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LOYOLA UNIVERSITY CHICAGO

TWEETING IN THE AGORA: AN HISTORICAL DOCUMENTARY OF EDUCATIONAL STRUCTURES AND DISCOURSE IN ANCIENT GREECE AND IN MODERN SOCIAL MEDIA

A DISSERTATION SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL OF EDUCATION IN CANDIDACY FOR THE DEGREE OF DOCTOR OF EDUCATION

PROGRAM IN ADMINISTRATION AND SUPERVISION

BY

JILL MARALDO

CHICAGO, ILLINOIS

MAY 2014

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ABSTRACT

This dissertation focuses on the systems and structures of formal and informal education in Ancient Greece under the leadership of Socrates, Plato and Aristotle and the systems and structures of education and discourse on social media, specifically on blogs and Twitter. Using historical documentary research methodology of primary and secondary sources, the researcher analyzed, compared and contrasted these systems and structures and examined the implications for today's educational leaders.

The four research questions of this study were:

- 1. According to select primary sources from 400 B.C.- 322 B.C. (heretofore referred to as ancient times) and historical secondary sources about that time period, what was the system and structure of formal and informal education and discourse?
- 2. According to select primary and secondary sources from 1990-2013 (heretofore referred to as modern times) what is the system and structure of formal and informal education and discourse?
- 3. How do the systems and structures of formal and informal education and discourse of ancient times compare and contrast to the systems and structures of formal and informal education and discourse of modern times?
- 4. What are the implications of this study for today's educational leaders?

Throughout the research process, several lenses were examined through select primary sources from 400 BC-322 BC and historical secondary sources about that time period and select primary and secondary sources from 1990-2013 to determine how the systems and structures of Socrates, Plato and Aristotle's practice and the systems and structures of educational leaders on social media address many issues such as equity of access, leadership and communal learning spaces.

Analysis of ancient and modern times, as well as the comparisons and contrasts between both periods was done to determine the impact of such systems and structures on today's educational leaders and the implications for the future.

CHAPTER I

INTRODUCTION

Purpose of the Study

Selections From the Laws of Plato Book VII - In these several schools, let there be dwellings for teachers, who shall be brought from foreign parts by pay, and let them teach the frequenters of the school the art of war and the art of music, and the children shall come, not only if their parents please, but if they do not please; and if their education is neglected, there shall be compulsory education, as the saying is, of all and sundry, as far as this is possible; and the pupils shall be regarded as belonging to the state rather than to their parents. My law would apply to the females as well as the males; they shall both go through the same exercises. I assert without fear of contradiction that gymnastic and horsemanship are as suitable to women as to men....And I further affirm, that if these things are possible, nothing can be more absurd than the practice which prevails in our own country of men and women not following the same pursuits with all their strength and with one mind, for thus the state, instead of being a whole, is reduced to a half, and yet has the same imposts to pay and the same toils to undergo; and what can be a greater mistake for any legislator to make? (Monroe, 1932, p. 243)

The problem of the Theorists - The writers of this group, while for the most part contemporary with the Sophists, differ from them in two important respects. The Sophists were practical teachers and were interested in the educational movement of the times chiefly in a personal way. They claimed to be able to prepare for a successful career, and were primarily concerned in achieving such a success for themselves. They taught for money and for reputation, as do most teachers at the present. Some of them, Socrates, had a profound public interest as well, but the earlier Sophists were not native Athenians, and had little patriotic or national interest. On the other hand, the theorists were profoundly interested in education on account of its national importance, and so far as practical teachers, they were wholly disinterested and refuse to accept any remuneration for their efforts. (Monroe, 1932, p. 116)

From *Plato's Republic Book VII* - Because a freeman ought to be a freeman in the acquisition of knowledge. Bodily exercise, when compulsory, does no harm; but knowledge which is acquired under compulsion has no hold on the mind. (Monroe, 1932, p. 216)

While these educational issues may sound the same as the modern issues that 21st century educators face, they are actually from 2,300 years ago. Socrates, Plato and Aristotle are possibly the last names one would mention when researching the role of social media in the development of a Personal/Professional Learning Network (PLN). However, the work of these ancient Greek philosophers is as relevant in the 21st Century as ever before. If one traveled back in time 2,400 years ago, words like "Twitter," "blog," and "Ning," did not even have definitions, none the less relevance; however, their foundations of purpose for professional learning can be traced to the ancient schools of the very philosophers mentioned above.

The Gymnasium, a forum for physical, academic and philosophical pursuits, was made famous by Plato's (born 427 BC - died 347 BC) Academy in 387 BC and then Aristotle's (born 384BC - died 322BC) ancient Peripatetic school at the Lyceum in 335 BC. Before that, Socrates (born 469BC - died 399 BC) wandered the agora (approximately early 400's BC), engaging in philosophical discussions with people in the marketplace. These early schools were gathering places for teachers and learners, a place to exchange ideas, develop new concepts and record thoughts and philosophies. Knowledge was passed from person to person through verbal and written interactions. The work of the teacher was recorded by the student, in order to preserve the learning and the content for future study.

Fast-forward to 2014 AD. Educators regularly gather to discuss various topics of interest, including pedagogy, philosophy, and best practice. These professional learning communities are as rich and vibrant as those that took place in ancient Greece. They are

no longer thriving at the Lyceum or in the Agora, but instead on the Internet, through social media.

The purpose of this study was to closely examine the history of the Gymnasium in ancient Greece, specifically the work of Socrates, Plato and Aristotle, and their roles as the founders of education and personal development at the Lyceum, ancient gymnasia and Peripatetic schools. Then, comparing and contrasting this ancient work to the modern day use of social media on the Internet for the development of Professional Learning Communities/Personal Learning Networks (PLC/PLN) for today's educators, with a specific focus on issues of equity and access to information on Twitter and blogs.

Proposed Research Questions

Compared to the research and documentation of the philosophies of Socrates,
Plato and Aristotle, there is little peer-reviewed literature on the use of social media as a
tool for professional/personal learning for educators. Therefore, four research questions
have emerged:

- 1. According to select primary sources from 400 B.C. 322 B.C. (heretofore referred to as ancient times) and historical secondary sources about that time period, what was the system and structure of formal and informal education and discourse?
- 2. According to select primary and secondary sources from 1990-2014 (heretofore referred to as modern times) what is the system and structure of formal and informal education and discourse?

- 3. How do the systems and structures of formal and informal education and discourse of ancient times compare and contrast to the systems and structures of formal and informal education and discourse of modern times?
- 4. What are the implications of this study for today's educational leaders?

Components of the Investigation

Throughout the research process, the researcher utilized the following lenses while examining the select primary sources from 400 BC - 322 BC and historical secondary sources about that time period and select primary and secondary sources from 1990-2014 to determine how the systems and structures of Socrates, Plato and Aristotle's practice and the systems and structures of educational leaders on social media, specifically Twitter and blogs address:

- A. Equity in primary participation
- B. To whom is thought and information disseminated following primary participation?
- C. Who formally leads?
- D. Who formally facilitates?
- E. Process for dissemination, transcription and interpretation
- F. Resultant change/spheres of influence for
 - a. the individual
 - b. the organization
- G. Public opinion of the discourse
- H. The evolution of public acceptance and validation

- a. What were the obstacles?
- b. What were the enhancers?
- Power of grassroots creation for success/participation and professional authority
- J. Power of moral authority for shared beliefs, purposes and values
 - a. The notion of a contribution to the greater good/collective knowledge of PLN

K. Communal learning spaces

Using these 11 lenses, the researcher focused her study and addressed the research questions set forth by this study within the following theoretical framework.

Theoretical Framework

Personalized Learning

Authors Collins and Halverson of Northwestern University and University of Wisconsin - Madison, suggest in their book, *Rethinking Education in the Age of Technology*, that technology will change learning both inside and outside of the classroom. The focus of learning will be more personal and will be in school, the workplace and brought directly to the learner, through distance learning opportunities.

The authors talk about an "equilibrium" that the modern school system has reached. They suggest that when new technology or approaches to learning are introduced, the system becomes unbalanced and must marginalize these new ideas to fit into the old model in order to maintain said equilibrium. Unfortunately, as the authors also say, schools of today are preparing students for the world of yesterday and not the

worlds of tomorrow.

Interestingly, their main points focus on learning in general and not on specific technological developments. There was no time when the authors suggested that one piece of technology by itself would transform educational institutions. Instead they focus on creating lifelong learners. Students who can access information anytime anywhere are the reality. The teachers are no longer the "sage on the stage," earning respect and establishing authority by the knowledge that they alone possess and can pass along to students (Collins & Halverson, 2009, p. 32). Most, if not all students can access more information that a teacher could ever possibly possess by turning on their phones that are remanded to their lockers or backpacks in most schools. This notion is frightening for teachers and school leaders, so they choose to reject the technology and keep it on the sidelines.

These issues continue to plague technology enthusiasts. The barriers that are in place to "rethinking education in the age of technology" may seem insurmountable at times. Teachers who are threatened or scared by the technology, school boards who don't want to fund the equipment purchases, and instructional leaders who must navigate the contradiction between common core standards and the theory of universal curriculum versus the individualization of learning that students desire and that technology provides. That is why the authors are suggesting a complete overhaul to the way schools are structured. The reality is that learning is happening on demand in most places *outside* the walls of the classroom: on the city bus, in the workplace and at the local coffee shop. People plug in to the Internet on their phones and laptops and iPads, access the

information about any topic that they need within milliseconds and then act upon that information. Web 2.0 is interactive, no longer a one way flow of information, people can interact with information and data all the time. They can publish to a worldwide audience, tweet to legions of followers in 140 character bursts and text a friend using only their thumbs. The knowledge economy that exists in America in the 21st century is not being served by the Industrial model of education that served the 20th century learners needs.

The trend of education has gone from learning practical knowledge – the apprenticeship model to the industrial model of mass public schooling to allow students to become good citizens and prepare for the expectations of colleges. The authors point to the Committee of Ten in the 1890's that recommended English, math, Latin, Greek, history, science and geography as the subjects that the colleges would deem important, thus shaping the high school curriculum of most of the 20th century (Collins & Halverson, 2009, p. 95). But the modern society where knowledge is key has made it "impossible for schools to teach people all the knowledge they might need as adults" (Collins & Halverson, 2009, p. 95), therefore creating a need for more general competencies. The SCANS report of 1991 found five core competencies were needed in order to be successful in the 21st century workplace. They are: "resources, interpersonal, information, systems and technology" (Collins & Halverson, 2009, pp. 95-96).

The authors continue to point out that learning is trending toward individualization. Learners of all ages must know how to access information, seek instruction and customize learning in order to be competitive. Learning is no longer

allocated to youth, we must create lifelong learners. Adults are expected to continue their learning in the workplace and the type of earning that takes place, both formal and informal are changing the definition of education as well, blurring the lines between secular and sacred as they were in earlier times when reading was taught for the purpose of reading the bible. People are creating learning communities that revolve around a topic of mutual interest or a shared vision or goal.

The authors have three main areas of focus to accomplish the task of changing the educational system, "performance – based assessment, new curriculum designs and new approaches to equity in a digital world" (Collins & Halverson, 2009, p. 113). Their idea is that the performance-based assessments would be based on the individual needs of the learners and taken when the learners were ready to take them. It would differ from the existing high school model by the timing of the assessments as well as the content itself of the learning which would be much more specific to the learners' areas of interest, providing them with a certification of knowledge on a specific topic instead of a general diploma. The idea of new curriculum design would reshape classrooms completely. Classes would be based on mutual interest in a subject instead of age or geography. "Traditional academic skills, such as reading, writing, mathematics, science, history, and geography, would be woven into each curriculum" (p. 117). This change in how curriculum is designed and implemented is a major shift for superintendents who would need to completely redesign their curriculum maps and rethink learning outcomes.

"Collins and Halverson (2009) cite David Shaffer's design for future schools. Shaffer suggests "schools organize learning around professional practices" (as cited in Collins &

Halverson, p. 188). He states that professions "have organized knowledge, beliefs, values and strategies" (p. 118) called "epistemic frames" (p. 118). They suggest that these frames be used to inform training and instruction for students pursuing various areas of study and careers.

Communities of Practice

Etienne Wenger, in his text *Situated Learning*, developed the concept of communities of practice and, in *Digital Habitats* in which he incorporates technology into his theory. Wenger (2013) writes,

Theoretically, my work focuses on social learning systems. I am trying to understand the connection between knowledge, community, learning, and identity. The basic idea is that human knowing is fundamentally a social act. This simple observation has profound implications for the way we think of and attempt to support learning.

In 2009, Wenger wrote about social learning, expanding his research on the topic of communities of practice. The concept of social learning is addressed in four parts and helps to inform this historical documentary research. Wenger examines social learning spaces, learning citizenship, social artists and learning governance. He states,

interest in these factors reflects a shift in the way learning is understood, from the acquisition of a curriculum to a process inherent in our participation in social systems. Increasing the learning capability of these social systems is becoming an urgent concern in a world where we face daunting learning challenges. (Wenger, 2009)

Professional Learning Communities

Finally, Rick and Rebecca DuFour (2010), in their chapter entitled, "The Role of PLCs in Advancing 21st Century Skills" from Bellanca and Brandt's 21st Century Skills compilation, discuss how, "PLC's will use technology to support and accelerate the PLC

process and expand the concept of community" (p. 85). This concept of community will be a key focus of the comparison between ancient and modern.

These researchers have laid the foundation upon which this study will be based. Their insights into education, technology, change and professional growth will help to focus the research and lend *gravitas* to the topic of social media as a learning tool for educators. For the purpose of this study, the work of Collins and Halverson, Wenger and DuFour will serve as the theoretical framework through which the resources and questions will be guided.

The following Venn diagram can be used to interpret the interrelationship between these three theories (see Figure 1).

The intersection of these three theories helps to shape the direction of this research. Wenger's Communities of Practice is rooted in the business world. The effectiveness of teams and the in-person interactions of team members were the main areas of focus of Wenger's research. Richard DuFour brought the concept of the professional learning community to the world of education. His research and contribution to this world of education and professional development have significantly influenced the direction of this research study. These two theories, from the often disconnected worlds of business and education are brought together by the research of Collins and Halverson, whose research on the future of education and professional development include a more personalized focus and ease of access for the learner, facilitated by technology and social media. While there are significant similarities between Wenger's work and DuFour's work, they are rooted in different worlds: the

world of business and the world of education. Collins' and Halverson's theory of personalized learning intersects the other two theories and stood as the main theoretical framework of this research.

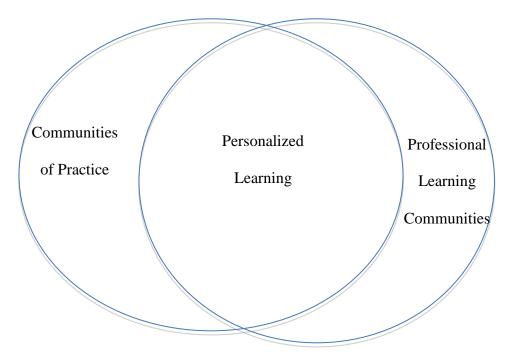


Figure 1. An Intersection of Three Theories

There does exist a body of criticism of social media. In a recent book *Networks* Without a Cause: A Critique of Social Media by Geert Lovink (2012), the author writes,

Many conceive of the Internet as a lively exchange of arguments and files. We talk through Skype, send pictures, check the weather and download software. Only with the rise of the blogosphere in 2003-04 did the Internet become inundated with self-promotion. A culture of "self-disclosure" established itself. Social networking sites, coming shortly after, unleashed a collective obsession with "identity management." (p. 38)

In the July/August issue of *The Atlantic*, author Nicholas Carr (2008) expressed concern for how the Internet is changing the way we consume information:

Thanks to the ubiquity of text on the Internet, not to mention the popularity of text-messaging on cell phones, we may well be reading more today than we did in the 1970s or 1980s, when television was our medium of choice. But it's a different kind of reading, and behind it lies a different kind of thinking—perhaps even a new sense of the self. "We are not only *what* we read," says Maryanne Wolf, a developmental psychologist at Tufts University and the author of *Proust and the Squid: The Story and Science of the Reading Brain.* "We are *how* we read." Wolf worries that the style of reading promoted by the Net, a style that puts "efficiency" and "immediacy" above all else, may be weakening our capacity for the kind of deep reading that emerged when an earlier technology, the printing press, made long and complex works of prose commonplace. When we read online, she says, we tend to become "mere decoders of information." Our ability to interpret text, to make the rich mental connections that form when we read deeply and without distraction, remains largely disengaged. (Carr, 2008)

He then ties his concerns to those that Socrates had for the use of writing.

Maybe I'm just a worrywart. Just as there's a tendency to glorify technological progress, there's a countertendency to expect the worst of every new tool or machine. In Plato's *Phaedrus*, Socrates bemoaned the development of writing. He feared that, as people came to rely on the written word as a substitute for the knowledge they used to carry inside their heads, they would, in the words of one of the dialogue's characters, "cease to exercise their memory and become forgetful." And because they would be able to "receive a quantity of information without proper instruction," they would "be thought very knowledgeable when they are for the most part quite ignorant." They would be "filled with the conceit of wisdom instead of real wisdom." Socrates wasn't wrong—the new technology did often have the effects he feared—but he was shortsighted. He couldn't foresee the many ways that writing and reading would serve to spread information, spur fresh ideas, and expand human knowledge (if not wisdom). (Carr, 2008)

He goes on to say,

So, yes, you should be skeptical of my skepticism. Perhaps those who dismiss critics of the Internet as Luddites or nostalgists will be proved correct, and from our hyperactive, data-stoked minds will spring a golden age of intellectual discovery and universal wisdom. Then again, the Net isn't the alphabet, and although it may replace the printing press, it produces something altogether different. The kind of deep reading that a sequence of printed pages promotes is valuable not just for the knowledge we acquire from the author's words but for the intellectual vibrations those words set off within our own minds. In the quiet spaces opened up by the sustained, undistracted reading of a book, or by any other act of contemplation, for that matter, we make our own associations, draw our

own inferences and analogies, foster our own ideas. Deep reading, as Maryanne Wolf argues, is indistinguishable from deep thinking. (Carr, 2008)

Criticisms, like those of Carr (2008) and Lovink (2012), stand in contrast to the findings of this researcher, though she acknowledges that such criticisms about the platform of social media for professional learning exist.

Significance of the Study to the Field of Educational Leadership

This research is positioned to have great impact on the field of Educational Leadership, lending credibility to what is sometimes dismissed as trivial, insignificant, informal or simply a passing fad. By tying the modern day use of social media to the very foundations of educational discourse in ancient Greece, Educational Leadership will further awaken to the impact and importance of this phenomenon, realizing that while the vehicle may be new, the practice of exchanging ideas in a forum predates the modern era. This research also has the potential to impact how Educational Leadership preparation programs at the university level as well as professional, dues-charging organizations, may consider the incorporation of social media into their curricula and missions, in order to stay relevant and competitive in a world where learning is shifting towards open, accessible and, most significantly, free of charge, opportunities for professional growth and development.

Other researchers have recently begun to study the use of social media for professional development. In her doctoral dissertation, "Learning in 140 Characters: Teachers' Perceptions of Twitter for Professional Development," Kerry J. Davis (2012) stated, "The purpose of the qualitative case study was to investigate ways in which U.S. K-12 public school teachers who participated in weekly Twitter Edchat discussions

perceived the use of a social network site for professional development" (p. iii). Dr. Davis went on to measure this use and concluded, "Data analysis included a pilot study, semi-structured interviews, archived tweets, and publically available archived documents. The main themes included (a) sharing knowledge and resources, (b) sense of belonging, (c) meaningful professional development, (d) technical benefits, and (e) technical drawbacks" (p. iii).

Dr. Vincent Cho, at Boston College, is also researching how teachers and administrators use Twitter for professional development. In his abstract of a soon-to-be published research article, Dr. Cho states,

Some have begun to argue that Twitter and similar technologies will enhance teachers' professional growth by allowing them to share practices, collaborate, and support each other in communities online. Matters, however, might not be so simple. It is not uncommon for technologies in education to fall short of the hopes around them. In this conceptual paper, argue that understanding why this occurs requires stronger theorizing about the relationships among technologies, practice, and communities of practice. (Cho et al., 2013)

Both researchers mention the concept of communities of practice, which is defined by E. Wenger (2010) as,

a community of practice can be viewed as a social learning system. Arising out of learning, it exhibits many characteristics of systems more generally: emergent structure, complex relationships, self-organization, dynamic boundaries, ongoing negotiation of identity and cultural meaning, to mention a few. In a sense it is the simplest social unit that has the characteristics of a social learning system.

The formation of professional learning communities on Twitter can be directly tied to the work of Wenger and DuFour in this area.

Researchers Mizuko Ito, Kris Gutierrez, Sonia Livingstone, Bill Penuel, Jean Rhodes, Katie Salen, Juliet Schor, Julian Sefton-Green, and S. Craig Watkins at the DML Research Hub published a report in January of 2013 regarding youth as connected learners called, "Connected Learning: An Agenda for Research and Design."

This report is a synthesis of ongoing research, design, and implementation of an approach to education called "connected learning." It advocates for broadened access to learning that is socially embedded, interest-driven, and oriented toward educational, economic, or political opportunity. Connected learning is realized when a young person is able to pursue a personal interest or passion with the support of friends and caring adults, and is in turn able to link this learning and interest to academic achievement, career success or civic engagement.

This model is based on evidence that the most resilient, adaptive, and effective learning involves individual interest as well as social support to overcome adversity and provide recognition.

This report investigates how we can use new media to foster the growth and sustenance of environments that support connected learning in a broad-based and equitable way. (Ito et al., 2013, p. 4)

Though focused on youth, their research can be viewed as applicable to the personal and professional learning that educational leaders seek when engaged in online discussions via Twitter and blog posts and comments.

Proposed Methodology

This is an historical comparative documentary study. Historical research methodology will be used to identify and analyze sources from ancient and modern times. According to Gary McCulloch (2004), there is a,

need to understand documents in relation to their milieu, or in other words, to relate the *text* to its *context*. It is necessary to find out as much as possible about the document from internal evidence elicited from the text itself, but it is no less important to discover how and why it was produced and how it was received. Documents are social and historical constructs, and to examine them without considering this simply misses the point. (p. 6)

The ubiquity of documents, both paper and electronic, allows researchers unfettered access to information. "Documents are literally all around us, they are inescapable, they are an integral part of our daily lives and our public concerns....At a public level, too, our identities are defined by the documents that are kept about us" (p. 1). When studying written work, McCulloch notes that,

Until very recently such artefacts were generally written on paper, whether by hand or mechanically. Over the past decade this has changed dramatically with the development of the World Wide Web. So it is vitally important now to take due account of electronic documents, including electronic mail and the data stored and communicated through the Internet. This major innovation has already helped to transform the nature of documentary studies and to extend its potential, and this process is likely to continue and to increase in its significance. (p. 2)

During this research study, this researcher will examine both electronic and printed documents. The invention and widespread use of the printing press by Gutenberg in the fifth century helped to create a print culture that continues today (McCulloch, 2004).

The interpretation and analysis of documents during a documentary research study is significant as well. "...documents need also to be interpreted in the light of specific factors involved in their production and context, such as personal, social, political and historical relationships" (McCulloch, 2004, p. 4). This study in particular, with its focus on educational systems and structures, fits within McCulloch's framework. He states, "Education is interesting and useful partly because of its role in incorporating and transmitting cultural heritages and traditions, that is, it forms a means to develop knowledge, understanding and values from one generation to the next" (p. 4).

McCulloch seeks to use historical documentary research as a means to bridge past and present. As in this research study, both ancient and modern texts were reviewed and analyzed in order to address the research questions. McCulloch (2004) states, "I am also very interested in the potential link between past and present, but hopefully not at the expense of becoming a historical or anachronistic in my approach to documents, which must be interpreted in relation to the historical context in which they are produced" (p. 6). Therefore a clear distinction is made between the ancient texts and analysis of Chapter III and the modern texts and analysis of Chapter IV.

The use of documentary analysis to research a topic can be a powerful approach to research.

Documents can provide potent evidence of continuity and change in ideals and in practices, in private and in the public arena. They are a significant medium through which to understand the way in which our society has developed, and how it continues to develop. Yet they also reflect a basic tension in our society, a rupture between its present and its past. Documentary studies need to come to terms with this alienation from history, and to find ways of reconciling the historical with the contemporary. (McCulloch, 2004, p. 6)

This research study seeks to contribute to this reconciliation.

The history of personal, public and private document creation stems from an increase in publication and literacy of the early decades of the 20th century.

The reading public was bombarded with journalism and commentary to suit every taste. Increasingly cheap book production, buttressed by the rise of paperbacks in the interwar years, also encouraged the mass circulation of fiction and non-fiction in book format.

By the same token, many individuals who were caught up in these contemporary changes took it upon themselves to record their own reactions and responses, sometimes for the benefit of themselves and their families, sometimes for a wider audience....Hence, just as the modern state and the agencies and institutions of the modern world transcribed themselves on paper, so there was a parallel development in which individuals became accustomed to writing themselves into the script.

Such documents, public and personal, constituted a potentially massive resource for social researchers. (McCulloch, 2004, p. 13)

This continues today on blogs and social media, as a way for the public to insert themselves into contemporary written documents.

Documentary research is sometimes criticized and dismissed as being "esoteric, dry and narrow" (McCulloch, 2004, p. 26), but this researcher disagrees. It is the ability of historical documents to connect the present to the past that guides this study.

McCulloch argues,

The full potential of documentary research had lain precisely in the way that it could provide insights into these connections, between past and present on one hand, and between public and private on the other. Its decline lay ultimately in the fragmentation of these basic core elements. Perhaps a rediscovery of the uses of documents in social research may depend on a renewed appreciation of the connections that they enable us to find. (p. 28)

McCulloch (2004) discusses four types of documents to be used for research: primary sources, secondary sources, hybrid sources and virtual sources. This research study will utilize all four of these source types.

The growing popularity of edited versions of documents in published form has established a kind of *hybrid* source this is convenient for researchers but requires careful appraisal. Moreover, the Internet and electronic mail have created a new kind of document, the *virtual* source, which has major implications for the future of such research. (p. 29)

This researcher uses primary, hybrid, secondary and virtual source documents in order to compare the discourse and learning communities of ancient Greece to the learning communities of today on social media platforms such as Twitter and blogs. This research will be carried out through a focus on the historical documentation for the ancient times of the work and history of Socrates, Plato and Aristotle in the Third

Century B.C., including Plato's Symposium, Republic and Laws and Aristotle's Nicomachean Ethics and Politics, and Xenophon's Memorabilia and Symposium. For the modern times, a thorough review of the work of educators almost 2,500 years later, such as Scott McLeod, Will Richardson, Wes Fryer, Vicky Davis, Steve Hargadon, Vincent Cho and Tom Whitby. Primary source blogs such as *Dangerously Irrelevant*, Connected Principals, Moving At The Speed of Creativity, The Cool Cat Teacher Blog, Classroom 2.0, Weblogg-ed, My Island View, Datapulted; and archived transcripts of live Twitter chats on various topics under the hashtags #Edchat, #PTChat, #CPChat, #SatChat, #EdAdmin #K12 #NTchat and #EdTech. While these primary sources will be consulted as the main resource for both the modern examples on social media platforms and historical works of Aristotle, Plato and Socrates, secondary sources will also help to support the primary sources, providing important historical context and interpretation of the ancient work by historians. Secondary source research will also be consulted to examine the current research in the field of social media for professional growth and discourse. The secondary resources will be used to support the primary sources. These sources are written after the time period. They are written about the primary source; this includes books or articles where scholars interpret primary sources. These sources include dissertations, textbooks and articles written about the event at a different time. This researcher selected resources from the ancient and modern times based on their relevance to educational leadership and the evidence of information relating to the eleven compnents of the investigation. Several sources were rejected based on their lack of

substantial information supporting systems and structures of education and discourse, specifically regarding the eleven components of the investigation.

McCulloch (2004) cites Marwick (1970), to explain the difference between primary and secondary source documents. "Primary sources constitute 'the basic, raw, imperfect evidence', which is often fragmentary, scattered and difficult to use. Secondary sources are the books and articles of the historians" (p. 30). Marwick goes on to explain that:

The distinction between primary and secondary sources is absolutely explicit, and is not in the least bit treacherous and misleading...The distinction is one of nature – primary sources were created within the period studied, secondary sources are produced *later*, by historians studying that earlier period and making use of the primary sources created within it. (McCulloch, 2004, p. 30)

McCulloch also addresses the act of translation that can create edits of interpretation to primary source documents – therefore creating a hybrid source.

In addition to the historical primary source documents analyzed during this study, this researcher has accessed several virtual primary source documents in order to analyze the modern era.

The World Wide Web, the Internet and electronic mail...provide unprecedented access to documents which hitherto had been available only to a few. They allow rapid (if not always instant) communication of large amounts of information on a global scale. They also promise to revolutionize the process involved in doing documentary research. Rather than being obliged often to travel long distances to gain access to archives and private collections, in may cases it will be possible for researchers to study the documents on their own computer screen.... (the) 'imminent arrival of digital archives and the accessibility of these primary source materials not just to the academy, but to any informed lay user, may well be the biggest democratizer of historical knowledge since the invention of printed data'. (McCulloch, 2004, p. 34)

McCulloch (2004) reminds researchers that, "whether one is reading primary or secondary documents, whether the documents are on paper or on the Internet, they need to be read critically and analyzed rather than being taken at face value" (p. 41). The analysis of sources, whether primary, secondary, hybrid or virtual, is an essential element of this research study. The context of the sources, the intentions of the writers and the subsequent interpretation of the work by contemporary audiences all played a role in the analysis of the texts for this research.

Marwick notes that historians should satisfy themselves that they have understood the document as its contemporaries would have understood it, rather than as it would be understood today. This entails recognition of technical phrases, esoteric allusions and references to individuals and institutions, as well as of the changing usages of particular words and terms. (McCulloch, 2004, p. 45)

The examination of discourse, meaning and context of words and phrases, also played a role in this research study. "Moreover, as well as linguistic analysis, Fairclough also identifies intertextual analysis as a key focus for social researchers, entailing a comparative understanding of the discourses of different texts in relation to social change" (McCulloch, 2004, p. 45).

Texts can also be analyzed through various frameworks.

The positivist approach emphasizes the objective, rational, systematic, and quantitative nature of the study. The interpretive outlook stresses the nature of social phenomena such as documents as being socially constructed. The critical tradition is heavily theoretical and overtly political in nature, emphasizing social conflict, power, control and ideology... (McCulloch, 2004, p. 46)

The concept of creating and utilizing archives plays an important role in the study of the modern documents for this research. "Archives are the running record of

society"....According to Pierre Nora (1996, p. 8) archives are the guardians of the memories of modern societies, which are increasingly dependent upon them:

No previous epoch ever stocked archives at such a prodigious rate: modern society spews out greater volumes of paper than ever before, and we now possess unprecedented means for reproducing and preserving documents, but more than that, we feel a superstitious respect and veneration for the trace. As traditional memory has vanished, we have felt called upon to accumulate fragments, reports, documents, images, and speeches – any tangible sign of what was – as if this expanding dossier might some day be subpoenaed as evidence before who knows what tribunal of history. The trace negates the sacred but retains its aura. (McCulloch, 2004, p. 51)

An archive, which was once defined as a physical location where a researcher needed to apply for access to the documents, has evolved now that the Internet can serve as the gateway to accessing historical documents. There is also a difference between public and private archives. Private or personal archives,

can also illuminate issues relating to the local community or the broader social or political concerns. Often individuals involved in a particular society, or in a national committee or other association, may have retained relevant records for their own use, and these can be very useful complementary sources for researchers who are primarily interested in these institutions. (McCulloch, 2004, p. 53)

These types of personal archives have proven useful in the analysis of the modern documents for this research. Archives of Twitter chats and previous blog posts are most often found on individual's blogs or websites. They are publically accessible for researchers and educators to find and read.

Another form of personal archive accessed in this research study is the blog post.

McCulloch (2004) explains that, "In my own research, I have often found personal archives to be of great value in illuminating individual contributions to public issues, and as a source that can provide important material on events and problems to which the

person involved was a witness" (p. 70). Blog posts can serve as just such a record of events and experiences of the writer. For this research, the blogs accessed are personal accounts of educational issues and experiences from the modern era.

