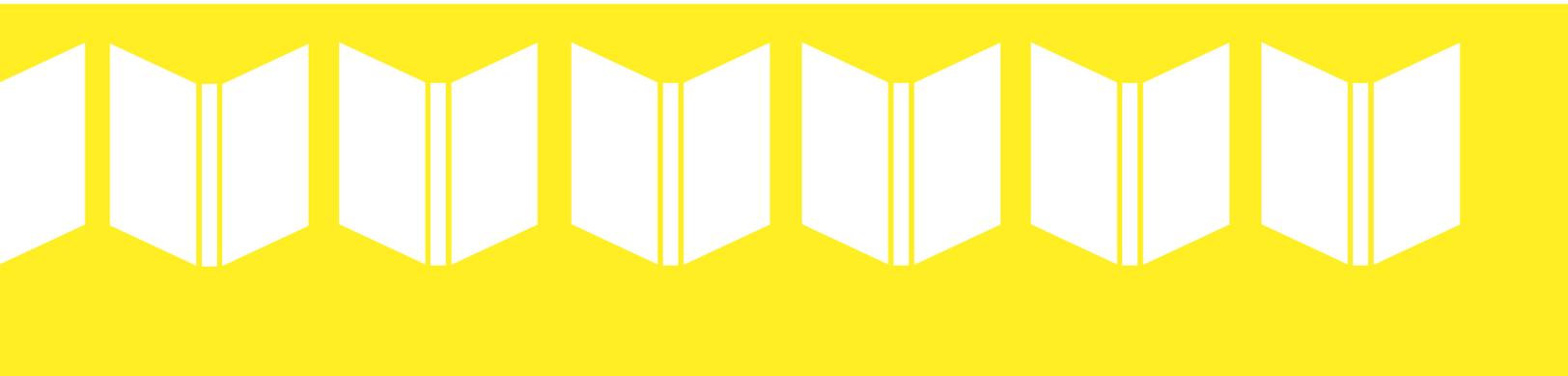


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# educational considerations

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## TABLE OF CONTENTS

<b>Multicultural Education: Life Styles or Chances?</b> .....	1
Angela Rhone	
<b>Distance Education in Educational Administration Programs</b> .....	6
Scott Norton	
<b>Can You Quantumfy That?</b> .....	11
Perry R. Rettig	

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“...It is important that teacher education students be allowed avenues to explore core knowledge about the history, culture, and foundations of any society.”

# Multicultural Education: Life Styles or Chances?

Angela Rhone

## Introduction

During the first class meeting of the multicultural education course I teach, I ask my second-year teacher education students to define the term multicultural education. I am usually surprised by their responses. Some responses describe food and a hero's day as definitions. Other responses elicit statements such as speakers and field trips. Still others refer to superficial teaching about ethnic groups, for example, tepees for native Americans and jerk chicken for Jamaicans. Accordingly, many of the students point out food and field trips as being the substance of multicultural education in their public schools and in their Introduction to Education course in college. Banks (1994) refers to this style of teaching as an ethnic additive approach or teaching from a “life styles” perspective. He argues:

*This additive approach to the study of ethnic content emanated from several assumptions that preclude substantial curriculum reform, perpetuate stereotypes and misconceptions of ethnic cultures and life-styles, and prevent teachers from dealing effectively and comprehensively with such concepts as racism, class stratification, powerlessness, and the reforms needed to empower ethnic groups. (p. 181)*

In supporting Banks's perspective, Bennett (1995) recommends that educators are clear that minority

perspectives are not built only from the success stories of heroes or from an emphasis on foods, fads, and festivals. Issues of race, class, gender, oppression, and colonialism are life-forming experiences that have shaped cultures. In life styles teaching, the depth of understanding of what one culture brings to another is traditionally viewed as insignificant, focusing on elements such as food. Manuel Duarte and Smith (2000) argue that the festive approach to cultural diversity is becoming a progressive first step for many schools. However they point out that it can initially harm ethnic groups by actually reinforcing dominant assimilationist thinking by viewing cultural traditions as “exotic, alien, and foreign-others,” (p. 174). Conversely, “life chances” teaching critically analyzes the political and social factors of how the culture evolved and its significance in a global economy (Banks). Without the life chances perspective, educators are missing the point of multicultural education, which is, according to Banks, to “*acquire the knowledge, skills, and commitments needed to make their societies and the world more responsive to the human condition*” (p. 61).

Hanvey (1975) argues for the development of a cultural consciousness by recognition of multiple historical perspectives. Hanvey believes individuals must understand the life styles perspective approach in order to be able to reduce their own ethnocentrism. Bennett (1995) contends that argues teachers are “obligated” to become knowledgeable about new ethnic and national perspectives. This ethnic approach toward a multicultural curriculum should encompass not only the life styles perspective but also the life chances. Nieto (2000) believes if that the life styles approach is merely limited to lessons in human relations and sensitivity training, the potential for substantive changes in schools becomes severely diminished.

There is a necessity in understanding the cultural background of diverse ethnic groups. Drawing from the principle that teacher education students need to become social critics, this paper attempts to explain the differences between life styles and life chances teaching. It explains why life styles teaching still exists. Finally, it explains why life chances, although more difficult to teach, offers a more effective outcome than life styles teaching. Additionally, this paper presents a sample lesson plans using the life styles and the life chances approaches to teaching.

## Differences Between Life Styles Teaching and Life Chances Teaching

Life styles teaching is a scraping of the surface; it introduces a cultural indicator but not its historical or

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Angela Rhone, Florida Atlantic University

social significance. For example, as a Jamaican, when I speak with my students about Jamaican culture, they associate culture with jerk chicken and dreadlocks. To limit the dialogue to food and hairstyles, at this point, is an example of life styles teaching. Unfortunately, many educators do leave the discussion at this point. A few students might ask why jerk chicken represents Jamaica; but unless the educators know the answer, jerk chicken becomes the framework from which students draw their knowledge about the island country. An examination of the history and social conditions in Jamaica and how they affect the foods of a culture are not explored. See Appendix A for a sample lesson plan of the life styles approach.

