a laugh)

At least you and the other two are still alive. Now I'm conversing with eighteenth-century scholars in the flesh.

DIDEROT

Hardly. In fact, I am no more solid than Little Miss Guilt-Trip over there.

(indicating the PROSECUTOR)

Let's just say that I represent a part of your mind that wants to speak its piece in these proceedings. Tell me, has it occurred to you that you are defending yourself when you have done nothing that needs defending?

PROSECUTOR

Wait a second. Haven't you been listening? Haven't you heard what his students did? What he told them?

DIDEROT

Yes, I heard. He taught a seventeen-year-old the power of his rational mind. He taught him that his beliefs, however pleasant, did not constrain other people with different beliefs. He taught him that in a public intellectual or political forum, the only arguments that hold weight are those that may be tested. He taught him the basis of TOLERANCE, of JUSTICE.

PROSECUTOR

(loudly)

Justice? Beat your opponents? Claw your way to the top? Exploit what you can?

DIDEROT

(cutting her off)

He didn't teach them that. I'll be the first one to admit that rationalism can be a powerful tool in the pursuit of avarice -- in the pursuit of a whole range of evils. But that does not change the essential merit of all that he values -- and that I and my colleagues worked for. And avarice, I believe, pre-dates us.

PROSECUTOR

And avarice can only be controlled when people recognize the worth of community. When educators teach values as well as facts and methods.

DIDEROT

(violently)

Whose values? YOURS?

(slight beat)

If you want to stress community, fine -- PROVE YOUR POINT. But don't you dare tell me that your argument is based on the values we all share -- because the devil is in the details. We all value life -- but they execute criminals in America. We all value equality -- but they don't educate women in half the world. We all value the beauty of nature -- but the whole world falls over itself to exploit it. Tell me, who exactly shares these "values" you speak of? Where do they come from? How will you enforce them?

PROSECUTOR

So we should give up? Forget it? Okay, kids, do what you want -- Mr. Diderot denies the existence of ethics and morality.

DIDEROT

I do not deny their existence -- I question your basis for identifying them. God, Scripture, the Everywhere Spirit, the unity of the human heart -- it's all smoke and mirrors, all an excuse for that disgusting human urge, "Be like me." Forge a consensus and I will listen. Until then, don't waste my time with belief.

(turning toward the audience)

I've seen it. I've seen the prisons. I've seen the books burned, the presses smashed, the speakers silenced. I've seen the results of the unexamined TRUTHS.

(he underlines the word sarcastically)

They obscure light, and they fetter the individual mind.

PROSECUTOR

Ah -- the sacred individual -- free to destroy an economy!

DIDEROT

(pointedly, to the PROSECUTOR)

Ah -- the community -- free to flog a teenager for spray-painting a car! He storms out; the PROSECUTOR watches him go, mouth hanging open. The TEACHER is thoughtful.

TEACHER

Well, that was illuminating. I'm glad someone else spoke up for my profession.

PROSECUTOR

Be careful, Professor. Don't assume that this case has been closed because of a forceful personality and a facile argument.

TEACHER

But it isn't facile. He has a point. Diderot, I mean. Forget for the moment my own personal feelings about the man and his ideas, we're talking about a system that has endured for centuries, a system that has done it's job and done it well. I mean, you had me, back there with Ted. HE had me. I was all ready to concede everything to you. Now I wonder. Maybe our methods were perfectly sound all along -- after all, it's only through reason that one can avoid bigotry.

PROSECUTOR

I think you'll find that attitude can be very destructive. There's someone else I would like you to confront.

TEACHER

Oh, not another one. I feel like Ebenezer Scrooge or something. I mean, which Spirit do I have to face next? If you really want to help me, why don't you just leave me alone and let me get some sleep?

PROSECUTOR

I must admit that your Mr. Diderot is quite a powerful witness. And I'm distressed by your reaction to him. I had thought we were making some progress with you, but it's now clear to me that I've been handling you too gently, too sympathetically. You must understand the facts of this case, sir. And you will. Your learned Dickens reference a moment ago is extremely appropriate. I'd like to introduce you to Mr. Thomas Gradgrind, Senior.

The TEACHER takes a moment to absorb this, as GRADGRIND himself enters the courtroom; in Hard Times, Dickens describes him as a man with "a square wall of a forehead, which had his eyebrows for its base, while his eyes found commodious cellarage in two dark caves, overshadowed by the wall. The emphasis was helped by [his] mouth, which was wide, thin, and hard set. The emphasis was helped by [his] voice, which was inflexible, dry, and dictatorial. The emphasis was helped by [his] hair, which bristled on the skirts of his bald head, a plantation of firs to keep the wind from its shining surface, if the head had scarcely warehouse-room for the hard facts stored inside. [His] obstinate carriage, square coat, square legs, square shoulders—nay, his very neckcloth, trained to take him by the throat with an unaccomodating grasp, like a stubborn fact, as it was—all helped the emphasis.". He enters and sits in the witness stand, where he looks at the PROSECUTOR expectantly. The TEACHER watches this in disbelief. It only takes a moment for him to react.