Books and media are other sources used in this historical documentary research study. "The media, defined broadly, are public channels of communication. Printed media and literature constitute public source material, readily accessible to researchers. They provide public accounts and reporting of events for a broad readership. They are useful in relation to both past and present" (McCulloch, 2004, p. 74). Had McCulloch's work been updated for 2013, he would surely have included social media in this same definition. Interestingly, McCulloch goes on to say that, when analyzing books, in particular, "It is also important not to assume that their readers believed what was written, still less that they put the ideas in them into practice, and so their influence must always be open to question" (p. 75). This researcher included this caution when analyzing both the ancient and the modern texts.

McCulloch (2004) continues with a discussion of the analysis of policy texts. This definition is used in this research to frame the philosophical works of Plato and Aristotle. Though not officially policy of the time, the framework "provide(s) a convenient means of understanding the official rhetoric or discourse that legitimizes particular kinds of change, constructing certain possibilities but also excluding or displacing other combinations" (p. 80).

Finally, McCulloch (2004) addresses diaries, letters and autobiographies, all of which could describe modern day blogs and social media, in "that they all 'present an

individual's subjective view of social life' (Burgess, 1984a, p. 125)" (p.101). Though often seen as very personal accounts of events,

it should not be assumed that their value as sources is confined to a personal or private domain. Many diaries, letters and autobiographies are highly revealing about public issues and debates, whether as commentaries on contemporary incidents or changes, or because they provide a record of meetings or other events in which the author is a witness. (p. 101)

While the researcher considered conducting personal interviews of some current bloggers and leaders in social media, she thought it would be more effective to maintain the original medium in which the modern writers conveyed their messages to their community of learners, therefore providing them no advantage of context or further reflection that the ancient leaders were not provided.

Limitations and Delimitations of the Study

As a practicing connected educator and district administrator, the researcher will have to control for bias. This will be done in several ways. First, the researcher will keep a reflexive journal to document any thoughts or emotions encountered during the study of other administrators' and educators' use of Twitter and social media for professional/personal growth and learning. She will also refrain from selecting any chat archives or blog posts in which she participated or commented upon. In order to continue the practice of being a connected educator on Twitter during the research process, the researcher started #ILedchat, a weekly chat for educators from Illinois and across the country to discuss a different educational topic each week. The #ILedchat chats, archives and posts on Google+ will not be used in any part for this research.

The researcher also kept a reflexive journal throughout the research process in order to reflect on issues of bias and to provide an outlet for her own opinions and reflections on the research and sources of information used during the research and writing process.

The researcher will utilize only available primary and secondary sources from two defined time periods, but not use interviews or surveys to gather data from the modern era, since those tools are not available for the ancient period being studied. These sources will be focused on the time of Socrates, Plato and Aristotle in ancient times and the modern era from 1990-2014.

This historical documentary research study is delimited to the ancient primary source documents and supporting secondary source documents from the period of 400 B.C. - 322 B.C. in ancient Greece and modern Twitter chats, blog posts and supporting documents from 1990-2014. It does not expand to the use of other social media tools, such as Facebook, nor does it include other online learning management systems such as Moodle or Blackboard. It also does not examine other ancient cultures such as ancient Rome or China. Each of these topics could be its own research study and will be included in suggestions for further research in Chapter V.

Proposed Chapters

Chapter II of this historical documentary will provide an overview of the work and historical impact of Socrates, Plato and Aristotle using both primary source documents and historical writings about their lives and contributions to ancient Greek society.

The overview will then shift to the modern era, providing a context of a wide variety of blogs, Twitter chats and other websites where educators gather to exchange ideas and grow their professional knowledge base outside of the traditional workshop or University setting.

This creating of web-based professional learning networks can be examined in the framework of DuFour's work on PLCs and Wenger's Communities of Practice. Chapter II will be divided around four key topics:

- 1. The ancient thinkers
- 2. The modern leaders,
- 3. The history of social media and
- 4. The advent of the Professional Learning Community.

This chapter will provide the context for a more in depth study of the ancients in Chapter III and the modern in Chapter IV.

Chapter III and Chapter IV will contain an in-depth study of the ancient and the modern respectively. Eleven issues will be addressed regarding leadership and learning in the context of ancient Greek education and modern blogs and weekly Twitter chats.

These issues are:

- I. Equity in primary participation
- II. To whom is thought and information disseminated following primary participation
- III. Who formally leads?
- IV. Who formally facilitates?

- V. Process for dissemination, transcription and interpretation
- VI. Resultant change/spheres of influence for
 - A. the individual
 - B. the organization
- VII. Public opinion of the discourse
- VIII. The evolution of public acceptance and validation
 - C. What were the obstacles?
 - D. What were the enhancers?
- IX. Power of grassroots creation for success/participation and professional authority
- X. Power of moral authority for shared beliefs, purposes and values
 - A. The notion of a contribution to the greater good/collective knowledge of a PLN
- XI. Communal learning spaces

Chapter V will be analysis, conclusions and implications for the field of Educational Leadership.

The chapter will begin with a comparison and contrast between Chapters III and IV. As a study in the field of educational leadership, the focus will be on the leaders' vision for creating vehicles for exploration and sharing of ideas and knowledge, as well as the expectations of those leaders.

The study will compare and contrast Socrates, Plato and Aristotle with modern day education leaders such as Eric Sheninger, Joe Mazza, Tom Whitby, Jimmy Casas,

Vincent Cho, Wes Fryer, Jennie Magiera, and Vicky Davis. The methodology will detail the methods of reviewing the transcripts and primary source documents used to compare and contrast the modern versus ancient discourse.

Chapter V will contain the key parallels to DuFour's PLC research, Collins and Halverson's *Rethinking Education in the Age of Technology*, thoughts on changing how we access learning and structure schools, discovered during the document review process and Wenger's *Communities of Practice*. Detailed discussion on the implications for the field of Educational Leadership will be the focus of this chapter, as well as a clear tie made between the gymnasium in Athens, Greece nearly 2,500 years ago, to the world of social media in which educators come together, as in ancient times, to discuss, debate and learn from each other through open discourse and a free exchange of knowledge and ideas.

Glossary of Terms

Blog: Short for weblog, an online journal or diary where authors can post their writing and readers can comment on posts

Community of practice: "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Wenger website: http://wenger-trayner.com/theory/).

Discourse: "noun 1. communication of thought by words; talk; conversation: earnest and intelligent discourse. 2. a formal discussion of a subject in speech or writing, as a dissertation, treatise, sermon, etc. 3. Linguistics - any unit of connected speech or writing longer than a sentence. verb (used without object) 4. to communicate thoughts

orally; talk; converse. 5. to treat of a subject formally in speech or writing" (http://dictionary.reference.com/browse/discourse?s=t). "Discourse is ideological and thus, by nature imbued with political power and intent" (Smagorinsky, 2005).

Hashtag: "The # symbol, called a hashtag, is used to mark keywords or topics in a Tweet. It was created organically by Twitter users as a way to categorize messages" (http://support.twitter.com/articles/49309-using-hashtags-on-twitter).

Microblog: "a social media site to which a user makes short, frequent posts" (http://www.oxforddictionaries.com/us/definition/american_english/microblog?q=microblog).

Ning: "An online service to create, customize, and share a social network" (ning.com).

PLC: Professional learning community.

PLN: Personal learning network

Post: "to publish (as a message) in an online forum (as an electronic bulletin board)" (http://www.merriam-webster.com/dictionary/post)

Professional development: "The term 'professional development' means a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement" (http://learningforward.org/who-we-are/professional-learning-definition#.UtdOW2RDtcQ)

Retweet (RT): "A Tweet by another user, forwarded to you by someone you follow. Often used to spread news or share valuable findings on Twitter" (http://support.twitter.com/articles/166337-the-twitter-glossary#r)

Social media: "forms of electronic communication (as Web sites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (as videos)" (http://www.merriam-webster.com/dictionary/social%20media). Twitter, a microblogging site, was formed in 2006. A mere seven years ago, this new platform has completely changed the way educators can connect and communicate. The ability to "follow" other users on the site, listen in, or lurk, during conversations online and, finally, feel comfortable enough to contribute to those conversations is the typical path of most Twitter users and a significant contribution to the field of educational leadership. Removing the barriers of distance and time, Twitter literally brings together the entire world of educators to one, virtual, communal learning space. As educational chats have become more and more popular, educators are flocking to weekly virtual gatherings such as #edchat, #satchat, #sbgchat, and #ptchat. Leaders in different states have begun to bridge the global and local connections by creating state-themed chats, such as #njedchat, #IAedchat, and #Wischat. These communities of learners gather around a topic every week to share resources and discuss current issues facing educators. Educational leaders are no longer limited to their immediate district colleagues, the teacher down the hall or the one in the faculty room for advice, but instead, can reach out across the globe and access the collective knowledge of millions of educators.

Structure: "1. A complex construction or entity. 2. the arrangement and interrelationship of parts in a construction such as a building. 3 the manner of construction or organization" (http://dictionary.reference.com/browse/structure?s=t)

System: "1. an assemblage or combination of things or parts forming a complex or unitary whole 2. any assemblage or set of correlated members. 3. an ordered and comprehensive assemblage of facts, principles, doctrines, or the like in a particular field of knowledge or thought. 4. a coordinated body of methods or a scheme or plan of procedure; organizational scheme. 5. any formulated, regular, or special method or plan of procedure" (http://dictionary.reference.com/browse/system).

Tweet (verb): The act of posting a message, often called a "Tweet," on Twitter (http://support.twitter.com/articles/166337-the-twitter-glossary#t)

Tweet (noun): "A message posted via Twitter containing 140 characters or fewer" (http://support.twitter.com/articles/166337-the-twitter-glossary#t)

Twitter: A microblog. "Twitter is an online social networking and microblogging service that enables users to send and read "tweets," which are text messages limited to 140 characters. Registered users can read and post tweets but unregistered users can only read them" (http://en.wikipedia.org/wiki/Twitter).

Twitter Chat: A synchronous online discussion that usually lasts for one hour. Twitter chats are on a specific topic, occur weekly or monthly, and are moderated by educators who ask pre-set questions (Q1, Q2, Q3...). The participants follow the hashtag and reply to the questions asked by responding with the corresponding answer number (A1, A2, A3). Participants also interact with other participants in the discussion, sharing resources, extending responses or even asking follow up questions.

CHAPTER II

HISTORICAL REVIEW

Communication, shared space, common ideals, shared goals, leadership, and contribution to the greater good: these are all attributes of education. These characteristics define the Academy, The Lyceum and the peripatetic schools of ancient Greece in the same way that they describe the virtual space in which social media for professional development resides.

Education in Ancient Times

The ancient philosophers Socrates, Plato and Aristotle lived during a time in which young men were educated in order to become good citizens and soldiers, able to contribute to their city. Education was designed for the continuation of the religion, rules and customs of the Greek society, specific to the city and her laws. Each city had its own rules about when and how boys should be educated. There was an attempt to keep the process more uniform in order to create consistency amongst the people. This ancient system of education was one in which young men were given the foundation for religious, civic and military understanding, one that developed both their physical and academic abilities. Formal education was limited to the younger years. What followed was a combination of tutoring, physical and academic pursuits and military preparedness.

The argument from a Common End (CE):

And since (epei d en) the whole city has one end, it is manifest that education should be one and the same for all, and its care (epimeleian) public (koinen) and

not private (idian) - not as at present, when everyone looks after his own children privately, and gives them private instruction (mathesin idian) of the sort which he thinks best. The training (askesin) in things which are of common interest should be made common (dei...koinen poieisthai) (1337a21-27). (Curren, 2000, p.126)

Plato argued, in his Book of Laws, that education should be for both boys and girls, so that men and women could contribute to society:

Selections From the Laws of Plato Book VII - In these several schools, let there be dwellings for teachers, who shall be brought from foreign parts by pay, and let them teach the frequenters of the school the art of war and the art of music, and the children shall come, not only if their parents please, but if they do not please; and if their education is neglected, there shall be compulsory education, as the saying is, of all and sundry, as far as this is possible; and the pupils shall be regarded as belonging to the state rather than to their parents. My law would apply to the females as well as the males; they shall both go through the same exercises. I assert without fear of contradiction that gymnastic and horsemanship are as suitable to women as to men....And I further affirm, that if these things are possible, nothing can be more absurd than the practice which prevails in our own country of men and women not following the same pursuits with all their strength and with one mind, for thus the state, instead of being a whole, is reduced to a half, and yet has the same imposts to pay and the same toils to undergo; and what can be a greater mistake for any legislator to make? (Monroe, 1932, p. 243)

Education in Modern Times

Today's schools are not much different than those from 2,300 years ago.

Certainly some things have changed, but the core tenets have not: develop young minds to become productive members of society, prepare students for college and careers, develop physical and academic growth, and continue traditions. Today, students are likely to attend school in brick and mortar locations, but may also attend virtual schools. These schools share many of the same values that traditional schools hold, but are located not in a physical space, but in the virtual world of the Internet. The students today have different learning qualities than students of recent history. According to David Warlick in

the foreword of What School Leaders Need to Know About Digital Technologies and Social Media,

There is evidence that their brains are physiologically different, elasticity wired in and built from information experiences that are dramatically different from any generation before-experiences that define their culture, which is based on video games, social networking, and a prevailing sense of hyperconnectedness that practically makes the word *good-bye* obsolete. It is an information experience that carries some unique and compelling qualities:

- It is fueled by questions-to overcome built-in barriers.
- It provokes conversations-because it is team-oriented.
- It redefines identity-both real and assumed or virtual.
- It is rewarded with currency-gold, coin, attention, powers and permission.
- It demands personal investment-because there is value.
- It is guided by safely made mistakes-which always add to the player's knowledge. (McLeod & Lehmann, pp. vii-viii)

Professional Development and Learning Communities

To schools leaders, administrators who endeavor to keep abreast of best practice in supervision, pedagogy, technology and assessment, the virtual world of social media is sometimes viewed as yet another distraction, keeping them away from the "real learning" and work of schools, but to those administrators who have discovered the power of the personal and professional learning networks available on sites like Twitter, that characterization couldn't be further from the truth.

In *Aristotle on the Necessity of Public Education*, Randall Curren (2000) tells us that the notion of suggesting or forcing people to mix together to create friendships and connections in society is one that Aristotle championed in order to dissolve divisions between groups of people. This concept of a collective education is one that is very similar to the structure that exists on social media. Creating connections, or followers, on sites like Twitter or tracking blog post comments or the number of "+1's" that a Google+

posting receives helps to break down the barriers that naturally exist due to limitations of distance and time. Children will not be allowed to attend or not attend a school at the whim of the father; as far as possible education must be compulsory for "one and all" (as the saying goes), because they belong to the city first and their parents second (804d) (Curren, 2000, p. 144).

The Cost of Learning

Another interesting fact about educational leaders using social media as their professional learning network is that usually no financial commitment is made. The "students" are not paying to attend professional development courses, are not receiving CPDU credit or salary advancement and the "instructors" are not being compensated for their contributions to the conversations. This is similar to the ancient Theorists, as explained by Paul Monroe:

The problem of the Theorists. - The writers of this group, while for the most part contemporary with the Sophists, differ from them in two important respects. The Sophists were practical teachers and were interested in the educational movement of the times chiefly in a personal way. They claimed to be able to prepare for a successful career, and were primarily concerned in achieving such a success for themselves. They taught for money and for reputation, as do most teachers at the present. Some of them, Socrates, had a profound public interest as well, but the earlier Sophists were not native Athenians, and had little patriotic or national interest. On the other hand, the theorists were profoundly interested in education on account of its national importance, and so far as practical teachers, they were wholly disinterested and refuse to accept any remuneration for their efforts. (Monroe, 1932, p. 116)

Participation

The PLN available through Twitter does not have a set attendance or registration.

The educators who participate tend to do so at their own choice and convenience,

however, one will find that there are some more regular participants from week to week on any given chat. The ancient Greeks had a similar experience with participation.

The schools of the Sophists were entirely private schools, and for the most part consisted of the group of students gathered around any one instructor. There was no system of beliefs or unity of methods that would lead to the formation of any permanent institution. Socrates did not have any definite place for giving instruction or any definite body of pupils. So long as no fees were extracted, there would be no definite student body. Plato, and very probably Aristotle, followed the example of Socrates in this respect. But Plato's successor, Speusippus, demanded regular fees, as did also the teachers of the other philosophical groups. This gave both definiteness and continuity of administration. A further factor in the development of definite schools was the acquiring of definite locations and names. The leading gymnasia of Athens were the Academy, the Cynosarges, and the Lyceum. These were in the suburbs, and were somewhat of the nature of public parks, being provided with water and gardens as well as exercise grounds. (Monroe, 1932, p. 297)

It is interesting to note how the more informal style of learning and gathering to learn has come back into fashion via social media. Socrates was limited to those people who could physically attend his teaching in the Agora, whereas educational leaders gather in the "Agora of the 21st century", the virtual world of social media, to discuss, debate and learn from each other. Now not limited by space or time, modern day scholars can infinitely connect with others to learn and grow professionally.

Motivation and Improving Education

In his text *Disrupting Class*, Clayton Christensen discusses improving education research by moving from descriptive research to prescriptive research. He also refers to the two stage process of disruption, noting that in education, we are entering the second stage, in which the learners themselves will be able to, "make the tools that help their fellow students learn" (Christensen, Horn & Johnson, 2008, p. 123). What is the appeal of using social media for professional learning? Educators have so many demands on

their time, required trainings and attendance at school and district functions, why spend personal time continuing to develop professionally? Yet search any chat hashtag on Twitter and one will immediately find thousands of educators partaking in professional growth activities and discussions during the late evening hours and early weekend hours for no compensation and under no requirement or law. Many of Socrates' students had a similar experience and motivation.

Socrates was the source of, and furnished the inspiration for, this entire movement in educational thought. Though he has left no writings, the character and the substance of his teachings can be quite accurately reproduces from the writings of his pupils, Xenophon and Plato. Socrates lived from 469 to 399 B.C. The earlier portion of his life was spent as a sculptor, but the middle and later portion, though from what exact date is not known, as a teacher. Yet he never opened a school or delivered public lectures, in these respects differing from the Sophists and from the philosophers who continued his line of thought and work. His method was to engage in conversation any interested person, either old or young, in the market-place, the shop, or the gymnasium. In the latter places he found abundant opportunity, and there his teachings were especially influential upon those just entering that period of their education, hitherto devoted wholly to physical training and the service of the state. (Monroe, 1932, p. 118)

What motivates the educational leaders of today to participate in personal learning networks using social media? If there is no remuneration, no obligation, no contract nor regulations nor laws requiring attendance why do these networks continue to grow in participation and influence? Again we can look to the ancients for an answer:

from *Plato's Republic Book VII* - Because a freeman ought to be a freeman in the acquisition of knowledge. Bodily exercise, when compulsory, does no harm; but knowledge which is acquired under compulsion has no hold on the mind. (Monroe, 1932, p. 216)

The Shift

This shift in the development of a professional learning network to a personal learning network, the shift from the required to the voluntary, from the paid to the freely

accessible, have the potential to change the landscape of professional development and higher education as we know it. Social capital, followers, influence and connections are changing the landscape of more traditional institutions. They are changing the ways people learn and connect, changing how people find jobs and progress to the next level in their careers. Resources such as LinkedIn, Twitter, Facebook, Google+, Ning, blogs and wikis are the newest proving grounds, classrooms and job boards. The question now becomes whether educators are relevant if they are not connected to the world around them? Can they contribute as much to the field? Can they grow to their highest potential? Can they maximize their impact on students and staff?

The Impact

What is the impact of social media on education, learning and information? One of the most widely accessed websites is called Wikipedia, an online encyclopedia. However, this encyclopedia is not written and edited by paid authors and then published and purchased by individuals and schools. Instead, this online collection of information and knowledge is 100% user-generated content – the collected works of millions of people around the world. What would Aristotle have thought of this website? He may have actually inspired it:

In 335 Aristotle returned to Athens to establish in the Lyceum his own school of philosophy, since the contrast between his own thought and that of the Academicians had now become more marked, both because his own ideas and methods had developed, and because the work of the Academy had now degenerated into mere exposition and comment. Here he continued to teach for eighteen years. The aim of Aristotle was broader than that of the Platonic or of the other schools; it was nothing less than to produce an encyclopaedia of all the sciences, - an organization of all human knowledge. (Monroe, 1932, p. 266)

The Development of the PLN

Educators spending time developing their Personal Learning Network (PLN) using social media are being inspired daily by several power-players in the field. These educational leaders contribute heavily to the day-to-day conversations, the shared resources and the organization of the Professional Learning Community (PLC). Some of these leaders are Scott McLeod, Will Richardson, Wes Fryer, Vicky Davis, Steve Hargadon, Vincent Cho, Chris Lehmann, Eric Sheninger and Tom Whitby. Recently, other leaders have also emerged as respected contributors, especially to the rising popularity of state and topic themed chats. They are Jimmy Casas of #IAedchat, Jennifer Hogan of #ALedchat, Tom Murray of #edtechchat, Shawn McCusker of #1to1techat and #sschat, Shelley Burgess of #satchat West Coast and Brad Currie of #satchat East Coast. By following these leaders on Twitter and Google+, reading and responding to their blog posts and engaging them in discussion and debate of current educational issues, one can truly begin to appreciate and comprehend the scope of learning available through social media.

Development of Connected Educators

Many educators who are unfamiliar with the realm of social media can begin by simply lurking on a site. Lurking is another word for reading, but not actively participating. Lurking is the consumer side of social media. Most begin here and then move on to the creator or producer side when they gain confidence and a level of comfort with the technology. Although quite a lot of knowledge can be gained through lurking/consuming social media, it is not until the educator becomes a content creator/producer

that he or she comes full circle and enters into the "prosumer" (Suciu, 2007) phase, consuming and producing regularly in order to contribute to and help grow the network.

Allow this researcher to paint a picture of a connected educator. Reading and commenting on blog posts and contributing to weekly twitter chats will soon become a regular fixture in the routine of the connected educator. He or she will wonder how they kept current on educational issues before creating this PLN. Headlines in journals will soon feel like old news, because the connected educator read that story on twitter three weeks ago. The syllabus of their graduate course may seem stale and two-dimensional in comparison. Conferences will take on a whole new feel when she follows the conference hashtag, engaging with attendees from her own session and others at the same time, catching up on multiple topics and conversations. This idea of crowdsourcing knowledge, of several heads being better than one, is the power of this new personal and professional learning network. The educator is no longer isolated in his classroom or office, limited to her graduate classmates or frustrated due to lack of support from her principal or supervisor. The network fills these voids and more. The connected educator is never alone and never far away from supportive resources for learning and professional growth.

In his book, *The Five Disciplines of PLC Leaders*, author Timothy Kanold (2011) discusses the concepts of

- 1. Vision and values
- 2. Accountability and celebration
- 3. Service and sharing

- 4. Reflection and balance
- 5. Inspiration and influence (p. 6)

The final concept of inspiration and influence rings especially true for the development of an enduring PLC model using social media. The PLC leader, as described by Kanold (2011), is defined as "the leadership work of consciously creating an enduring organizational legacy through the daily building of effective PLC practices and behaviors" (p. 8).

Twitter and Blogs

Two platforms of communication are the main focus of this research, blogs and Twitter. A definition of blogs from *What School Leaders Need to Know About Digital Technologies and Social Media*,

In simple terms, blogs are web-based logs or journals (*web log*, shortened to *blog*). The basic concept behind blogging is not new. Social interaction in teaching and learning is a keystone of educational theory. When teachers and students blog, they are able to actively engage audiences outside the usual classroom time boundaries. (McLeod & Lehmann, 2012, p. 4)

Twitter is a micro-blogging platform and social network that allows users to post tweets, or short, 140-character messages that are public on the Internet. "Although Twitter has grown into a global phenomenon for its social and casual communication value, increasing numbers of professionals-including educators, administrators, school districts and community groups -are using Twitter as a means of sharing information and building school communities" (Couros & Jarrett, 2012, p. 148).

It is no longer acceptable for a school or a district to only pay attention to their physical presence in their community. The virtual presence of a school is becoming just

as important as a Board of Education meeting or an Open House. School leaders have an opportunity to "project a positive image" (McInosh & Utecht, 2012, p. 177) of their schools and to engage stakeholders as never before.

When it comes to creating and protecting your school's image on the web, it's vital to understand where your audience-parents, community leaders, potential students-choose to spend their time online. If they are on Facebook, for example, then you need to know how your school is represented there. In recent years, there has been an expectation that a school's brochure-ware website was sufficient to project a positive image of learning at the school....We're used to cleaning, pruning and just occasionally curating a physical image of our school's that we project out to the community. In today's socially networked world, not only do principals and leaders need to be aware of what the physical image of their school portrays but also what is portrayed by the digital image of their school-and people's reactions to it. (McInosh & Utecht, 2012, p. 176)

The development of the PLN or personal learning network is one that cannot be forced or directed by others. The motivation is internal for such an endeavor. An educator must choose to become a connected educator for his or her own professional growth and development. Etienne Wenger states, "In general we have found that managers cannot mandate communities of practice. Instead, successful managers bring the right people together, provide an infrastructure in which communities can thrive, and measure the communities' value in nontraditional ways" (Wenger & Snyder, 2000, p. 140)

Wenger (1998) also states,

Communities of practice develop around things that matter to people. As a result, their practices reflect the members' own understanding of what is important. Obviously, outside constraints or directives can influence this understanding, but even then, members develop practices that are their own response to these external influences. Even when a community's actions conform to an external mandate, it is the community—not the mandate—that produces the practice. In this sense, communities of practice are fundamentally self-organizing systems. (p. 2)

This notion of Wenger's "self-organizing system" describes the gathering of educators during weekly Twitter chats. Neither geography nor job assignment creates these groups. Instead, they are brought together through a shared interest and desire to learn together about the topic at hand. The topic may have been set by one leader or a small group of facilitators, but the knowledge, resources and professional dialogue is completely community derived.

Wenger goes on to describe how a community of practice differs from both a team and a network.

A community of practice is different from a *team* in that the shared learning and interest of its members are what keep it together. It is defined by knowledge rather than by task, and exists because participation has value to its members. A community of practice's life cycle is determined by the value it provides to its members, not by an institutional schedule. It does not appear the minute a project is started and does not disappear with the end of a task. It takes a while to come into being and may live long after a project is completed or an official team has disbanded.

A community of practice is different from a *network* in the sense that it is "about" something; it is not just a set of relationships. It has an identity as a community, and thus shapes the identities of its members. A community of practice exists because it produces a shared practice as members engage in a collective process of learning. (Wenger, 1998, p. 4)

Just like a weekly Twitter chat has a small group of planners and moderators to establish the topic, write the questions, pose the questions throughout the chat, facilitate the discussion during the chat and archive the chat for future reference, leadership plays an important role in Wenger's communities of practice.

Whether these communities arise spontaneously or come together through seeding and nurturing, their development ultimately depends on internal leadership. Certainly, in order to legitimize the community as a place for sharing and creating knowledge, recognized experts need to be involved in some way, even if they

don't do much of the work. But internal leadership is more diverse and distributed. It can take many forms:

- The *inspirational* leadership provided by thought leaders and recognized experts
- The day-to-day leadership provided by those who organize activities
- The *classificatory* leadership provided by those who collect and organize information in order to document practices
- The *interpersonal* leadership provided by those who weave the community's social fabric
- The *boundary* leadership provided by those who connect the community to other communities
- The *institutional* leadership provided by those who maintain links with other organizational constituencies, in particular the official hierarchy
- The *cutting-edge* leadership provided by those who shepherd "out-of-the-box" initiatives.

These roles may be formal or informal, and may be concentrated in a core group or more widely distributed. But in all cases, leadership must have intrinsic legitimacy in the community. (Wenger, 1998, p.6)

Though Wenger's Communities of Practice theory predates the social media movement, his research supports the need for community in the digital age.

The web: new technologies such as the Internet have extended the reach of our interactions beyond the geographical limitations of traditional communities, but the increase in flow of information does not obviate the need for community. In fact, it expands the possibilities for community and calls for new kinds of communities based on shared practice. (Wenger, Communities of Practice, A Brief Introduction)

Wenger also includes schools and education into the communities of practice

model:

Schools and districts are organizations in their own right, and they too face increasing knowledge challenges. The first applications of communities of practice have been in teacher training and in providing isolated administrators with access to colleagues. There is a wave of interest in these peer-to-peer professional-development activities. But in the education sector, learning is not only a means to an end: it the end product. The perspective of communities of practice is therefore also relevant at this level. In business, focusing on communities of practice adds a layer of complexity to the organization, but it does not fundamentally change what the business is about. In schools, changing the

learning theory is a much deeper transformation. This will inevitably take longer. The perspective of communities of practice affects educational practices along three dimensions:

Internally: How to organize educational experiences that ground school learning in practice through participation in communities around subject matters?

Externally: How to connect the experience of students to actual practice through peripheral forms of participation in broader communities beyond the walls of the school?

Over the lifetime of students: How to serve the lifelong learning needs of students by organizing communities of practice focused on topics of continuing interest to students beyond the initial schooling period? From this perspective, the school is not the privileged locus of learning. It is not a self-contained, closed world in which students acquire knowledge to be applied outside, but a part of a broader learning system. The class is not the primary learning event. It is life itself that is the main learning event. Schools, classrooms, and training sessions still have a role to play in this vision, but they have to be in the service of the learning that happens in the world. (Wenger, Communities of Practice, A Brief Introduction)

In the chapter, "The Role of Professional Learning Communities in Advancing 21st Century Skills" by Richard and Rebecca DuFour in Bellanca and Brandt's 21st Century Skills: Rethinking How Students Learn (2010), the "father of PLC's" Rick DuFour, posits that

The Partnership (2009) [P21] was emphatic on this point [transforming schools into PLC's] and stipulated that the environments best suited to teach 21st century skills 'support professional learning communities that enable educators to collaborate, share best practices and integrate 21st century skills into classroom practice.' The Partnership called for schools to be organized into 'professional learning communities for teachers that model the kinds of classroom learning that best promote 21st century skills for students' and urged educators to encourage 'knowledge sharing among communities of practitioners, using face-to-face, virtual and blended communications. (2010, p. 77)

It is exactly these virtual communities that have emerged and grown through social media. The interactions of educators and the formation of a PLC are not limited by

geography or time. The DuFours discuss the shift that must take place both in behavior and the, eventually, in culture for a successful PLC model. They refer to these cultural shifts as those from "professional judgment" to "best practice," from "individual autonomy" to a "collaborative culture" and from working alone to taking a "collective responsibility for their students" (DuFour & DuFour, 2010, p. 79).

The concept of teamwork, "people working *interdependently* to achieve a *common* goal for which members are *mutually accountable*" (DuFour & DuFour, 2010, p. 83) is reminiscent of Aristotle's argument from a Common End:

The argument from a Common End (CE)

And since (epei d en) the whole city has one end, it is manifest that education should be one and the same for all, and its care (epimeleian) public (koinen) and not private (idian) - not as at present, when everyone looks after his own children privately, and gives them private instruction (mathesin idian) of the sort which he thinks best. The training (askesin) in things which are of common interest should be made common (dei...koinen poieisthai) (1337a21-27) (Curren, 2000, p. 126)

This notion that education has had a "common end" for thousands of years is now supported by social media and PLC research. "Technology can also help educators redefine their concept of collaboration....As Ken Blanchard (2007) writes, 'There is no reason that time and distance should keep people from interacting as a team. With proper management and the help of technology, virtual teams can be every bit as productive and rewarding as face-to-face teams" (DuFour & DuFour, 2010, p. 87). The DuFours also discuss the shift in teachers' and principals' work from that of "isolated" and "episodic" to cohesive, collaborative engaging.

The DuFours specifically mention the work of Malcolm Gladwell's *The Tipping Point*, wherein Gladwell

describes that 'magic moment when an idea, trend, or social behavior crosses a threshold, tips, and spreads like wildfire' (2002, back cover). The tipping point is reached when a few key people in the organization who are highly regarded by and connected to others (the Law of the Few) present a compelling argument in a memorable way (the Stickiness Factor) that leads to subtle changes in the conditions of the organization (The Power of Context). The Law of the Few seems to be at work as key influencers in the profession have lined up to support the PLC concept. Virtually every leading educational researcher and almost all professional organizations for educators have endorsed it. (DuFour & DuFour, 2010, pp. 90-91)

This researcher suggests that this tipping point extends to PLCs on social media as well and is poised to change the culture and structure of not just a school or a district, but of the entire educational field as a whole, pre-k through higher education, extending into professional learning for one's entire career. The DuFours end with the suggestion that teachers and administrators will learn best by doing and that they should "engage in the behaviors that are vital to a PLC...to prepare not only their students but also themselves for the challenges and opportunities of an uncertain future" (DuFour & DuFour 2010, p. 93).