Life chances teaching promotes research in understanding the social and political significance of consuming jerk chicken in Jamaica. Banks's (1994) notion of life chances teaching includes *"the ways structurally excluded ethnic groups are victimized by social, economic, and political variables such as institutionalized racism, class stratification, and political powerlessness"* (p. 181).

A life chances approach to teaching asks, for example, What is the significance of jerk spices to the Jamaican community? Under what circumstances was this food eaten and prepared? What social conditions brought on the use of the strong spice? Why has this cooking style been transferred to a country outside of its origin? Conducting in-depth research on this subject would call for a greater investment in time by educators.

One underlying historical explanation regarding jerk food preparation is slavery. Slaves who did not have any access to refrigeration began to heavily spice the chicken to store it for days, buried in the ground for warmth. As recent as 50 or 60 years ago, Jamaicans still may not have had refrigeration and continued to keep the meat this way.

The life chances approach would ask educators to critically examine how one aspect of the culture, slavery, affected food preparation. Yes, Jamaicans eat jerk chicken; but the social and political history tied to the food is what is not "served" to students in today's classrooms. See Appendix B for a sample lesson plan of the life chances approach.

### **Why Life Styles Teaching Still Exists?**

Serving food and representing cultures by wearing traditional ethnic attire are methods used to teach culture that are easy and fun and do not create divisions in classrooms. The life styles approach does not require critical thinking. By critical thinking, I refer to taking a specified

subject and looking at it from different perspectives, not necessarily accepting what has been presented. It involves examining underlying issues of causation and why things happen. It calls for data research and analysis, referring to multiple sources of information. It calls for the researcher to question presented material and the researcher's own position on the topic. Rote memorization of "facts" instead of critical thinking exercises is encouraged in the classroom.

### **Life Styles Teaching is Work**

In life styles teaching, some educators will follow the curriculum handed to them without making any changes. Following the given curriculum does not create any controversy. In this context, no parents will fight them; students will not challenge them; and educators will keep their jobs. It is not because educators are lazy necessarily, but many were not taught in college to think critically or to question a given curriculum. When educators look at a regular classroom and what an educator's day entails, as well as the time they are allotted to accomplish these tasks, it is very daunting. It is a lot of work in a short time. To do outside research seems overwhelming. In effect, life styles teaching is comfortable for educators. It is basically cultural rote memorization.

### **Life Chances teaching Offers a More Effective Outcome**

The numerous factors that affect cultures and how those cultures evolve into their current status can be taught in the life chances method. As seen with jerk chicken, a background of slavery, oppression, occupation, and poverty forced Jamaicans to use this method as one means of cooking. To merely eat the food in a classroom and presume that this represents the Jamaican culture ignores the history and development of jerk chicken from a social and political context. However, from a life chances perspective, educators are asked to look at the different facets of a given culture and to really experience it, feel it, and research it.

To teach from a life chances perspective is difficult to do because educators have to acknowledge their own ignorance of cultural history. More important, life chances challenges educators to conquer their ignorance and change their notions of culture as more than what people eat. This act requires a shift in consciousness and a willingness to open up to different cultures.

## Life Chances As a Skill Builder for Educators

Life chances also asks educators to delegate research responsibilities to students. Learning is a two-way process, an interaction between students and educators. As classroom mediators, educators should give students proper direction. This is not to say that educators should lose control of their classes or not have their own personal convictions. However, students gain a broader scope of knowledge when they are allowed to participate in the learning process.

Life chances methodology forges interdisciplinary curriculum in college and classrooms. In conducting outside research, teacher education students are assigned extra material to read and are given guidance in discovering different sources and literary approaches. Perhaps they will find a biography in addition to encyclopedias. Some students who have never visited a library may now be required to do so and to learn to explore various sources. Their technology skills are important and can be developed as they research a given topic on the Internet or World Wide Web.

In assembling their findings, teacher education students hone their writing skills. They learn how to write a bibliography. They practice outlines for their presentations and can be creative in how they deliver their projects to their classmates. In group work, students research together in a cooperative setting and build interdependence, a necessary function in a multicultural environment. Many presentations involve films, slides, and data analysis.

Life chances teaching introduces teacher education students to an in-depth understanding of other cultures. For example, one research project I assign involves concentration on one ethnic group and its contemporary academic achievement. The students primarily choose a foreign country to study and gain a different perspective, shaking their beliefs and assumptions about the group. Life chances curriculum forces teacher education students to take a position and to become social activists. In life styles teaching, students are passive receptacles.

## Conclusion

If educators are to be change agents and social critics, they need to learn life chances and how to implement them and teach them to their students. Educators need to change how they teach and how they prepare teacher education students. On the one hand, life styles teaching does introduce one part of a culture, such as food, which is essential. However, life chances teaching explores the

nature of that food and its significance in the culture. It is this aspect of multicultural education that is lacking. To take culture to the next level, beyond food consumed, to why they are consumed in a certain way, is an introduction to the history and social conditions affecting a culture, shaping it into the form it is today. In the context of understanding the need for multicultural education, it is important that teacher education students be allowed avenues to explore core knowledge about the history, culture, and foundations of any society.

Life chances teaching gives depth to multicultural education, where life styles teaching leaves students without a context from which to understand the goals and foundation of multicultural education. If educators are to effectively fulfill these goals, multicultural education should be taught as more than food and clothing but as the framework for understanding the political and social context of a culture and how those factors have affected its people.

