In Search of Expertise in Teaching

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This essay isolates and explains three essential qualities of the expert teacher, examining the practices of three teaching masters—Zeno of Elea; Lao Tzu of Ch'U; Jesus of Nazareth—to do so. My premise is that teaching expertise is a function of a particular type of educational relationship between teacher and student. Three qualities characterize educational relationships having exceptional, perhaps extraordinary, quality. First, students regard the teacher's curriculum as having profound moral and cultural worth; second, engagement of the imagination not only initiates the educational relationship but sustains it to its conclusion; third, the primary form of pedagogy is the story.

Cet essai met en lumière trois des qualités essentielles de tout excellent enseignant par l'étude de trois grands maîtres—Zénon d'Élée, Lao Tzu et Jésus. L'auteure pose comme hypothèse que l'excellence dans l'enseignement repose sur un type particulier de relation entre le maître et l'élève. Trois traits caractérisent les relations pédagogiques de nature exceptionnelle, voire extraordinaire. D'abord, les élèves considèrent l'enseignement du maître comme ayant une profonde valeur morale ou culturelle; ensuite, l'imagination joue un rôle non seulement dans l'établissement, mais aussi dans le maintien de telles relations; enfin, le principal outil pédagogique utilisé est le récit.

A long tradition of research on teaching has illuminated relationships between teaching strategies and academic achievement. Yet, many researchers and professionals are dissatisfied with what we have learned from this body of research, in part because it says very little about the expert professional. Our schools require not just effective teachers, but rather teachers with a level of mastery far beyond the ordinary, perhaps even beyond the expert, perhaps to the extraordinary. It is now time, as Berliner argues, for the emergence of a second stage of research on teaching, a second stage devoted to the study of the expert pedagogue.[1]

The first daunting difficulty in such study is the identification of "expert" pedagogues. Because teaching expertise is poorly understood, criteria on which to identify experts are obscure. Nonetheless, some renowned pedagogues come to mind.

In every profession, there are those who stand apart from all others, those who are excellent, perhaps even extraordinary. Teaching is no exception. Over the past twenty-five hundred years, many cultures in different ages have declared the same very few teachers to be exceptional. Three of these

great masters are Zeno of Elea, Lao Tzu of Ch'u, and Jesus of Nazareth. These three teachers not only made a profound difference to their contemporaries' lives and to the nature of their societies, but their influence continues to be felt today.

Anthony Barton's intensive study of these three masters invites further inquiry, both interpretive and analytical.[2] Barton's central argument is that there is more to teaching than its technology. The what of teaching, curriculum content, should determine the "how," or the form in which it is taught. This challenges the conventional theory of instruction that content should fit the instructional forms, such as lecturing and questioning, and that effective teaching depends on technique.[3]

In his discussion of the teaching approaches of Lao Tzu of Ch'U, a contemporary or contemporaries of Confucius, Barton emphasizes that scholar's didactic teaching about the effective government of the state. Barton believes Lao Tzu's teaching judiciously balanced curriculum content and student access to content.

Zeno of Elea was a contemporary of Socrates and perhaps his teacher. Barton argues that Zeno was master of the instructional technique of question and answer, sometimes referred to as conversation. Zeno's paradoxes forced students to deal with not only argument forms and evidence but also with the very presuppositions of their own thinking.

Jesus of Nazareth, only a few generations later, talked with people in small groups, out of doors and away from political interference. He encapsulated his ideas in catchy phrases, and in short stories, anecdotes, and parables.

Barton concludes that all three master teachers invented methods appropriate to the curriculum content and to the students endeavouring to learn, and therefore proposes that there is no sure way of teaching. Still, Barton surmises there was something about the teaching manner of Lao Tzu of Ch'U, Zeno of Elea, and Jesus of Nazareth that commanded attention, but concludes (too quickly) that this almost-magical quality defies explanation. However, such a conclusion invites another question and therefore another answer. What if this mysterious, ephemeral "something" were the particular blending of what was taught with the methods by which it was taught?