TEACHER

You can't do that!

PROSECUTOR (defiant)

Why not?

TEACHER

Why not? He doesn't even exist! Besides, he's unreliable. He's a caricature.

PROSECUTOR

I can do anything I want -- dead philosophers, fictional characters. This is a dream. And as for being reliable, your Mr. Diderot was SUCH a paragon of impartiality.

TEACHER

Hey, look, don't try to impress me with your semantic circus stunts. You know exactly what I mean.

(pointing at GRADGRIND)

That man is not a real person. He's a fictional character. What do you think, I never read HARD TIMES before?

PROSECUTOR

That's the point. I pulled him out of YOUR head.

TEACHER

Well, you can just send him right back in again, because I'll be damned if I'm going to let you cloud my mind with this kind of --

PROSECUTOR

This kind of what? Why are you so threatened by him? Are you doubting yourself again? Are you afraid he might actually have something useful to contribute? Or are you afraid that his testimony might actually serve to discredit that of your sublime Monsieur Diderot?

(turning to GRADGRIND)

Mr. Gradgrind. What is your profession, please?

GRADGRIND

Schoolmaster.

PROSECUTOR

I see. And do you know why I called you here today?

GRADGRIND

You did not call me. HE did.

(indicating the TEACHER)

That is the actual fact of the matter.

PROSECUTOR

And you're a great believer in the facts, aren't you?

GRADGRIND

It is not a matter of belief, Madam. One does not "believe" in the facts; one simply accepts them.

PROSECUTOR

And this is the controlling principle of your life?

GRADGRIND

It is. You must understand: facts alone are what is wanted in life. Plant nothing else, and root out everything else. You can only form the minds of reasoning animals upon Facts: nothing else will ever be of any service to them.

PROSECUTOR

I see. And what is your relationship to Sissy Jupe?

GRADGRIND

You mean Cecilia

PROSECUTOR

(glancing at her notes)

She calls herself Sissy.

GRADGRIND

Preposterous. Sissy is not a name, as I informed her on the occasion of our first conversation. I instructed her then to refer to herself as Cecilia. If, since then, she has chosen to call herself something else, I have no knowledge of it.

PROSECUTOR

Fine. How did you come to know Cecilia Jupe?

GRADGRIND

She was a student in my school. The daughter of a circus performer, of which nothing further need be said here. When her father abandoned her, I took upon myself the responsibility of her upbringing and education.

PROSECUTOR

How did that work out?

GRADGRIND

In truth, it didn't.

PROSECUTOR

How do you mean?

GRADGRIND

She proved a disappointment. She had not acquired anything like the exact knowledge which I looked for. She was extremely deficient in her facts. Her acquaintance with figures was very limited. She was altogether backward and below the mark.

PROSECUTOR

In what way?

GRADGRIND

She was... a sensitive creature, with a distressing tendency toward the fanciful and even maudlin. On one occasion, in class, one of the teachers put forth the following question to her: "This schoolroom is an immense town, and in it there are a million inhabitants, and only five-and-twenty are starved to death in the streets in the course of a year; what is your remark on that proportion?"

PROSECUTOR

And what was her response?

GRADGRIND

She said that she thought it must be just as hard upon those who WERE starved, whether the others were a million or a million-million. Which was clearly wrong.

PROSECUTOR

Clearly. And so, for this sensitivity -- or inexactitude, if you prefer -- you dismissed her from your school.

GRADGRIND

Regrettably. There was no alternative.

PROSECUTOR

No alternative? She was beyond the power of your teaching? Is that what you're saying?

GRADGRIND

The damage caused by her early experiences was too pervasive.

PROSECUTOR

By which you mean the years she spent with her father in Mr. Sleary's circus. How had this damaged her?

GRADGRIND

It had created in her a reliance on the fanciful. The setting in which she was raised, with its clowns and acrobats and tricksters, was on its most basic level greatly opposed to the principles of fact and reason embraced and promoted by my system. So pervasive was this influence that none of my methods were able to reverse it.

PROSECUTOR

Was that also the case with your daughter Louisa?

GRADGRIND

Certainly not. Louisa learned well from my system. Her education was a complete success.

PROSECUTOR

Really? Then how do you account for what happened to her?