Modern Examples of Professional Learning

As the modern examples of collaboration and professional learning will take the form of blog posts and Twitter chat archives, here are examples of both. The first is a blog post from the Connected Principal's site, a website containing hundreds of blog posts written by principals from around the world.

This is typical of the types of posts that are added regularly to the Connected Principals website, a site where principals from around the world share ideas and post blogs. The site is divided into several categories under which principals can post: 21st Century Management, Best Educational Practices, Change Management, Collaboration

and Communication. The tag line for the entire site is, "Sharing Learning Leading" (http://connectedprincipals.com/) (see Appendix A). This site is a perfect example of a virtual PLC, in which school leaders, who once worked in isolation, can now connect to each other, exchange ideas and best practices, leadership challenges and successes.

Similarly, educators are gathering regularly on Twitter to participate in weekly chats. Though these are synchronous chats (taking place in real time), the chats are usually archived for future reading, reaction and discussion (see Appendix B).

This process allows educators to return to a specific chat topic, re-read the posts and reflect on the process. The archive also allows educators who could not participate in the original chat, due to time conflicts or simply not being aware of the chat, to benefit from the shared knowledge, though they do not receive the same benefit of the exchange of dialogue that happens naturally during the course of the chat. A close evaluation of several chats and blog posts will be explored in Chapter IV.

Final Overview

The look back to ancient times and the close examination of the modern day interactions will be the basis of this research. Looking through eleven lenses, this researcher will examine the leadership, education and collaboration that took place thousands of years ago and those that are taking place now on social media. Knowledge and information are the keys to power, both during ancient times and today:

From *Plato's Republic Book V* - I said: Until, then, philosophers are kings, or the kings and princes of this world have the spirit and the power of philosophy, and political greatness and wisdom meet in one, and those commoner natures who follow either to the exclusion to the other are compelled to stand aside, cities will never cease from ill -no, nor the human race, as I believe - and then only will our State have a possibility of life and behold the light of day.

Plato realized that learning was a lifelong pursuit.

In Speech of Protagoras on 'Teaching of Morals', from the Protagoras of Plato 325C-326D. Education and admonition commence in the first years of childhood, and last to the very end of life. Mother and nurse and father and tutor are quarrelling about the improvement of the child as soon as he is able to understand them...

There were other philosophers during the time of Socrates who held opinions about teaching and learning that went beyond the traditional classroom and gender stereotypes. Xenophon, a contemporary of Socrates, said in *Oeconomicus*, a Socratic dialogue:

Selections from the Economics of Xenophon - 41 'Some other of your occupations, my dear wife,' continued I, 'will be pleasing to you. For instance, when you take a young woman who does not know how to spin, and make her skillful at it, and she thus becomes of twice as much value to you. OR when you take one who is ignorant of the duties of a housekeeper or servant, and having made her accomplished, trustworthy and handy render her of the highest value.'

Selections from the Economics of Xenophon 15 - I accordingly desired my wife', continued he, 'to consider herself the guardian of the laws established in the house.'

These early statements about household management, education and how learning improves job performance can be seen as one of the earliest mentions of professional development. The development of the household workers by the female head of the house in order to attain maximum performance of their household duties was an important part of ancient Greek life.

Plato was also concerned about the professional development of school leaders:

Selections From the Laws of Plato Book VII - And how can our law sufficiently train the director of education himself; for as yet all has been imperfect, and nothing has been said either clear or satisfactory? Now, as far as possible, the law

ought to leave nothing to him, but to explain everything, that he may be the interpreter and tutor of others.

Plato commented on the approach to instruction that teachers should take, as well as the practice of recording notes or archives of discussions and lectures:

Selections From the Laws of Plato Book VII - When I reflected upon all these words of ours, I naturally felt pleasure, for all of the discourses which I have ever learnt or heard, either in poetry or prose, this seemed to me to be the justest, and most suitable for young men to hear; I cannot imagine any better pattern than this which the guardian of the law and the educator can have. They cannot do better than advise the teachers to teach the young these and the like words, and if they should happen to find writings, either in poetry or prose, or even unwritten discourses like these of ours, and of the same family, they should certainly preserve them, and commit them to writing. And, first of all, they shall constrain the teachers themselves to learn and approve them, and any of them who will not, shall not be employed by them, but those who they find agreeing in their judgement, they shall make use of and shall commit to them the instruction and education of youth.

Ahead of their time and timeless in their words and work, Socrates, Plato,

Aristotle and their fellow philosophers and students in ancient Greece set the stage for the
modern connected educator. This study will explore the educational leaders of today who
share knowledge, disseminate information and influence future generations and their
forefathers who shared knowledge, disseminated information and influenced future
generations 2,300 years earlier.

CHAPTER III

THE ANCIENTS

Equity in Primary Participation

The systems and structures of formal and informal education in ancient Greece included primary schools where boys were taught to read and write, secondary schools where young boys were trained in physical development, music and taught the basics of becoming a citizen of the State. "Athens itself had gone no farther toward introducing public schooling that instituting a system of military training, the ephebeia, which was publicly funded and compulsory for citizens aged eighteen to twenty" (Curren, 2000, p. 12). There was a distinct military purpose to much of the training and boys often completed their studies and then became hoplites, or soldiers. "Their training prepared them to be hoplites, or heavily armed infantry, but they were not made hoplites, perhaps because the ephebia was compulsory for all male citizens but only those of considerable wealth could bear the cost of the armaments, which hoplites were normally expected to provide themselves" (p. 12). Education was not just limited to the purpose of military preparation, however.

Apart from this required military training, what Athenian schooling consisted of in Aristotle's time, for those who desired it and could afford it, were lessons in athletics (gymnastike); the 'arts of the Muses' (mousike), which included music, poetry, narratives, and above all Homer; and 'letters' (grammatica) and arithmetic. The democratization of Athens had brought with it the introduction of group lessons as a more affordable alternative to traditional one-on-one instruction, and the introduction of letter schools, which taught writing, reading, and arithmetic, subjects which had acquired broader commercial utility with the

growth of trade. It is impossible to say how many boys attended these various lessons, and there is no clear evidence that any girls did, but there are indications that boys of wealthier families began school at a younger age and may have attended more expensive schools. (Curren, 2000, p.12)

Very young students had to walk throughout the city to attend these different schools, so families assigned them a slave for supervision and protection, called a paidagogos. There is some irony that the citizens entrusted this slave to care for their children and their moral education, but that they were slaves who were not thought able to care for themselves as citizens (Curren, 2000). Aristotle realized that in order to sustain the political and moral authority of the state, that there should be a common purpose for public education of youth. In the *Argument from a Common End (CE)*

And since (*epei d en*) the whole city has one end, it is manifest that education should be one and the same for all, and its care (*epimeleian*) public (*koinen*) and not private (*idian*) - not as at present, when everyone looks after his own children privately, and gives them private instruction (*mathesin idian*) of the sort which he thinks best. The training (*askesin*) in things which are of common interest should be made common (*dei...koinen poieisthai*). (1337a21-27)

In *Politics*, Aristotle explores how education can be used to unite people. The purpose of uniting citizens under a common belief system and political structure will help to solidify the future of the city-state.

...Aristotle's suggestion that the education is the means, or primary means, through which the polis 'should be united' and made into a community,' and we identified friendship, and the reciprocal goodwill and trust associated with it, as a fundamental basis of unity (Pol. II.4 1262b5-10, III.9 1280b32-81a2; *NE* VIII.1 1155a23-28), alongside a shared commitment to the city's natural end, or *telos*, of living the best or happiest life (Pol. III.3 1276b1-2, III.9 1280b7-10, VII.8 1328a35-36). (Curren, 2000, p. 127)

Aristotle believed that by promoting a common experience with shared values, the future of the state could be better insured. He endorsed a shift from private to public, from the influence of the family to the influence of the state.

The commonalities between these various groups might be enhanced by common religious observances (Pol. III.9 1280b37, VII.8 1328b11-12, VII.10 1330a9-10), common meals (Pol. II.5 1263b37-64a1, II.9 1271a27-35, VII.10 1330a3-23, etc.), and especially common education, in which all citizens would share, and so the institution of these would be an important means through which the legislator could promote unity. (Curren, 2000, p. 136)

Aristotle also believed that the families and their individual traditions could not be placed above those of the State. "Fresh tribes and brotherhoods should be established; the private rites of families should be restricted and converted into public ones; in short, every contrivance should be adopted which will mingle the citizens with one another and get rid of old connections (VI.4 1319b23-27)" (Curren, 2000, pp.138-139). The notion of suggesting or forcing people to mix together to create friendships and connections in society is one that Aristotle championed in order to dissolve divisions between groups of people (Curren, 2000). "The twin interrelated proximate goals of this education are the universal adoption of the city's natural end as a common end and the promotion of friendly ties between citizens and the various social entities or aggregates they belong to" (Curren, 2000, p.139).

To establish a formal system of education, and to distinguish it from the informal education of families, at home, Aristotle discussed the creation of a public school system to solidify the future of the State.

Education should first of all be the *same for all*, since the city's attaining its natural end requires that every citizen be prepared to both live the best life himself and cooperate in his fellow citizens doing so. Secondly, it should be *public* both

to *ensure* that it will be the same for all, which it will not be if "everyone looks after his own children separately, and gives them separate instruction of the sort which he thinks best" (1337a24-26), and to ensure that the children of the city are educated together, if not all in one place because there are too many of them, then in schools which are common in the sense that each of them mixes together children of each relevant kind (above all, children of all socioeconomic classes)since this is more conducive to mutual goodwill and the sharing of a common end than education which does not facilitate children coming to know each other. (Curren, 2000, pp.139-140)

Aristotle feared that the influence of the family and its private interests would supercede those of the State, leading to a decline in the stability of Athens. He realized that education had to be public in order to maintain control.

In the background of this argument is the assumption that without public control of education, the divisions within a city will tend to preclude friendly contact among those divided from each other, and that such education that occurs will be oriented not to the common interest but to private factional interest. (Curren, 2000, p.140)

He also thought that public school should be mandatory. "Children will not be allowed to attend or not attend a school at the whim of the father; as far as possible education must be compulsory for "one and all" (as the saying goes), because they belong to the city first and their parents second (804d)" (p. 144). Aristotle argued that the individual had an obligation to the group as a whole. That in order to be a productive member of the community or citizen of the city, one had to be educated in those topics that were most important of the city and it's successful continuation (Curren, 2000).

Equity of access to formal school structures was often limited by class and gender groupings. Though the philosophies of Socrates and Plato sought to bring equality to these groups, their practices did not always match their words.

The social revolution of the fifth and fourth centuries B.C. affected the position of women as well as other aspects of Greek society, but the changes in the education

of women were in no wise so profound as those affecting the education of men. It is true that there was a demand for greater freedom for women. Evidences of this are to be found in the teachings of Socrates and the writings of Plato. The latter held that the women possessed the same faculties as men, only in a lesser degree, and were entitled to a similar education. (Monroe, 1932, p. 34)

In Plato's *Republic*, he discusses the similarities between men and women, but there is little evidence of women being trained at his Academy.

Selections from The Republic of Plato Book V - Let us proceed now to give the women a similar training and education, and see how far that accords with our design. What do you mean? What I mean may be put into the form of a question, I said: Do we divide dogs into hes and shes, and take the masculine gender out to hunt, or have them keep watch and ward over the flock, while we leave the females at home, under the idea that the bearing and suckling their puppies hinder them from sharing in the labours of the males? No, he said, they share alike; the difference between them is in degrees of strength.... Then, if women are to have the same duties as men, they must have the same education? Yes. The education which was assigned to the men was music and gymnastic. Yes. Then women must be taught music and gymnastic and also the art of war, which they must practice like the men? That is the inference I suppose. (Monroe, 1932, p. 173)

Xenophon, a contemporary of Plato and Aristotle, suggested in his work, *Economics*, that women had more of a role in domestic affairs. In the home they would be charged with training the slaves and maintaining rule in the house. This informal system of education lies in stark contrast to the more formal structures for men.

Selections from the Economics of Xenophon - 41 'Some other of your occupations, my dear wife,' continued I, 'will be pleasing to you. For instance, when you take a young woman who does not know how to spin, and make her skillful at it, and she thus becomes of twice as much value to you. Or when you take one who is ignorant of the duties of a housekeeper or servant, and having made her accomplished, trustworthy and handy render her of the highest value.' (Monroe, 1932, p. 43)

Plato's *Republic* goes on to discuss the needs of the State and how women can support those needs in his described utopia.

From *Plato's Republic Book V* - Well, and may we not further say that our guardians are the best of our citizens? Far the best. And will not their wives be the best women? Yes, again I say the very best. And can there be anything better for the interests of the State than the men and women of a State should be as good as possible? There can be nothing better. And our course of music and gymnastic will accomplish this? Certainly. Then we have made an enactment not only possible but in the highest degree advantageous to the State? True. (Monroe, 1932, p. 179)

Plato goes into additional detail in his book of *Laws*. Here he has his characters debate the irony of training women equally with men and then not utilizing their talents to support the State. Plato's main focus was always on the preservation and furtherance of the State, seeking ways to support it through education, rules and structures.

Selections From the Laws of Plato Book VII - In these several schools, let there be dwellings for teachers, who shall be brought from foreign parts by pay, and let them teach the frequenters of the school the art of war and the art of music, and the children shall come, not only if their parents please, but if they do not please; and if their education is neglected, there shall be compulsory education, as the saying is, of all and sundry, as far as this is possible; and the pupils shall be regarded as belonging to the state rather than to their parents. My law would apply to the females as well as the males; they shall both go through the same exercises. I assert without fear of contradiction that gymnastic and horsemanship are as suitable to women as to men....And I further affirm, that if these things are possible, nothing can be more absurd than the practice which prevails in our own country of men and women not following the same pursuits with all their strength and with one mind, for thus the state, instead of being a whole, is reduced to a half, and yet has the same imposts to pay and the same toils to undergo; and what can be a greater mistake for any legislator to make? (Monroe, 1932, p. 243)

There was some evidence that young girls did actually attend formal schooling in ancient Greece. Though the exact nature of the curriculum and instruction are not known, it seems that, according to artistic renderings, some girls did receive formal education in addition to their informal, domestic education.

From *Memorabilia* by Xenophon - Nor does it satisfy the parents merely to feed their offspring, but as soon as the children appear capable of learning anything, they teach them whatever they know that may be of use for their conduct in life;

and whatever they consider another more capable of communicating than themselves, they send their sons to him at their own expense, and take care to adopt every course that their children may be as much improved as possible." "This home instruction was in many instances the only education provided for girls; apart from their learning of household arts such as cooking, weaving, spinning and so forth, we know very little about the general education of girls....It is usually thought that all girls received their education at home. But the archeological record, scant though it is, seems to point to a different conclusion. There is a fifth century vase painting 'showing a girl, rather large, led by a woman who is pointing the way. That they are going to school is apparent from the reluctance with which she goes.' There is also a 'rather chubby little girl in terracotta...holding her tablet in her right hand, and a purse containing her astragals in her left.' (Beck, 1964, pp. 84-85)

Since Plato's Republic encouraged the education of women, it is believed that girls were admitted to his *Academy*.

As to the age of entrance, the references to boys in the Epicrates passage suggest adolescents and we know that Aristotle joined the Academy at seventeen. It is likely that women as well as men were admitted, and this is in line with the teaching of the *Republic*. A large portion of his pupils seem to have been foreigners. (Beck, 1964, p. 228)

In Laws, Plato also made specific reference to educating girls along with the boys.

We include under gymnastics all military exercises, such as archery and all hurling of weapons, the use of the light shield and heavy armour, military evolutions, movements of armies, and encampments, and all that relates to horsemanship. Of all these things there ought to be public teachers, receiving pay from the state, and their pupils should be the men and boys, the women and girls, who are to know all these things (*Laws* 813 de). (Lodge & Frank, 1970, p.141)

Though not considered to be equal in all practices, women were certainly valued by their contribution to many aspects of the community.

The planned community, whether ideal republic or model city, is to be founded upon the basic concept of Justice. As applied to women, this means that women's unique and positive capacities, which can be utilized in making definite contributions to the life of the planned community, are to be developed by all the social institutions - home, school, church, army, law courts, community festivals, etc. - which are regarded in the *Dialogues* as of directly educational significance. (Lodge & Frank, 1970, p. 287)

Access to education adjusted over the course of one's lifetime in ancient Greece. The structures went from informal to formal, beginning in the home, where parents and nurses were the teachers, then shifting to more formal education in support of the values of the State.

Once born, the first three years of the child's life are devoted in the *Laws*, primarily to physical development....The nutrition is provided, partly by the mothers, ands partly by especially suitable nurses, who relieve the biological mothers - at least in the higher classes - of much of the trouble which, in less well-planned communities, all too frequently falls to their lot in looking after very young children....But the training received during this period is not exclusively physical. The general moral atmosphere, and the attitude toward perfecting the young for their future life of citizenship in the model community, continue to exercise a pervasive influence. (Lodge & Frank, 1970, p. 289)

As the children age, their gender plays a more significant role in their access to education.

The next stage of the life-cycle is the period from six to ten years of age. The sexes are now separated and are sent to separate schools. Here the young girl learns to be a schoolgirl, associating exclusively with schoolgirls, and being taught all she learns by schoolmistresses. What she learns, while superficially not unlike what her brothers are learning in their boys' school, is acquired in a very different spirit. (Lodge & Frank, 1970, p. 293)

As girls grew into women, their opportunities began to narrow. They were mostly relegated to a domestic existence, not given the freedom to pursue the same education and opportunities as their brothers.

In the *Laws*, the influence of the home continues throughout her life. As maid, wife, mother, and matron, her life is definitely centered in the home: a home permeated by community spirit. The influence of the school persists, after her sixteenth year, only indirectly: namely in the monthly gymnastic and music festivals which continue to keep alive in her the spirit of her education. What is that spirit? As far as we have studied it, it is intensely, narrowly, local. Her interests are concentrated upon the community into which she has been born, in which she has progressively immersed her growing self. All that she is, all that

she has become, she owes to that community: a community which she has never left, and indeed has never thought of leaving. (Lodge & Frank, 1970, p. 295)

However, Plato does not dismiss the importance of the role of women to the State and the future. In his described utopia, he sees the role of women to become mothers to further future generations of citizens.

This is one of the most important phases in a woman's life-cycle, and women are educated for it, partly by life itself, and partly by public opinion and by the instructions and admonitions of matron-magistrates. These matrons are the same as the playground matrons who supervised the years of pre-school play in the temple precincts. They represent authority, community protection, mature experience, safe guidance, and wise counselling in intimate matters. They teach the young women that marriage is a sacred mystery, in which women weave the web of life and cooperate with God in the work of creation. They teach them also that marriage is of profound concern to the State, and that it is their civic as well as their religious duty to marry and bear children according to the laws of the planned community. (Lodge & Frank, 1970, p. 300)

There was evidence that women and girls were always under the control of the males in their home.

The position of women at Athens in the fifth century, and, indeed, in all of Greece except Sparta, was very much lower than in the times of which Homer wrote. The home was very strictly their sphere; and life for them extended very little beyond it....During her maiden days an Athenian girl would remain under the eye of her mother and learn to fulfill her domestic duties. (Robinson, 1933, p. 82)

Robinson continues his analysis of the destiny of women in ancient Athens:

Throughout her life she remained always under the tutelage of some male, and, if left a widow, returned into the charge of her father or brother. Henceforward her duties centered in the management of the home. She would superintend the work of the slaves, especially the female ones. (Robinson, 1933, p. 84)

Including a system of teachers being paid by the state for their services endorses a system of public versus private education. Both private and public instruction was

prevalent in ancient Greece, including paid instructors in order to support the interests of the State.

Aristotle's arguments provide us with compelling grounds for taking seriously a sort of educational equality that we should care about. Using his case for the legitimacy and desirability of public provisions for moral education as a starting point, one can plausibly develop on Aristotelian premises a mandate for equitable access to a required curriculum of moral and political education, instruction in the academic disciplines, and preparation for work. (Curren, 2000, p. 6)

There was also debate about how these teachers should be selected and trained. Plato realized the importance of teacher selection and training, since there was, in his belief, a direct connection between the education of the youth and the future of the State. In order to contribute to the needs of the State, students would have to receive instruction that fulfills the morals and values of the State and that support the development of future leaders.

Laws 968d & Republic 533a: on how to find teachers for a leadership class: "First, a list would have to be made out of those who by their ages and studies and dispositions and habits are well fitted for the duty of a guardian. In the next place, it will not be easy for them to discover themselves what they ought to learn, or become the disciple of one who has already made the discovery. The learners do not know what is learned to advantage until the knowledge which is the result of learning has found a place within their souls. And so the details as to what they should study and at what times, while not exactly a 'secret,' can hardly be stated beforehand. (Lodge & Frank, 1970, p. 145)

The system of education was largely based on who these instructors were and where they taught.

The issue of school fees and equity of access for all classes depended much on how the children were needed as a support for their family. Again, there was a disparity between the boys and the girls.

At Athens the state required that all boys be taught to read and write; girls were not catered for. It was left to parents to choose a school and to pay the fees for the class. The schools themselves were run by private enterprise; and the school masters, as we have said, were but little respected. They often found it difficult to extract their fees. Nevertheless, the fees were low enough to allow even poor parents to get their sons tolerable instruction. (Robinson, 1933, p. 139)

The class differences between rich and poor played a significant role during the latter portion of the children's education.

At fourteen or thereabouts poor parents would require their children's assistance in their craft or trade. The sons of the rich, however, having attained proficiency in elementary subjects, were ready to go farther; and, until they were of an age to undergo their military service, they had four years ahead of them in which to do so. (Robinson, 1933, p. 142)

The pursuit of a public education was one that influenced future generations of leaders, including our own founding fathers of the United States.

Citing Aristotle's remark in Politics VIII.1, that education should be adapted to the form of government under which citizens will live, John Adams argued in his Defence of the Constitutions that children 'of every rank and class of people, down to the lowest and the poorest' should be 'educated and instructed in the principles of freedom' and 'in every kind of knowledge that can be of use to them in the practice of their moral duties...and of their political and civic duties' (Adams 1778, 168,197) (Curren, 2000, pp. 6-7)

The structures of education, including the physical location of the schools themselves played an important role in the equity of access to education.

The schools of the Sophists were entirely private schools, and for the most part consisted of the group of students gathered around any one instructor. There was no system of beliefs or unity of methods that would lead to the formation of any permanent institution. Socrates did not have any definite place for giving instruction or any definite body of pupils. So long as no fees were extracted, there would be no definite student body. Plato, and very probably Aristotle, followed the example of Socrates in this respect. But Plato's successor, Speusippus, demanded regular fees, as did also the teachers of the other philosophical groups. This gave both definiteness and continuity of administration. A further factor in the development of definite schools was the acquiring of definite locations and names. The leading gymnasia of Athens were

the Academy, the Cynosarges, and the Lyceum. These were in the suburbs, and were somewhat of the nature of public parks, being provided with water and gardens as well as exercise grounds. (Monroe, 1932, p. 297)

Plato taught at the Academy, while Aristotle taught at the Lyceum. These schools' location played an important role in the history of education in ancient Greece.

Plato taught chiefly at the Academy, both in the public gymnasium and in private grounds which he acquired near by. This plot of ground, together with the headship of the school, Plato left to his nephew, Speusippus. The small property became the nucleus of a considerable foundation, for it was enriched, not only by fees, but by gifts from wealthy patrons and by the bequests of the heads of the school....The heads of the school were called *scholarchs*, and received their positions either through the designation of their predecessor, or, later, by election. In a similar way Aristotle settled in the Lyceum and Antisthenes in the Cynosarges. Later the pupils of the latter removed to the frescoed portico in Athens, whence they were called Stoics. Epicurus taught in his own private grounds, which he left as the nucleus of an endowment for his school. As with the success of Plato, each of these groups became definitely organized into a school with an endowment, and with a recognized head, or scholarch. (Monroe, 1932, p. 298)

All of these schools provided instruction to a large number of students over the years of their existence. "The attendance at these schools was very large. Theophrastus, the successor of Aristotle in the headship of the Lyceum, is said to have had more than two thousand pupils at one time" (Monroe, 1932, p. 298).

The topic of study was also an important factor in ensuring the future of the State, vet only a select few were chosen to study these topics.

From *Plato's Republic Book VII* - After that time those who are selected from the class of twenty years old will be promoted to higher honour, and the sciences which they learned without any order in their early education will now be brought together, and they will be able to see the natural relationship of them to one another and to true being. Yes, he said, that is the only kind of knowledge which is everlasting. (Monroe, 1932, p. 217)

Though Plato was concerned about students starting to debate issues at too young an age, before they are mature enough to learn the proper respect for the process.

From *Plato's Republic Book VII* - There is danger lest they should taste the dear delight too early; for young men, as you may have observed, when they first get the taste in their mouths, argue for amusement, and are always contradicting and refuting others in imitation of those who refute them; like puppy-dogs, they delight to tear and pull at all who come near them. (Monroe, 1932, p. 219)

The subjects to be studied were prescribed, too.

From Selections From the Laws of Plato Book VII - There still remains three studies suitable for freemen. Arithmetic is one of them; the measurement of length, surface and depth is the second; and the third has to do with the revolution of the stars in relation to one another. (Monroe, 1932, p. 257)

Equity of access to the education and discourse was influenced by many factors, including location of the schools, technique of the instructors and gender and class of the pupils. Several topics would be covered during this period of education in a young man's life.

Even in the early period, in addition to the immediate group of assistants or favorite pupils, a great number of minor teachers of grammar, rhetoric, dialectic, physics, and mathematics gathered around these four great schools of philosophy. Besides these philosophers and Sophists, there were numerous private tutors who prepared candidates for entrance to these higher schools, helped the younger students in their exercises, and directed them in their reading and note work. The philosophical chairs thus became the centre of the intellectual activity in all Greece. (Monroe, 1932, p. 299)

When exposed to the lectures of such men as Plato and Aristotle, those in attendance would benefit from the interactions of teacher and pupil. It was the direct connection between teacher and student that had a profound influence on education. This created a system of small group learning.

It was the recognition of the power of personal contact in education which led the Greek educator to favor small classes. This in turn rendered education more

expensive, with the result that higher education in Athens could only be for the elite. Isocrates, like some of the other Greek educators, attempted to justify this situation. His view on educational selection is revealed in the *Areopagiticus* (44-6), where he refers approvingly to the customs of the men of old:

However, since it was not possible to direct all into the same occupations, because of differences in their circumstances, they assigned to each one a vocation which was in keeping with his means; for they turned the needier towards farming and trade, knowing that poverty comes about through idleness, and evil-doing through poverty. Accordingly they believed that by removing the root of evil they would deliver the young from the sins which spring from it. On the other hand they compelled those who possessed sufficient means to devote themselves to horsemanship, athletics, hunting and philosophy, observing that by these pursuits some are enabled to achieve excellence, others to abstain from many vices. (Beck, 1964, p. 269)

Education shifted from informal to formal with the arrival of the Sophists.

...but no sooner did individualism and the desire for pleasant diagogic life come into competition with the state than a culture was demanded which it had no means of supplying. Here the Sophists found their opportunity. The young men were to be met everywhere-in the streets, the market-place, the gymnasia, the taverns, the homes, etc. The Sophist had only to show himself in order to be surrounded by a knot of them. He had but to seat himself at the exedra, or lay himself down under a tree in the gymnasium, and they crowded round to hear his wisdom-his manifold stores of unfamiliar knowledge and his brilliant arguments on any theme proposed to him. (Davidson, 1894, p. 89)

As need demanded, several more formal structures were created for education. There were some differences in prerequisite knowledge and ability for acceptance to these formal educational institutions.

Early in the fourth century there arose established secondary schools in Athens. Plato began to teach Logic and Philosophy, Isokrates Rhetoric, not for a few weeks at a time, but permanently: their courses lasted three or four years. Characteristically there was no State organisation or interference; Isokrates taught in his own house, near the Lukeion, Plato in his garden near Kolonos and in the Akademeia. Their pupils came from all parts of the civilised world, staying in Athens during the course of their study. Plato imposed a preliminary examination of mathematics upon his pupils, Isokrates only commended a knowledge of such subjects. (Freeman, 1922, p. 180)

The equity of access to such systems of education was affected by class. Plato's purpose for the students of the Academy was to become leaders and advisers to kings. This was not a role that was available to all men, nor was it available to women.

Plato was less concerned with the education of the ordinary citizen than with the problem of how to train political technicians, experts in political affairs who could act as advisers to kings or as leaders of the people. It may be that this was an aristocratic prejudice; but it was a remarkable anticipation of what was in fact to become the normal mode of effective political action after the triumph of Macedonia, when the system of absolute monarchy was imposed on the Hellenised world. The role played under Plato by the Academy as nursery of counsellors-of-state was later assumed by the Stoic schools at the beginning of the Hellenistic era....History gives many examples of such overlapping: something that seems to be a survival from a past that is dead and gone turns out to be a pointer to the future. (Marrou, 1956, p. 65)

Before the formal structures of education at the Academy and the Lyceum,

Socrates, the mentor of Plato, would lecture and engage in teaching in public. This open
access to education allowed all people to engage in learning, though the structures were
informal.

The Platonic dialogues and the works of Xenophon picture Socrates going about Athens questioning and making people in everyday life think about their basic assumptions. In contrast to the sophists, Socrates seems to have kept closely to the notion of the Old Education that after the elementary stage of classroom instruction a young man was educated, not in any kind of school apart from the city, but informally through life in the city itself. (Lynch, 1972, p. 42)

Again, Socrates unique teaching methods were described by Xenophon:

From: Xenophon *Memorabilia* I, 1.10; cf. IV, 1.1: Socrates was constantly out in the open. Early in the morning he went to the *peripatoi* and the gymnasia; when the Agora filled up, he could be seen there; and for the rest of the day he would always be wherever he might associate with (*sunesesthai*) the most people. (Lynch, 1972, p. 42)

Socrates' protege, Plato, discussed this notion of voluntary learning: from *Plato's*Republic Book VII - "Because a freeman ought to be a freeman in the acquisition of

knowledge. Bodily exercise, when compulsory, does no harm; but knowledge which is acquired under compulsion has no hold on the mind" (Monroe, 1932, p. 216). Aristotle followed with a similar description in *Politics*:

From The Politics of Aristotle Book VIII - The object with which we engage in or study them also makes a great difference; if it is for our own sakes or that of our friends, or to produce goodness, they are not illiberal, while a man engaging in the very same pursuits to please strangers would in many cases be regarded as following the occupation of a slave or a serf. (Burnet, 1967, p. 108)

Socrates sought to engage learners who wanted to learn, no matter who or where they were. He provided equity of access to his teaching, which was unusual at the time.

He (Socrates) went about cross-examining anyone who would submit to it, and discovered to his surprise that not one could give him a satisfactory answer to his searching questions. Unlike the professional sophists, he charged no fee of those who listened to his discussions; and as a result he fell into the direct poverty. Nevertheless, he did not abandon his quest. He continued to buttonhole mne in the street and to discuss the problems of existence with many young folk who were brought under the spell of his intellectual enthusiasm. (Robinson, 1933, p. 146)

This type of instruction was controversial even at that time, causing others to question Socrates' motives.

Socrates was an unusual type of teacher; indeed he himself said that he was not a teacher at all. He was the midwife who brought other people's thoughts to birth, the gad-fly who stimulated his sluggish contemporaries. He had no school; he did not give regular classes, and he took no fees. His conversations were conducted in public. 'Early in the day he went to the public walks and gymnasia; when the agora filled up he was to be seen there, and for the rest of the day he would be wherever he was likely to find the most company' (Xenophon, Mem. I. i.10). Everyone who was prepared to submit to his questioning could hear him, whatever their age and status. But it was the young who heard him most willingly, and over them he exercised a remarkable fascination. He was, if we can believe Plato, susceptible to the youthful charms of those good-looking boys who were to be seen in palaestra and gymnasium surrounded by admirers; but, as Alcibiades says in the *Symposium*, in his relations with them the positions of lover and beloved were reversed as they found themselves irresistibly attracted by his personality (Plato, *Symposium* 222b). (Clarke, 1971, p. 58)

The equity of primary participation to both formal and informal education varied based on many factors, including the gender and class of the students and the role and location of the teachers. While the philosophers communicated the reasons for creating equal opportunities for women to receive the same education as men, the systems of formal education often created a gap between men and women. While women were exposed to informal structures of education and often led domestic training for slaves in the home, the men were sent to more formal systems of education in order to further the interests of the State.