If so, then I think certain qualities typify these experts' teaching and that a theory of expertness will show what all three brought to their teaching practices.

THE EXPERT PEDAGOGUE

I begin with my conclusion. The expert pedagogue's traits are significant in their relational quality. Traits such subject-matter knowledge or regard for students are significant only if they contribute to *the creation of an educational relationship between teacher and students.* That the relationship is an educational one is essential since that quality distinguishes relationships in

teaching from those in, say, coaching, parenting, therapy, or ministering. The three masters certainly created and maintained educational relationships, characterized by three qualities that warrant the qualifier "extraordinary." First, students regarded the teachers' curriculum as having profound moral and cultural worth. Second, imaginative engagement initiated the educational relationship and sustained it. Third and finally, the primary form of pedagogy was the story.

The three master teachers' educational relationships exemplified these qualities to varying degrees. And although conceptually distinct, the qualities were not mutually exclusive at a practical level. Rather, they formed a small but commanding constellation of interrelated and interdependent fundamental elements of expert teaching.

CURRICULUM AS HAVING PROFOUND MORAL AND CULTURAL WORTH

Jesus of Nazareth practiced as a teacher almost two thousand years ago. His students believed his curriculum momentously important to them personally and to the turbulent society in which they lived. Through his teaching, Jesus examined his students' personal moralities and the collective morality of the authority structures of their society. He enabled his followers not only to understand the collective immorality of the excesses of the Roman government but also to regard such immorality not as particular to Romans only but as an extension of their own personal relationships. He pressed them to assume responsibility and to do something to ensure that all were regarded equal not only in the eyes of God but, as important, before Caesar and the state's justice system. His lessons were simple, easily remembered, and profound. He not only taught his lessons, he lived them, and he expected his followers to do the same: "If a man in authority makes you go one mile, go with him two" and "If a man wants to sue you for your shirt, let him have your coat as well."[4]

Jesus behaved like a servant and identified intimately with outcasts and children. His curriculum forced his followers to confront, as Northrop Frye explains, ". . . the master-slave dialectic on which the whole of human history turns."[5] He enabled his students to accept that all people, depending upon the settings, will ultimately play both master and servant roles, and that personal and societal morality hinge on the clear understanding of these dual roles and how they come together.

The specific goals of Jesus' curriculum were to facilitate maturation of his followers' personal conscience, to further moral exercise of power by individuals and by the governing body of the collectivity, and to enhance his followers' faith in God. Jesus argued there could be no moral exercise of power without the consent of those governed, and intended not only to enlighten his students but to enable them to bring about a new social order based on justice, fairness, and equality. In this new social order, each person might assume different responsibility and hence exercise different authority,

but all would be equally worthy. To accomplish his first curriculum goal, Jesus created conditions enabling his students to understand themselves as political beings who are members of a given social order. However, he was fully aware of the dangers of rapid change and warned, in the parable "New Wine in Old Wineskins," that not only would new wine poured into old skins burst the wineskins, but that consequently both would be lost. Thus he argued that understanding both the old and the new were indispensable to social progress. His followers learned about the possibility of better worlds on earth and in heaven, and acquired techniques to help them bring about desired changes.

Lao Tzu taught that civil servants' moral duty was to the state. Personal attainments were of secondary importance. The state was the highest order, an order as elusive and sustaining as water—although it cannot be wrestled with or possessed, it constantly benefits its "myriad creatures without contending with them."[6] The state, although sacred like all natural things, will benefit its people only if there is a means to regulate its activities, to redistribute its wealth, to sanction its detractors, to reward its benefactors, and ultimately to enable its people to progress. Lao Tzu's teachings helped produce a great state in China, and through his students led others subsequently to build great states administered by the ubiquitous but essential civil service.