GRADGRIND

I don't know what you're talking about.

PROSECUTOR

You don't remember? Well, then, permit me to refresh your memory.

She gestures toward the back of the stage, and there appears LOUISA, wet from rain and wearing a long hooded cloak.

LOUISA

I curse the hour in which I was born to such a destiny.... How could you give me life, and take from me all the inappreciable things that raise it from the state of conscious death? Where are the graces of my soul? Where are the sentiments of my heart? What have you done, oh, Father, what have you done, with the garden that should have bloomed once, in this great wilderness here?

She strikes her chest with both hands, her face anguished, then vanishes into darkness. GRADGRIND and the TEACHER watch, wide-eyed.

PROSECUTOR (to GRADGRIND)

Do you remember now?

TEACHER

What exactly are you getting at with this?

PROSECUTOR

(to the TEACHER)

Don't you see what he did? What his "system" did? And to his own daughter?

TEACHER

I'm not sure I do.

PROSECUTOR

He built a clock.

TEACHER

I'm sorry?

PROSECUTOR

He lived in a universe that he and those who came before him viewed as a clock -- dead, precise, predictable -- each part distinct, separate and individual, touching other parts only when necessary. It was a mechanistic model, born of a mechanistic mindset -- to understand something you dissected it, took it apart, classified the components. And so it worked for its time. And prominent thinkers -- like our Mr. Diderot -- sought to apply that model to everything: the physical universe, human society, knowledge itself. A society composed of discrete individuals protected by individual rights and pursuing their own self-interest. Knowledge divided into discrete categories to be mastered individually. The human mind itself as primarily linear. But that worldview doesn't work anymore. Its very success demands a new perspective: the mechanical universe must make room for the subtleties of ecology.

GRADGRIND

Nonsense. Nothing is different.

PROSECUTOR

(to both of them)

Really? By looking at the world narrowly in terms of its components and your ability to understand and use them, you have failed to anticipate the large-scale consequences of your own actions. You harnessed the energy and the resources of the globe to produce incredible prosperity for some, but in the process you have threatened the environment itself. You used all the knowledge you had to try to feed a global population of three billion in the 1960's, only to produce a population of six billion in the 1990's. We must cease to think only in terms of individual opportunities and narrow goals; we must think in broad terms using all the varieties of human knowledge and human wisdom. Otherwise, we risk a world where the interests of a few will threaten millions.

GRADGRIND

I disagree. Whether you want to admit it or not, any system, a planet or a society, is merely a concatenation of individual parts. We may understand such a system by understanding those parts, and if any one of those parts stops working, the whole thing falls. I should think that fits in quite nicely with your notion of community.

PROSECUTOR

No. The parts help to make it work, but they are useful and valuable only insofar as they contribute to the smooth operation of the whole. I'm talking about a real community based on the interconnectedness of things and people. I'm talking about access to a kind of transcendence that your daughter was denied. You taught your students to command knowledge, to stand outside

and KNOW. I'm talking about allowing students to have a hand in creating their own knowledge, to be a part of what they know.

(to the TEACHER)

In the world you and he and your predecessors have made, your precious individual is in fact lost and unimportant. The community that I'm talking about is an expression of the individual spirit; it sets it free.

GRADGRIND

And what would you have us do with this system on which we have relied so heavily for so long? A system that has done so much to develop the potential of the human mind. Would you reject it entirely? With what would you replace it?

PROSECUTOR

No one here is suggesting that we abandon our old honored ways of thinking and knowing; only that we expand them to include others. Such an expansion could do even more to develop the mind's potential. The more we learn about the human brain, the more it becomes clear that learning is far more complex than previously imagined. The mind's incalculable capacity to gather and synthesize -- that is what we need to foster. The kind of learning that I propose is not just a matter of emphasizing community. It is an attempt to teach people in a way that proceeds from the mind's architecture of learning.

GRADGRIND

But by accepting such alternative ways of thinking, we effectively invalidate the systems we have developed and honored over a period of centuries.

PROSECUTOR

Well, I don't agree. But even so, why not, if those systems no longer fit the world they were designed to serve?

GRADGRIND

So the changes in world-view you are proposing would in fact be neither gentle nor comfortable, but actually cataclysmic. What you are calling for is not simply a reassessment, but a revolution.

PROSECUTOR

Something to rival the great intellectual and scientific revolutions fomented by Galileo and Locke and Newton and Darwin. Yes. And I ask again: why not?

GRADGRIND

And where are we to find these great minds, these new Newtons and Galileos?

PROSECUTOR

That's the point. We don't find them like diamonds in the mud. We create them -- or rather, we help them to create themselves.