Though the philosophers also touted the notion of state-funded schools, many institutions were still private and charged fees directly to the students and their families. Though fees were not seen as prohibitive, it was the need of the lower classes to have their children help with their trades that limited their access to formal educational institutions. The upper class population was available to stay in school longer, thus allowing them to pursue higher learning and become well-versed in political thought in order to further the interest of the State.

The teachers themselves often created systems and structures of education that increased access of primary participation for students. The act of wandering the agora, seeking a friendly ear and an open mind led Socrates to interact with an entire city of students. Plato and Aristotle both led thousands of students through formal education at the Academy and the Lyceum respectively. Each helped to shape the formal and informal systems and structures of education in Ancient Greece.

To Whom is Thought and Information Disseminated Following Primary Participation?

The dissemination of information was limited in ancient times by several factors, including class, gender and other issues of equity previously described. Students would share their knowledge and learning with others, carry on dialogues and interact with other students and members of their families. Often slaves would double as tutors in these circumstances for very young children.

Those wealthy families had slaves to supervise their children to and from school. In earlier times (6th Century BC) tutors were hired to teach individual students. It is unclear to me whether any knowledge was shared with these slaves or whether any information was passed on into the "slave class. (Curren, 2000, pp. 12-14)

Very young students had to walk throughout the city to attend these different schools, so families assigned them a slave for supervision and protection, called a paidagogos. There is some irony that the citizens entrusted this slave to care for their children and their moral education, but that they were slaves who were not thought able to care for themselves as citizens (Curren, 2000).

Not every citizen attended formal schooling, which would impact who had access to information and to whom it was shared.

Apart from this required military training, what Athenian schooling consisted of in Aristotle's time, for those who desired it and could afford it, were lessons in athletics (gymnastike); the 'arts of the Muses' (mousike), which included music, poetry, narratives, and above all Homer; and 'letters' (grammatica) and arithmetic. The democratization of Athens had brought with it the introduction of group lessons as a more affordable alternative to traditional one-on-one instruction, and the introduction of letter schools, which taught writing, reading, and arithmetic, subjects which had acquired broader commercial utility with the growth of trade. It is impossible to say how many boys attended these various lessons, and there is no clear evidence that any girls did, but there are indications

that boys of wealthier families began school at a younger age and may have attended more expensive schools. (Curren, 2000, p. 12)

Socrates held strong opinions about knowledge and how it was best gained and shared.

From Aristotle's Ethics: Euthydemos.

Socrates is repeating to Crito his conversation with a youth named Cleinias, which proceeds as follows: 'Did we not agree that philosophy should be studied? and was that not our conclusion?- Yes, he replied.-And philosophy is the acquisition of knowledge? - Yes, he said. - And what knowledge ought we to acquire? Is not the simple answer to that, A knowledge that will do us good? -Certainly, he said. - And should we be any better if we went about with a knowledge of the places where most gold was buried in the earth? - Perhaps we should, he said.- But have we not already proved, I said, that we should be none the better off, even if without trouble and digging all the gold that there is in the earth were ours? And if we knew how to convert stones into gold, the knowledge would be of no value to us, unless we also knew how to use the gold? Do you not remember? I said. - I quite remember, he said - Nor would any other knowledge, whether of money-making, or of medicine, or of any other art which knows only how to make a thing, and not to use that which is made, be of any use to us....Then, my dear boy, I said, the knowledge which we want is one that uses as well as makes? True, he said.' (Burnet, 1967, pp. 3-4)

The practice of the ancient philosophers was to distribute information via lectures and not books. The spoken word, versus the written word, was primary means of communicating ideas during this time period. Socrates left no written work at all and Plato and Aristotle's works were mostly recorded and shared by their students.

The *Ethics* and *Politics*...are two courses of lectures intended to form a training in the legislative art, to fit their hearers to become statesmen and lawgivers. It must not be supposed that they deal with what we call Ethics and Politics respectively. On the contrary, the distinction between these branches of philosophy is ultimately due to the accident of the titles given these lectures when they were made up into books. The *Ethics* is the more theoretical of the two and deals with the question 'What is the good for man?' the *Politics* on the other hand discusses rather the practical problem of the realisation of that good by the agency of the state. As is only natural, however, the two questions cross each other at innumerable points.

To appreciate the style of the two treatises-the peculiar effect of which I have tried to bring out in my translation-it is necessary to remember that they are essentially lectures and not books, and that they were delivered to a cultivated Athenian audience who had a general knowledge of contemporary philosophical discussions, especially the views of Plato and his successors in the Academy. It is from these views that Aristotle regularly starts instead of from those expressed in his own more scientific writings. As the aim of the science is practical, he felt no doubt that it was more important to attach his teaching to something his hearers knew already than to give it a firm theoretical basis. (Burnet, 1967, p. 11)

They believed that the oral tradition of passing on knowledge was more powerful than the written tradition. Attending a lecture or engaging in discourse at the Academy or the Lyceum or in the agora with Socrates allowed for the benefit of context, tone and interaction between lecturer and audience that the written word does not.

I know that what is read has less power of persuasion than what is heard. It is universally believed that a speech, if actually delivered, deals with serious and important subjects; but if only written and never spoken, it is supposed to aim merely at effect and the fulfillment of a contract. This opinion is quite reasonable. For the written speech is deprived of the prestige of the author's presence and of his voice and of the proper rhetorical delivery: it is read when the occasion which called it forth is past, and the points which it discusses are consequently less interesting. The slave who reads it aloud puts no character into it, but drones it out as though he were reckoning up the items of a bill. (Freeman, 1922, p. 204)

Plato specifically did not favor the written word over the delivered lecture. He believed that those who would read his work aloud would miss the point of his message and perhaps fail to communicate his meaning. This would change the impact of those to whom information was disseminated following primary participation, including those of us accessing the work today, thousands of years later.

Plato regarded the written word with even greater contempt. To him it is the cause of forgetfulness; those who employ writing learn to rely on their notes, not on their memory, and are accustomed to register their impressions on tables of wax, not on the mind. Again it is impossible for an author to control the circulation of his works; they may reach those for whom they are not intended. For Plato expects speaker and writer alike to express only what is suitable to their

audience; the teacher must, by a study of psychology, know what arguments will do good and what will do harm to each particular pupil. But a book cannot impart knowledge, in the Platonic sense of the word at all; for it is unable to answer questions or to explain its author's meaning when the reader fails to follow. (Freeman, 1922, p. 205)

The impact of the work of Socrates, Plato, Aristotle and their contemporaries continues to impact readers today. Students of history and philosophy can enjoy and learn from thee ancient works. Though we are all recipients of the information following primary participation, we are still learning from their philosophies today.

Each man tended to become a law to himself; and the bonds which held the city-state together were gradually loosened. Such was the mournful outcome of the New Enlightenment. Yet it had its nobler and more enduring side. For Socrates' example was not wholly lost upon his countrymen. His pupil Plato and other great philosophers carried on his earnest and sincere pursuit of truth; and thus, while the political life of Greece was ruined, her intellectual life received a stimulus and inspiration which was to influence the thinkers of all succeeding time. For Socrates had taught them to trust their reason. 'We must follow whither the argument will lead' was one of his favorite maxims; and wherever men have learnt to think honestly and to think straight, they have been in a very real sense his pupils. (Robinson, 1933, p. 149)

Since the primary means of participating in education was face to face in ancient times, and since the founders of the Academy and the Lyceum favored the tradition of lecture and not writing books, anyone who has heard retold or read accounts of the work of Socrates, Plato and Aristotle, including this researcher, has become a secondary participant in the thought and information. Only those present at the original lectures could fully benefit from the experience of primary participation.

Who Formally Leads? Who Informally Leads?

In order to define who formally and informally lead education in ancient times, we can begin by examining the work of Socrates. Socrates never taught in a formal

classroom, nor did he head a formal institution, like Plato's Academy and Aristotle's Lyceum. Instead he chose to interact with his "students" outside, in the public sphere.

Socrates was an unusual type of teacher; indeed he himself said that he was not a teacher at all. He was the midwife who brought other people's thoughts to birth, the gad-fly who stimulated his sluggish contemporaries. He had no school; he did not give regular classes, and he took no fees. His conversations were conducted in public. 'Early in the day he went to the public walks and gymnasia; when the agora filled up he was to be seen there, and for the rest of the day he would be wherever he was likely to find the most company' (Xenophon, Mem. I. i.10). Everyone who was prepared to submit to his questioning could hear him, whatever their age and status. But it was the young who heard him most willingly, and over them he exercised a remarkable fascination. He was, if we can believe Plato, susceptible to the youthful charms of those good-looking boys who were to be seen in palaestra and gymnasium surrounded by admirers; but, as Alcibiades says in the *Symposium*, in his relations with them the positions of lover and beloved were reversed as they found themselves irresistibly attracted by his personality (Plato, *Symposium* 222b). (Clarke, 1971, p. 58)

Before young men found themselves interacting with Socrates in the agora, however, they would begin to attend schooling at a young age.

At Athens the state required that all boys be taught to read and write; girls were not catered for. It was left to parents to choose a school and to pay the fees for the class. The schools themselves were run by private enterprise; and the school masters, as we have said, were but little respected. They often found it difficult to extract their fees. Nevertheless, the fees were low enough to allow even poor parents to get their sons tolerable instruction. (Robinson, 1933, p. 139)

Very young children are taught by parents and nurses and state-appointed playground matrons. Then, as they grow older, non-citizen, paid teachers are used to teach adolescents and teenagers. Only those who will become leaders themselves are taught by citizens and graduates of the Academy (Lodge & Frank, 1970, p. 148).

Once born, the first three years of the child's life are devoted in the *Laws*, primarily to physical development....The nutrition is provided, partly by the mothers, ands partly by especially suitable nurses, who relieve the biological mothers - at least in the higher classes- of much of the trouble which, in less well-planned communities, all too frequently falls to their lot in looking after very

young children....But the training received during this period is not exclusively physical. The general moral atmosphere, and the attitude toward perfecting the young for their future life of citizenship in the model community, continue to exercise a pervasive influence. (Lodge & Frank, 1970, p. 289)

During this time of a child's life, women played more of a leadership role than men.

From Laws 794: "All children between the ages of three and six ought to meet at the village temples, the several families of each village uniting on one spot. The nurses are to see that the children behave properly and orderly: each group of children and nurses being under the control of a playground matron, selected from among the women controllers of marriage, and clothed with all the necessary power. (Lodge & Frank, 1970, p. 292)

These women took this role very seriously and took pride in the impact of their leadership on the children's education.

At this stage, Plato thinks the nurses have an opportunity to provide quite a little in the way of moral education, preparing their charges for some of the restraints of community life. They see that the children play 'properly and orderly'; and sports and games provide an especial opportunity of educating the child out of the disposition of being self-willed. He learns, not only to overcome obstacles, but to play with older children, who take the lead....By thus associating with his equals on competitive terms, and by imitating what he sees the other children doing, the child himself learns by doing. (Lodge & Frank, 1970, p. 292)

For the women, this path of leadership was an important role in the community and in her own journey towards maturity.

The final phase of a woman's life in the planned community begins with the age of forty. She can now being to hold office. The kind of office for which she is peculiarly fitted by her nature and experience, is the office of matron-magistrate. In this office, she is one of the 'controllers of marriage' and also assists in supervising the pre-school community games of young children. This gives full play to her womanly nature in its maturity. Her natural feeling for enjoying gossip is directed to noble and useful purposes; and her protective interests in young children is encouraged and provided with an official outlet, and also with a certain measure of power and recognition in the community life. In addition, her genuine control over the personnel and numbers of the next generation gives her a position of very great power and importance. If, later in life, she becomes a priestess of one of the community cults, this too is a position of prominence and importance. (Lodge & Frank, 1970, p. 302)

However, women themselves were still under the leadership of men.

Throughout her life she remained always under the tutelage of some male, and, if left a widow, returned into the charge of her father or brother. Henceforward her duties centered in the management of the home. She would superintend the work of the slaves, especially the female ones. (Robinson, 1933, p. 84)

Once in school, young children were taught by their schoolmasters; though these teachers were limited in their influence on the children. They would only teach basic knowledge of letters and numbers, not moral education, which was still left to the family.

The schoolmaster was only responsible for one small section of children's education - the mental side. He did not really educate his pupils. Education means, essentially, moral training, character training, a whole way of life. The 'master' was only expected to teach them to read-which is a much less important matter....In antiquity the schoolmaster was far too insignificant a person for any family to think of giving him the responsibility of educating its children, as it so often does today. If anyone other than parents was ever given the job, it was the pedagogue, who was only a slave, no doubt, but who was at least one of the family. Through his daily contact with the child, and his example-whenever possible-and at any rate by his precepts and the careful watch he kept over him, he made a far greater contribution to his education, especially his moral education, than the purely technical lessons provided by the schoolmaster. (Marrou, 1956, p. 147)

There is much written about the profile of those who would become educators during this time and who was chosen to supervise these teachers. Everyone in the society played a role in the education of youth.

With the Greeks, however, the school is only one of the social institutions concerned with educating the rising generation. It is not a public, but a private institution. It's teachers are not public officials, but cheap hirelings. They are qualified to train the children in elementary techniques: to play games, to read and write, to make a little music. But that is all. For educating the children so that they become full members of the community, the typical Greek looks to community institutions proper; and the true educators are not the school-teachers, but the adult free-born citizens. It is not merely in their capacity as parents or uncles, but as representatives of the community ways of living in all their aspects, organized and unorganized, that the citizens are regarded as educational authorities. They are qualified, not only in common opinion, but in Plato's

mature judgement, to act as authorities to supervise and direct the behavior of the rising generation, and to correct without hesitation whatever they consider amiss in the behavior of the school-teachers. For the development of true manliness, public spirit, and any sort of idealism, the children look, not to the school and its imported professionals, but to the older generation who belong. (Lodge & Frank, 1970, p. 12)

Education was of primary importance to the ancient Greeks. "The character and Organization of Old Greek Education is determined by the city state. This institution furnished the basis and ideals of education, as did the family with the Chinese and the theocracy with the Hebrews" (Monroe, 1932, p. 3). In Athens, the schools and their structure were carefully designed.

Education was public only in so far as it was subject to close state supervision of the general results to be expected of home training or individual private institutions. It could be given in the home, but was more commonly obtained in private schools. In contradiction to the general authority and responsibility of adults at Sparta, a law of Solon forbade any adult save teachers and pedagogues entering the school. (Monroe, 1932, pp. 11-12)

Families felt a strong obligation to educate their children for the preservation and betterment of the State. Everyone had their role to play in a child's education (*Speech of Protagoras on 'Teaching of Morals,' from the Protagoras of Plato* 325C-326D). "Education and admonition commence in the first years of childhood, and last to the very end of life. Mother and nurse and father and tutor are quarrelling about the improvement of the child as soon as he is able to understand them..." (Monroe, 1932, p. 31). From the earliest ages, families would facilitate their children's access to education. The parents themselves would begin this process at home, and it would continue throughout the years in school.

From *Memorabilia* by Xenophon - "Nor does it satisfy the parents merely to feed their offspring, but as soon as the children appear capable of learning anything,

they teach them whatever they know that may be of use for their conduct in life; and whatever they consider another more capable of communicating than themselves, they send their sons to him at their own expense, and take care to adopt every course that their children may be as much improved as possible. (Beck, 1964, p. 84)

In order to describe those that were considered teachers or educators, we look again to the ancient beliefs about who should lead. The families put great trust in these leaders to educate and protect their children. From *Republic* 467d f. - "The parents will place their children under the command of experienced veterans who will be their leaders and teachers. Thus they will get an excellent view of what is hereafter to be their own business; and if there is danger they only have to follow their elder leaders and escape" (Lodge & Frank, 1970, p. 140). These leaders in education were essential in helping to shape the future leaders of the State. "Under the head of "professor" we can understand the teaching personnel in the field of higher education; men who perform a very important function in developing to full manhood select adolescents of the governing classes- a function indispensable in any civilized community, whether actual or ideal" (p. 46).

The concept of formal leaders of education, those that would lead classes and head schools, was a relatively new phenomenon during this time period.

Men who pursued the career of teaching in the field of higher education professionally, i.e. as a way of earning their living, were a phenomenon of the generation immediately preceding Plato. By his own time they had become something of a commonplace. They are frequently discussed in the *Dialogues*, usually in a slightly satirical, and sometimes in a bitter spirit. The best-known picture of professors in action is to be found in the *Protagoras*, and the keenest analysis of their nature and function in the *Sophist*, but they form part of the background of almost all of the *Dialogues* and frequently step forward into the limelight, if only for a moment. (Lodge & Frank, 1970, p. 47)

In *Laws*, Plato suggested that the leadership of these educators was an important role as well.

Laws 765d f: - The minister of the education of youth, male and female, must be fifty years of age and must have children lawfully begotten and preferably of both sexes Of all the great offices of state this is the greatest, and care must be taken that the very best of all the citizens is elected. The magistrates (with certain exceptions) are the electors, and they are to select the best of the law-guardians. The official they select holds office for a term of five years. (Lodge & Frank, 1970, p. 146)

Plato also suggested that teachers were to be publically funded for their work.

Laws 813 de: We include under gymnastics all military exercises, such as archery and all hurling of weapons, the use of the light shield and heavy armour, military evolutions, movements of armies, and encampments, and all that relates to horsemanship. Of all these things there ought to be public teachers, receiving pay from the state, and their pupils should be the men and boys, the women and girls, who are to know all these things. (Lodge & Frank, 1970, p. 141)

The character of these educational leaders was of utmost importance, as well.

From Against the Sophists (17-18) by Isocrates: The teacher, for his part, must so expound the principles of the art with the utmost possible exactness as to leave out nothing that can be taught, and for the rest, he must in himself set such an example of oratory that the pupils who have taken form under his instruction and are able to pattern after him will from the outset, show in their speaking a degree of grace and charm which is not found in others. (Beck, 1964, p. 286)

Two types of leaders emerged during this period, the Sophists and the Theorists.

Each brought his own philosophy to education.

The problem of the Theorists - The writers of this group, while for the most part contemporary with the Sophists, differ from them in two important respects. The Sophists were practical teachers and were interested in the educational movement of the times chiefly in a personal way. They claimed to be able to prepare for a successful career, and were primarily concerned in achieving such a success for themselves. They taught for money and for reputation, as do most teachers at the present. Some of them, Socrates, had a profound public interest as well, but the earlier Sophists were not native Athenians, and had little patriotic or national interest. On the other hand, the theorists were profoundly interested in education on account of its national importance, and so far as practical teachers, they were

wholly disinterested and refuse to accept any remuneration for their efforts. (Monroe, 1932, p. 116)

The leaders of the schools that these men created differed, as well, especially in regard to charging tuition.

The schools of the Sophists were entirely private schools, and for the most part consisted of the group of students gathered around any one instructor. There was no system of beliefs or unity of methods that would lead to the formation of any permanent institution. Socrates did not have any definite place for giving instruction or any definite body of pupils. So long as no fees were extracted, there would be no definite student body. Plato, and very probably Aristotle, followed the example of Socrates in this respect. But Plato's successor, Speusippus, demanded regular fees, as did also the teachers of the other philosophical groups. This gave both definiteness and continuity of administration. A further factor in the development of definite schools was the acquiring of definite locations and names. The leading gymnasia of Athens were the Academy, the Cynosarges, and the Lyceum. These were in the suburbs, and were somewhat of the nature of public parks, being provided with water and gardens as well as exercise grounds. (Monroe, 1932, p. 297)

The format, location and legacy of each school depended upon its leadership.

Plato taught chiefly at the Academy, both in the public gymnasium and in private grounds which he acquired near by. This plot of ground, together with the headship of the school, Plato left to his nephew, Speusippus. The small property became the nucleus of a considerable foundation, for it was enriched, not only by fees, but by gifts from wealthy patrons and by the bequests of the heads of the school....The heads of the school were called *scholarchs*, and received their positions either through the designation of their predecessor, or, later, by election. In a similar way Aristotle settled in the Lyceum and Antisthenes in the Cynosarges. Later the pupils of the latter removed to the frescoed portico in Athens, whence they were called Stoics. Epicurus taught in his own private grounds, which he left as the nucleus of an endowment for his school. As with the success of Plato, each of these groups became definitely organized into a school with an endowment, and with a recognized head, or scholarch. (Monroe, 1932, p. 298)

Several thousand young men were educated at these schools, under the leadership of Plato, Aristotle and their successors. "The attendance at these schools was very large. Theophrastus, the successor of Aristotle in the headship of the Lyceum, is said to have

had more than two thousand pupils at one time" (Monroe, 1932, p. 298). In order to gain entrance into such prestigious institutions, students were often prepared by tutors or other teachers.

Even in the early period, in addition to the immediate group of assistants or favorite pupils, a great number of minor teachers of grammar, rhetoric, dialectic, physics, and mathematics gathered around these four great schools of philosophy. Besides these philosophers and Sophists, there were numerous private tutors who prepared candidates for entrance to these higher schools, helped the younger students in their exercises, and directed them in their reading and note work. The philosophical chairs thus became the centre of the intellectual activity in all Greece. (Monroe, 1932, p. 299)

During this time,

...there was a demand for fuller education; and simultaneously with the demand there had arisen a class of men competent to satisfy it. From various parts of the Greek world, and more especially from Sicily, came professional teachers who studied knowledge in all its branches. 'Sophists' or 'wisdom mongers' was the name they went by; and their claims were certainly not modest. (Robinson, 1933, p. 142)

The creation of formal schools at the Academy and the Lyceum fulfilled this demand and provided structure to higher education in ancient Athens.

The generation of Socrates and the great Sophists, a generation so fruitful in ideas but so inchoate and confusing, was succeeded by a new generation destined to bring Greek education to maturity....This decisive achievement was accomplished at the beginning of the fourth century - in point of fact, during the decade 390 and 380- and it was essentially the result of the work of two great teachers, Plato (427-348) and Isocrates (436-338). The former opened his school in 387; the latter, in 393. (Marrou, 1956, p. 61)

Socrates' methods, though less formal than Plato and Aristotle, still informed their future work. His informal leadership style had a profound impact on his students.

He (Socrates) went about cross-examining anyone who would submit to it, and discovered to his surprise that not one could give him a satisfactory answer to his searching questions. Unlike the professional sophists, he charged no fee of those who listened to his discussions; and as a result he fell into the direct poverty.

Nevertheless, he did not abandon his quest. He continued to buttonhole men in the street and to discuss the problems of existence with many young folk who were brought under the spell of his intellectual enthusiasm. (Robinson, 1933, p. 146)

Xenophon discussed in *Memorabilia* I, 1.10; cf. IV, 1.1: "Socrates was constantly out in the open. Early in the morning he went to the *peripatoi* and the gymnasia; when the Agora filled up, he could be seen there; and for the rest of the day he would always be wherever he might associate with (*sunesesthai*) the most people" (Lynch, 1972, p. 42). His students realized that simply by associating with Socrates, they would benefit from his instruction. "Xenophon, too, in his *Memorabilia*, tells how Euthydemus never left his side except for urgent necessities, thinking that he could only become a worthy character by associating with Socrates. It is evident that both Socrates and his pupils realized the value of association for moral as well as intellectual improvement" (Beck, 1964, p. 197).

The question of who formally and informally leads is closely followed by who formally and informally facilitates. This research has shown that the two lenses are very similar in ancient times. The leadership and the facilitation of information and education was done first in the home, later in schools and more formal institutions such as the Academy and Lyceum and even in the public market of the agora. The men and women who fulfilled these leadership roles were often the same who were facilitators of this knowledge and information.

Who Formally and Informally Facilitates?

The Platonic dialogues and the works of Xenophon picture Socrates going about Athens questioning and making people in everyday life think about their basic assumptions. In contrast to the sophists, Socrates seems to have kept closely to the notion of the Old Education that after the elementary stage of classroom

instruction a young man was educated, not in any kind of school apart from the city, but informally through life in the city itself. (Lynch, 1972, p. 42)

In Plato's *Laws*, he discussed the importance of finding the right facilitators of knowledge for youth.

Selections From the Laws of Plato Book VII - When I reflected upon all these words of ours, I naturally felt pleasure, for all of the discourses which I have ever learnt or heard, either in poetry or prose, this seemed to me to be the justest, and most suitable for young men to hear; I cannot imagine any better pattern than this which the guardian of the law and the educator can have. They cannot do better than advise the teachers to teach the young these and the like words, and if they should happen to find writings, either in poetry or prose, or even unwritten discourses like these of ours, and of the same family, they should certainly preserve them, and commit them to writing. And, first of all, they shall constrain the teachers themselves to learn and approve them, and any of them who will not, shall not be employed by them, but those who they find agreeing in their judgement, they shall make use of and shall commit to them the instruction and education of youth. (Monroe, 1932, p. 250)

The importance of interacting with elders was key to facilitating expectations for youth. "They also teach the boys self-control; and it contributes much towards their learning to control themselves, that they see every day their elders behaving themselves with discretion" (Monroe, 1932, p. 124). Exactly this type of interaction and association was key to Socrates method as a facilitator of education.

Socrates was the source of, and furnished the inspiration for, this entire movement in educational thought. Though he has left no writings, the character and the substance of his teachings can be quite accurately reproduces from the writings of his pupils, Xenophon and Plato. Socrates lived from 469 to 399 B.C. The earlier portion of his life was spent as a sculptor, but the middle and later portion, though from what exact date is not known, as a teacher. Yet he never opened a school or delivered public lectures, in these respects differing from the Sophists and from the philosophers who continued his line of thought and work. His method was to engage in conversation any interested person, either old or young, in the market-place, the shop, or the gymnasium. In the latter places he found abundant opportunity, and there his teachings were especially influential upon those just entering that period of their education, hitherto devoted wholly to physical training and the service of the state. (Monroe, 1932, p. 118)

The result of shifting the responsibility of facilitation from the father to the teacher changed the dynamics of the society as a whole.

The changes in education of the period are manifold and not confined to any one aspect, though they are more pronounced in what would now be called secondary and higher education. Using the testimony of the *Clouds* with caution and supplementing it with corroborative evidence, circumstantial or direct, from a great variety of sources, the following general changes can be indicated. The very source of education, the home itself, was affected by these changes. There was a decline in the rigid discipline of the boy and of the immediate personal supervision of the boy by his father. His early training was now left more largely to the direction of nurses and pedagogues in whose selection less care was exercised. There was no need for old time severity. There was greater ease and luxury in the home life...The changes in the school were more significant. A similar freedom or license prevailed there. (Monroe, 1932, pp. 58-59)

Women also acted as facilitators in the domestic sphere. Often a husband would allow his wife authority over their slaves, including the training that the slaves needed to perform their duties.

Selections from the Economics of Xenophon - 41 'Some other of your occupations, my dear wife,' continued I, 'will be pleasing to you. For instance, when you take a young woman who does not know how to spin, and make her skillful at it, and she thus becomes of twice as much value to you. OR when you take one who is ignorant of the duties of a housekeeper or servant, and having made her accomplished, trustworthy and handy render her of the highest value.' (Monroe, 1932, p. 43)

and

Selections from the Economics of Xenophon 15 - 'I accordingly desired my wife', continued he, 'to consider herself the guardian of the laws established in the house. (Monroe, 1932, p. 49)

Unlike the previous times of ancient Greece, women's authority was limited to these domestic responsibilities, facilitated by their mothers.

The position of women at Athens in the fifth century, and, indeed, in all of Greece except Sparta, was very much lower than in the times of which Homer wrote. The home was very strictly their sphere; and life for them extended very little

beyond it....During her maiden days an Athenian girl would remain under the eye of her mother and learn to fulfill her domestic duties. (Robinson, 1933, p. 82)

The facilitation of knowledge and education was more informal than formal during this time. Teachers like Socrates interacted with youths in public, facilitating knowledge and information. Girls' development was facilitated by their parents, and limited to domestic affairs and the supervision and training of her slaves. Boys who attended more formal schooling were influenced by their elders and their education was facilitated by their parents and their professors at more formal institutions such as the Academy and the Lyceum.

What was the Process for Dissemination, Transcription and Interpretation of Knowledge and Information?

One of the more superficial reasons why Aristotle's educational thought has been neglected is that *Politics* is not a pleasingly polished work in the way that the *Republic* is. While the latter was evidently written to be read, the former is a record of a series of lectures: perhaps Aristotle's own notes, perhaps those of a student who heard them, or perhaps a compilation of two or more sets of notes. These lectures were evidently given repeatedly and evolved over time, without consistency being fully imposed as various amendments were made. Aristotle may have expressed himself more fully than he does in the manuscripts that have come down to us, and he may have made adjustments as he spoke, without correcting the text he was speaking from. Those of us who lecture may recall doing just this sort of thing, and it would explain some of the text's anomalies if what has come down to us was copied in part or in whole directly from Aristotle's own notes. In any case, the reader is faced with a text that is compressed, sometimes cryptic, and occasionally cluttered with apparently inconsistent formulations. (Curren, 2000, p. 1)

Aristotle, and Plato and Socrates before him, favored the lecture or face to face conversation to disseminate information. They excelled at the spoken word, engaging students in deep discussion and philosophical debates that have endured thousands of years. However, had these same students not chosen to record these words in writing,

they would have been lost to the ages. By the strictest definition, most, if not all of the work of Socrates, Plato and Aristotle should be considered a secondary source, since the original material was spoken and our access to it today depends upon the transcription of the lectures by students and translated by scholars. Today's students depend upon these secondary sources to gain access to the original thoughts and words of these ancient philosophers.

Socrates was the source of, and furnished the inspiration for, this entire movement in educational thought. Though he has left no writings, the character and the substance of his teachings can be quite accurately reproduces from the writings of his pupils, Xenophon and Plato. Socrates lived from 469 to 399 B.C. The earlier portion of his life was spent as a sculptor, but the middle and later portion, though from what exact date is not known, as a teacher. Yet he never opened a school or delivered public lectures, in these respects differing from the Sophists and from the philosophers who continued his line of thought and work. His method was to engage in conversation any interested person, either old or young, in the market-place, the shop, or the gymnasium. In the latter places he found abundant opportunity, and there his teachings were especially influential upon those just entering that period of their education, hitherto devoted wholly to physical training and the service of the state. (Monroe, 1932, p. 118)

If the work of the master was dependent upon the writings of the student for posterity, then there may be some question of to whom the work should be attributed.

The whole question of authorship is complicated by the fact that the list of the 146 Aristotelian writings, made by the librarian of the great library at Alexander about 220 B.C., does not contain the name of a single one of his works, at least under the title by which we now know them. On the other hand, concerning the accepted works, it is quite as generally admitted that the substance, the spirit and the general form, if not the exact wording, are wholly Aristotelian. Where the efforts of the school supplemented those of the master, they were wholly under the dominance and direction of the latter, so that the same may be said of resulting collaborations. (Monroe, 1932, p. 267)

There was also the concept of dissemination of information by association.

Students learned from their teacher simply by spending time with them, engaging in

discussion and listening to lectures. The students were clearly influenced by the work and styles of the teachers.

What then can we assert of Socrates as an educator? And this suggests another question - why did Plato employ him as the chief character of his dialogues? No doubt it was partly because Plato began writing about the same kind of subjects and by expressing the same kind of views as he had taken over for him; and partly because he wished to do honour to his memory. But there is surely another reason - because Plato was carrying on the educational method that Socrates had employed so successfully. If that is so, the most *Socratic* element in the dialogues will be the method of inquiry and the general attitude to education which is characteristic of this method. (Beck, 1964, p. 190)

Students and teachers spent most of their time together, information and knowledge was passed from one to the other on a regular basis. Often these exchanges were less formal and more social.

Nevertheless we should not imagine this teaching as having been excessively magisterial. Besides lectures, a prominent place was given to the kind of friendly conversation that went on during drinking parties. These, judiciously used, remained for Plato one of the essential elements of education. Life at the Academy meant in fact a kind of communal life between master and pupil, and possibly a collegiate organization (though it is not certain whether all lived together in an adjoining building). (Marrou, 1956, p. 68)

Xenophon agreed that association between student and teacher was the most effective way to disseminate and transfer knowledge.

Xenophon, too, in his *Memorabilia*, tells how Euthydemus never left his side except for urgent necessities, thinking that he could only become a worthy character by associating with Socrates. It is evident that both Socrates and his pupils realized the value of association for moral as well as intellectual improvement. (Beck, 1964, p. 197)

There was a growing demand in ancient Athens for access to knowledge and education. What first began an informal learning opportunities eventually shifted to formal structures for the dissemination of knowledge.