The critical factor distinguishing the relationships of teaching as practiced by the two masters from other forms of human relationships is the educational development of the participants, those whom we call students. However, the cases of Jesus of Nazareth and Lao Tzu of Ch'U help us to understand that there necessarily is a purpose, or to put that another way, ends towards which the education is to be directed. What those ends are today is a question debated by many and answered especially well by Gutmann, and by Nyberg and Egan.

Gutmann quite correctly points out that although education may be broadly defined "to include every social influence that makes us who we are,"[7] the inclusiveness of such broad definition subsumes the concept of political socialization. Both Gutmann and Nyberg and Egan[8] are careful to argue that much of what occurs during socialization can best be described as unconscious social reproduction. Such socialization is an essential feature of organized life because societies thus perpetuate themselves. However, it is not the means by which societies change and their members improve their lot. To Gutmann, if the objective instead is to understand how members of a society "participate consciously in shaping its future, then it is important not to assimilate education with political socialization."[9] It is within and from the educational relationship that understanding and plans for action can be advanced in order to make life in society "more worthwhile."[10] It can be argued that this educational posture encapsulates the educational objectives or ends-in-view of both Lao Tzu of Ch'U and Jesus of Nazareth.

Through their teachings, these expert teachers related particular things to some larger and profoundly significant purpose that enabled their teaching to travel beyond the technical and to embrace the moral.

Fenstermacher has tried to isolate the moral dimension of the teacher's curriculum. His point is that teaching, as medicine, is a form of skilled practice, and becomes almost incomprehensible when disconnected from its fundamental moral purposes. "A teacher without moral purpose is aimless, as open to incivility and harm as to good."[11] To understand teaching, Fensternmacher argues we must dispense with such contemporary concepts as skill and competence because they do not capture the essential meaning of teaching. Goodlad, however, contends that such concepts do provide one way of thinking about teaching, but offer only a partial picture of the nature of teaching. He proposes there is a "richly layered context within which teaching decisions are made." One layer of choice is about technique and strategies; another about content; a third about forms of relationships. Nonetheless, normative considerations "pervade the whole, becoming moral imperatives for teaching, a profession of teaching, and teacher education."[12]

Perhaps Nord put it best when he wrote,

> Morality orients education: it directs, structures, sometimes constrains, and provides content for teaching. In fact, the primary purpose of education is to initiate students into an informed, critical appreciation of the moral dimension of life. This being the case, it follows that moral knowledge is the knowledge most worth having for teachers.[13]

Fenstermacher proposes that there are three ways in which teachers can be what he calls moral educators and moral agents. They can teach directly or didactically about moral values; they can teach about morality through courses in family life, religion, or philosophy; or they can act as models of a particular set of moral values. To Fenstermacher, it is the third which has the greatest potential "to shape and influence student conduct in . . . educationally productive ways."[14] The third way embodies the moral character of the teacher and pervades the teacher's total "manner" in the educational relationship. It is clear that both Lao Tzu of Ch'U and Jesus of Nazareth practiced all three ways. However, there can be little dispute that it was by acting as a model of a form of life, by his manner, that Jesus had and has his great impact. Perhaps an apt expression of the presumed ends-in-view that characterize the teaching of Jesus is found in Ryle's words:

> What will help to make us self-controlled, fair-minded or hard-working are good examples set by others, and then ourselves practicing and failing, and practicing again, and failing again, but not quite so soon and so on. In matters of morals, as in the skills and arts, we learn first by being shown by others, then by being trained by others, naturally with some worded homily, praise and rebuke, and lastly by being trained by ourselves.[15]

Gutmann best links the development of a personal morality with that of a cultural morality, both of which were of such great importance to Lao Tzu and Jesus of Nazareth. In a democratic society, she argues, the morality of the culture can be expressed and preserved. Democratic virtue should be the essential characteristic of all citizens and of all teaching. It is precisely in a pluralistic society rife with disagreement over morality and the nature of the good life that democracy can be a point of agreement. Teachers must enable their students to acquire the essential virtues of all democratic citizens—tolerance, reasonableness, nondiscrimination—and to develop a deliberative character that predisposes them to participate as if by habit in open and informed conversations about moral and political issues. In sum, then, Gutmann argues that if teachers are to provide for moral, and therefore cultural, development of the kind embodied in Lao Tzu's and Jesus's practices, then they (and policy makers today) must be guided by a democratic theory of education. Such a theory