GRADGRIND

Have you any conception of how terrifying such assertions are to most people?

PROSECUTOR

Radical change is always fearsome. Even when such change ultimately leads us to better and healthier and more enlightened ways of knowing.

GRADGRIND

But who are you to decide what those new ways will be?

PROSECUTOR

Who are you to insist that the old ways are good enough?

TEACHER

Wait a minute. She's right.

GRADGRIND

Excuse me?

TEACHER

Well, I've been listening to her, and I think she's right. Not that the old system has been a failure. I still believe in it -- it has done and continues to do good. But where's the harm in looking at others, based on recent brain-research?

GRADGRIND

And these alternatives -- where would they come from? Whose philosophies or ideologies would they embrace?

TEACHER

Does it really matter, if they work?

GRADGRIND

But these are questions that must be considered. You cannot talk about an educational revolution which will result in a whole new way of seeing and thinking about the universe without first determining -- in very specific ways -- the nature and content of the ideas that are to bring about your new world consciousness. Do you suppose that Newton could have so comprehensively restructured our view of the cosmos without having first done the meticulous analysis that ultimately led him to his conclusions? The sort of profound change you're talking about begins in observation and only gradually leads to action.

PROSECUTOR

Well, what are we doing here, if not starting the conversation? Asking the questions and raising the issues?

GRADGRIND

The universe is old, and we are not even adolescents. Do you honestly think that people's ideas and perceptions will change simply because you say they should?

PROSECUTOR

No. But I do believe that if we can demonstrate to them the ways in which the old system has failed them, then they will begin to see that we cannot continue along the path we've been on and still hope to thrive.

GRADGRIND

Well, I envy you your certitude.

PROSECUTOR

(pointing at the TEACHER)

Look at him. He is the world in small. If we can get through to him, then there is still hope. *There is a moment of silent tableau, and then we jump directly to:*

SCENE 4: CLOSING ARGUMENTS

The TEACHER sits on one side of the stage watching the other side as if on television, the PROSECUTOR is concluding her closing statement in the trial in Singapore.

PROSECUTOR

...And so, your Honor, the evidence is overwhelming. I... we, the people of Singapore and of the international community, ask you to take the necessary steps to prevent such wrongdoing in the future, and to allow for wider prosperity for all.

The TEACHER sits silently as the PROSECUTOR crosses the stage and sits by him. Their manner is familiar, even friendly.

TEACHER

That was terrific. I'm very impressed. What will happen?

PROSECUTOR

To your ex-students? I don't know. They may even be acquitted.

TEACHER

And what about me? How does my... "trial of conscience" end?

PROSECUTOR

With a speech, of course. I am a lawyer.

(Rising, addressing the audience)

"Sweet is the lore which Nature brings

Our meddling intellect

Misshapes the Beauteous forms of things:

We murder to dissect"

William Wordsworth implies something fundamental in these lines, namely that the whole may be greater than the sum of its parts, in certain circumstances. To say so is not to deny the great achievements of scientific analysis, or dissection, for that matter. Our understanding of ourselves and of the world around us owes much to such means of investigation. However, it is becoming increasingly clear that the essence of a living being lies in more than the sum of its constituent biochemical reactions, just as the essense of an ecological community lies in more than the sum of its resident organisms. Integration, interconnectedness, dynamic evolution, symbiosis -- these are principles that considerably enhance our understanding of nature. Further, they provide us with a compelling model for the nature of understanding. As research into the functions of the human brain proceeds, it appears that human learning itself is a process of integration and network-building, that the mind does not learn best in a linear fashion. If the principles of the Enlightenment and the technical successes of the Industrial Revolution could produce a template for education in the nineteenth and twentieth centuries, cannot the principles of ecology and the efforts in brain research shape education in the twenty-first?

Turning and looking at the TEACHER expectantly; he rises, joins her, and addresses the audience.

TEACHER

We are not suggesting that contemporary educational methods be discarded outright, merely that they be expanded and transformed. Where we currently encourage competition and individual achievement, can we foster cooperation and collaboration? Where we currently value passive command of material, can we reward active investigation? Where we currently separate knowledge into its component parts, can we emphasize the essential unity of those parts and the relevance of each to a greater whole? Finally, can we complement the power of rational analysis with the perspectives provided by other means of inquiry, other ways of knowing, other cultural definitions of truth? We must take these steps if we are to help students face the challenges posed by a growing global population, crippling worldwide poverty, limited resources, and a threatened environment. We must change education itself if we are to encourage students to pursue wisdom as well as knowledge, for wisdom is called for. We must ACT, if we are ALL to reach for...

(he pauses)

..."The Beauteous forms of things."

Fade to black. END OF PLAY

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