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## **Appendix A**

### **Life Chances Approach Lesson Plan**

*Description:* Food is often used to represent a given culture. However, within one culture can exist several different ethnic groups, as in the Jamaican culture. The different ethnic groups that have existed at some time or the other in Jamaica are the Arawak Indians, Africans, Chinese, Hindus, Jews, Germans, English, Scottish, and Irish. They have all impacted the culture, bringing with them their foods, celebrations, religion, music, and art.

An educator attempting to examine the cultural significance of jerk chicken should examine it in the context of the Jamaican culture and investigate several issues:

1. What is jerk chicken and from where does the name originate?
2. What prompted the use of jerk spice and how was it originally prepared?
3. Which ethnic group initiated the use of jerk spice?
4. How has the preparation of jerk chicken survived?
5. What political and social significance does jerk chicken have in relationship to the varying social classes in Jamaica?

Using a life chances approach allows teachers to perform in-depth analysis of cultural norms which can yield an understanding of the culture.

The lesson plan below demonstrates how a life chances approach can be used to teach about one aspect of the Jamaican culture.

*Grade Level:* College/University

*Duration:* One week

*Goal:* Students will gain an understanding of how different ethnic groups in Jamaica impact the culture.

*Objectives:*

1. Students will research and present their research on the different ethnic groups in Jamaica.
2. Students will examine what each ethnic group brought with them when they arrived in Jamaica.
3. Students will research the significance of certain foods, especially as they pertain to ethnic group of origin.

*Background Information for the Teacher:* This activity can be used as a way to teach Jamaican history and culture. More important, this activity should shed light on the contribution of the different ethnic groups to Jamaican society, as demonstrated through a Jamaican staple.

*Materials:*

Map of Jamaica

World map (Focusing on countries of origin for Jamaican ethnic groups)

Map of slave trade routes

Films on the history of Jamaica portraying slave life

Spice samples

Books (examples)

*Procedures:*

1. Students compile a timeline detailing the arrival of different ethnic groups from the 17th century through the 19th century.
2. Students read about the history of Jamaica, and list the different contributions that each ethnic group brought to the country.
3. Students will present their presentations and the evolution of jerk preparation for meats.

*Assessment:* Students will be assessed on how well they can analyze the impact of each ethnic group's input on the culture, using the example of the historical and cultural significance of jerk chicken.

## **Appendix B**

### **Life Styles Approach Lesson Plan**

*Description:* Food is often used to represent a given culture. In order to accommodate the different groups of students in a class, the teacher will assign a food day. Each student is asked to bring in the food from his or her native country or parents' native country. In order to accommodate Jamaican students, the teacher will ask the Jamaican students to bring in Jamaican food for all the students.

*Grade Level:* College/University

*Duration:* One week

*Goal:* Students will become familiar with the Jamaican culture by preparing and sharing Jamaican food items in class.

*Objectives:* Students will become familiar with Jamaican food to understand the culture.

*Background Information for the Teacher:*

1. Sharing food in class is an accepted demonstration of cultural sensitivity and understanding.
2. As students eat food, the teacher, without a historical context.
3. Students will present the food without presenting any kind of history behind the food.

Jerk chicken then represents the culture, without the historical context of why it is eaten in Jamaica.

*Materials:*

Map of Jamaica  
Ingredients for food  
Paper plates, plastic cutlery, napkins, beverages, and cups  
Jerk chicken

*Procedures:*

1. Have the teacher request volunteers to bring in jerk chicken to share with the class.
2. Tell the students the quantity of jerk chicken required to serve the class.
3. Tell the students when the "Food Day" is.
4. Allow students time before the "Food Day" to decorate.
5. Recruit students to prepare the food.

*Assessment:*

1. Have the students set up their decorations for "Food Day."
2. Have other teachers come in and judge the food.
3. Have students write about what they learned from "Food Day."
4. Give praise to students who prepared food for "Food Day."

*“...The significance of distance education is vested in large part in the extent to which it makes educational opportunities more available to more students.”*

# Distance Education in Educational Administration Programs

Scott Norton

## **I. Introduction**

New technologies for instructional delivery are being implemented in institutions of higher education at a rapid rate. Consider the fact that as early as 1995 one third of the institutions in the U.S. was offering courses by Distance Education (DE) and that another one fourth was in the planning stage for such implementation (The Institute for Higher Education Policy, 1998, Student Aid for Distance Learners). By the year 2000, 68% of the University Council for Educational Administration (UCEA) member institutions was delivering instruction using some type of DE technology. And, although there is some disagreement concerning the place of DE in the preparation of school leaders, the results of the study discussed herein make it clear that the escalation of DE programming in the preparation of students in Educational Administration programs is inevitable.

Yet, prior to this study, the specific status of DE in the preparation of school leaders in Educational Administration was generally unknown; neither the existence of DE programs nor the specific activities of faculty personnel in this area had been clearly identified. The primary purposes of this study were to: (1) determine the status of DE programs and practices in Educational Administration, and (2) to identify those institutions and faculty personnel that appeared to be taking leadership roles in DE in UCEA

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**Scott Norton, Arizona State University**

institutions. All 60 Educational Administration UCEA-member departments were included in the study; the 46 departments that responded included 41 that were active in some way with DE program delivery and five that reported they had no DE program activities.

The study instrument was developed through a review of current literature; content validity was judged by the Advisory Committee of the UCEA Program Center for Preparation Programs and by four other national university faculty personnel who were recognized for their work in the area of DE. The preliminary study instrument was piloted in 15 non-member UCEA institutions; their suggestions and clarifications were incorporated into the instrument's final design.