> recognizes the importance of empowering citizens to make educational policy and also of constraining their choices among policies in accordance with those principles—of nonrepression and nondiscrimination—that preserve the intellectual and social foundations of democratic deliberations. A society that empowers citizens to make educational policy, moderated by these two principled constraints, realizes the democratic ideal of education.[16]

THE IMAGINATION AS THE CENTRE OF THE EDUCATIONAL RELATIONSHIP

To Lao Tzu, in the imagination every question has an answer, every problem a solution. To him, in the imagination even the way of heaven can be known. In one of his memos he wrote about the centrality of the imaginative mind in understanding.

> Without stirring abroad
> One can know the whole world;
> Without looking out of the window
> One can see the way of heaven.
> The further one goes
> The less one knows.
> Therefore the sage knows without having to stir,
> Identifies without having to see,
> Accomplishes without having to act.[17]

Lao Tzu engaged his followers' imagination through the employ of a combination of the poetic form and analogy. It is a methodology Barton describes as the draping of pragmatism with mystery. An excellent example of this is found in one of Lao Tzu's memos about the good life. He enjoins us to remember that:

In a home it is the site that matters;
In quality of mind it is the depth that matters;
In an ally it is benevolence that matters;
In government it is order that matters;
In affairs it is ability that matters;
In action it is timeliness that matters.[18]

If Lao Tzu stirred the imaginative mind with poetry, Zeno of Elea's way of quickening the imagination of his students was through the riddle. Zeno's most famous riddle is familiar to all: the race between the tortoise and the hare. Who will win the race? Another is about the relative speeds of three chariots—one that is parked; one that is heading up the street; another heading down the street. What is the speed of the chariot in the middle? A third famed riddle is about the falling millet seed. When it lands, does it make a sound?

Zeno's approach was subtle yet profound. He would pose a superficially benign riddle. His students would quickly solve it on premises drawn from conventional wisdom. If their premises were faulty, as often was the case, his students would reach bizarre or silly conclusions. From such an intellectual position there was truly only one sane escape—laughter at one's own specious reasoning. Within such a setting mirth and delight came easily and the conditions were set forth in the imaginative mind to range and to consider. Relaxed defences led to an eagerness to tackle the argument again. However by this time, the minds of the students would be prepared enough to imagine different premises from which to construct the argument which could depend on premises paradoxical to common sense. For Barton, the power in this type of educational relationship resides in students' developing the ability "to discard faulty assumptions in favour of new ideas of a higher order."[19]

These two masters, and Jesus especially, understood that the imagination is a natural quality of mind. We have records of many famous examples of the imagination at work: Albert Einstein claimed he achieved his insights into the fundamental nature of space and time by visualizing systems of light waves and idealized physical bodies (including clocks and measuring rods) in states of relative motion. Indeed, the riddle that eventually led him to conceive the special theory of relativity first became apparent to him when he was only sixteen years old as he imagined he was travelling alongside a beam of light at a velocity of 186,000 miles per second. Other great scientists such as James Maxwell and his electromagnetic waves, Michael Faraday and his magnetic fields, James Watt and his steam engine, James Watson and his DNA double helix claimed that fanciful imaginings fuelled by metaphors, allegories, and images were the basis of their great discoveries.[20]

To be able to imagine is to be free of convention; sometimes it is to be free of circumstance. Imagination is personal and comes from within. It enables the construction of a world that is as free from the empirical world

of sights, sounds, smells, tastes, and textures as one wishes it to be. Imagination can be a means of human freedom as no other. To Northrop Frye, imagination is ". . . the constructive power of the mind set free."[21] It is construction for its own sake. "In the world of the imagination, anything goes that's imaginatively possible, but nothing really happens." If something does happen, then the world of imagination has been left for the world of action. However, to Frye, there is more to the mind than the imagination, and it is this other that can come to educate the imagination through the imposition of language. It is through language that epistemology, that is, human knowledge, is constructed. Therefore, language and imagination are intimately linked in the educational relationship.