...but no sooner did individualism and the desire for pleasant diagogic life come into competition with the state than a culture was demanded which it had no means of supplying. Here the Sophists found their opportunity. The young men were to be met everywhere-in the streets, the market-place, the gymnasia, the taverns, the homes, etc. The Sophist had only to show himself in order to be surrounded by a knot of them. He had but to seat himself at the exedra, or lay himself down under a tree in the gymnasium, and they crowded round to hear his wisdom-his manifold stores of unfamiliar knowledge and his brilliant arguments on any theme proposed to him. (Davidson, 1894, p. 89)

This method began with Socrates, who would wander the agora, seeking students with which to interact.

From Dikaiarchos (Plutarch, *An seni res publica gereda sit* XXVI, 796d=Dikaiarchos, fr. 29, Wehrli) - Socrates at any rate was a philosopher, although he did not set up benches or establish himself on a throne or observe a fixed hour for conversing (*diatribe*) or walking (*peripatos*) with his acquaintances (*gnorimoi*); instead he played with them whenever he had a chance and served in the army or went to the Agora with some of them.... (Lynch, 1972, p. 44)

Plato believed that it was not the formal instruction of an individual that imparted knowledge, but the city of Athens itself that would enable learning.

The Platonic dialogues and the works of Xenophon picture Socrates going about Athens questioning and making people in everyday life think about their basic assumptions. In contrast to the sophists, Socrates seems to have kept closely to the notion of the Old Education that after the elementary stage of classroom instruction a young man was educated, not in any kind of school apart from the city, but informally through life in the city itself. (Lynch, 1972, p. 42)

The instructors were not the only ones responsible for disseminating knowledge to the students; every adult in the city shared this responsibility.

With the Greeks, however, the school is only one of the social institutions concerned with educating the rising generation. It is not a public, but a private institution. It's teachers are not public officials, but cheap hirelings. They are qualified to train the children in elementary techniques: to play games, to read and write, to make a little music. But that is all. For educating the children so that they become full members of the community, the typical Greek looks to community institutions proper; and the true educators are not the school-teachers, but the adult free-born citizens. It is not merely in their capacity as parents or

uncles, but as representatives of the community ways of living in all their aspects, organized and unorganized, that the citizens are regarded as educational authorities. They are qualified, not only in common opinion, but in Plato's mature judgement, to act as authorities to supervise and direct the behavior of the rising generation, and to correct without hesitation whatever they consider amiss in the behavior of the school-teachers. For the development of true manliness, public spirit, and any sort of idealism, the children look, not to the school and its imported professionals, but to the older generation who belong. (Lodge & Frank, 1970, p. 12)

However, Isocrates argued that the teachers must be well prepared to enable their students to learn.

From Against the Sophists (17-18) by Isocrates: The teacher, for his part, must so expound the principles of the art with the utmost possible exactness as to leave out nothing that can be taught, and for the rest, he must in himself set such an example of oratory that the pupils who have taken form under his instruction and are able to pattern after him will from the outset, show in their speaking a degree of grace and charm which is not found in others. (Beck, 1964, p. 286)

Plato, too, addressed the importance of well-prepared instructors to maximixe the dissemination of knowledge to the students.

Selections From the Laws of Plato Book VII - And how can our law sufficiently train the director of education himself; for as yet all has been imperfect, and nothing has been said either clear or satisfactory? Now, as far as possible, the law ought to leave nothing to him, but to explain everything, that he may be the interpreter and tutor of others. (Monroe, 1932, p. 247)

In order to effectively disseminate knowledge and allow for interpretation by the student, the philosophers created formal structures of education. They founded schools such as the Academy and the Lyceum, and selected instructors who would be able to teach effectively there. Plato had a clear purpose for these instructors and how they should enable learning.

Selections From the Laws of Plato Book VII - When I reflected upon all these words of ours, I naturally felt pleasure, for all of the discourses which I have ever learnt or heard, either in poetry or prose, this seemed to me to be the justest, and

most suitable for young men to hear; I cannot imagine any better pattern than this which the guardian of the law and the educator can have. They cannot do better than advise the teachers to teach the young these and the like words, and if they should happen to find writings, either in poetry or prose, or even unwritten discourses like these of ours, and of the same family, they should certainly preserve them, and commit them to writing. And, first of all, they shall constrain the teachers themselves to learn and approve them, and any of them who will not, shall not be employed by them, but those who they find agreeing in their judgement, they shall make use of and shall commit to them the instruction and education of youth. (Monroe, 1932, p. 250)

Aristotle had a clear purpose for the structure of his school in order to impart knowledge to his students. He sought to disseminate knowledge to all. His purpose was to encompass all knowledge and information at the Lyceum.

In 335 Aristotle returned to Athens to establish in the Lyceum his own school of philosophy, since the contrast between his own thought and that of the Academicians had now become more marked, both because his own ideas and methods had developed, and because the work of the Academy had now degenerated into mere exposition and comment. Here he continued to teach for eighteen years. The aim of Aristotle was broader than that of the Platonic or of the other schools; it was nothing less than to produce an encyclopaedia of all the sciences, - an organization of all human knowledge. (Monroe, 1932, p. 266)

Aristotle captured the heart of Socrates' methods of imparting knowledge and understanding, as well as the importance of interpretation of ideas and knowledge.

From Aristotle's *Ethics*: *Euthydemos*. Socrates is repeating to Crito his conversation with a youth named Cleinias, which proceeds as follows: 'Did we not agree that philosophy should be studied? and was that not our conclusion?-Yes, he replied.-And philosophy is the acquisition of knowledge? - Yes, he said. - And what knowledge ought we to acquire? Is not the simple answer to that, A knowledge that will do us good? - Certainly, he said.-And should we be any better if we went about with a knowledge of the places where most gold was buried in the earth?-Perhaps we should, he said.- But have we not already proved, I said, that we should be none the better off, even if without trouble and digging all the gold that there is in the earth were ours? And if we knew how to convert stones into gold, the knowledge would be of no value to us, unless we also knew how to use the gold? Do you not remember? I said. - I quite remember, he said - Nor would any other knowledge, whether of money-making, or of medicine, or of any other art which knows only how to *make* a thing, and not to *use* that which is

made, be of any use to us....Then, my dear boy, I said, the knowledge which we want is one that uses as well as makes? True, he said.' (Burnet, 1967, pp. 3-4)

Plato, too, explained his system of gaining deeper understanding and interpreting new knowledge.

From Plato's *Phaedo 100 a-101 e* - The method itself is stated formally in the *Phaedo:* However, this was the method which I adopted: I first assumed some principle which I judged to be the strongest, and then I affirmed as true whatever seemed to agree with this whether relating to the cause or to anything else; and that which I disagreed I regarded as untrue....Inexperienced as I am, and ready to start, as the proverb says, at my own shadow, I cannot afford to give up the sure ground of a principle. And if anyone assails you there, you would not mind him, or answer him until you had seen whether the consequences which follow agree with one another or not, and when you are further required to give an explanation of this principle, you would go on to assume a higher principle, and a higher, until you found a resting place in the best of the higher; but you would not confuse the principle and consequences in your reasoning, like the Eristics - at least if you wanted to discover real existence. (Beck, 1964, pp. 190-191)

Originally, these educators preferred the spoken exchange to impart knowledge to their students. This left little room for misinterpretation by the students.

I know that what is read has less power of persuasion than what is heard. It is universally believed that a speech, if actually delivered, deals with serious and important subjects; but if only written and never spoken, it is supposed to aim merely at effect and the fulfillment of a contract. This opinion is quite reasonable. For the written speech is deprived of the prestige of the author's presence and of his voice and of the proper rhetorical delivery: it is read when the occasion which called it forth is past, and the points which it discusses are consequently less interesting. The slave who reads it aloud puts no character into it, but drones it out as though he were reckoning up the items of a bill. (Freeman, 1922, p. 204)

Plato thought that it was extremely important to know his audience and to adjust his lecture based on their prior knowledge, understanding and needs. He feared that the written word was subject to misunderstanding by the reader who was unprepared for the information.

Plato regarded the written word with even greater contempt. To him it is the cause of forgetfulness; those who employ writing learn to rely on their notes, not on their memory, and are accustomed to register their impressions on tables of wax, not on the mind. Again it is impossible for an author to control the circulation of his works; they may reach those for whom they are not intended. For Plato expects speaker and writer alike to express only what is suitable to their audience; the teacher must, by a study of psychology, know what arguments will do good and what will do harm to each particular pupil. But a book cannot impart knowledge, in the Platonic sense of the word at all; for it is unable to answer questions or to explain its author's meaning when the reader fails to follow. (Freeman, 1922, p. 205)

Plato was correct to fear the misinterpretation of his work by the unprepared audience. Even in person, a lecture can be misunderstood by an unprepared audience, as was the case during one of Plato's public lectures.

But the most definite piece of evidence is the account of Aristoxenos, who quotes Aristotle as his source, of the lecture on the Good, which Plato delivered. This lecture, we are told, was attended by large numbers of people from both Athens and the country, most of whom were disappointed. The lecture, it seems, was open to a wide public, by whom it was imperfectly understood. Even the scholars who took notes of it, and later published them, were at variance in their interpretation of Plato's words. (Beck, 1964, pp. 234-235)

The method of dissemination of knowledge began to shift from oral to written, even during the times of Plato and Aristotle. Even the type of knowledge being shared and created was changing.

The character of the work of these schools was very different from that of their founders. From the very first the scholarchs attempted only to set forth the ideas of the respective founders of the schools. This is what distinguishes them from the earlier schools: there was no attempt to apply the ideas of the great teachers in investigation, research, or even in discussion on new topics. For the most part the work became as formal and as artificial as the work of the Sophists, only it was directed toward a different object. The philosophical schools at least had a definite body of doctrine to expound and to comment upon. In the case of the Lyceum the works of the founder were soon removed from Athens, and the ideas of Aristotle were preserved only in fragments, chiefly by means of note-books in the school. Not only did the Lyceum fail to develop new doctrine; it did not even succeed in preserving the old. In all these schools there grew up a reverence for

the written word that had great influence, literary and religious as well as educational. So far as the spirit of education was concerned, this later development was distinctly inferior to the earlier conditions. (Monroe, 1932, p. 299)

During ancient times, the process for dissemination, transcription and interpretation of knowledge shifted from informal to formal and from oral to written. What began as more casual, personal interactions in the agora between teacher and student, transformed into more formal systems and structures of education. Schools were constructed, teachers were selected and trained and students attended classes and transcribed their new knowledge in the written form. This allowed for interpretation of information by scholars who may not have been present for the original lecture or for consumption and criticism by the public, for whom the information was not originally intended. Though this shift may not have pleased the founders of these schools, it has allowed their wisdom to be shared with today's scholars, thousands of years later.

What was the Resultant Change and Spheres of Influence for the Individual?

"...if Aristotle is offering advice to anyone in the Nicomachean Ethics it is to private individuals and not to the statesman or political theorist" (Curren, 2000, p. 3).

The systems and structures of ancient education had an effect on the development of the individual in the context of society. Children were first influenced by their families, in the home (*Speech of Protagoras on 'Teaching of Morals,' from the Protagoras of Plato* 325C-326D). "Education and admonition commence in the first years of childhood, and last to the very end of life. Mother and nurse and father and tutor are quarrelling about the improvement of the child as soon as he is able to understand

them..." (Monroe, 1932, p. 31). Children were then sent to school, where they were influenced by their teachers, their slaves and the other members of the community.

Very young students had to walk throughout the city to attend these different schools, so families assigned them a slave for supervision and protection, called a paidagogos. There is some irony that the citizens entrusted this slave to care for their children and their moral education, but that they were slaves who were not thought able to care for themselves as citizens. The notion as education as social rank. (Curren, 2000, pp. 12-14)

The influence on the individual was on their physical as well as academic development. Children and young adults were being prepared to contribute as individual members of society, to become citizens in that society.

Once born, the first three years of the child's life are devoted in the *Laws*, primarily to physical development....The nutrition is provided, partly by the mothers, ands partly by especially suitable nurses, who relieve the biological mothers - at least in the higher classes- of much of the trouble which, in less well-planned communities, all too frequently falls to their lot in looking after very young children....But the training received during this period is not exclusively physical. The general moral atmosphere, and the attitude toward perfecting the young for their future life of citizenship in the model community, continue to exercise a pervasive influence. (Lodge & Frank, 1970, p. 289)

Aristophanes described this preparation in his work, *The Clouds*.

The *Clouds* of Aristophanes is another important source in reconstructing the nature of Old Athenian Education. The debate between Just Logos and Unjust Logos (esp. vv. 961-1104) makes it clear that the ultimate goal of the early educational system was not simply excellence in *mousike* and *gumnastike* as such but, beyond that, a kind of moral excellence as well. The physical and mental discipline involved in these pursuits, it was felt, would make a child into a "good" (*eukosmos*) person and a useful citizen, like the men who fought at Marathon. (Lynch, 1972, p. 33)

Children at this young age were on the beginning of their path as individuals who would eventually contribute to society as citizens. The sphere of influence on the individual child during this time was significant, in that the type of education they received would determine their role in the future.

We do not ordinarily realize that formal education begins at so young an age. Yet in truth everything which is done for the infant makes a lasting impression upon it. Such education helps to determine the type of citizen that the child will eventually become, and also the manner of service which, as citizens, it will thereafter contribute to society. (Lodge & Frank, 1970, p. 290)

The greatest sphere of influence on the child at this age besides his parents was his nurse.

According to Lodge and Frank,

At this stage, Plato thinks the nurses have an opportunity to provide quite a little in the way of moral education, preparing their charges for some of the restraints of community life. They see that the children play 'properly and orderly'; and sports and games provide an especial opportunity of educating the child out of the disposition of being self-willed. He learns, not only to overcome obstacles, but to play with older children, who take the lead....By thus associating with his equals on competitive terms, and by imitating what he sees the other children doing, the child himself learns by doing. (p. 292)

The path of the individual during the early stages of education is set based on the needs of society, as well as his individual abilities and talents.

Application of Plato's utilitarian principles to the sphere of education gives us three basic principles....They are: The aim of education is to produce sociable and happy citizens....All children should therefore be trained from an early age to adopt the norms of society....The precise nature of the education that a child undergoes at a later stage should be decided, in so far as it is possible, by reference to his aptitude and the demands and needs of the society. (The norms, needs, and demands of society must, of course, be defined with reference to the claims of Platonic utilitarianism.). (Barrow, 1975, pp. 179-180)

As they grew, they attended more formal training at the Academy or Lyceum or joined the military, where their individual development was also shaped and influenced by the systems and structures in place.

At eighteen the ephebic stage was reached, when the oath given in the selections was administered, and the youth entered on the last stage of apprenticeship for

citizenship. This period included a two-years' military service in guard and police duty, mostly in rural regions. At twenty he was admitted to full citizenship. (Monroe, 1932, p. 13)

There was often a distinct military influence on the individual student. "As for learning, they had just what was absolutely necessary. All the rest of their education was calculated to make them subject to command, to endure labor, to fight and conquer" (Monroe, 1932, p. 16).

Even during this time, the systems and structures began to change and the sphere of influence on the individual changed as well.

The changes in education of the period are manifold and not confined to any one aspect, though they are more pronounced in what would now be called secondary and higher education. Using the testimony of the *Clouds* with caution and supplementing it with corroborative evidence, circumstantial or direct, from a great variety of sources, the following general changes can be indicated. The very source of education, the home itself, was affected by these changes. There was a decline in the rigid discipline of the boy and of the immediate personal supervision of the boy by his father. His early training was now left more largely to the direction of nurses and pedagogues in whose selection less care was exercised. There was no need for old time severity. There was greater ease and luxury in the home life...The changes in the school were more significant. A similar freedom or license prevailed there. (Monroe, 1932, pp. 58-59)

Plato realized the importance of properly educating the individual, which he addressed in his *Republic*.

Selections from the Republic of Plato relating to the Sophists Book IV (491-497) - And may we not say, Adeimantus, that the most gifted minds, when they are illeducated, become the worst? Do not great crimes and the spirit of pure evil spring out of a fulness of nature ruined by education rather than from any inferiority, whereas weak natures are scarcely capable of any very great good or very great evil. (Monroe, 1932, p. 109)

The influence on the individual who attended school at that time was significant both personally and academically.

The boys attending the public schools, pass their time learning justice; and say that they go for this purpose, as those with us say who go to learn to read....They also teach the boys self-control; and it contributes much towards their learning to control themselves, that they see every day their elders behaving themselves with discretion. (Monroe, 1932, p. 124)

Education at this time was structured to meet the needs of the society by guiding the individual toward service to the state. "Plato defines the principles that are yet recognized as the basis of society, the reciprocity of needs and services, and the education of each individual for the performance of some function in this interchange of services" (Monroe, 1932, p. 131). The structures of education were also designed to support the training of the individual to excel in certain fields and to be productive members of society. Their individual contributions would benefit the entire community.

It was the recognition of the power of personal contact in education which led the Greek educator to favor small classes. This in turn rendered education more expensive, with the result that higher education in Athens could only be for the elite. Isocrates, like some of the other Greek educators, attempted to justify this situation. His view on educational selection is revealed in the *Areopagiticus* (44-6), where he refers approvingly to the customs of the men of old:

However, since it was not possible to direct all into the same occupations, because of differences in their circumstances, they assigned to each one a vocation which was in keeping with his means; for they turned the needier towards farming and trade, knowing that poverty comes about through idleness, and evil-doing through poverty. Accordingly they believed that by removing the root of evil they would deliver the young from the sins which spring from it. On the other hand they compelled those who possessed sufficient means to devote themselves to horsemanship, athletics, hunting and philosophy, observing that by these pursuits some are enabled to achieve excellence, others to abstain from many vices. (Beck, 1964, p. 269)

For women, the path for the individual was very different than that of her male counterparts. She was separated in both schooling and in her individual role in society.

Her parents and adult women had more of an influence on her education and then, later, her husband had influence over her life.

The next stage of the life-cycle is the period from six to ten years of age. The sexes are now separated and are sent to separate schools. Here the young girl learns to be a schoolgirl, associating exclusively with schoolgirls, and being taught all she learns by schoolmistresses. What she learns, while superficially not unlike what her brothers are learning in their boys' school, is acquired in a very different spirit. (Lodge & Frank, 1970, p. 293)

Plato addressed the stages of the women's life in *Laws*. There were several distinct stages that influenced the development of the individual.

In the *Laws*, the influence of the home continues throughout her life. As maid, wife, mother, and matron, her life is definitely centered in the home: a home permeated by community spirit. The influence of the school persists, after her sixteenth year, only indirectly: namely in the monthly gymnastic and music festivals which continue to keep alive in her the spirit of her education. What is that spirit? As far as we have studied it, it is intensely, narrowly, local. Her interests are concentrated upon the community into which she has been born, in which she has progressively immersed her growing self. All that she is, all that she has become, she owes to that community: a community which she has never left, and indeed has never thought of leaving. (Lodge & Frank, 1970, p. 295)

The next phase of the women's life, according to *Laws*, represents another change for women, one in which she fulfills her duties to the society.

This is one of the most important phases in a woman's life-cycle, and women are educated for it, partly by life itself, and partly by public opinion and by the instructions and admonitions of matron-magistrates. These matrons are the same as the playground matrons who supervised the years of pre-school play in the temple precincts. They represent authority, community protection, mature experience, safe guidance, and wise counselling in intimate matters. They teach the young women that marriage is a sacred mystery, in which women weave the web of life and cooperate with God in the work of creation. They teach them also that marriage is of profound concern to the State, and that it is their civic as well as their religious duty to marry and bear children according to the laws of the planned community. (Lodge & Frank, 1970, p. 300)

Xenonphon also addressed the role of the individual woman and the influence of her

husband in *Economics*:

Selections from the Economics of Xenophon - 41 'Some other of your occupations, my dear wife,' continued I, 'will be pleasing to you. For instance, when you take a young woman who does not know how to spin, and make her skillful at it, and she thus becomes of twice as much value to you. OR when you take one who is ignorant of the duties of a housekeeper or servant, and having made her accomplished, trustworthy and handy render her of the highest value.' (Monroe, 1932, p. 43)

Finally, according to *Laws*, the individual women's role changes again, to that of higher importance. Her role becomes that of a leader in the planned community of *Laws*.

The final phase of a woman's life in the planned community begins with the age of forty. She can now being to hold office. The kind of office for which she is peculiarly fitted by her nature and experience, is the office of matron-magistrate. In this office, she is one of the 'controllers of marriage' and also assists in supervising the pre-school community games of young children. This gives full play to her womanly nature in its maturity. Her natural feeling for enjoying gossip is directed to noble and useful purposes; and her protective interests in young children is encouraged and provided with an official outlet, and also with a certain measure of power and recognition in the community life. In addition, her genuine control over the personnel and numbers of the next generation gives her a position of very great power and importance. If, later in life, she becomes a priestess of one of the community cults, this too is a position of prominence and importance. (Lodge & Frank, 1970, p. 302)

The other important sphere of influence over the individual woman was religion, which played an important guiding role in all aspects of her life.

But there is, throughout her life, a further influence, more universal, more ideal, as well as more definitely pervasive: namely, the influence of religion. From her earliest years, she is exposed to its power; and it must at once be admitted that no educational influence which she ever encounters in her life equals or even approaches the power of religion. It is indeed religion which gives to the home, to the school, to art and to literature, the power for good which these have. (Lodge & Frank, 1970, p. 297)

What was the Resultant Change and Sphere of Influence for the Organization?

Just as there was resultant change and a distinct sphere of influence for the individual person during ancient times, there was also evidence of change to the organization itself. The systems and structures of education in ancient times were also undergoing change, influenced by many factors such as politics, religion war and philosophy. Again, the philosophies and work of Socrates, Plato and Aristotle influenced this time period. "But to the Greeks it is unquestionable that education is for the sake of life, adult civic life, and not *vice versa*" (Lodge & Frank, 1970, p. 13).

The creation of public schools for the betterment of the state was an important change to the structures of education. "...the promotion of civic unity through the cultivation of the moral and intellectual virtues, and through common schooling that promotes goodwill and friendship" (Curren, 2000, p. 9). There were several benefits to the creation of public school structures. "From these relationships flow several arguments for public education, advanced in the cause of individual virtue, happiness, freedom, and rationality; political excellence and stability; and the promotion of friendship and social solidarity" (p. 5).

The sphere of influence on Athenian education was most powerfully the betterment of the State.

While this education was more literary in character that Spartan, its dominant motive was moral and social. Its whole purpose was preparation for active Athenian citizenship, but a citizenship which demanded political as well as military services. The influence of these political obligations upon the character of the youth and the citizen is emphasized in the oration of Pericles. (Monroe, 1932, p. 13)

The changes were evident in the home as well as the school structures.

The changes in education of the period are manifold and not confined to any one aspect, though they are more pronounced in what would now be called secondary and higher education. Using the testimony of the *Clouds* with caution and supplementing it with corroborative evidence, circumstantial or direct, from a great variety of sources, the following general changes can be indicated. The very source of education, the home itself, was affected by these changes. There was a decline in the rigid discipline of the boy and of the immediate personal supervision of the boy by his father. His early training was now left more largely to the direction of nurses and pedagogues in whose selection less care was exercised. There was no need for old time severity. There was greater ease and luxury in the home life...The changes in the school were more significant. A similar freedom or license prevailed there. (Monroe, 1932, pp. 58-59)

The systems and structures of education at the schools of Plato and Aristotle were influenced by the philosophies of those leaders.

But the greatest change occurred in the character of the education from fifteen to twenty. Hitherto boys had spent the first three years of this period in the gymnasium, and in the political training in the agora, and the courts, and the last two years in the ephebic military service. Suring the time of the conflict between the old ideas and the new, the education of the gymnastic period became predominantly intellectual. The substitution of discussion and rhetorical education for the old physical and civic training is quite clearly pictured in some of the dialogues of Plato in which youths participate. Whatever else may be said for Platonic discussions, it must be admitted that they could never be brought to a close, and that they were without any immediate practical result. It can, therefore, be readily understood how these educational innovations appeared to the conservatives but a training in idleness. The new movement was at first but a vague general tendency, but by the opening of the fourth century it came to have a definite organization in the philosophical and rhetorical schools, while in its earlier stage it found its best representation in the Sophists. (Monroe, 1932, p. 60)

Socrates had an early influence on the change in educational structure at this time.

Socrates was the source of, and furnished the inspiration for, this entire movement in educational thought. Though he has left no writings, the character and the substance of his teachings can be quite accurately reproduces from the writings of his pupils, Xenophon and Plato. Socrates lived from 469 to 399 B.C. The earlier portion of his life was spent as a sculptor, but the middle and later portion, though from what exact date is not known, as a teacher. Yet he never opened a school or delivered public lectures, in these respects differing from the Sophists and from the philosophers who continued his line of thought and work. His method was to engage in conversation any interested person, either old or young, in the market-

place, the shop, or the gymnasium. In the latter places he found abundant opportunity, and there his teachings were especially influential upon those just entering that period of their education, hitherto devoted wholly to physical training and the service of the state. (Monroe, 1932, p. 118)

Like the Theorists, Socrates did not seek payment for his services. Several of the Sophists did seek payment for their services, therefore influencing the systems of education at that time.

The problem of the Theorists. - The writers of this group, while for the most part contemporary with the Sophists, differ from them in two important respects. The Sophists were practical teachers and were interested in the educational movement of the times chiefly in a personal way. They claimed to be able to prepare for a successful career, and were primarily concerned in achieving such a success for themselves. They taught for money and for reputation, as do most teachers at the present. Some of them, Socrates, had a profound public interest as well, but the earlier Sophists were not native Athenians, and had little patriotic or national interest. On the other hand, the theorists were profoundly interested in education on account of its national importance, and so far as practical teachers, they were wholly disinterested and refuse to accept any remuneration for their efforts. (Monroe, 1932, p. 116)

Socrates' influence on the educational systems at the time also had an influence on the content of the knowledge and instruction. "It will be recalled that the Socratic solution of the educational problem was that the new state of society was to be based on knowledge, that the germs of knowledge were inherent in every human being, by virtue of his own experience, and that these germs could be developed by the dialectic process" (Monroe, 1932, p. 131). Plato, too, influenced the systems of education at that time. "Plato defines the principles that are yet recognized as the basis of society, the reciprocity of needs and services, and the education of each individual for the performance of some function in this interchange of services" (Monroe, 1932, p. 131). Plato addresses his philosophy clearly in his *Republic*.

From *Plato's Republic Book V* - I said: Until, then, philosophers are kings, or the kings and princes of this world have the spirit and the power of philosophy, and political greatness and wisdom meet in one, and those commoner natures who follow either to the exclusion to the other are compelled to stand aside, cities will never cease from ill - no, nor the human race, as I believe - and then only will our State have a possibility of life and behold the light of day. (Monroe, 1932, p. 180)

Plato established norms for the system of education and society at this time in terms of freedom and happiness. These foundational structures formed the basis of society. "(Plato's) chief interest is in education for character, education for citizenship, and education for leadership in a small community of freemen co-operating in realizing the ideal which we know as the Hellenic way of life" (Lodge & Frank, 1970, p. 14).

The norms that ought to be accepted are the Platonic norms: that is to say, the belief or conviction that happiness is the supreme value and that there are no good grounds, *a priori*, for so organising any aspect of community life so as to treat people unequally in respect to happiness. In addition, the belief that the criterion of aptitude, or ability and interest, is the right and proper criterion for the distribution of activities within the community; and, finally, that assumption that freedom is an unhelpful concept, and that freedom is desirable only when and where men have clearly shown themselves able and willing to put the claims of equal happiness before all other claims. (Barrow 1975, p. 181)

As priorities changed in the ancient society, so, too did the systems and structures of education.

If we ask ourselves what is the difference between the education which existed before the rise of reflective thought and that which Socrates would have recommended, the answer is that, while the former was essentially a preparation for a state and an order of things already existing, the latter was a preparation for a commonwealth that had not yet appeared; the former had a real, the latter an aim; the former was conservative, the latter revolutionary and progressive. (Davidson, 1894, p. 112)

At the Academy, Plato focused his curriculum on creating citizens who would prove valuable to society by becoming advisors to Kings and play other political roles.

Plato was less concerned with the education of the ordinary citizen than with the problem of how to train political technicians, experts in political affairs who could act as advisers to kings or as leaders of the people. It may be that this was an aristocratic prejudice; but it was a remarkable anticipation of what was in fact to become the normal mode of effective political action after the triumph of Macedonia, when the system of absolute monarchy was imposed on the Hellenised world. The role played under Plato by the Academy as nursery of counsellors-of-state was later assumed by the Stoic schools at the beginning of the Hellenistic era....History gives many examples of such overlapping: something that seems to be a survival from a past that is dead and gone turns out to be a pointer to the future. (Marrou, 1956, p. 65)

However, some argued that the change of focus from the support of the state to the betterment of the individual changed the systems of the schools themselves and had a negative influence on Greek society.

Thus, indirectly at any rate, the New Learning of the sophists was to prove the ruin of Greece. Slowly but surely it sapped the strength of her people's character. In the succeeding epoch the old sense of allegiance to the state decayed. Men no longer placed the common welfare before their personal interest. (Robinson, 1933, p. 149)

The political focus of these schools helped them stay relevant during the times.

However, there were many factors that led to the decline of these educational structures, including politics, war and financial struggles.

As far as the decline of the Peripatetic School is concerned, one general conclusion should be evident from the brief account given of the external history of Aristotle's school during the later Hellenistic and early Roman periods. A complex of factors related to the character and history of the Peripatos as an institution help to explain why the school declined so sharply in the early third century B.C. and failed to recover in subsequent times. Some of the factors, such as the phenomenon of fragmentation and the destructive influence of wars apply to the workings of the other three schools as well. But as an institution based on cooperative effort among members and on the accumulation and classification of knowledge, the Peripatos was most seriously affected by fragmentation of its membership, by the loss of its library, and by losses of facilities and money in war. For of the major Athenian philosophical schools, the success of Aristotle's most depended on a stable institution, transmitting the efforts of each age for the next generation to build upon. (Lynch, 1972, p. 162)

The changes to the systems and structures of educational organizations during ancient times were influenced by many factors including politics, war, monarchies, individual interest and community interests. As the needs and priorities of the society shifted over time, so did the structures of education.

What was the Public Opinion of the Discourse during Ancient Times?

Public opinion of educational discourse varied during this time. There were those that believed the work of Socrates was corrupting youth, a charge that eventually was levelled against him more formally and led to his sentencing.

There were those that thought he was a bad influence. He was accused of corrupting youth, and the charge was sufficiently plausible to secure his condemnation by an Athenian jury. But his followers remember him, in Plato's words, as the best and wisest and justest man they had known, and the later philosophical schools, with the exception of the Epicurean, all derived from him. (Clarke, 1971, p. 58)

As can be seen from Clarke's description, although some condemned Socrates, his influence on the future of Greek educational systems and structures was undeniable.

To most, the purpose of educational discourse was to lead to the improvement of the state. "But to the Greeks it is unquestionable that education is for the sake of life, adult civic life, and not *vice versa*" (Lodge & Frank, 1970, p. 13). As a matter of fact, the adults in this society had an obligation to the younger generation, helping to shape their growth and development. People believed in this obligation to the state above their own interests. "Upon the whole, he taught his citizens to think nothing more disagreeable than to live by (and for) themselves" (Monroe, 1932, p. 22).

The public opinion of the schools themselves varied as well.

At Athens the state required that all boys be taught to read and write; girls were not catered for. It was left to parents to choose a school and to pay the fees for the class. The schools themselves were run by private enterprise; and the school masters, as we have said, were but little respected. They often found it difficult to extract their fees. Nevertheless, the fees were low enough to allow even poor parents to get their sons tolerable instruction. (Robinson, 1933, p. 139)

The opinion of the teachers was not always a favorable one. Beck described how the teachers themselves were trained.

The teaching profession was probably not held in very high esteem, but those who were forced to earn their living by teaching would learn their craft in the same way as medicos- by association, imitation and practice. For the higher type of teaching as in Plato's Academy, Isocrates' school or for the career of a sophist a similar apprenticeship had to be served - long association with the master until independence was achieved. The particular body of knowledge and the techniques of the particular school to which the scholar was attached must be thoroughly learned. (Beck, 1964, p. 143)

Often, the opinion of the discourse itself was criticized. These critiques were aimed at the curriculum and outcomes of the schools and sometimes at the instructors.