## **II. The Study Findings**

### **DE Technologies Being Utilized**

Educational Administration department chairs in the 41 UCEA member institutions were asked several questions designed to determine the DE technologies that had been implemented in their preparation programs and ways in which these technologies were being delivered. Eleven different DE technologies were reported by the chairs as ones presently being utilized in their preparation programs for school leaders. Table I shows the leading DE technologies reported; 63% reported the use of Web-based computer communication, 49% was utilizing e-mail courses; 37% live or taped TV courses; 32% closed circuit TV; and 20% videotape technology. Beyond the DE technologies listed in Table I, no notably different ones were reported. It should be noted that course delivery solely by DE methods was quite limited, that is, only 15% of the participants reported that some courses were being delivered by DE technologies only. The large majority of courses was being delivered through a combination of DE technologies and traditional, face-to-face instructional methods.

### **Instructional Delivery by DE Methods vs. Traditional Methods**

Instructional delivery by DE methods often is perceived to be so different from traditional delivery methods that major differences in course content, course requirements, course evaluation procedures, and course completion time are logical assumptions. Yet the similarities between these two instructional methods proved to be much greater than their differences. In regard to course content differences, for example, only 20% of the participating chairs reported

**Table 1. Type of Distance Technologies Utilized**

<i>Type of Technology Utilized</i>	<i># of Responses</i>	<i>% Responses</i>
Web-based Internet	27	63%
E-courses	20	49%
TV Courses	16	37%
Closed Circuit TV	13	32%
Videotape Technology	8	20%
Conference Audio Communication	6	15%
Telephone	6	15%
U.S. Mail	6	15%
Satellite Courses	4	10%
Traditional Correspondence Courses	1	3%
CD ROM Courses	1	3%

that the content of DE courses was different than the same course taught by traditional methods. Similar statistics were revealed for course requirements, student evaluation procedures and, somewhat surprisingly, for course completion time; approximately 80% of the chairs reported “no difference” between the two delivery methods in regard to each of these three provisions. Two comments by study participants serve to summarize the views of chairs concerning differences between the two delivery methods. One chair noted that *“the only thing that changes is the mode of delivery, all expectations remain the same.”* Another commented that, *“distance education courses are developed to enhance learning and increase course availability. The same level of quality is expected for teaching and student performance.”*

### **Educational Administration Courses Being Taught Through DE Technology**

What courses are being taught through DE technology? Study results indicated that virtually every educational administration course commonly offered in preparation programs was being taught through DE methods by one or more of the university programs. Department chairs listed 80 different course titles that were or had been delivered through DE methods by UCEA member institutions. School Law, Administrative Leadership, Personnel Administration, Supervision and Instructional Leadership led the course listings. School Law, for example, had been taught through DE methods by 18 of the 41 participating preparation programs. However, less common courses such as Introduction to Site-Based Management, Grant Writing, Team Building, Conflict Management and Administration for Teachers also were being offered through DE.

In addition, students also were being served by DE technologies in ways other than course offerings. Student services, for example, were provided through DE by 60.9% of the Educational Administration programs. Student admission services, fieldwork projects, and student advisory committee meetings were other services being provided through DE methods. And, as one participant noted, “all department information is on the Web.”

### **Special Contributions of DE Technologies**

The significance of DE is vested in large part in the extent to which it makes educational opportunities more available to more students, more affordable to students and the extent to which it is reducing constraints for course taking for students. The large majority of the department chairs, 73.9%, believed that DE technologies indeed were making educational opportunities more available to more students. As one participant remarked, “We definitely have students in our program via DE who would not be there if on-campus courses were the only way to access us.” Study data revealed that more out-of-state students plus more students from rural areas were taking advantage of DE courses.

The reduction of student commuting costs was largely responsible for the fact that 56% of the chairs reported that DE courses were making educational opportunities more affordable to students. However, specific cost factors related to DE programming had not been clearly identified in most educational administration programs. Table 2 reveals that only 16% of the chairs reported that cost factors related to DE programs had been clearly identified. Another 40% of the chairs reported that cost factors had been identified for some program provisions and 44% reported that such cost factors were yet to be determined.

**Table 2. Extent Dollar Costs for DE Courses/ Programs Had Been Identified**

<i>Cost Factor Identification</i>	<i>% Response</i>
a. Cost factors have been clearly identified	16%
b. Cost factors have been identified to some extent	40%
c. Cost factors have not been clearly identified	44%

In a related question, those chairs who indicated that DE costs had been clearly identified were asked to pinpoint those DE factors that had been specifically “costed.” Of the 23 chairs who had responded in this manner, 52.2% indicated that the factor, compensation for the instructor, had been clearly determined. Also, the factor, equipment costs, was reported as clearly costed by 52.2% of the participants and 43.9%, 34.9%, and 30.4% of the chairs indicated that costs had been calculated for related DE preparation costs, training costs, and purchase costs for course instructional materials respectively. However, the study data, along with comments by study participants, made it clear that DE program costs had not been determined specifically in the large majority of the preparation programs studied.

### Technical Support for DE Programs

All but three of the department chairs reported that there was an infrastructure at their institutions for delivering DE programs. Approximately three fourths of the chairs indicated that a special unit at the university/college level existed to facilitate DE activities in Educational Administration as well as for other program units. The second most utilized operational procedure was one in which no special unit for facilitating DE activities existed, rather certain units or individuals within the institutional setting gave some service in this area.

Technical support for DE programming was viewed as “very adequate” or “moderately adequate” by 24.4% and 53.6% of the chairs respectively. Similar statistics were reported relative to the adequacy of instructional support available to faculty to help them implement Distance classes. Table 3 shows the responses of participants relative to the kinds of DE support not readily available at the present time.