Imagination is not all there is to the mind. Frye argues that there are three levels of mind: the level of personal consciousness and awareness of the world beyond self; the level of social participation and procedures for how to do or act; and the level of the imagination. Each level employs not a different type of language but a different reason for using language in particular ways. That is, the imaginative mind would use the same words but for different ends than would the social or the personal mind. Frye underscores this point by distinguishing between language use in the arts and in the sciences. Science, he says, explains the world by collecting data about it, then formulating its laws as best it can. Once laws are established, science "moves towards the imagination: it becomes a mental construct, a model of a possible way of interpreting experience."[22] The more that science becomes a mental construct and the less a set of empirical propositions, the more it will use the language of mathematics, "one of the languages of the imagination, along with literature and music." On the other hand, art, Frye proposes, begins with a mental construct, wholly of our making. Art "starts with the imagination, and then works towards ordinary experience: that is, it tries to make itself as convincing and recognizable as it can."

The final measure of worth of the imagination resides in its products.[23] If we choose to reside in our imagination, we remain detached from the outside world. Such a state is not the desired goal of the educational relationship. Education in its manifest form is public and has a public product, an educated person. An educated person can act in and upon the world in worthwhile ways so as to bring understanding to, and exercise influence in that world for its betterment. The imagination in education is not for detachment, although detachment is sometimes a prior and necessary step along the educative road. Rather, imagination is the means of educational engagement—an engagement with the world of values, ideas, actions, and things.

THE PEDAGOGY OF THE STORY

The three expert teachers practiced a pedagogy which shares its roots with the origins of verbal language ability: the story. Jesus of Nazareth and Zeno

of Elea told stories of such significance and importance that many of our cultures have been subsequently and profoundly changed. The method, as Kieran Egan has simply and aptly termed it, was teaching as story-telling.[24]

Zeno of Elea's riddles were locked in stories. Barton suggests his stories ". . . must be one of the most powerful ruses ever devised by a masterly thinker."[25] In the design of his curriculum, Zeno first determined the riddle and then crafted the story. The most famous of his riddles is found in the old chestnut of the handicap race between Achilles (who has subsequently and unfortunately become a hare) and the tortoise. Told one way, and Achilles is the victor; told (mathematicians would say proven) another way and the tortoise wins. Zeno of Elea became so famed for his stories that his most renowned student, Socrates, came to adopt not only his actual stories but also this pedagogical method as one central feature of his teaching.

Perhaps the most famous of all story-tellers is Jesus of Nazareth. His teachings were not impromptu discourses, but in fact stories or parables of particular poetic beauty and simplicity. The imagination of his followers was stimulated by such popular and well-known parables as the "Wise and Foolish Builders," the "Good Samaritan," the "Lost Sheep," the "Prodigal Son," the "Labourers in the Vineyard," and the "Sower." His stories, usually told in pairs, presented his followers with a principle or a rule and then with a way of living or practice that exemplified the rule.

A story is a form that embodies some structure of the mind. It is an archetype of human thought. To Harold Rosen, the story is "a primary and irreducible form of human comprehension"[26] in that it not only represents but bodies forth patterns toward which human thought is disposed.

The words in a story are not arbitrarily selected; they are included only if they contribute to the shaping of the events of the story or the placing of events in context. Words are relative in two ways: first they are relative to each other in their sentence syntax and paragraph sequence; second and as important, they are relative to their place in the story form. As Egan puts it, a story is to be thought of as a "linguistic unit that carries its context around with it."[27] In placing these words in context—setting, character, plot and circumstance—we shape them into events and thus understand their relative importance to the story as a whole. The context determines which words belong and which do not.