But the greatest change occurred in the character of the education from fifteen to twenty. Hitherto boys had spent the first three years of this period in the gymnasium, and in the political training in the agora, and the courts, and the last two years in the ephebic military service. Suring the time of the conflict between the old ideas and the new, the education of the gymnastic period became predominantly intellectual. The substitution of discussion and rhetorical education for the old physical and civic training is quite clearly pictured in some of the dialogues of Plato in which youths participate. Whatever else may be said for Platonic discussions, it must be admitted that they could never be brought to a close, and that they were without any immediate practical result. It can, therefore, be readily understood how these educational innovations appeared to the conservatives but a training in idleness. The new movement was at first but a vague general tendency, but by the opening of the fourth century it came to have a definite organization in the philosophical and rhetorical schools, while in its earlier stage it found its best representation in the Sophists. (Monroe, 1932, p. 60)

The instructors' area of focus with students was sometimes criticized as being aimed too much toward philosophy and not enough toward work and contribution to to society.

Vocational and technical education belong to that side of life which the average freeborn Greek citizen regarded as "banausic" and unworthy of his serious attention; and to some extent Plato's aristocratic upbringing induced in him a tendency to share this general prejudice. But his association with Socrates, the sculptor's son who never wearied of bringing the analogy of the arts and crafts into his reasonings, seems to have enabled him to outgrow this class feeling, and we know that in his later years, as head of a great educational institution, he trained his students deliberately in applying the techniques of dialectical analysis to such pursuits as angling, hunting and weaving. (Lodge & Frank, 1970, p. 15)

Sometimes the discourse itself was criticized, or, at a minimum, misinterpreted by the audience. Plato himself suffered from such criticism, after a particular public lecture that he delivered.

But the most definite piece of evidence is the account of Aristoxenos, who quotes Aristotle as his source, of the lecture on the Good, which Plato delivered. This lecture, we are told, was attended by large numbers of people from both Athens and the country, most of whom were disappointed. The lecture, it seems, was open to a wide public, by whom it was imperfectly understood. Even the scholars who took notes of it, and later published them, were at variance in their interpretation of Plato's words (Beck, 1964, pp. 234-235)

Public opinion of discourse at this time was affected by both the content of the discourse and the structures of education in place at the time. These factors influenced the priorities of the people and the systems of education and discourse in place at the Academy and Lyceum, as well as other institutions. The focus of education shifted from service to the state to service to the self, which would cause differing opinions as to its role and importance.

What were the Obstacles and Enhancers to the Evolution of Public Acceptance and Validation of the Systems and Structures of Education and Discourse?

As the systems and structures of education evolved over time, there were several obstacles and enhancers to the public acceptance and validation of those changes. The

education of girls was one area where public opinion changed over time. The charging of fees for education could be seen as an obstacle, but it was one which was usually easy to overcome for most families.

At Athens the state required that all boys be taught to read and write; girls were not catered for. It was left to parents to choose a school and to pay the fees for the class. The schools themselves were run by private enterprise; and the school masters, as we have said, were but little respected. They often found it difficult to extract their fees. Nevertheless, the fees were low enough to allow even poor parents to get their sons tolerable instruction. (Robinson, 1933, p. 139)

As priorities shifted, the public opinion about women's education and role in society began to shift as well.

The social revolution of the fifth and fourth centuries B.C. affected the position of women as well as other aspects of Greek society, but the changes in the education of women were in no ways so profound as those affecting the education of men. It is true that there was a demand for greater freedom for women. Evidences of this are to be found in the teachings of Socrates and the writings of Plato. The latter held that the women possessed the same faculties as men, only in a lesser degree, and were entitled to a similar education. (Monroe, 1932, p. 34)

In ancient Persia, there was a division between those men who were properly educated and those men who were not, as to how they were publicly perceived.

The Persians are said to be in number about a hundred and twenty thousand; and of these no individual is excluded by law from honors and magistracies, but all are at liberty to send their boys to the public schools of justice. Those who are able to maintain their children without putting them to work, send them to these schools; those who are unable, do not send them. Those who are this educated under the public teachers, are at liberty to pass their youth in the class of young men, they who are not so educated, have not that liberty. They who pass their term among the young men, discharging all things enjoined by the law, are allowed to be incorporated amongst the full-grown men, and to partake of all honours and magistracies; but they who do not complete their course in the class of youths do not pass into that of full-grown men. Those who make their progress through the order of full-grown men unexceptionably, are then enrolled among the elders; so that the order of elders stands composed of men who have pursued their course through all things good and excellent. Such is the form of government among the Persians, and such the care bestowed upon it, by the

observance of which they think that they become the best citizens. (Monroe, 1932, p. 127)

The perception of the educational structures of the peripatetic schools shifted as the aim of the schools themselves changed.

But the greatest change occurred in the character of the education from fifteen to twenty. Hitherto boys had spent the first three years of this period in the gymnasium, and in the political training in the agora, and the courts, and the last two years in the ephebic military service. Suring the time of the conflict between the old ideas and the new, the education of the gymnastic period became predominantly intellectual. The substitution of discussion and rhetorical education for the old physical and civic training is quite clearly pictured in some of the dialogues of Plato in which youths participate. Whatever else may be said for Platonic discussions, it must be admitted that they could never be brought to a close, and that they were without any immediate practical result. It can, therefore, be readily understood how these educational innovations appeared to the conservatives but a training in idleness. The new movement was at first but a vague general tendency, but by the opening of the fourth century it came to have a definite organization in the philosophical and rhetorical schools, while in its earlier stage it found its best representation in the Sophists. (Monroe, 1932, p. 60)

Another obstacle to education was the cost of higher education. The school leaders were in favor of keeping class size small so that the ratio of student to teacher was small as well. They believed that this led to better educational opportunities. So while the cost caused access to decrease and perhaps cause unfavorable public opinion, the educational benefits to the student was improved.

It was the recognition of the power of personal contact in education which led the Greek educator to favor small classes. This in turn rendered education more expensive, with the result that higher education in Athens could only be for the elite. Isocrates, like some of the other Greek educators, attempted to justify this situation. His view on educational selection is revealed in the *Areopagiticus* (44-6), where he refers approvingly to the customs of the men of old:

However, since it was not possible to direct all into the same occupations, because of differences in their circumstances, they assigned to each one a vocation which was in keeping with his means; for they turned the needier towards farming and trade, knowing that poverty comes about through idleness, and evil-doing through poverty. Accordingly they believed that

by removing the root of evil they would deliver the young from the sins which spring from it. On the other hand they compelled those who possessed sufficient means to devote themselves to horsemanship, athletics, hunting and philosophy, observing that by these pursuits some are enabled to achieve excellence, others to abstain from many vices. (Beck, 1964, p. 269)

Another major obstacle to the validation of the educational structures was the external politics and war at the time. Aristotle's Lyceum was profoundly affected by these changes, and was not able to survive them for many more generations.

As far as the decline of the Peripatetic School is concerned, one general conclusion should be evident from the brief account given of the external history of Aristotle's school during the later Hellenistic and early Roman periods. A complex of factors related to the character and history of the Peripatos as an institution help to explain why the school declined so sharply in the early third century B.C. and failed to recover in subsequent times. Some of the factors, such as the phenomenon of fragmentation and the destructive influence of wars apply to the workings of the other three schools as well. But as an institution based on cooperative effort among members and on the accumulation and classification of knowledge, the Peripatos was most seriously affected by fragmentation of its membership, by the loss of its library, and by losses of facilities and money in war. For of the major Athenian philosophical schools, the success of Aristotle's most depended on a stable institution, transmitting the efforts of each age for the next generation to build upon. (Lynch, 1972, p. 162)

A final obstacle to public acceptance was in regard to the content being taught. There was a divide between aristocracy and average citizen when it came to the content of the curriculum. Plato himself was torn by these differences in opinion as to whether vocational and technical education should be included at the Academy.

Vocational and technical education belong to that side of life which the average freeborn Greek citizen regarded as "banausic" and unworthy of his serious attention; and to some extent Plato's aristocratic upbringing induced in him a tendency to share this general prejudice. But his association with Socrates, the sculptor's son who never wearied of bringing the analogy of the arts and crafts into his reasonings, seems to have enabled him to outgrow this class feeling, and we know that in his later years, as head of a great educational institution, he

trained his students deliberately in applying the techniques of dialectical analysis to such pursuits as angling, hunting and weaving. (Lodge & Frank, 1970, p. 15)

Plato, however, decided to include the vocational side of education due to the influence that his own mentor, Socrates, had on his educational leadership.

The enhancers to public acceptance and validation of the systems and structures of education were that education was mostly seen as a support of the state. There was a military purpose to the training and the needs of the state were placed before the needs of the individual. "In those parts of the world know to Aristotle, public education was devoted almost entirely to military training, and as rare even in that form" (Curren, 2000, p. 11). This perception of service to the state above the self was important not just in ancient Athens, but in Sparta and Lacedemonia as well.

Selections from the Life of Lycurgus by Plutarch: "The spartan children were not in that manner under tutors purchased or hired with money, nor were the parents at liberty to educate them as they pleased; but as soon as they were seven or eight years old, Lycurgus ordered them to be enrolled in companies, where they were all kept under the same order and discipline, and had their exercises and recreations in common. (Monroe, 1932, p. 15)

And in Lacedemonia,

The discipline of the Lacedaemonians continued after they were arrived at years of maturity. For no man was at liberty to live as he pleased; the city being like one great camp, where all had their state allowance, and knew their public charge, each man concluding that he was born, not for himself, but for his country. (Monroe, 1932, p. 21)

This type of public education was accepted and validated by the public opinion that the needs of the state were above the needs of the individual at that time. "Upon the whole, he taught his citizens to think nothing more disagreeable than to live by (and for) themselves" (Monroe, 1932, p. 22).

The nature of education during this time was beginning to take on a more intellectual focus. This was validated by the emergence of schools such as the Academy and Lyceum that would support these intellectual pursuits. "It called for a wholly new type of ability, a versatility unknown and foreign to the earlier times. This leadership was gained and held by intellectual supremacy rather than by military power" (Monroe, 1932, p. 52). Publically, the Sophists knew that the ability to express oneself in public was a critical skill therefore they sought to instill this virtue in schools through education (Monroe, 1932, p. 64). Socrates was one an inspiration to his successors, Plato and Aristotle. Though he did not create a formal educational system, he did engage his students out in the city.

Socrates was the source of, and furnished the inspiration for, this entire movement in educational thought. Though he has left no writings, the character and the substance of his teachings can be quite accurately reproduces from the writings of his pupils, Xenophon and Plato. Socrates lived from 469 to 399 B.C. The earlier portion of his life was spent as a sculptor, but the middle and later portion, though from what exact date is not known, as a teacher. Yet he never opened a school or delivered public lectures, in these respects differing from the Sophists and from the philosophers who continued his line of thought and work. His method was to engage in conversation any interested person, either old or young, in the market-place, the shop, or the gymnasium. In the latter places he found abundant opportunity, and there his teachings were especially influential upon those just entering that period of their education, hitherto devoted wholly to physical training and the service of the state. (Monroe, 1932, p. 118)

Xenophon described Socrates' unique technique of engaging students out in public in his *Memorabilia* I, 1.10; cf. IV, 1.1:

Socrates was constantly out in the open. Early in the morning he went to the *peripatoi* and the gymnasia; when the Agora filled up, he could be seen there; and for the rest of the day he would always be wherever he might associate with (*sunesesthai*) the most people. (Lynch, 1972, p. 42)

Plato addressed the aim of education and the public debate about its focus in his *Republic*.

In *Plato's Republic Book VIII* - That education should be regulated by law and should be an affair of the state is not to be denied, but what should be the character of this public education, and how young persons should be educated, are questions which remain to be considered. For mankind are by no means agreed about the things to be taught, whether we look to virtue or the best life. Neither is it clear whether education is more concerned with intellectual or with moral virtue. (Monroe, 1932, p. 282)

Aristotle would build upon the public acceptance of Plato's work at the Academy, when delivering his lectures at the Lyceum.

The *Ethics* and *Politics*...are two courses of lectures intended to formal training in the legislative art, to fit their hearers to become statesmen and lawgivers. It must not be supposed that they deal with what we call Ethics and Politics respectively. On the contrary, the distinction between these branches of philosophy is ultimately due to the accident of the titles given these lectures when they were made up into books. The *Ethics* is the more theoretical of the two and deals with the question 'What is the good for man?' the *Politics* on the other hand discusses rather the practical problem of the realisation of that good by the agency of the state. As is only natural, however, the two questions cross each other at innumerable points.

To appreciate the style of the two treatises-the peculiar effect of which I have tried to bring out in my translation-it is necessary to remember that they are essentially lectures and not books, and that they were delivered to a cultivated Athenian audience who had a general knowledge of contemporary philosophical discussions, especially the views of Plato and his successors in the Academy. It is from these views that Aristotle regularly starts instead of from those expressed in his own more scientific writings. As the aim of the science is practical, he felt no doubt that it was more important to attach his teaching to something his hearers knew already than to give it a firm theoretical basis. (Burnet, 1967, p. 11)

Isocrates, a contemporary of Plato, addressed the need to focus the education of men by guiding them towards a particular trade or career. These choices were validated in that men were thought to avoid evil and wrongdoing by pursuing the proper path in education, even though the cost of the education might limit who was able to attend.

It was the recognition of the power of personal contact in education which led the Greek educator to favor small classes. This in turn rendered education more expensive, with the result that higher education in Athens could only be for the elite. Isocrates, like some of the other Greek educators, attempted to justify this situation. His view on educational selection is revealed in the *Areopagiticus* (44-6), where he refers approvingly to the customs of the men of old:

However, since it was not possible to direct all into the same occupations, because of differences in their circumstances, they assigned to each one a vocation which was in keeping with his means; for they turned the needier towards farming and trade, knowing that poverty comes about through idleness, and evil-doing through poverty. Accordingly they believed that by removing the root of evil they would deliver the young from the sins which spring from it. On the other hand they compelled those who possessed sufficient means to devote themselves to horsemanship, athletics, hunting and philosophy, observing that by these pursuits some are enabled to achieve excellence, others to abstain from many vices. (Beck, 1964, p. 269)

Plato, too, included vocational training as a part of education at the Academy, though publically, the people did not usually support this focus of learning.

The obstacles and enhancers to public acceptance and validation of education shifted along with the changes in education itself. As the focus shifted from the state to the individual, from military might to intellectual might, the systems and structures of education adapted to meet these needs. The students who were trained at these schools, by the likes of Plato, Isocrates and Aristotle, as well as those who engaged in the agora with Socrates before them, realized the importance of intellectual pursuits and an education that supported this new direction.

What was the Power of Grassroots Creation of Systems and Structures for Success/Participation and Professional Authority in Education?

Socrates was a teacher, even though he had no formal school structure. He would walk with his students throughout the city, engaging them in dialogue and discussion.

Although not a formal system of education, his work inspired the creation of more formal systems and structures of education by his students Plato and then Aristotle. This grassroots creation of educational systems began with Socrates.

From Dikaiarchos (Plutarch, *An seni res publica gereda sit* XXVI, 796d=Dikaiarchos, fr. 29, Wehrli) - Socrates at any rate was a philosopher, although he did not set up benches or establish himself on a throne or observe a fixed hour for conversing (*diatribe*) or walking (*peripatos*) with his acquaintances (*gnorimoi*); instead he played with them whenever he had a chance and served in the army or went to the Agora with some of them.... (Lynch, 1972, p. 44)

Socrates founded what was to become a much more formal system of education.

Socrates was the source of, and furnished the inspiration for, this entire movement in educational thought. Though he has left no writings, the character and the substance of his teachings can be quite accurately reproduces from the writings of his pupils, Xenophon and Plato. Socrates lived from 469 to 399 B.C. The earlier portion of his life was spent as a sculptor, but the middle and later portion, though from what exact date is not known, as a teacher. Yet he never opened a school or delivered public lectures, in these respects differing from the Sophists and from the philosophers who continued his line of thought and work. His method was to engage in conversation any interested person, either old or young, in the market-place, the shop, or the gymnasium. In the latter places he found abundant opportunity, and there his teachings were especially influential upon those just entering that period of their education, hitherto devoted wholly to physical training and the service of the state. (Monroe, 1932, p. 118)

Xenophon describes the method that Socrates used in *Memorabilia*:

I, 1.10; cf. IV, 1.1: "Socrates was constantly out in the open. Early in the morning he went to the *peripatoi* and the gymnasia; when the Agora filled up, he could be seen there; and for the rest of the day he would always be wherever he might associate with (*sunesesthai*) the most people. (Lynch, 1972, p. 42)

Socrates and the other Sophists were creating a new system of education by fulfilling a demand for intellectual dialogue and discourse between teacher and student.

...but no sooner did individualism and the desire for pleasant diagogic life come into competition with the state than a culture was demanded which it had no means of supplying. Here the Sophists found their opportunity. The young men were to be met everywhere-in the streets, the market-place, the gymnasia, the

taverns, the homes, etc. The Sophist had only to show himself in order to be surrounded by a knot of them. He had but to seat himself at the exedra, or lay himself down under a tree in the gymnasium, and they crowded round to hear his wisdom-his manifold stores of unfamiliar knowledge and his brilliant arguments on any theme proposed to him. (Davidson, 1894, p. 89)

The system of education at this time began to take on a more formal structure. The professional authority established by the school leaders created a sense of trust and led to success for these new systems of education. After learning from Socrates, Plato decided to create the Academy.

The foundation of the Academy is usually assigned to 388-7 B.C., soon after Plato's return from Italy and Sicily. Having rejected politics as a career he no doubt felt that he could best serve his city by providing higher education for its best intellects....In founding the Academy, therefore, Plato showed his originality not in the mere idea of scholars working together in the same building but in the type of work to be carried on there. (Beck, 1964, p. 227)

This professional authority in education helped to create a stronger foundation for these more formal educational structures.

Plato was not the only philosopher to create a formal school at this time. He was the beginning of a long line of school leaders in ancient Athens.

Plato taught chiefly at the Academy, both in the public gymnasium and in private grounds which he acquired near by. This plot of ground, together with the headship of the school, Plato left to his nephew, Speusippus. The small property became the nucleus of a considerable foundation, for it was enriched, not only by fees, but by gifts from wealthy patrons and by the bequests of the heads of the school....The heads of the school were called *scholarchs*, and received their positions either through the designation of their predecessor, or, later, by election. In a similar way Aristotle settled in the Lyceum and Antisthenes in the Cynosarges. Later the pupils of the latter removed to the frescoed portico in Athens, whence they were called Stoics. Epicurus taught in his own private grounds, which he left as the nucleus of an endowment for his school. As with the success of Plato, each of these groups became definitely organized into a school with an endowment, and with a recognized head, or scholarch. (Monroe, 1932, p. 298)

Plato, too can be credited with founding what can be considered the first institution of higher learning: The Academy was truly the first university.

To Plato too we owe the idea of the secondary school as a unified institution with an integrated curriculum and staffed by permanent specialists. In founding the Academy Plato may be said to have invented the University. It had to be reinvented in the Middle Ages, but the institutions then founded owed part at least of their curriculum to Plato, and modern universities are not uninfluenced by the ideal of scholars working together in the pursuit of knowledge first formulated by Plato in the ancient Academy. (Beck, 1964, p. 240)

Aristotle followed Plato by creating the Lyceum. Aristotle's professional authority served as the foundation of his school's work.

In 335 Aristotle returned to Athens to establish in the Lyceum his own school of philosophy, since the contrast between his own thought and that of the Academicians had now become more marked, both because his own ideas and methods had developed, and because the work of the Academy had now degenerated into mere exposition and comment. Here he continued to teach for eighteen years. The aim of Aristotle was broader than that of the Platonic or of the other schools; it was nothing less than to produce an encyclopaedia of all the sciences, - an organization of all human knowledge. (Monroe, 1932, p. 266)

Generally speaking, the schools at this time were led by the Sophists. They were created to inspire intellect and rhetoric. Originally, no fees were charged for attendance, but later this, too, changed.

The schools of the Sophists were entirely private schools, and for the most part consisted of the group of students gathered around any one instructor. There was no system of beliefs or unity of methods that would lead to the formation of any permanent institution. Socrates did not have any definite place for giving instruction or any definite body of pupils. So long as no fees were extracted, there would be no definite student body. Plato, and very probably Aristotle, followed the example of Socrates in this respect. But Plato's successor, Speusippus, demanded regular fees, as did also the teachers of the other philosophical groups. This gave both definiteness and continuity of administration. A further factor in the development of definite schools was the acquiring of definite locations and names. The leading gymnasia of Athens were the Academy, the Cynosarges, and the Lyceum. These were in the suburbs, and

were somewhat of the nature of public parks, being provided with water and gardens as well as exercise grounds. (Monroe, 1932, p. 297)

The systems and structures of education developed formally in ancient Athens from the grassroots works of Socrates and his proteges Plato and Aristotle. Their professional authority as educational leaders helped to create the more formal systems of education in Greece. Students from all over came to Athens to study with these early educators. Their work helped to shape the future of education.

What was the Power of Moral Authority for Shared Beliefs, Purposes and Values? How did Educational Systems and Structures Contribute to the Greater Good and Collective Knowledge?

The systems and structures of education in ancient Athens were established to create unity and a shared purpose amongst the citizens of Greece. Education was originally founded to serve the needs of the State and to further the shared beliefs of the society. Ancient education was for "...the promotion of civic unity through the cultivation of the moral and intellectual virtues, and through common schooling that promotes goodwill and friendship" (Curren, 2000, p. 9).

Socrates created an interesting paradox when it came to public education and the teaching of virtues.

How could Socrates be an advocate of public education, a public education in virtue moreover, if he believe one must have moral knowledge to be a teacher of virtue, and believes no one possess such knowledge?....The answer to this question must begin in recognition that Socrates saw good reasons to doubt that complete or true virtue could be taught, but did think it possible and important for cities to ensure that their citizens receive a more elementary form of moral education. (Curren, 2000, p. 20)

Socrates, like others after him, realized that in order to promote shared beliefs, purposes and values, there had to be public systems of education.

From these relationships flow several arguments for public education, advanced in the cause of individual virtue, happiness, freedom, and rationality; political excellence and stability; and the promotion of friendship and social solidarity. (Curren, 2000, p. 5)

Socrates believed that unless the people were taught right from wrong by the state, that they could not be held liable for not obeying these virtues (Curren, 2000, p. 22).

In the *Clouds*, by Aristophanes, he addresses the moral authority that was such an important part of education at this time. Contributions to the greater good of Athens were the primary aim of ancient educational systems and structures.

The *Clouds* of Aristophanes is another important source in reconstructing the nature of Old Athenian Education. The debate between Just Logos and Unjust Logos (esp. vv. 961-1104) makes it clear that the ultimate goal of the early educational system was not simply excellence in *mousike* and *gumnastike* as such but, beyond that, a kind of moral excellence as well. The physical and mental discipline involved in these pursuits, it was felt, would make a child into a "good" (*eukosmos*) person and a useful citizen, like the men who fought at Marathon. (Lynch, 1972, p. 33)

The city itself was in charge of establishing the moral agenda of education. "The character and Organization of Old Greek Education is determined by the city state. This institution furnished the basis and ideals of education, as did the family with the Chinese and the theocracy with the Hebrews" (Monroe, 1932, p. 3). This was true in ancient Sparta and Lacedaemonia as well. In Sparta, "while there was no definite school, all of childhood was a schooling, definitely systematized for educational purposes; and the chief occupation of the adults, aside from their military life, was the education of the younger generation. This education was almost wholly physical and moral" (Monroe,

1932, p. 9). In Lacedaemonia, "The discipline of the Lacedaemonians continued after they were arrived at years of maturity. For no man was at liberty to live as he pleased; the city being like one great camp, where all had their state allowance, and knew their public charge, each man concluding that he was born, not for himself, but for his country" (Monroe, 1932, p. 21).

As the purpose of education shifted from military might to intellect, the school structures adjusted to meet these needs (Monroe, 1932, p. 52). "Ability to speak in public, in defence of one's own rights and in advocacy of personal views on public questions, was expected of all Athenian citizens. The Sophists deliberately proposed to create this ability through instruction" (Monroe, 1932, p. 64). Another shared belief was that of self-control. In the schools, "They also teach the boys self-control; and it contributes much towards their learning to control themselves, that they see every day their elders behaving themselves with discretion" (Monroe, 1932, p. 124).

Plato's definition of the purpose of education holds true today. "Plato defines the principles that are yet recognized as the basis of society, the reciprocity of needs and services, and the education of each individual for the performance of some function in this interchange of services" (Monroe, 1932, p. 131). Plato addressed the issues of the shared beliefs and moral values needed in education in his *Republic*.

From *Plato's Republic Book V* - I said: Until, then, philosophers are kings, or the kings and princes of this world have the spirit and the power of philosophy, and political greatness and wisdom meet in one, and those commoner natures who follow either to the exclusion to the other are compelled to stand aside, cities will never cease from ill -no, nor the human race, as I believe - and then only will our State have a possibility of life and behold the light of day. (Monroe, 1932, p. 180)

Plato goes on to describe the systems and structures of education that are needed to support these shared beliefs and morals in the *Republic, Books VII and VIII*.

Plato's Republic Book VII - They will begin by sending out into the country all the inhabitants of the city who are more than ten years old, and will take possession of their children, who will be unaffected by the habits of their parents; they will then train them in their own habits and laws, that is to say, in those which we have given them: and in this way the State and constitution of which we were speaking will soonest and most easily succeed, and the nation which has such a constitution will be most benefited. (Monroe, 1932, p. 221)

And in *Republic Book VIII*, he describes how the structure and system of education informs the systems of government, as well.

Plato's Republic Book VIII "No one will doubt that the legislator should direct his attention above all to the education of youth, or that the neglect of education does harm to states. The citizen should be moulded to suit the form of government under which he lives. For each government has a peculiar character which originally formed and which continues to preserve it. The character of democracy creates democracy, and the character of oligarchy creates oligarchy; and always the better the character, the better the government. (Monroe, 1932, p. 281)

Plato, too, questioned whether the main purpose of education should be moral or purely intellectual.

Plato's Republic Book VIII "That education should be regulated by law and should be an affair of the state is not to be denied, but what should be the character of this public education, and how young persons should be educated, are questions which remain to be considered. For mankind are by no means agreed about the things to be taught, whether we look to virtue or the best life. Neither is it clear whether education is more concerned with intellectual or with moral virtue" (Monroe, 1932, p. 282)

Plato established the system of education at the Academy which held a shared belief and the moral authority of the pursuit of truth.

Nevertheless Plato's work in the sphere of education itself was of much greater historical importance than the political role he had intended it to play. Opposing the Sophists because they were too exclusively concerned with immediate

practical results, Plato built his system of education on a fundamental belief in truth, and on the conquest of truth by rational knowledge. (Marrou, 1956, p. 66)

The shared beliefs of education under the philosophy of Plato were characterized under his utilitarian principles.

Application of Plato's utilitarian principles to the sphere of education gives us three basic principles....They are: The aim of education is to produce sociable and happy citizens....All children should therefore be trained from an early age to adopt the norms of society....The precise nature of the education that a child undergoes at a later stage should be decided, in so far as it is possible, by reference to his aptitude and the demands and needs of the society. (The norms, needs, and demands of society must, of course, be defined with reference to the claims of Platonic utilitarianism.) (Barrow, 1975, pp. 179-180)

Barrow goes on to explain that these norms or principles make up the shared beliefs of Plato's view of education at this time.

The norms that ought to be accepted are the Platonic norms: that is to say, the belief or conviction that happiness is the supreme value and that there are no good grounds, *a priori*, for so organising any aspect of community life so as to treat people unequally in respect to happiness. In addition, the belief that the criterion of aptitude, or ability and interest, is the right and proper criterion for the distribution of activities within the community; and, finally, that assumption that freedom is an unhelpful concept, and that freedom is desirable only when and where men have clearly shown themselves able and willing to put the claims of equal happiness before all other claims. (Barrow 1975, p. 181)

Lodge and Frank (1970) assert that,

In our schools, experience is not left to itself, but is selected and amplified in accordance with the community value-judgement. Highly specialized techniques are brought to bear. The traditional background and outlook of the social group are imparted to the rising generation in accordance with an approved plan; and the natural reaction-tendencies of the youthful organisms are modified until they take on the patterns regarded by the community as desirable. In the narrower sense, then 'Education' is understood as *socially controlled experience*. (p. 11)

This establishes a system of shared beliefs of a community affecting the structure and system of education. They state that, "(Plato's) chief interest is in education for

character, education for citizenship, and education for leadership in a small community of freemen co-operating in realizing the ideal which we know as the Hellenic way of life" (Lodge & Frank, 1970, p. 14).

Lodge and Frank (1970) describe how Plato addressed constructing these structures of shared belief and moral purpose of education in the *Republic* and *Laws*.

In deciding what kind of a city will be the best for human beings, Plato insists upon starting with a clean sheet: pre-supposing only the general Hellenic aim of culture, i.e., of converting chaos into cosmos and of directing instinct by reason; and avoiding local traditions and feuds, in so far as these would give a historical bias to his constructions and force them into their own channels. With this aim he constructs the ideal city of the *Republic* and the model city of the *Laws*, paying more attention in the *Laws* to the human conditions under which his ideal is realizable. (p. 61)

Plato's *Dialogues* also address the importance of shared beliefs and purpose in the structure of education.

The planned community, whether ideal republic or model city, is to be founded upon the basic concept of Justice. As applied to women, this means that women's unique and positive capacities, which can be utilized in making definite contributions to the life of the planned community, are to be developed by all the social institutions - home, school, church, army, law courts, community festivals, etc. - which are regarded in the *Dialogues* as of directly educational significance. (Lodge & Frank, 1970, p. 287)

The impact on women's education, in particular, was shaped by these shared morals, values and religious principles.

But there is, throughout her life, a further influence, more universal, more ideal, as well as more definitely pervasive: namely, the influence of religion. From her earliest years, she is exposed to its power; and it must at once be admitted that no educational influence which she ever encounters in her life equals or even approaches the power of religion. It is indeed religion which gives to the home, to the school, to art and to literature, the power for good which these have. (Lodge & Frank, 1970, p. 297)

A woman's education was also shaped by the shared beliefs in marriage and contributions to the common interest of the community.

This is one of the most important phases in a woman's life-cycle, and women are educated for it, partly by life itself, and partly by public opinion and by the instructions and admonitions of matron-magistrates. These matrons are the same as the playground matrons who supervised the years of pre-school play in the temple precincts. They represent authority, community protection, mature experience, safe guidance, and wise counselling in intimate matters. They teach the young women that marriage is a sacred mystery, in which women weave the web of life and cooperate with God in the work of creation. They teach them also that marriage is of profound concern to the State, and that it is their civic as well as their religious duty to marry and bear children according to the laws of the planned community. (Lodge & Frank, 1970, p. 300)

It seems that the education of women at this time was particularly influenced by the shared beliefs and moral values of the society. Women were needed to contribute to the collective knowledge and the greater good of society by getting married and having children.

As men realized the opportunities that education provided, and how becoming more educated could help them contribute to the greater good of the society, more systems were put into place to support this demand.

Now the development of democracy at Athens had one very significant effect. It created a thirst for knowledge; nor is it difficult to see the cause. The manifold opportunities of action and discussion sharpened men's wits. As citizens of a self-governing community, every individual felt himself endowed with a new importance and was eager to make his way in a society which opened so many avenues to advancement. So there was a demand for fuller education; and simultaneously with the demand there had arisen a class of men competent to satisfy it. (Robinson, 1933, p. 142)

The seeds of development of systems of education for a shared moral purpose were planted by Socrates. His work supported the foundation that education was tied directly

to freedom and that this was the shared moral purpose of education. Although he did not create a formal structure of education, his work appears to have inspired it.

Had Socrates founded a school and sent forth its members as apostles with the definite mission to announce the advent of the kingdom of liberty, in which each subject should recognize the state as the embodiment of his own rationality, and therefore the condition of his own freedom, it seems as if such a result might actually have been reached. But neither Socrates himself nor any one of his immediate followers was able to fathom the meaning of his principle sufficiently for this. (Davidson, 1894, p. 129)

Aristotle addressed these issues in his *Politics*. He described the systems and structures of education that would support the shared beliefs and morals of the time in *Book VII of Politics*.

Chapter 13 - All of life is divided between occupation (ascholia) and leisure and between war and peace, and of our activities some are necessary and useful and others noble. The same preference must be exercised here as in regard to the parts of the soul and their activities - war being chosen for the sake of peace, occupation for the sake of leisure, and necessary and useful things for the sake of noble things. The statesman must legislate with a view to all these things - the parts of the soul and their activities, and particularly those that are better and have more the character of an end, and similarly with regard to the ways of life and the choice of preferred actions. For they must be able to be occupied (ascholein) and to go to war, but much more to remain at peace and at leisure, and they must be able to do necessary and useful things, but ought rather to do noble things.