<i>Kinds of DE Support Needed</i>	<i>% Response</i>
a. Support for the development of specific courses	58.5%
b. Support for the actual delivery of DE courses	51.2%
c. Support for the teaching of DE courses	43.9%
d. Support for inservice training: DE methods and possibilities	42.4%
e. Support for financing DE equipment purchases	36.6%
f. Support for the financing of courses, film, and so forth	36.6%
g. Support for the compensation of DE faculty	36.6%
h. Other kinds of support needed	9.8%

Seven different kinds of DE support were listed for the chairs’ consideration and they were asked to check each one that applied to their situation. Slightly more than half of the study participants was of the opinion that specific support for the development and delivery of DE courses was needed at their institutions at the present time. Each of the support entries was checked by more than one third of the respondents. Support for inservice training on DE methods and possibilities, for example, received a 42.4% response and three support factors related to money matters each received a response of 36.6%. In any case, the study findings pointed clearly to several areas for which faculty involved in DE programming needed special support in order to be more effective.

### Constraints That Inhibit DE Quality

Twenty-three potential inhibitors of DE effectiveness were listed for the consideration of the study participants. Only two of the 23 entries received no response as inhibiting DE programming: federal regulatory requirements and the lack of eligible measures for student aid. The leading constraints relative to DE quality and the percent of response are shown in Table 4. As Table 4 reveals, factors that tended to inhibit quality program implementation were evidenced in several areas including: faculty, students, funding, graduate college and university definitions and restrictions, support services, and student services.

<i>Inhibitors or Constraints to DE Program Effectiveness</i>	<i>% Response</i>
a. Lack of faculty interest	48.8%
b. Lack of needed funding	43.9%
c. Restrictive graduate college & university requirements	43.9%
d. Lack of a funded budget for DE programs	39.0%
e. Lack of adequate technical support	31.7%
f. Inability to provide quality services for DE students	31.7%
g. Price of attendance definitions	29.3%
h. Lack of general institutional support	29.3%
i. Lack of student interest	19.5%
j. Accounting practices that operate on a fiscal calendar year	12.9%
k. Definition of time or units of measurement	9.7%
l. Institutional definitions of an academic semester, week, etc.	9.7%
m. Institutional accountability relative to student performance	7.3%
n. Student counseling problems	7.3%
o. All other entries on the checklist	24.4%

Although it was evident that the large majority of participating chairs held positive views relative to DE programming, a few chairs expressed concerns relative to its viability in graduate programs. One chair, for example, was of the opinion that the lack of face-to-face student interaction violated the norms of professional practice regarding collaboration and teamwork. In the words of this participant, *“DE downplays the value-added university experience and is inappropriate for graduate education which requires learning in a community and is incompatible with certain instructional priorities for school leaders.”* Another commented that, *“We have no DE courses in our program and likely never will.”* One participant expressed a concern that DE might be just another one of the program changes that has detracted from the standards required by quality graduate programming and a quality university experience.

### **Program Evaluation Considerations**

Relative to the success of DE technologies and student learning, approximately one fourth of the chairs expressed the opinion that no such evidence was available for making this judgment. However, another 36.6% of the chairs believed that there was “no difference” in student learning between those courses taught in the more traditional mode and those taught through DE methods. Although 14.6% viewed DE methods as resulting in “more successful” learning for students, 24.4% was of the opinion that DE methods resulted in “less successful” learning results. These study results loom significant for several reasons and point to the need for more in-depth, comprehensive evaluation studies of DE and its impact on student performance. Comments by the participants provided additional insight into the matter of student learning. One chair commented that, *“My colleagues believe that graduate education involves more than taking courses and learning facts. It involves a deeper learning which can occur only through relationships.”* Another pointed out that, *“Student persistence to graduate is roughly the same with or without traditional or DE programs; it depends on the faculty members.”* And another noted that, *“Evaluation is more difficult in DE courses; all formats have strengths and weaknesses and all can be successful.”*

Web-based computer communication was viewed by 80.0% of the study participants as having the most promise for use in preparation programs in Educational Administration in the future. Web-based methods outdistanced each of the other DE technologies by a substantial margin. The second most popular DE technology,

television, was judged as most promising and appropriate by 41.5% of the chairs. E-courses, CD-ROM, satellite courses and conference audio communication each received support as the most promising DE technologies by less than 40.0% of the respondents.

### **Identification of Effective DE Programs**

One of the stated purposes of this study was to identify educational administration programs and faculty personnel that appeared to be taking a leadership role in DE. Although it is not the purpose to identify all such programs here, four specific institutions that have developed impressive DE programs to date are mentioned for those persons who might wish to contact the participants of these programs for further information.

#### **University of Kentucky**

Department of Administration & Supervision  
Lexington, KY

*Contact persons:*

James S. Rinehart, Department Chair  
Susan J. Scollay, Director of Graduate Studies  
Eddy Van Meter

#### **Kansas State University**

Department of Educational Administration & Leadership  
Manhattan, KS

*Contact persons:*

David Thompson, Department Chair  
Gerald Bailey  
Trudy Salsberry  
Robert Shoop  
Kent Stewart  
Al Wilson

#### **University of Missouri-Columbia**

Department of Educational Leadership & Policy Studies  
Columbia, MO

*Contact persons:*

Irvin Cockriel, Department Chair  
Dan Cockrell  
George Peterson  
Jay P. Scribner  
Jerry Valentine

#### **Purdue University**

Department of Educational Foundations and Administration  
West Lafayette, IN

*Contact persons:*

William D. McInerney, Department Chair  
Marilyn Hirth

### III. Study Summary

Data collected relative to this study provided the following findings:

1. Web-based computer communication was the leading technology being utilized for DE courses in Educational Administration programs in UCEA member institutions. E-courses, TV courses, videotape technology, and closed circuit TV were other leading DE methods utilized.
2. Eighty DE course titles were reported by the study participants with School Law, Administrative Leadership, Personnel Administration, Supervision, and Instructional Leadership leading the course listings. The large majority of DE courses, however, was being taught through a combination of DE and traditional classroom methods.
3. In the large majority of institutions, such factors as course content, course requirements, student evaluation procedures, and course completion time were the same as in traditional courses.
4. Most of the participating chairs was of the opinion that DE courses were making educational opportunities more available to more students, and about half believed that DE courses were also reducing the time constraints for course taking by students. About one third was of the view that DE also was making education more affordable for students by reducing such factors as commuting costs. The fact that DE technology was increasing program access to new student audiences and that 70% of the chairs reported that student demand for DE courses was at a "high" or "moderately high" level were significant findings with major implications for future DE programming in educational administration.
5. DE courses, without question, were being designed internally by individual faculty members or by faculty members who worked in teams. Commercial purchasing of courses was extremely limited.
6. DE efforts on the part of faculty were considered as adding to the workload of faculty and about 70% of the faculty, who were involved in DE instruction, did not receive additional compensation for such involvement.
7. DE implementation most often was the result of both faculty choice and some pressure from others to initiate such programs. More than one third of the chairs indicated that such implementation was strictly the choice of faculty personnel.
8. Loss of student enrollment, increases in credits from other programs, increases in student enrollment, and

problems of territory were the leading problems resulting from competition in the delivery of DE courses. However, the competition for prime time slots for program delivery seemingly could become a greater problem within universities in the future.

9. Although the cost factors related to DE methods had been identified to some extent, many institutions had not clarified these costs or had done so only in a limited way.

10. Although some technical support for faculty for designing and delivering DE courses was available at most universities, such support continued to be a need in many cases. Support for the development of specific courses, support for course delivery, support for the teaching of DE courses, and support for inservice training relative to DE methods and possibilities were the leading areas of need as reported by the participating chairs.

11. Inhibitors or constraints to DE programming in Educational Administration programs were led by such factors as lack of faculty interest, lack of needed funding, restrictive Graduate College requirements, lack of a funded budget for DE programs, lack of adequate technical support, and the inability to provide quality services for DE students.

12. Study results made it clear that extended efforts must be made to evaluate the end results of DE programming, especially in relation to student learning. Although 36% of the study participants perceived "no difference" in student learning between traditional and DE courses, nearly one fourth was of the opinion that DE courses resulted in "less learning" for students.

13. Finally, although it was evident that some EDA programs were only in the initial stages of DE programming, DE methods were well established in the majority of preparation programs. On the basis of the evidence in this study, the escalation of DE programming in preparation programs for Educational Administration students appears inevitable and those departments preparing school administrators necessarily will have to become proficient in the use of DE technology for program delivery if they intend to be competitive and meet student needs.

“...Everything is interconnected and creating relationships and networks is a central task of school leaders.”

# Can You Quantumfy That?

**Perry R. Rettig, Ph.D.**

Current educational practices are based upon the science of Newtonian or classical physics. This approach is flawed in that it is an inappropriate method to look at human, social, and dynamic systems. This approach is very appropriate for the study of closed systems like machines and clockwork mechanisms. But, as Margaret Wheatley (1994a, p. 29) posited, “*A mechanical world feels distinctly anti-human.*” A model derived from lessons learned in quantum physics is more appropriate. Quantum physics and the other new sciences include a set of scientific principles and approaches that are more conducive to studying open systems, such as the environment, social systems, and people. The traditional view is more rational and linear, whereas the new view is more intuitive and multifaceted. Again, the past view is more reductionistic and encourages competition, whereas the newer thinking is more holistic and encourages cooperation. While classical or Newtonian physics is an excellent science, it is not the science to be used in order to understand us and the organizations in which we live.

## **Classical Thinking**

Classical physics seemed to provide the opportunity for scientists to better understand things. As the science explicitly suggests, if you can just break down the complex whole and study its parts individually, you can understand the whole and make predictions about the future. You can then provide an algorithm for success and for subsequent replication. This might work for machines and planetary movements, but cannot do justice to the understanding of the complexities of people and of the organizations in which they work. Unfortunately,

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**Perry R. Rettig, University of Wisconsin–Oshkosh**

scientists and theorists in other fields have taken these fundamental principles of Newtonian physics and applied them to fields that don't fit the approach. For example, behaviorists like John Watson and B.F. Skinner applied this classical model of mechanistic linear prediction to the study of human life and behavior. However, the science is inappropriate here. Henry Stapp (1993) stated,

*The behaviorists sought to explain human behavior in terms of certain relatively simple mechanisms, such as stimulus and response, habit formation, habit integration, and conditioning of various kinds. It is now generally agreed that the simple mechanisms identified by the behaviorists cannot adequately account for the full complexities of human behavior.* (p. 13)

Frederick Taylor then applied this same method to understanding how to make employees work more efficiently and how to provide the leadership to control the desired results. Stephen Covey explained his concern, “*You simply can't think efficiency with people. You think effectiveness with people and efficiency with things*” (1989, p. 169). The flaw lies in the belief that people can be dissected and understood and controlled like machines. It believes that leaders must motivate and think for their workers. It believes that work must be broken down into ever smaller parts in order to understand the whole. It does not take into account the human equation. It does not take into account how the parts effect the whole in interconnected ways that cannot be measured in isolation. It does not take into account the incomprehensible interconnectedness of the relationships within the whole. It does not fit the study of humans and their organizations.

## **Classical Schools**

Still, our school systems are profoundly influenced by the Newtonian way of thinking. Our schools are organized and structured in a highly rigid, classical model. The supervision and evaluation of teachers, curriculum and instruction, and assessment of students also have very strong ties to Newtonian physics.

School systems are highly and rigidly structured. The hierarchy is a top-down model wherein different silos are aligned for efficiency and standardization. Most medium- and larger-sized school districts have a superintendent at the top of the hierarchy. Directly under them on the operational flowchart are either deputies, or directors, or assistant superintendents who have people in specialized

areas reporting to them. For example, there quite likely is a director of personnel, a director of pupil services, a director of business services, and a director of curriculum and instruction. Each of these directors will supervise five to ten people (coordinators) with more specialized roles and expertise.