Stories have the potential to provide some of the conditions for the educational relationship because they unleash the imaginative power of the mind, and harness this power through language. Maxine Greene offers an explanation of how this happens through her theory of poetry as a place for the genuine. Poets, she says, are literalists of the imagination who present for our consideration imaginary gardens with real toads in them.[28] Importantly, though, she uses this theoretical construct to show how literature, broadly conceived through its story form, enables both the cognitive and emotional engagement of the students with the curriculum content. Greene's real toads constitute the cognitive content of stories for teaching. In fact, they comprise

the cognitive content or text of stories everywhere and for every purpose. The imaginary garden constitutes the emotive content of stories which only comes to life as we engage the cognitive content. The emotive content is not "in" the story, as with the cognitive content. Rather, it is "in" the reader or listener of the story. Henry Aiken also made this point, but he put it this way: "The predominant power of words to arouse, sustain, and project emotion is a function, not of their quality as sounds, but of their meaning."[29]

Students' imaginations are tapped through the inescapable process of reenactment. Stories present in their cognitive content an image of something that, by virtue of the form, is reenacted in the mind. It cannot be otherwise. The educational significance of this resides in the fact that this reenactment can only occur in the imagination. Hence, because of students' natural compulsions, it is their inescapable obligation to reenact the cognitive content in their imagination. In so doing they unleash the constructive power of their minds.

As students go through this imaginative act of reenactment, the story becomes a part of them, which, says Maxine Greene, enables their "release into" the story.[30] As the students read or listen, the feelings aroused in them ". . . will magnetize a variety of energies, perceptions, and ideas to be patterned in accord with the form" of the story. As this arousal occurs, the emotive content of the story is developed by each student in individual terms. The emotive content of any story will be different for each and every student, shaped by the uniqueness of each. As their imaginary gardens grow, the engagement of each with the cognitive content becomes richer. Once the students are held fast in the embrace of the garden, then the teacher is able to bring mental discipline to the matters of the real toads through the imposition of language for the purposes of education. To Greene, "the very process of putting the experience into words helps to organize what has been undergone. Once expressed, it becomes a kind of content, a structure which may well give rise to questions never framed before.

AN EXAMPLE

Some might dismiss this essay's argument by asking, "who am I to be able to teach like Jesus of Nazareth, Meno of Elea, or Lao Tzu of Ch'U?" The point is that if we understand something about what enabled each of them to be expert pedagogues, to transcend the ordinary, the simply effective, then it is quite possible that some of the extraordinary might grace our own teaching.

Imagine a real toad, a topic in almost all science subjects in our schools—the dinosaur. Next, imagine two settings in which an educational relationship is to be created and maintained. In the first instance, there is a grade three teacher and his class of twenty-five eight-year-olds. In the second, there is a grade eleven biology teacher and her class of twenty-nine adolescents.

The primary grade teacher begins planning by determining that his students are to understand the great struggles among these great beasts as they foraged for food in a time long, long ago. Some dinosaurs ate plants, others animals. Each type of dinosaur had special physical adaptations enabling them to eat certain diets: some had long necks to reach into the tall trees; others had huge hind leg muscles to enable them to chase down their fast moving prey; still others had crops containing grit and sand to assist them to digest their food. The teacher begins to tell a story. The educational relationship begins through the imagination.

To stimulate the primary student's imagination, the teacher introduces a very tiny dinosaur, a Compsognathus, no larger than the size of a small chicken, which is attempting to forage for food in a land of the great, fierce carnivores such as Tyrannosaurs, Allosaurus, and Ceratosaurus. Shattering preconceived notions about dinosaurs as huge as houses will surely cause primary children to wonder. Imagine, a dinosaur they could hold in their hands or even hide in their packs! The teacher has given this little dinosaur a name. She is Boreal, and she is terribly hungry and very, very frightened in a world fraught with danger. Problems abound when Boreal decides when and how to eat safely, and how she might cleverly protect herself from being a dinner rather than having one. This is the plot of the teacher's story.