Accordingly, it is with these aims in view that they should be educated both when they are still children and during other ages in life that require education.

[1333a30-b5] (Lord, 1982, p. 40)

Aristotle goes on to describe the importance of a diverse education in support of the shared belief in freedom. He discusses the importance of education's support of these shared beliefs and moral authority. Also from Aristotle's *Politics*:

That there exists, then, a certain education that is to be taught to our sons not because it is useful or necessary but because it is liberal and noble is evident. Whether it is one or more than one in number, and what they are and how they are to be taught, these things will be considered later. At present, we have advanced this far: we have some testimony of the ancients drawn from the established

subjects of education; for music makes this clear. It has also become clear that certain of the useful things are to be taught not only on account of their usefulness, such as the learning of letters, but also because they make further kinds of learning possible; and drawing must similarly be taught not in order that they may not make mistakes in their private purchases or that they may be able to guard against deception in the buying or selling of articles, but rather becasue it makes them observant (theoretikon) of physical beauty. To seek usefulness everywhere is least of all suited to men who are magnanimous and free. [1338a30-b4] (Lord, 1982, p. 57)

Socrates, Plato and Aristotle all contributed to the systems and structures of education that were supported by shared beliefs and moral authority. Their legacy of work addressed the content of education for this common purpose. They all believed that the system of education was in service to the moral authority of the belief in freedom and contribution to the greater good of Athens. Everything from politics to religion helped to inform these shared beliefs. Citizens attended schools in order to contribute to the collective knowledge and improve their community. There was an obligation to Athens and the educational systems were designed to support the betterment of the State. The shared beliefs and purposes of education were clear and were the foundation for which the systems of ancient education were founded.

Communal Learning Spaces (Physical / Virtual)

The formal and informal systems and structures of education led to learning that took place in many different locations during ancient times. Depending on the phase of life, the gender of the participant and who was leading the learning, the location could vary from the home to the street to the marketplace to a more formal school. The communal learning spaces had many benefits for the participants. (Samuel) "Knox and others invoked the Aristotelian argument that public schools which bring children of

different social backgrounds together would promote social unity through bonds of personal friendship" (Curren, 2000, p. 7). The idea that having a school where students would interact and spend time together learning would benefit the State through, "...the promotion of civic unity through the cultivation of the moral and intellectual virtues, and through common schooling that promotes goodwill and friendship" (p. 9).

Plato discussed the notion of communal learning and even communal living in his philosophy. According to Plato "...while the future guardians would be raised communally and receive schooling in *mousike* and *gymnastike* from the city itself..." (Curren, 2000, p. 51). In Sparta, the entire community was responsible for the education of children, yet there was no formal system or structure for education there. "While there was no definite school, all of childhood was a schooling, definitely systematized for educational purposes; and the chief occupation of the adults, aside from their military life, was the education of the younger generation" (Monroe, 1932, p. 9). Plutarch further described Spartan education structures.

Selections from the Life of Lycurgus by Plutarch: "The spartan children were not in that manner under tutors purchased or hired with money, nor were the parents at liberty to educate them as they pleased; but as soon as they were seven or eight years old, Lycurgus ordered them to be enrolled in companies, where they were all kept under the same order and discipline, and had their exercises and recreations in common. (Monroe, 1932, p. 15)

In Athens, the laws were different than Sparta and the structures of the schools were different as well.

Education was public only in so far as it was subject to close state supervision of the general results to be expected of home training or individual private institutions. It could be given in the home, but was more commonly obtained in private schools. In contradiction to the general authority and responsibility of

adults at Sparta, a law of Solon forbade any adult save teachers and pedagogues entering the school. (Monroe, 1932, pp. 11-12)

Plato addressed communal learning further in his *Republic*.

Plato's Republic Book VII - They will begin by sending out into the country all the inhabitants of the city who are more than ten years old, and will take possession of their children, who will be unaffected by the habits of their parents; they will then train them in their own habits and laws, that is to say, in those which we have given them: and in this way the State and constitution of which we were speaking will soonest and most easily succeed, and the nation which has such a constitution will be most benefited. (Monroe, 1932, p. 221)

In reality, Plato created a school structure in the Academy where communal learning would take place for students.

The foundation of the Academy is usually assigned to 388-7 B.C., soon after Plato's return from Italy and Sicily. Having rejected politics as a career he no doubt felt that he could best serve his city by providing higher education for its best intellects....In founding the Academy, therefore, Plato showed his originality not in the mere idea of scholars working together in the same building but in the type of work to be carried on there. (Beck, 1964, p. 227)

This formal system and structure of school, as created by Plato, stands as a model even today for secondary and higher education.

To Plato too we owe the idea of the secondary school as a unified institution with an integrated curriculum and staffed by permanent specialists. In founding the Academy Plato may be said to have invented the University. It had to be reinvented in the Middle Ages, but the institutions then founded owed part at least of their curriculum to Plato, and modern universities are not uninfluenced by the ideal of scholars working together in the pursuit of knowledge first formulated by Plato in the ancient Academy. (Beck, 1964, p. 240)

Socrates' approach to education and learning was informal and took place on the public streets, in parks and in that open marketplace, known as the agora. Xenophon described Socrates approach in his *Memorabilia*:

I, 1.10; cf. IV, 1.1: Socrates was constantly out in the open. Early in the morning he went to the *peripatoi* and the gymnasia; when the Agora filled up, he could be

seen there; and for the rest of the day he would always be wherever he might associate with (*sunesesthai*) the most people. (Lynch, 1972, p. 42)

Plutarch also described Socrates' informal structure of teaching. He would incorporate all aspects of life into his interactions with students, including work, play, discussion and military service.

From Dikaiarchos (Plutarch, *An seni res publica gereda sit* XXVI, 796d=Dikaiarchos, fr. 29, Wehrli) - Socrates at any rate was a philosopher, although he did not set up benches or establish himself on a throne or observe a fixed hour for conversing (*diatribe*) or walking (*peripatos*) with his acquaintances (*gnorimoi*); instead he played with them whenever he had a chance and served in the army or went to the Agora with some of them... (Lynch, 1972, p. 44)

Socrates continued in this way throughout his life, which led to his own financial decline and eventual demise.

He (Socrates) went about cross-examining anyone who would submit to it, and discovered to his surprise that not one could give him a satisfactory answer to his searching questions. Unlike the professional sophists, he charged no fee of those who listened to his discussions; and as a result he fell into the direct poverty. Nevertheless, he did not abandon his quest. He continued to buttonhole mne in the street and to discuss the problems of existence with many young folk who were brought under the spell of his intellectual enthusiasm. (Robinson, 1933, p. 146)

Plato, in his *Symposium* and Xenophon, in his *Memorabilia*, both addressed the unique ways that Socrates approached education in Athens.

Socrates was an unusual type of teacher; indeed he himself said that he was not a teacher at all. He was the midwife who brought other people's thoughts to birth, the gad-fly who stimulated his sluggish contemporaries. He had no school; he did not give regular classes, and he took no fees. His conversations were conducted in public. 'Early in the day he went to the public walks and gymnasia; when the agora filled up he was to be seen there, and for the rest of the day he would be wherever he was likely to find the most company.' (Xenophon, Mem. I. i.10) Everyone who was prepared to submit to his questioning could hear him, whatever their age and status. But it was the young who heard him most willingly, and over them he exercised a remarkable fascination. He was, if we can believe Plato, susceptible to the youthful charms of those good-looking boys

who were to be seen in palaestra and gymnasium surrounded by admirers; but, as Alcibiades says in the *Symposium*, in his relations with them the positions of lover and beloved were reversed as they found themselves irresistibly attracted by his personality. (Plato, *Symposium* 222b) (Clarke, 1971, p. 58)

The demand for learning increased over time in ancient Athens and the systems for education adjusted to meet this need. Students were not satisfied to only learn in schools, but desired to learn throughout the city itself. It was the Sophists who first began to meet this need for greater access to education.

...but no sooner did individualism and the desire for pleasant diagogic life come into competition with the state than a culture was demanded which it had no means of supplying. Here the Sophists found their opportunity. The young men were to be met everywhere-in the streets, the market-place, the gymnasia, the taverns, the homes, etc. The Sophist had only to show himself in order to be surrounded by a knot of them. He had but to seat himself at the exedra, or lay himself down under a tree in the gymnasium, and they crowded round to hear his wisdom-his manifold stores of unfamiliar knowledge and his brilliant arguments on any theme proposed to him. (Davidson, 1894, p. 89)

It was Socrates whose methods would eventually impact the more open learning structures of the Sophists and of education all over Athens. Plato described Socrates' impact in *Lysis*.

That the teaching of Socrates soon affected the practice not only of the gymnasia, but also of the palaestras and schools, is rendered evident by a passage in the *Lysis* of Plato. Here Socrates is made to relate how, as he was one day walking by the road immediately outside the city-wall, from the Academy to the Lyceum, he was invited by a knot of young men to enter an enclosure the door of which stood open. They inform him that they and many other beautiful youths spend their time there. On asking what sort of club it is, he is told that it is a palaestra, recently built; but that most of their time is spent in discussions under the direction of a certain Miccus, a 'companion and admirer' of his. (Davidson, 1894, pp. 112-113)

The foundation of the Academy, by Plato, creates a communal learning space that would give more formal structure to the education in Athens. Other leaders began to create

more formal structures of education too. The entire city of Athens could be considered a communal learning space, of sorts.

...in the gymnasia or the streets or the colonades of Athens the philosopher and the thinker could teach and meditate in peace, in an atmosphere ennobled by her treasures of architecture and art and sculpture, which subdued the most blatant visitor, amid the literary circles which her dramatic contests attracted and encouraged. Here was an ideal spot for the meeting place of the best minds in Hellas and the growth of a great educational system. The city was an education in itself. (Freeman, 1922, p. 179)

In fact, Davidson (1894) suggests that Athens itself was the structure of education, the communal learning space of the time. "During the period in which the Greeks had anything that could fairly be called an educational system, as distinguished from the training afforded by experience, their life centered in, and revolved round, a single institution, which, for want of a better term, we may call the city-state" (p. 31).

During the transition from the fifth to the fourth century B.C., the educational structures became more formal.

Sometimes the sophists lectured in class-rooms; and in the fourth century B.C. regular schools were established at the two great gymnasia outside the walls of Athens, one under the philosopher Plato and the other under Aristotle, his pupil. But in the fifth century teachers were in the habit of travelling about from city to city, and they made shift to teach their pupils in the wrestling -schools or wherever else they could find them. (Robinson, 1933, p. 145)

The other philosophers, such as Isocrates, also created communal learning spaces.

Each was slightly different from the other, both in their location, approach to learning and curricular focus.

Early in the fourth century there arose established secondary schools in Athens. Plato began to teach Logic and Philosophy, Isokrates Rhetoric, not for a few weeks at a time, but permanently: their courses lasted three or four years. Characteristically there was no State organisation or interference; Isokrates taught in his own house, near the Lukeion, Plato in his garden near Kolonos and in the

Akademeia. Their pupils came from all parts of the civilised world, staying in Athens during the course of their study. Plato imposed a preliminary examination of mathematics upon his pupils, Isokrates only commended a knowledge of such subjects. (Freeman, 1922, p. 180)

Each of these formal structures of education was in a different location, led by a different philosopher. Plato, Antisthenes, and Aristotle each founded a different school, in a different spot in Athens.

When Plato began to teach shortly after his return to Athens he chose as his headquarters the Academy, a gymnasium on the outskirts of Athens three-quarters of a mile from the Dipylon gate. A gymnasium as one of the chief places where the young congregated was a natural choice for a teacher. Socrates had frequented the gymnasia; a little before Plato settled at the Academy Antisthenes had begin to teach in another gymnasium, the Kynosarges, and the third of the suburban gymnasia, the Lyceum, was to be Aristotle's headquarters. (Clarke, 1971, p. 59)

These communal learning spaces may have been formal structures, but they were not always so formal in their system of education. Often the lectures and learning was less formal and more conversational between students and teachers.

Nevertheless we should not imagine this teaching as having been excessively magisterial. Besides lectures, a prominent place was given to the kind of friendly conversation that went on during drinking parties. These, judiciously used, remained for Plato one of the essential elements of education. Life at the Academy meant in fact a kind of communal life between master and pupil, and possibly a collegiate organization (though it is not certain whether all lived together in an adjoining building). (Marrou, 1956, p. 68)

Plato addressed the formal structures of education that he thought best for Athens in *Laws*. He began his recommendations with the youngest children in mind.

Laws 794: All children between the ages of three and six ought to meet at the village temples, the several families of each village uniting on one spot. The nurses are to see that the children behave properly and orderly: each group of children and nurses being under the control of a playground matron, selected from among the women controllers of marriage, and clothed with all the necessary power. (Lodge & Frank, 1970, p. 292)

The communal learning of the early years is now divided during later childhood. Boys and girls are remanded to separate learning spaces.

The next stage of the life-cycle is the period from six to ten years of age. The sexes are now separated and are sent to separate schools. Here the young girl learns to be a schoolgirl, associating exclusively with schoolgirls, and being taught all she learns by schoolmistresses. What she learns, while superficially not unlike what her brothers are learning in their boys' school, is acquired in a very different spirit. (Lodge & Frank, 1970, p. 293)

Children are expected to participate in their community activities, thus creating a sense of education throughout the entire city.

From Laws 653, 800: Festivals are times of rest when opportunity is given to attend service. As religion is part of the State law, attendance is mandatory. There is an additional reason for this. Plato reminds us that temple attendance improves education. When children are thus in constant attendance, listening and participating in the service by song and dance, their souls are charmed into harmony with the established law. (Lodge & Frank, 1970, p. 298)

For girls, these festivals and community events would become the predominant structure of education, in addition to the home.

In the *Laws*, the influence of the home continues throughout her life. As maid, wife, mother, and matron, her life is definitely centered in the home: a home permeated by community spirit. The influence of the school persists, after her sixteenth year, only indirectly: namely in the monthly gymnastic and music festivals which continue to keep alive in her the spirit of her education. What is that spirit? As far as we have studied it, it is intensely, narrowly, local. Her interests are concentrated upon the community into which she has been born, in which she has progressively immersed her growing self. All that she is, all that she has become, she owes to that community: a community which she has never left, and indeed has never thought of leaving. (Lodge & Frank, 1970, p. 295)

The communal learning spaces of formal education at the Academy and Lyceum held together the system and structure of the Peripatetic school in ancient Athens. The loss of this structure, due to changing times and external factors such as war and destruction caused a decline in these formal structures of education.

As far as the decline of the Peripatetic School is concerned, one general conclusion should be evident from the brief account given of the external history of Aristotle's school during the later Hellenistic and early Roman periods. A complex of factors related to the character and history of the Peripatos as an institution help to explain why the school declined so sharply in the early third century B.C. and failed to recover in subsequent times. Some of the factors, such as the phenomenon of fragmentation and the destructive influence of wars apply to the workings of the other three schools as well. But as an institution based on cooperative effort among members and on the accumulation and classification of knowledge, the Peripatos was most seriously affected by fragmentation of its membership, by the loss of its library, and by losses of facilities and money in war. For of the major Athenian philosophical schools, the success of Aristotle's most depended on a stable institution, transmitting the efforts of each age for the next generation to build upon. (Lynch, 1972, p. 162)

Communal learning spaces had a profound impact on both the informal and formal systems and structures of education in ancient Greece. Whether students were learning in the streets, at festivals, in the home, in the agora or at schools like the Academy or the Lyceum, their interactions with each other and with their teachers led to increased knowledge. The academic discussion that took place between philosophers and students were sometimes informal in nature, yet they would all benefit from the constant interactions and contact. The fourth century B.C. was shaped by these academic pursuits and the legacy of Socrates, Plato, Aristotle and their contemporaries left a lasting mark on education.

CHAPTER IV

THE MODERN ERA

Equity in Primary Participation

The systems and structures of formal and informal education and discourse on social media for today's educators include both blogs and Twitter. These tools are used regularly as a method of building a personal learning network and expanding educator's access to learning. In their book *Rethinking Education in the Age of Technology*, authors Collins and Halverson (2009) discuss several shifts that must take place on a policy level in order to accommodate new learning styles and more open access to education through technology.

The approaches to equity are more complicated, since the technology itself equalizes the access to information which improves learning for all students, but the access to the technology itself is the challenge. The authors suggest that the government, in rethinking the ways it supports and mandates education, may play a role in funding access to technologies. There is already a culture of haves and have-nots in this country and the authors are calling on government and school leaders to not worsen that divide.

They are really suggesting that, as learning moves outside of the traditional classrooms and into the homes and workplaces and hands of people across the country, superintendents and policy makers must start asking different types of questions in order to work towards a viable solution. They suggest, we, as readers, "rethink learning,

motivation, what is important to learn, careers, the transitions between learning and work, educational leadership, and the role of government in education" (Collins & Halverson, 2009, pp. 129-143).

Bettendorf, Iowa High School principal Jimmy Casas writes a blog at jimmycasas.blogspot.com. In this blog he addresses many leadership issues that face him as a principal. In one particular post, entitled "Leaders Strive to be tomorrow...Today" Casas talks about what has inspired him as a leader and specifically why he started keeping a blog a year before. In his post he addresses his fear of starting to blog:

So why was I scared to start a personal blog that would be accessible to my students, parents, staff, colleagues and other educators to see? Well I, I wasn't really sure myself until I heard Sue Enquist speak and then it hit me! I was scared of the 33% and I was scared to allow others to take away what little excellence I had. When you go through school your whole life feeling like a failure and lack the confidence to formulate any thoughts in order to put them on paper; well, you find any reason you can not to follow through even though you really want to for fear of what the B3's will do to you. And then by luck you cross paths with someone like George Couros and Patrick Larkin who push you and encourage you to look past your deficiencies because they believe you have something to offer. Then a few months later you attend a leadership conference and listen to Sue Enquist, a legendary coach, tell you that "excellence doesn't negotiate," and that "personal excellence starts over each day" and you cannot help but get jacked up to change the world! And the next thing you know one year has passed by and that rookie blogger has written seventeen posts and accumulated over 33,000 reads on his blog from educators all over the world and you wonder, "How did that happen?" Maybe, just maybe, it is because he decided to be tomorrow ...today! (Casas, 2013b, p. 2)

It was the access to information that was holding Casas back from starting his blog, but that eventually led to its success, as well.

In the comments section below the blogpost, there are 28 comments from educators who reacted to this post. On particular comment was from an educator in New

Jersey named Barry Saide. Here is the exchange between Saide and Casas:

- barry saide November 17, 2013 at 10:22 AM
- Jimmy, what a passionate, powerful read. I think you redefined the title of your blog with this one. We need to get you in NJ sometime sooner than later.

Keep Being You, Barry

- Jimmy Casas November 17, 2013 at 11:58 AM
- Thank you Barry. So cool that a guy from Iowa and a guy from New Jersey can call one another out of the blue one day and half a year later become good friends half a country away. Thanks for being you and for inspiring others to be excellent! -jimmy (Casas, 2013b, p. 4)

Because of this blog, two educators from different states were able to connect and share ideas. The structure of an online blogging platform allowed for equity of access to Casas' post and knowledge about educational leadership.

According to the Connected Principals blog site, Amber Teamann is an Assistant Principal at Luna Elementary School in Garland. Texas. Teamann is another contributing author to the Connected Principals blog. In one recent post, entitled "Whose Voice is in your Leadership Circle?," Teamann (2013) addresses the issue of equity of voice in organizations. Teamann writes,

When making decisions, having discussions, or troubleshooting topics on your campus, how many people are involved? How many voices have input? I think it's important to have several...in fact, I can give you some perspective on 4 voices that I think NEED to be involved in practically all of your campus decisions. A quadrant of leadership, if you will. (p. 1)

Teamann goes on to describe the four types of voices that are important to listen to when districts make organizational decisions. She describes "The Boss," "The Sunshine," "The

Bitty Bird" and "The Cheerleader" (pp. 1-2). Each of these roles balances the other in the decision making process. While "The Boss" leads the organization and "empower(s) everybody on the campus to be the best they can be, from students to staff" (p. 1), the "Sunshine" provides provides balance and calm, while remaining a positive influence, the "Bitty Bird" speaks for those who are vulnerable in the organization and makes sure to be aware of law and policy impacts on decisions. Finally, the "Cheerleader" attempts to encourage and motivate the group. By providing equity of voice to all of these groups, Teamann suggests that the systems of educational organizations will be able to make better decisions.

Another structure for education is the YouMedia space in Chicago at the Chicago Public Library.

The energy level and buzz in the space is similar to what I see when young people are with their same-aged peer group, immersed in online gaming, gossiping, or sharing YouTube videos, but this is an intergenerational space framed by educational goals--an open public space, an institution of public education, where learning and literacy are seamless with youth-driven activity. (Ito, 2011, p. 3)

This system of education extends beyond the traditional school in order to provide equity of access to youth across the city. There is support for such programs at the national level, as well.

If we think of the mission of public education as providing learning opportunities to all young people and not only about supporting public schools, YouMedia represents some of the best of what public education has to offer in the 21st Century. The Obama administration has recognized this, and the Institute of Museum and Library Services recently announced that they would work with the MacArthur Foundation in scaling the YouMedia effort to thirty more libraries across the country. (Ito, 2011, p. 3)

Expanding the role of such systems and structures of education can lead to greater equity

of access, as well.

Imagine what it would mean to think of public education as a mission shouldered not only by schools, but by a wide range of public institutions committed to knowledge and learning? When we think of public education, do we include the efforts of those in public and independent media, who develop radio, television, movies and games with an educational mission? Do we include organizations like Mozilla, Wikipedia, Creative Commons, and the Internet Archive committed to the production of knowledge in the public interest and in the public domain? Do we think of the efforts in broadband policy that seek to make the online knowledge accessible to families across the country? To me, these are all efforts in public education that are often overlooked in our often exclusive focus on schools. (Ito, 2011, p. 3)

In response to Ito's blog post, a reader posted the following comment:

4- Jordan Rizzo Tue, Jan 29, 2013, @ 9:55

I am absolutely fascinated with YouMedia. It is the perfect mix of traditional learning styles and new technology of today's world. I think this is exactly what teens need in order to succeed and I would love to see more programs of this nature come about in the near future. The fact that teens can go there and learn from each other and their mentors will motivate them to do their best with each project. I also liked how their website is open to everyone, so kids from all over can interact and receive feedback from one another. With having so much help and support, I believe the teens will feel more comfortable to take risks. Hopefully after much recognition, we will see new, interesting ways to educate our kids. Thanks for this very intriguing post! (Ito, 2011, p. 4)

This comment both extends the primary participation to this reader and addresses how the participation of youth will increase as a result of the YouMedia project.

Equity in primary participation also includes when bloggers write about their learning at conferences they attend. This ability to extend and share information beyond in-person attendance is one of the powers of the system of education on social media.

Principal Eric Sheninger writes about his experience at a conference in 2011:

On July 13th I had the pleasure of hearing Dr. James Strong, from the College of William and Mary, deliver a keynote address at the NJ Department of Education Leadership Institute entitled "Qualities of Effective Principals." Dr. Strong

emphasized that the job of a principal, or school leader for that matter, is about making a difference in the lives of children. Leading and teaching is challenging work that requires a high level of understanding and patience. (Sheninger, 2011, p. 1)

S. Leibowitz also writes on her blog about the impact of a recent conference:

Michael Fullan activated my learning even further, leaving me not only with a direction, but also with some concrete steps as to how to move forward. And, again, it's not about the technology. Wisdom I gleaned included:

- Offer respect to others before it is earned
- Engage in impressive empathy, meaning empathy even for those who stand in your way
- Invest in capacity building human capital and social capital
- Build social contagion
- Eliminate non-essentials
- Focus on a small number of ambitious goals. (Leibowitz, 2012, p. 2)

George Couros (2013a), a school leader from Canada, writes about how the system of social media brings educators together and creates equity across geographical borders.

A "spike" is a place where there is a large amount of people with one main area of interest that come together to create some of the best work in their field. It is not the only place, but these specific areas are usually known for excellence. So if I asked you where the "spike" is for educators, where would that be? Well, because most places on Earth have a school, if we think of a "spike" being in a physical place, it would be hard to identify where that one place would be. This is where social media comes in. Passionate educators are using things like Twitter and hashtags, such as #edchat to come together, ask questions, share ideas and create innovative ideas. (p. 3)

For school administrators, this equity extends to virtual mentorship programs, as well.

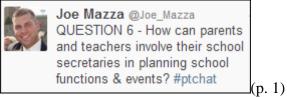
Opportunities like the "School Admin Virtual Mentor Program" which brings mentorship to current and future administrators, gives the much needed outsider view to what we do in our organization (for free). If we want thinking outside of the box, we have to look outside of it by tapping into what social media can deliver. We often bring out the innovators within our organization, while also bringing innovators into our work. To create innovative practice within schools, we must go past an inward-only focus. (Couros, 2013a, p. 5)

The power of social media lies in the ability to connect people across the world. This creates a system and structure of education that extends beyond traditional limitations of time and space.

Social media, and the open culture it has created, has made our culture and mindset "participatory." 'One of the reasons social media has grown so fast is that it taps into what we, as human beings, naturally love and need and want to do—create, share, connect, relate.' Notter and Grant If our culture is shifting to this, wouldn't this become the expected norm that many new educators (and current students) would expect to live within our schools? While we live in a world where people are used to *creating, sharing and connecting*, schools can no longer ignore this cultural shift. They must embrace the idea that we are lucky to live in a time of such technological advance and openness that will make the opportunity to be *innovative* that much easier. (Couros, 2013a, pp.5-6)

Tom Murray (2013) discussed the system and structure of Twitter chats as a means for equity in primary participation in learning for teachers and administrators.

Each week, educators from around the world take part in various conversations on Twitter known as "chats." These conversations have become an excellent way for educators to connect on relevant topics, share resources and best practices, all while challenging each other's thinking. The premise of a Twitter chat is simple. Each lasts for 60 minutes, moderators pose questions on a predetermined topic, and participants use a consistent hashtag (#) to communicate. Here's an example from a recent #ptchat:



In an in-depth research study, Alderton et al. (2001) examined how educators utilize Twitter for professional learning.

Purpose for Twitter: The survey asked the participants to describe what they saw as their purpose for using Twitter. All of them responded that Twitter allows them to build connections with educators beyond those in their immediate vicinity. These connections are purposefully made as a way to find and share resources and to provide and receive support. For example, Participant 8 stated, "My primary

purpose is to connect with other teachers, so that I can learn from them and share resources that I find." Similarly, Participant 9 wrote, "I am the only biology teacher at my school. I use it [Twitter] as a means of obtaining advice, resources and collaboration I also use it to find out about new tech tools." Participant 6 also specifically explained that using Twitter helps her stay informed about her local community by following news organizations and local businesses. Participant 1 described how connecting with other educators helps to keep her informed: "I know that when a link comes through Twitter, it has caught the interest of likeminded professionals and people. That means it is likely to be of value to me. This process of information filtering saves me tons of time because I'm getting good information quickly---I'm using the network to sift through content for me. (p. 356)

By accessing professional learning via Twitter chats, these educators become primary participants in their own professional education through the structure of social media. The study went on to examine the equity of access to information that social media can provide educators.

Nine of the ten participants specifically described increased access to practical resources and ideas as a benefit. For example, Participant 8 stated, "I have been able to implement ideas from others in my own classroom, and share my own ideas which people have helped me improve." Similarly, Participant 2 wrote, "It's great to be able to connect with people who are useful resources. They can point me to activities, lessons, etc. that will directly impact my students." Participant 1 describes the importance of this type of networking in the face of decreasing school budgets: There isn't a week that goes by that I don't stumble across a resource and/or instructional strategy that I can use immediately in my classroom. Not a single week. The same resources and strategies would take me months to come up with or track down on my own. Considering the limited amount of time that I have for planning and professional development—which has been cut completely from our district's budget for next year—this kind of access to immediate, valuable information is amazing. (Alderton et al., 2011, pp. 360-361)

During this researcher's analysis of several Twitter chat archives, she found multiple references the issue of equity of primary participation. Chat participants came from all over the world and for a wide variety of backgrounds to participate virtually in these chats. Some commented explicitly about the equity of access, while others simply

participated, but, by nature of their location or role in education, this researcher was able to further analyze their equity in primary participation. For example: "**Emily Graves** @MsGraves214 Emily Graves = Elem integrator @ Fieldston Lower within Ethical Culture Fieldston School #techcoach 7:33 PM - 30 Aug 2012" (Russell, 2012, p.76). Emily works at an exclusive private school in New York City that might not have interacted or shared information with other schools/educators without the equity that social media provides.

Other educators address the issue of telling their story on social media. The system provides them equity of primary participation by giving them a platform to communicate and share their experiences. Two comments from a #techcoach (Technology Coach) chat in 2012:

Craig Badura @mrbadura If we don't tell our story, someone else is going to tell it. #techcoach 8:29 PM - 30 Aug 2012

Craig Badura @mrbadura @lisettecasey It's a great opportunity to showcase awesome things happening at school as well. #techcoach 8:28 PM - 30 Aug 2012. (Russell, 2012, p. 10)

During a recent #PTChat (Parent Teacher Chat) several educators introduced themselves as being from all over the world.

Lisa @lisaodavis Hi Everyone! Lisa - PTA exec board member and mom of 3. From Long Island, NY:) Psyched for @Bammys this weekend!! #ptchat 8:01 PM - 18 Sep 2013

Sherri Wilson @ptaswilson I'm Sr. Manager of Family Engagement at @NationalPTA right outside our nation's capital! #ptchat 8:01 PM - 18 Sep 2013

Joe Clark @DrJoeClark Joe, superintendent from NE Ohio. #ptchat 8:01 PM - 18 Sep 2013

Melissa Goulet @MeGoulet1#ptchat I am Missy and I teach high school

chemistry in New Hampshire. This is my first ever live chat, I hope I am doing this right 8:01 PM - 18 Sep 2013. (Mazza, 2013, pp. 2-3)

Evan Scherr @EvanScherr Evan, Educational Technologist in Sasebo, Japan. #ptchat 8:05 PM - 18 Sep 2013. (Mazza, 2013, p. 13)

Similarly, during a #SATChat (Saturday Chat), educators from around the world gathered to discuss topics, providing equity of access no matter where they lived.

Christine Smith @CsmithChristine Good morning #satchat! Christine Smith, VP of intermediate school in central NJ 6:32 AM - 6 Oct 2012

Lisa Neale @lisaneale Good Morning! Lisa Neale, Principal in a rainy Ontario, Canada. #satchat 6:33 AM - 6 Oct 2012

Jay Posick @posickj #satchat Jay Posick, principal in Merton, WI. 6:33 AM - 6 Oct 2012

Louiza Hebhardt @equilibriumctc Louiza Hebhardt, teacher & counsellor, director EQUILIBRIUM teacher wellbeing services, Adelaide, South Australia #satchat 6:33 AM - 6 Oct 2012. (Currie, 2012, pp. 4-5)

During #1to1techchat (1:1 technology chat), someone commented on being a first time chat participant. "Bonnie Strejc @MrsStraitsClass Hi everyone! bonnie from Illinois. First twitter chat :) #1to1techat 8:04 PM - 4 Sep 2013" (McCusker, 2013, p. 6). Later in that same chat, an educator addresses how technology provides equity of access to students with special needs. "Sam Blanco @SamBlancoBCBA I'm Sam from Brooklyn, NY. I'm focused on using devices with students with autism. #1to1techat 8:05 PM - 4 Sep 2013" (McCusker, 2013, p. 8).

The moderator of the chat invites equity of primary participation by encouraging those that are "lurking" to introduce themselves to the group and to begin participating when they are ready to do so. "Shawn McCusker @ShawnMcCusker If you are lurking

in please say hello and feel free to join when you are comfortable. #1to1techat 8:08 PM - 4 Sep 2013" (McCusker, 2013, p. 16).

During this same chat, educators share how technology can provide equity of access to education for students and teachers and the lack of access to technology can reduce that equity. "Shaelynn Farnsworth @shfarnsworth A1: New London Group cites a growing disparity between those w/ access to tech./information & those w/out surpassing SES #1to1techat 8:11 PM - 4 Sep 2013" (McCusker, 2013, p.21) This is followed by several more examples of how access to technology can provide equity in primary participation.