Each of these major function areas (personnel services, business services, pupil services, and curriculum and instruction) have their own systems for accountability and bureaucracy. Tedious and microscopic budgeting processes provide accountability for business services, while personnel services uses very prescriptive collective bargaining agreements. Pupil services is clearly governed by federal and state laws which detail how students, teachers, and programs are identified, served, and evaluated. Curriculum and instruction has numerous committees that must go through various levels of permission for changes and textbook adoption. Student and curriculum evaluation are the hallmark of accountability in this function area. The entire organization is governed by hundreds of impersonal policies. Communication is clearly funneled through hierarchical flow charts. E-mail and memoranda rule the day. Individual schools are mirror images, at an albeit smaller scale, of these systems.

Principals are expected to provide clinical supervision and evaluation of teachers, as well as for classified staff. Sadly, teachers often complain that the supervision that they receive is more perfunctory in nature and meaningless to them (Rettig, 1998). They are observed very infrequently and then receive a written report as to the effectiveness of their work. The summative evaluations at the end of the year are typically based upon these infrequent observation reports. The observation and evaluation forms are very detailed in what is expected of the teacher and in the levels of performance. Each teacher is rated using the same forms. Individualized supervision and evaluation are the exception, not the rule. Forms rule the day and personal plans are cursory, at best. Consistency, control, and standardization are valued as desirable.

Teachers are typically not allowed to unilaterally choose their own textbooks and curriculum. They usually must follow the prescribed curriculum guide provided by the school district. Likewise, they must use textbooks that have been written by external publishers and adopted by the board of education. Many of these textbooks attempt to “teacher proof” the job of educators. There is renewed interest in state and national curricula. There is an

emphasis on consistency and standardization. Furthermore, there is an increasing emphasis at both the local and state levels for standardization of assessment and testing of students. In other words, the curriculum, the instruction, and the assessment tools are becoming more and more homogeneous and similar from school to school. Each school is beginning to look alike. Education expert, Linda Darling-Hammond (1999) explained:

*One inheritance from the assembly line is the notion that decision making about curriculum, assessments, school design, and student progress is the purview of those who sit above teachers in a large bureaucracy. Teachers' work consists largely of stamping students with lessons as they pass by, conveyor belt style, from grade to grade and class period to class period. (p. 32)*

While classical scientific thought's grip is still strong on our schools, there is hope. As leadership theorist Margaret Wheatley posited, “*There is a simpler way to lead organizations, one that requires less effort and produces less stress than the current practices* (1994a, p. 3). The lessons we are learning from quantum physics and the other new sciences support many of the more intuitive notions we already feel are best practices and also give rise to new thinking that may fundamentally change how education is approached in this new millennium. “*In the new science, the underlying currents are... giving primary value to the relationships that exist among seemingly discrete parts*” (Wheatley, 1994a, p. 9).

### **Quantum Thinking**

Just what is quantum physics? Quantum physics can best be defined as a “*statistical theory that deals with probabilities*” (Stapp, 1993, p. 14). It looks at the interconnectedness of the universe at the subatomic level. Its language is the more intuitive and qualitative mathematics of patterns and relationships. Perhaps a theoretical example from this science and from another newer science will help.

Bell's Theorem is also known as non-local causality. This experiment was done mathematically before it was verified in the laboratory. What John Bell discovered was the idea that you could pair together two electrons. Once they were paired together, you could separate them at macroscopic distances. After they were separated, the experimenter/observer could change the spin of one of the electrons. In a most interesting twist, the other electron would instantaneously change its spin in a corresponding

fashion even though it could not “see” the other electron. How could this be?

We are trapped by our limited, classical thinking. It is apparent that the two objects are separate, but that is the trap. The two objects are not necessarily two objects, or separate. They are interconnected, or one object. *“It is a quantum loophole through which physics admits the necessity of a unitary vision”* (Jaworski, 1996, p. 79). Interconnectedness and relationships are the center piece to this quantum world, and communication is the glue to these relationships. There is not an observer separate from the observed. The observer and observed are linked together as part of the whole. *“The work of Bell... has resulted in a strong experimental confirmation that in the quantum realm it is wrong to think of quantum phenomenon as independent hidden entities influenced by independent local circumstances”* (Pine, 1999, p. 22). Fritjaf Capra (1996) went further when he said,

*Living systems are integrated wholes whose properties cannot be reduced to those of smaller parts. Their essential, or ‘systemic,’ properties are properties of the whole, which none of the parts have. They arise from the ‘organizing relations’ of the parts... Systemic properties are destroyed when a system is dissected into isolated elements. (p. 36)*

From Bell’s Theorem, and from other quantum experiments, we learn of the unifying context of nature. We are not separate; we are interconnected. Isolating through measurement of individual parts does not give us a better understanding of the whole. The whole can only be understood by examining the entire system in a unified fashion.

Fractals prove to be yet another mysterious phenomenon in nature that can teach us important lessons. Examples of fractals can be seen in every day life. They can be created in the laboratory, and they can be created with a computer. Fractals are images or shapes that continually repeat themselves in finer and finer detail within a particular object. In nature, we see fractals in ferns, in mountains, in trees, and in clouds. When the observer studies one of these objects, he or she notices a pattern in the shape of the leaf or of the cloud. If one then looks even closer and closer, these same patterns continually appear over and over again at ever increasing microscopic levels. One can never seem to get to the end. It reminds one of walking into a hall of mirrors where two mirrors are facing one another and the same images continually reflect back upon one another at every decreasing sizes.

We learn a very special message from fractals. We learn that by trying to measure or observe something in ever increasing detail we really don’t learn anything new. Rather, we must look outward to the macroscopic picture. From fractals we learn to look for patterns and recurring themes; we must be patient. We need to look at the entire system over space and time. In other words, a quick one-time snapshot is not sufficient.