As the students enter into the story and reenact the days in the life of little Boreal, they create the imaginary gardens of their emotional content. The teacher introduces the appropriate cognitive content to enable the students to understand why Boreal ate plants and was specially adapted to do so, why Allosaurus ate meat and hunted smaller dinosaurs, and how Boreal survived, or perhaps did not, in the complex struggles for survival 180 million years ago.

Although the story describes what and how they ate, it is in depth about dominance and subservience and the struggle for survival typical of all life forms. It is a story only in small part about eating; it is fundamentally a story of power and powerlessness, life and death. It has great moral, and therefore cultural, significance.

In the second case, the secondary school teacher wants the students to understand there is considerable uncertainty about the accepted scientific claim that dinosaurs were dull in colour. Simply, new research suggests that dinosaurs were avant-garde in their appearance. This in itself should quicken the imagination of fashion-conscious adolescents who would be intrigued to learn that a new theory proposes that dinosaurs were not only very colourful, to the point of gaudy, but were decorated with ornamental bumps and swirls and horny protrusions. She wants them to question the accepted claim of the scientific community that dinosaurs were drab and dull in their camouflage grey. Her end-in-view is to enable her students to understand how scientific knowledge is constructed through the cut and thrust of debate about evidence and the application of the imagination to the findings.

Because of the students' age, they could find the situation of a scrappy underdog appealing. So, first, a story of dinosaurs as brightly coloured as skiers on the slopes of the Canadian Rockies. More, a story about a young rebel trying to convince a group of established university professors that this could have been the case! Therefore, the story is also about sculptor Stephen Czerkas,[31] a man who without a doctorate and a university position challenges accepted scientific claims about dinosaur skin colour. Through the study of recently discovered pieces of the skin of a carnataur, Czerkas has concluded not only that this animal had been richly coloured, but probably most other dinosaurs had been as well. Not only is Czerkas questioning accepted theories, but in so doing questions the authority of tenured university professors.

The teacher's story is about the development of scientific knowledge. It reveals that the pursuit of scientific truth is not always the idealized activity it is often made out to be. The understandings that the students would develop would touch the very heart and fragile nature of scientific method and the political and moral circumstances in which we struggle to discover the truth. It is a story to enable students to question the limits of their own personal knowledge and that of the research worlds around them. It is an extraordinary story having profound consequence.

CONCLUSION

I have so far avoided defining expertise since a useful definition depends on some future mapping of its contours, boundaries, elements, and patterns. A lack of definition did not prevent consideration of three expert pedagogues who went beyond the usual, the ordinary, and the customary. We know of these three, Lao Tzu of Ch'u, Zeno of Elea, and Jesus of Nazareth, not because educational researchers were able to draw some significant correlations between process variables and products of student academic achievement, but because of the extraordinary consequences of their teaching. Because of their teachings, their students were able to make a profound difference to their own and the lives of others around them, and to the cultures in which they lived.

One conclusion at least is warranted. The proper measure of expertise in teaching is found not in what teachers do, rather in what their students do because of the teaching. This study claims that the essence of expertise resides in the educational relationship between teacher and students, a relationship characterized by at least three qualities not the stuff of contemporary theory. Zeno of Elea, Lao Tzu of Ch'u, and Jesus of Nazareth implemented curricula students deemed to have moral and cultural significance; they centred their teaching in the human imagination; and they practiced their pedagogy through the telling of stories. Their teaching deliberately created an educational relationship characterized by these three interrelated qualities. Through this creation their artistry was displayed and

because of it, continues to be celebrated. Expert teachers are not born. Rather all who aspire to become expert are born with the ability to learn how to create the necessary characteristics of this educational relationship.

When teaching is done with such extraordinary expertise, as it has been done on occasion, it becomes, as Alfred North Whitehead proposed, an enterprise of cosmic significance.[32] We Canadians should remember that the most telling indication of any society's future greatness will be found in the expert pedagogues it nurtures.

NOTES

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