### **Quantum Schools**

Quantum physics and the other new sciences have taught us some valuable lessons—if we listen. Some of these lessons seem common-sense, and so they support the work that some people and organizations are already doing. Other lessons are counterintuitive, and they make us strain to understand their meaning and application. Some of these require a great “leap of faith” while others feel more natural. In any case, a summary of these key lessons follows:

(1) People and systems are subjective. Objectivity is an illusion, and measurement is subsequently subjective. How we see the world is less a matter of reality than a matter of what we choose to see. However, we help to create reality by our participation. Observation is a form of participation. We cannot be separate from what we observe.

(2) All of nature is unified and interconnected. We are part of nature and are thus interconnected with all of nature and each other. *“The implications of this are profound... the physical world is an inseparable whole”* (Gilman, 1996, p. 12). This concept supports the point that we are part of what we observe, not separate from it. How can we be interconnected with what we are observing, yet not influence it? *“We have finally come to see the world as a single, albeit complicated, system, one immense set of interrelated pieces”* (Lipman-Blumen, 1996, p. 78).

(3) A web of relationships is central to this unification. Just as living systems are integrated wholes, so too is everyone and everything interrelated. Therefore, identifying and embracing the web of relationships internal and external to the system is imperative. Everyone receives their identity from each other, and in turn, create the identity of everyone else. Measuring by taking apart the whole to observe individual parts, takes us further away from reality. The whole can only be understood by looking at the whole as a system; it needs to be observed over the breadth of time and space.

(4) Changes at the local level can make huge impact at the system level. Margaret Wheatley (1994a) said it best: *'Think globally, act locally' expresses a quantum perception of reality. Acting locally is a sound strategy for changing the large system... Acting locally allows us to work with the movement and flow of simultaneous events within the small system. We are more likely to become synchronized with that system, and thus to have an impact. These changes in small places, however, create large-system changes... because they share in the unbroken wholeness that has united them all along. Our activities in one part of the whole create non-local causes that emerge far from us.* (p. 42)

### **Application of the Lessons**

Now that the lessons from quantum physics and the other new sciences have been identified, let's turn our focus to application of the lessons to several key attributes of school systems. As was mentioned earlier in this article, school structure, teacher supervision and evaluation, curriculum and instruction, and student assessment are but a few critical elements in education that are effected by our scientific stances.

School systems should be less isolated with silos and departments and should be more integrated horizontally and vertically. As information is the lifeblood of living organizations, communication from top to bottom and across the organization must be able to move quickly throughout the entire system. Furthermore, leaders of these systems must become more comfortable with ambiguity and with long-term goals, and be less concerned with control. In the words of Margaret Wheatley (1994b, p. 20), *"Leaders need to stop managing moments and analyzing results day by day, or even quarter by quarter, and look for deeper order that shows up as patterns of behavior."* Fritjaf Capra (1996) explained the new structure:

*There is another kind of power, one that is more appropriate for the new paradigm—power as influence of others. The ideal structure for exerting this kind of power is not the hierarchy but the network... The paradigm shift thus includes a shift in social organization from hierarchies to networks.* (p. 10)

Similarly, these organizational structures must be fluid and flexible. People must now be organized not in rigid permanent structures. Rather, they must be able to divide and join other people immediately for evolving tasks and

then divide again just as quickly. In other words, people within organizations (and even external to the organizations) must be able to quickly respond to changing conditions and reorganize for the new task at hand. Once the task is completed, different people go on to different tasks. Each time, different leaders may come to the front to meet these tasks. Lipman-Blumen (1996) posited:

*Unlike the rigid hierarchies of formal organizations, the informal system may be composed of many loosely structured webs, outside the chain of reporting channels. More flexible than hierarchies, network segments can operate separately. They even break away temporarily for specific purposes and then regroup without damage—sometimes in new configurations.* (p. 210)

Thus, the new school system needs to be less concerned with command and control. It must focus less on maintaining its present structure of departments and bureaucratic functions, and focus more on networking together all people within the system. More time should be spent on focusing on the clients—the teachers and students in the classrooms—and less on serving the dictates of administration.

As administration becomes less concerned with controlling and managing, their focus for teacher supervision and evaluation must change accordingly. Since living organizations are so highly complex and interconnected, it is impossible to draw a line of cause and effect—tug on one strand of the web and the whole web trembles. Therefore, it is imperative that administration abandon the reductionist philosophy of checklists to measure teacher skill parts. Rather, supervisors should spend a great deal of time looking for patterns and emerging themes. This will require long looks over space and time. In other words, supervisors need to examine the effectiveness of the entire system working together year after year, not on singular lessons from one teacher at a time. Furthermore, supervisors should welcome their intuitions. They should run from the attempt of control through the objective lens and embrace the subjective nature of working with people.

Perhaps the most important lesson to learn is that the leader's role will change. No longer will the role of the administrator be to control and evaluate. The role will now change to helping the professionals build networks and to rely on one another. Teachers need to become part of their colleagues' networks. More time should be spent observing one another for the purpose of professional development, not for accountability. Rather than be-

coming more and more isolated, teaching must search for relationship building.

As teachers expand their networks, they will take on more active roles in curriculum and instruction. Fewer levels of bureaucracy will permit information to flow quicker and be more appropriately used by those working most closely with the customers. Rather than standardizing curriculum, materials, and pedagogy, individual teachers and school sites must be given the opportunity to react to the particular needs of their unique students. In other words, as organizations are fluid and ever changing, so too are people. Thus, teachers must be able to respond to their own classes with unique approaches. Standardization can only guarantee mediocrity.

Curriculum and instruction will also need to change if we take the lessons of quantum physics and the other new sciences to heart.

Margaret Wheatley (1994a, p. 63) warned us, "Every act of measurement loses more information than it obtains."

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