Kyle Beatty @kylefcs A2: So many answers at the tips of their fingers. Collaboration. Participation from silent Ss. #1to1techat 8:23 PM - 4 Sep 2013 (McCusker, 2013, p. 46)

Sam Blanco @SamBlancoBCBA A2 - Great for a lot of my Ss who can't write well or hold a pencil. More accessible when Ss taught correctly how to use tech. #1to1techat 8:25 PM - 4 Sep 2013 (McCusker, 2013, p. 51)

Bill Chapman @classroomtools A2 - Do you remember life before search engines? Finding info then was very time consuming - indexes, trips to libraries, etc. #1to1techat 8:28 PM - 4 Sep 2013 (McCusker, 2013, p. 58)

Shaelynn Farnsworth @shfarnsworth Technology also makes primary sources for students more accessible! #1to1techat 8:34 PM - 4 Sep 2013 (McCusker, 2013, p. 70)

The moderator ends with advice to the chat participants about how to best participate in such an active chat. He suggests that they try to process the information that best suits their needs as educators. "Shawn McCusker @ShawnMcCusker @SamBlancoBCBA ITs like this every week. Work at your own pace, find what matters to u, follow those who resonate w your needs #1to1techat 8:52 PM - 4 Sep 2013" (McCusker, 2013, p. 99).

The systems and structures of education on social media, such as blogs and
Twitter chats can provide equity of access to information as well as equity in primary
participation. Educators from around the world gather via social media to connect, share
resources and discuss relevant educational topics. The system of social media provides a
vehicle for these discussions to cross the boundaries of time and space. The ability to
comment on a blog post from years earlier, to interact with educators from Australia,
Japan, Canada and the United States simultaneously without leaving your house creates
equity of primary participation that could not exist without social media.

To Whom is Thought and Information Disseminated Following Primary Participation?

The systems and structures of education on social media, specifically blogs and Twitter chats can lead to information being shared after the primary participation of the educators who were originally part of the chat, or those that wrote the blog post. By posting their writing on the Internet, educators disseminate their ideas to wide audience that can transcend time and geography.

In his blog post, "Leaders Strive to be Tomorrow....Today" Jimmy Casas, Principal of Bettendorf High School in Iowa writes about motivation for school leaders and about a conference he attended that inspired excellence in his own approach to education. He was a primary participant at that particular conference in Kalamazoo, Michigan. Upon writing the blog post, he was also a primary participant in the writing of the post. Then, upon publishing the post on November 17, 2013, all of the educators who read his blog became secondary participants in both the conference and the blog post.

Twenty-eight educators decided to comment on his post. Several more may have read it and not chosen to write comments. Jimmy Casas responds to most of the 28 comments directly in the comments section of his blog. This exchange between author and readers becomes its own form of primary participation. For example, the first comment is from educational leader Tony Sinanis, Principal of Cantiague Elementary School in Jericho, NY.

Cantiague_Lead November 17, 2013 at 8:06 AM Jimmy,

Awesome post and I thank you for the reminder that we get to start over each day... each day we have the chance to be EXCELLENT! You are definitely an honorary member of my Life Board of Directors... THANK YOU! Tony

Reply



Jimmy Casas November 17, 2013 at 9:12 AM

Thank yo my friend. I would say the same thing about you Tony! I take great pride in recognizing individuals who are of genuine character and you definitely are one I am proud to call friend! - jimmy (Casas, 2013b, p. 2)

And then another comment from Deb Day:

Deb Day November 17, 2013 at 9:15 AM

Love this post, JImmy. The 33% held me back several times in my life. It's hard to ignore them, but in order to be the best we can be, we have to put them behind us if they don't want to move forward.

Youth Frontiers does a Respect Retreat for our freshmen at the beginning of the year. They talk to kids about how we get a test back and get 97%. Instead of focusing on the 97 right, we focus on the 3 wrong and what we should have done. They stress that we should begin focusing on what we do well, what we succeed at because no one is perfect. I love the analogy to life and try to remind kids of this simple thought when they have things going wrong. It's nice to remind myself of this too.

As for the "Lifeboard" That's a great question. I'm going to have to think about that for awhile. But it could be a blog post :)
Reply



Jimmy Casas November 17, 2013 at 9:39 AM

Thank you Deb! Yes, those darn 33 percenters are hard to fend off, but we have to in order to protect our desire to be better. More importantly, as leaders, we have to protect those we serve because they too are getting pushed down by the toxins in our organizations. If we don't model the courage to move forward, how can we expect them to. It is our duty to protect them & inspire them to be great! - jimmy (Casas, 2013b, pp. 3-4)

Both of these comments reflect an interaction between blogger and reader, further blurring the lines between primary and secondary participation.

In Teamann's (2013) blog post, "Whose Voice is in your Leadership Circle?," she refers to a "PLN discussion" (p. 2) when making decisions. By bringing decisions to a PLN on social media, then a wider audience can be reached beyond original participants.

A comment on Ito's blog mentions the writer's plans to share the information at an upcoming conference. "Comments Sat, Feb 12, 2011, @ 14:04 **1- Evonne Heyning** Very helpful, thanks for writing such a comprehensive study on digital youth habits and trends. I'll be sharing a bit of this info with the Gov2.0LA leaders meeting this weekend as we talk about youth and mobile engagement" (Ito, 2011, p. 4).

By posting their thoughts to a public blog, educators share their ideas and engage their audience in a virtual dialogue. Often, a blogger will reply to comments made on their blogs. While the original post can be viewed as primary participation, the comments and resulting dialogue is secondary participation. The readers of the blog are

on the receiving end of this dissemination of information and thought. Here is an example of an exchange between two educators. Interestingly, the first writer, Heather Staker, works for the ChristensonInstitute.org. Christenson's work, *Disrupting Class*, was addressed in this blog post, making the interchange between blogger and audience even more significant. Here is their exchange:

Heather Staker / November 5, 2013

Thanks for this thoughtful post. I'm glad you find the work on hybrid theory helpful and agree that many schools are using online learning to sustain their traditional model, rather than to disrupt it into a new way of learning that is personalized and student-centered. Disrupting Class predicts two waves of disruption. The first wave entails the traditional course format migrating to an online medium. But the second is the one that excites us all the most I think, and that is when the learning model itself is disrupted. To your point, the current metrics of success are not necessarily geared toward channeling this disruption to its highest quality. States have a lot of work to do to define and measure student outcomes in ways that encourage the best programs to be developed and grow.

Marie Bjerede / November 6, 2013

@Heather – thank you so much. I'm optimistic about the trajectory for technology and the potential for richer ways to measure student outcomes. It would be very interesting to collect a wider set of metrics to see how they correlate to different definitions of success in life, such as academic performance, college completion, salary, etc, and also to see how they correlate to the capacity of students to use the freedom of mastery-based learning and the power of high quality content to accelerate their education. It might be particularly illuminating to get at the non-cognitive measures that precede and underlie academic achievement – the popular literature has proposed numerous candidates (from grit to focus to disposition) over the past five years or so with citations of research that imply a host of formal metrics and interventions." (Bjerede, 2013, p.3)

In his blog, Mark Anderson addresses how educators are sharing their ideas to a wider audience via Twitter.

'The first thing is that there are some very well known experts out there on Twitter and they are not posting about a latte machiato in Starbucks, they are providing links and opinions on bleeding edge research. New developments and products appear there immediately and feedback appears almost as quickly.

Advice on new software and internet services appears within hours (sometimes minutes) of release. If you're interested in what's new in your field, then Twitter is a great place to start.'

The article continues to talk on about the various virtues on Twitter and give more reasons as to why it is a great thing. As the author (@olafelch) states, the opportunities for professional development by utilising Twitter are exponential. Now you might think this is just a post for teachers, well it is not – students of all ages can network and gain lots of information from building your own PLN in areas that you want to learn more about... (Anderson, 2011, p. 2)

Anderson pinpoints how information is shared to world using the system of social media. He addresses how quickly this information is made available to the secondary participants.

In her blog, educator Jenna Shaw shares information after attending the national ISTE conference in San Antonio. Her blog readers become secondary participants to this conference, where other educators met face to face to learn about educational technology.

Almost every session I sat in this week at ISTE mentioned something about teaching our students to be good citizens online. I have been taking a deeper look at this myself while I engage in the curriculum rewriting process for my school and expand our technology integration initiatives. (Shaw, 2013, p. 1)

Shaw goes on to discuss a disturbing trend that she was noticing on her Twitter feed. By addressing this on her blog, her audience again becomes secondary participants to her experience. Some then shift back to primary participants when they comment on the blog post and interact with the writer. The resultant dialogue is primary participation.

So, I was browsing Twitter while I was on the plane ride home from San Antonio and I was pretty disheartened by what I was reading. Teachers, like, a lot of them, tweeting about their travels home. Tweeting, more specifically, about strangers around them. What they are wearing, eating, smell like, the stories they told. These posts were not nice and some of the statements were incredibly mean. These unsuspecting people are traveling just like anyone else and they are being made fun of on public forums.

In school, we call this cyber bullying.

I make this point because I was watching comments made by adults traveling back from an educational technology conference; some were bloggers that I believe take digital citizenship seriously. They were making comments almost exactly like the comments I have seen make middle school girls cry. (Shaw, 2013, pp. 1-2)

Unknown June 30, 2013 at 9:04 PM Thank you for sharing this ---

I always stop and wonder before I tweet something about the person next to me isit that what I want them to see if they were the next person to follow me on twitter.

As you state, I have seem our "professional learning network" be quite cruel as they chat about people nearby -- and I, like you, cringe.

True -- many times I wish to tweet exactly what my thoughts might be -- but then I remember "tweet people like you wish to be tweeted" and that helps.

Thank you for posting this -- good to read! Jennifer

Jenna Shaw July 11, 2013 at 11:44 AM

"Tweet people like you wish to be tweeted" is a fantastic motto! Thank you for sharing that. (Shaw, 2013, p. 2)

In their research study, Alderton et al. (2011) addressed how educators share and disseminate information via social media.

Purpose for Twitter: The survey asked the participants to describe what they saw as their purpose for using Twitter. All of them responded that Twitter allows them to build connections with educators beyond those in their immediate vicinity. These connections are purposefully made as a way to find and share resources and to provide and receive support. For example, Participant 8 stated, "My primary purpose is to connect with other teachers, so that I can learn from them and share resources that I find." Similarly, Participant 9 wrote, "I am the only biology teacher at my school. I use it [Twitter] as a means of obtaining advice, resources and collaboration I also use it to find out about new tech tools." Participant 6 also specifically explained that using Twitter helps her stay informed about her local community by following news organizations and local businesses. Participant 1

described how connecting with other educators helps to keep her informed: "I know that when a link comes through Twitter, it has caught the interest of likeminded professionals and people. That means it is likely to be of value to me. This process of information filtering saves me tons of time because I'm getting good information quickly---I'm using the network to sift through content for me. (Alderton, et al, 2011, p. 356)

In his post about "Qualities of Effective Principals," Sheninger (2011) disseminates knowledge from a conference he attended via his blog.

On July 13th I had the pleasure of hearing Dr. James Strong, from the College of William and Mary, deliver a keynote address at the NJ Department of Education Leadership Institute entitled "Qualities of Effective Principals." Dr. Strong emphasized that the job of a principal, or school leader for that matter, is about making a difference in the lives of children. Leading and teaching is challenging work that requires a high level of understanding and patience. (p. 1)

Then, in the comments section, the true power to transcend time becomes apparent when one of the nine comments on the blog is from 2011 and then another is from 2013. The ability to span a conversation over two years demonstrates the power of social media.

Randy

July 30, 2011 at 11:54 am

As I read through the list of elements and indicators, I asked myself the question — would this list look the same 10 or 20 years ago if we were describing effective principals? I think it would. How would we expand the list if we embrace the notion that principal leadership today is different than it was 10 or 20 years ago? We say teaching must look different. We say learning looks different. How does — should — leading look different?

to

Shaune Beatty

May 5, 2013 at 11:38 pm

Pleased I came across this article though I missed its original post. Definitely an agreeable piece. I don't believe we can underestimate the power of relationships, even during those tougher moments. With students, teachers and members within the school community. With relationships, I am pleased it shares ethics and students as compass points. Within my school, I also feel there is a balance of "pressure" and "support" from the office. Changes are not always popular as

people get comfortable, but some risks need to be taken. When decided upon, there may be some "pressures" to change. As long as this is met with equitable "support" I believe a principal is acting within an effective capacity given that the change makes sense. (Sheninger, 2011, pp. 4-7)

Another school leader, S. Leibowitz (2012), shared knowledge gained from her attendance at a national ISTE conference. First she writes, "'The definition of a motion leader is one who motivates the unmotivated in a way that the unmotivated then thank them for', Michael Fullan, ISTE Conference, 2012, Session Title: Stratosphere: Integrating Technology, Pedagogy and Change Knowledge" (p. 1). Leibowitz goes on to share with her audience what she learned from Fullan's session.

Michael Fullan activated my learning even further, leaving me not only with a direction, but also with some concrete steps as to how to move forward. And, again, it's not about the technology. Wisdom I gleaned included:

- Offer respect to others before it is earned
- Engage in impressive empathy, meaning empathy even for those who stand in your way
- Invest in capacity building human capital and social capital
- Build social contagion
- Eliminate non-essentials
- Focus on a small number of ambitious goals. (p. 2)

George Couros (2013b), in his blog, writes about what he has learned from watching various keynote speakers. Since his blog audience was not necessarily in attendance at all of these keynotes, Couros is disseminating his thoughts and reflections to this secondary audience.

Now for the great lessons that I have learned from others watching them speak. My brother Alec, who helped me get into speaking, showed me the power of visuals and media to supplement ideas in a talk and was a great way to engage the audience.

Dean Shareski taught me that is important to empower the audience to do something great, not for them to feel lesser in their work.

Jenny Magiera showed me that laughter and learning go hand-in-hand and it is way easier to connect people t with an idea when they are smiling. (pp. 2-3)

A reader then commented on Couros' (2013b) blog: William D. Parker December 6, 2013 at 1:34 am Good stuff. I feel the same way about learning. Whether I am sitting in a waiting room, buying something at the store, watching a movie, or observing a teacher, I find I myself trying to understand how each of these environments is serving others. It is thrilling to still be a student, no matter our stage in life. (p. 4)

The audience of his blog is learning from Couros' experience attending these keynotes and conferences. In a later blog post, Couros addresses sharing knowledge with his audience, free of charge.

I wanted to try my hand at writing a series of blog posts on "Leading Innovative Change." As I am looking at writing a book on the same topic, I thought I would put some ideas out there and hopefully learn from others on these topics. I also want to give these ideas away for free. These posts are for anyone in education, but are mostly focused on school administrators. (Couros, 2013a, p. 1)

Couros addresses the issue of knowledge sharing directly in one of his blog posts, suggesting that knowledge is more widely shared when posted online and shared through social media.

If your job is to create a culture that embraces any type of learning, how much impact does it have when we only see one person at a time and share it with no one? Sitting down and taking the time to write a blog, tweet some ideas, or use any other online community is not only beneficial in the reflection process, but also brings ideas to a larger community. (Couros, 2013a, p. 2)

He also comments about how important it is to share ideas and that anyone can share ideas, not just those in traditional leadership positions.

When these spikes are created, leaders have to be comfortable that great ideas can come from anyone, anywhere and at any time. **The focus for leadership should not be on** *their ideas***, but the** *best ideas***.** This process also often creates strong influencers, that may not have any formal leadership position, yet have tremendous pull with others through their sharing of ideas. (Couros, 2013a, pp. 3-

Connecting people with ideas is the goal of social media for professional development, as Couros (2013a) states, "Many great ideas are out there. We just need to find them, and more importantly, get people connected to them" (p. 5).

On Twitter, many educators share ideas that they learned elsewhere during chats. For example:

Lisette Casey DE @lisettecasey Not supervisory they just loved the feedback. Got the idea for SLA in Philadelphia. Teachers required to observe each other #techcoach 8:05 PM - 30 Aug 2012. (Russell, 2012, p. 40)

Craig Badura @mrbadura Going to run "Tech Tailgates from 5:30-630 before last 3 home football games. #techcoach 8:24 PM - 30 Aug 2012. (Russell, 2012, p. 15)

Dana Sirotiak @Sirotiak02 Mommy Time Management Tips http://www.pinterest.com/pin/234539093067185030/ ... via @pinterest #ptchat 8:47 PM - 18 Sep 2013

Dana Sirotiak @Sirotiak02 5 Time Management Tips for Busy Families http://www.pinterest.com/pin/184295809721122865/ ... via @pinterest #ptchat 8:47 PM - 18 Sep 2013. (Mazza, 2013, p. 114)

Most chat moderators make their chat archives available online. The chat transcript then becomes available to a secondary audience who did not originally participate in the live chat session. It is from these chat archives that this researcher located all Twitter chat sources. For example:

Joe Mazza @Joe_Mazza All #PTchat archived conversations can be found here at @IELconnects http://iel.org/ptchat/archives.html ... 8:58 PM - 18 Sep 2013 (Mazza, 2013, p. 136)

Shawn McCusker @ShawnMcCusker For those of you new to the chat we keep our archives here https://docs.google.com/document/d/1onmwHblRlbPGVoSYgp0fqtQm0Kk6L9N

3ixjihH9rt-c/edit ... #1to1techat 8:32 PM - 4 Sep 2013. (McCusker, 2013, p. 65)

Shawn McCusker @ShawnMcCusker @Mrseduc8 There will be an archive posted after the chat. No need to feel left out. #sharingiscaring #1to1techat 8:45 PM - 4 Sep 2013. (McCusker, 2013, p. 87)

The systems and structures of education on social media have shown to facilitate the dissemination of thoughts and information to a secondary audience following primary participation. Readers have easy access to blog posts, Twitter chat archives and links. They can engage in conversations over the course of time, posting comments and questions to blogs that may have been written years before. Authors can engage with their audience via blog comments and chats. Educators can transfer knowledge and learning from firsthand experience to a wider audience via a blog post or participation in a Twitter chat.

Who Formally Leads? Who Informally Leads?

Leadership in the systems and structures of education on social media may be difficult to define. There are school and district leaders who write blog posts, there are educators that lead weekly Twitter chats and there are leaders who lead conversations online with other educators, but who may not be officially leaders in their job titles.

Many of these leaders directly address the topic of educational leadership in their writing, others lead through their words and actions online.

In his blog post "Leaders Strive to be Tomorrow...Today," Jimmy Casas, principal of Bettendorf High School in Iowa describes his motivation for educational leadership and excellence. He also advises other school leaders to strive for their best by ignoring naysayers.

1. 33% Rule: Don't let the bottom third (B3) suck the life out of you. The bottom third is those individuals who either can't or won't celebrate your successes with you. For whatever reason, those who live in the B3 cannot be genuinely happy for others when they experience any amount of positive attention or are recognized for their accomplishments. They tear others down through their negativity and in many instances, relish in others' personal failures. These people not only want to remain status quo, but they judge others who strive to be better. Recognize that a positive mindset can help you overcome all adversity. Surround yourself with a circle of greatness in order to protect your excellence! (#PLN) (Casas, 2013b, p. 1)

Casas is modeling educational leadership through this blog post. He is also the leader of the blog itself. He is responsible for what he posts, how often and about what topic he writes.

Amber Teamann is a contributing author to the Connected Principal's blog site. Her post, "Whose Voice is in your Leadership Circle" suggests that school leaders include multiple perspectives when making decisions. She is leading this particular discussion by posting her blog on a popular school administrator blog site. She also suggests that group decision making and consulting with a PLN is an effective way to make decisions.

'The smartest person in the room is the room' - by David Weinberger. I love this quote and reference it frequently when talking about collaboration, connecting, or in any form of a PLN discussion. Even more importantly, I hope your leadership circle, whether it be on Twitter, Instagram, Voxer or IRL, I hope it involves all of these voices. Never forget that we are better together than we could ever be separate. (Teamann, 2013, p. 2)

Teamann states that leaders need access to a PLN, either face to face or virtually, in order to help make effective decisions as leaders.

In her blog post, Ito discusses how students lead other students in the YouMedia space at the Chicago Public Library.

Too often, we assume that socializing and fun is hostile to academics, and that "peer pressure" pulls kids away from learning. Responsible adults see their role as limiting access to games and entertainment, and drawing kids away from their peers in order to insist on attention to schoolwork and learning. In YouMedia, you'll see a very different dynamic. Young people are invited to hang out, play with games, and mess around informally with technology. They deep dive into media literacy projects that are supported by knowledgeable peers and mentors. Engagement thrives when young people are allowed to experiment, socialize, and take ownership of the agenda; there's absolutely no reason why the content of that activity can't be adult-sponsored learning. When young people are supported in pursuing their own choices and interests, and when they are allowed to mobilize peer activity around those interests, suddenly socializing, fun, and peer pressure drive learning rather than detracting from it. (Ito, 2011, p. 3)

She criticizes the role of traditional adult leadership as being contrary to youth engagement, but suggests that the structure of YouMedia helps to foster leadership amongst the youths as well as create a more positive relationship between the adults and teens. Even the President of the United States has recognized the success of this program and has taken the lead to support the expansion of the program to other cities.

If we think of the mission of public education as providing learning opportunities to all young people and not only about supporting public schools, YouMedia represents some of the best of what public education has to offer in the 21st Century. The Obama administration has recognized this, and the Institute of Museum and Library Services recently announced that they would work with the MacArthur Foundation in scaling the YouMedia effort to thirty more libraries across the country. (Ito, 2011, p. 3)

Several bloggers have written posts about leadership, as well as writing about educators who have become leaders in the field. In a recent post, Tom Murray addresses several leaders of popular Twitter chats.

Recently, I pulled together six educators from around the country who are leaders in this area. Joe Mazza (@joe_mazza) and Dana Sirotiak (@sirotiak02) moderate #ptchat; Scott Rocco (@scottrrocco), Bill Krakower (@wkrakower) and Brad Currie (@bcurrie5) moderate #satchat; and Jerry Blumengarten (@cybraryman1) is a moderator of #edchat. The conversation below on the Power of Twitter Chats

was designed to share the value of this mode of professional development with other educators. (Murray, 2013, p. 1)

In another post, Josie Holford, the Head of School at Poughkeepsie Day School in NY writes about the leadership she encountered during a site visit to another school.

At Parker I met a terrific group of people who sparked with ideas, collegial energy and creative thinking. We worked on a few ideas together. I don't know what will come of any of them but with those intellectual resources on tap whatever Parker does will probably be something imaginative, exciting and true to the Parker tradition.

Thank you Parker people and thank you Meg for giving me the opportunity to experience a little of your school. (Holford, 2013, p. 1)

Often, bloggers address the topic of leadership head on in their writing. Principal Eric Sheninger wrote a blog post about "Qualities of Effective Principals" on his blog, which was posted on the Connected Principals site. Sheninger (2011) writes, "School improvement efforts rely heavily on quality leadership. Educational leaders are tasked with establishing a collective vision for school improvement and initiating change to spur innovation, ensure student learning, and increase achievement" (p. 1). He continues in his blog to address the specific qualities that school leaders must possess.

What do good principals do? The audience at the leadership institute identified what they perceived to be the top elements. These included the following items below where I have added some of my personal thoughts:

- <u>Great communicator</u>: Principals need to be able to communicate what the school is all about. School leaders don't always do the best in terms of epitomizing effective communication. In terms of evaluations, we can't keep telling teachers that they are doing good work when they are not. Being a direct communicator is often lost during discussions on teacher performance.
- <u>Difference maker</u>: Principals need to be able to keep the focus on important initiatives and culture characteristics that have an impact on student learning and achievement. They establish accountability measures to hold teachers and students accountable for learning. Great principals

- see solutions, not just problems.
- Risky, but not too risky: Principals have to be willing to try new things and have a mindset to keep trying until improvement is the end result. They need a backstop of support that allows them to fail in these efforts. The most effective decision makers take risks, but do not bet the farm or take quantum leaps without knowing the end result.
- Manage by walking around: Principals that consistently walk around know the students, can better identify areas where teachers can improve, and set the tone for practices to be emulated throughout the building. The human factor is extremely important. Great principals establish a positive school culture by treating people the way they would like to be treated. How we smile, say hello, and engage in conversations all are important factors in setting a positive tone.
- Address problems: Strong principals will do the hard, dissatisfying work associated with addressing and removing ineffective staff. This requires addressing problems head on with a positive attitude. When hiring new staff, principals need to go to great efforts to hire educators that align best with the vision of the school.
- <u>Cares about students and staff</u>: Effective principals never give up on kids and their support staff. They are the epitome of instructional leadership and will show teachers how to become more effective based on evaluative data. (Sheninger, 2011, pp.1-2)

Sheninger takes what he learned at a leadership conference and shares his thoughts with his blog audience. He then provides some parting words to inspire other leaders.

Now more than ever schools need great leaders. As the reform movement continues to swell across the country more eyes will be on the principal, as well as other district leaders, and their ability to ensure student learning and increase achievement. The task now at hand is to develop a plan on how to support principal effectiveness while developing an evaluation tool that will help us do the best job possible for the students that we serve. (Sheninger, 2011, p. 3)

Leibowitz (2012) writes about the leadership lessons she learned at an ISTE conference, while listening to Michael Fullan. "Michael Fullan, in true motion leader style,

Other school leaders share their leadership inspiration on their blogs. S.

motivated me (ok I was already motivated, but supported me) to shift my perspectives on the role of teacher and by extension the role of principal from facilitator of learning to activator of learning" (pp. 1-2). Similarly, George Couros reflects on presentations that he has attended at conferences. His blog post addresses what he learned from observing other leaders deliver keynote addresses at conferences.

Now for the great lessons that I have learned from others watching them speak. My brother Alec, who helped me get into speaking, showed me the power of visuals and media to supplement ideas in a talk and was a great way to engage the audience.

Dean Shareski taught me that is important to empower the audience to do something great, not for them to feel lesser in their work.

Jenny Magiera showed me that laughter and learning go hand-in-hand and it is way easier to connect people t with an idea when they are smiling. I honestly could not tell you much about their content, because in reality, I feel the people that I have listed talk about many similar things. That being said, all of those lessons can apply to any position, whether you are a speaker, principal, or teacher, or a combination of any of those. There is a lot to be learned even when sometimes we act like we have seen this all before. (Couros, 2013b, pp. 2-3)

In a separate blog post, Couros writes about the value of leadership and the focus on in seeking out the best ideas instead of always deciding everything themselves.

When these spikes are created, leaders have to be comfortable that great ideas can come from anyone, anywhere and at any time. **The focus for leadership should not be on** *their ideas***, but the** *best ideas***.** This process also often creates strong influencers, that may not have any formal leadership position, yet have tremendous pull with others through their sharing of ideas. (Couros, 2013a, pp. 3-4)

Couros continues to discuss the power of sharing ideas and the important role of school leaders in facilitating this type of knowledge sharing.

In education, the focus has to move from distinct roles, to the idea that everyone can be both a teacher and a learner. Organizations, as a whole, should model what they expect from students on a micro level; that they are willing to learn and grow. With a focus on sharing on a mass scale, ideas often come to the forefront, and not necessarily people (although people that either *have or share* the best ideas will stick out). As we tell our students the day they walk into kindergarten,

"You need to share," this should also be the focus for organizations that are looking to move forward and create innovation. Sharing should then not be the exception, but the default. (Couros, 2013a, p. 4)

He concludes his post with a discussion about the pros and cons of developing leadership from within an organization with bringing in fresh ideas from outside an organization.

Many large organizations have the belief that leadership should always be developed within—which it should be to an extent—but there has to be a balance of bringing in an outside view. When you have people that have been trained within a system, by the system, you are more likely to repeat the same patterns that have always existed. As Jamie Notter and Maddie Grant share, "Innovation has an inherent distaste for best practices because it is about new solutions, not copying existing solutions." (Couros, 2013a, p. 4)

Couros believes that in order for organizations to bring innovative ideas and practices, they need to look outside of themselves and their current practices for inspiration.

Couros models this by engaging on social media and sharing his ideas and learning from others.

On several of the Twitter chats that this researcher analyzed, the topic of leadership was addressed explicitly during the chat. Also, many of the educators modeled leadership through their tweets. There are examples of both formal and informal leadership on these chats. During the #techcoach chat, one participant talks about being an informal leader.

Krissy Venosdale @venspired@MsGraves214 I don't have a title, so I'm just the "Geek" who will help out with whatever tech issue is needed. :) #techcoach7:53 PM - 30 Aug 2012. (Russell, 2012, p. 57)

Sometimes during chats, the leaders are the moderators, "**Tim O'Connor** @toconnor851 @ShawnMcCusker Thanks for moderating Shawn! I learned a lot! #1to1techat 9:04 PM - 4 Sep 2013" (McCusker, 2013, pp.119-120). At other times, the

leaders are those that are participating in the chats, leading by sharing ideas and resources and inspiring others. "**Kyle Beatty** @kylefcs Good job, Shawn! @ShawnMcCusker This chat goes by so fast. Love the side conversations tonight. #1to1techat 9:04 PM - 4 Sep 2013" (McCusker, 2013, pp. 119-120). These "side conversations" that Beatty refers to are the informal leadership examples during chats. For example:

Kathy Bellew @kat_byte A3 Ss need to know that everything on the Internet is not fact. Need to disseminate and evaluate. Ts can lead #1to1techat 8:35 PM - 4 Sep 2013" (McCusker, 2013, p. 71)

and

Paul Solarz @PaulSolarz A4 - Each ePortfolio entry we do has ?s asking Ss to analyze & reflect on their learning. My pretend one: http://psolarz.weebly.com/0---mr-solarz-sample-portfolio.html ... #1to1techat 8:49 PM - 4 Sep 2013. (McCusker, 2013, p. 93)

Some chat participants are leaders in their field: "S. Kwesi Rollins @Kwesibaby58 I'm Kwesi Rollins, Director of Leadership Programs @IELconnects. Washington, DC. http://www.iel.org. #ptchat 8:03 PM - 18 Sep 2013" (Mazza, 2013, p. 8) and "Todd @ToddWhitaker The Friday Focus was the best leadership tool I ever used and one of the cornerstones of it was staff morale. #satchat 6:54 AM - 6 Oct 2012" (Currie, 2012, p. 43). Todd Whitaker is a published author and leader in the field of education. Though not the leader of this chat, Whitaker shares his thoughts and experiences with the other chat participants, thus acting as a leader by participating with the others. Other chat participants demonstrated leadership by sharing ideas and resources, too. For example:

Dana Sirotiak @Sirotiak02 Mommy Time Management Tips http://www.pinterest.com/pin/234539093067185030/ ... via @pinterest #ptchat

8:47 PM - 18 Sep 2013 and **Dana Sirotiak** @Sirotiak02 5 Time Management Tips for Busy Families http://www.pinterest.com/pin/184295809721122865/ ... via @pinterest #ptchat 8:47 PM - 18 Sep 2013. (Mazza, 2013, p. 114)

Others give advice for how students can become better learners, thereby leading the instructional improvement effort.

Shawn McCusker @ShawnMcCusker@classroomtools A1 and by extension, knowing how to access and analyze is protection against manipulation wouldn't you say? #1to1techat 8:13 PM - 4 Sep 2013. (McCusker, 2013, p. 27)

Bonnie Strejc @MrsStraitsClass A2: kids take ownership of their learning instead of being passive bystanders #1to1techat 8:24 PM - 4 Sep 2013. (McCusker, 2013, p. 50)

During the #1to1techchat, a few educators discussed how to improve questioning techniques to engage students in learning. One suggests that students should be the ones developing the questions, turning the students into educational leaders. One chat participant even refers to the moderator as Socrates!

Nathan Stevens @nathan_stevens @ShawnMcCusker alt final? Question, students show be creating, teachers asks question to guide students. Feed on that Socrates #1to1techat 8:53 PM - 4 Sep 2013. (McCusker, 2013, p. 101)

Shawn McCusker @ShawnMcCusker @nathan_stevens thats the trick. We should have them constructing both the questions and the activities. #1to1techat 8:56 PM - 4 Sep 2013. (McCusker, 2013, p. 106)

Sam Blanco @SamBlancoBCBA @ShawnMcCusker @nathan_stevens Yes! Student involvement at each point. #1to1techat 8:57 PM - 4 Sep 2013. (McCusker, 2013, p. 107)

The systems and structures of formal and informal education on social media creates both formal and informal leaders. Sometimes these leaders write blog posts or moderate Twitter chats. Other times, they discuss the topic of leadership explicitly and still other times they are participants on social media, adding their voice to the

conversation and inspiring others to act. Each is a leader in his or her own right, contributing to their own education and the education of others.

Who Formally Facilitates?

The systems and structures of education on social media can lead to several people facilitating knowledge for others. These are educators who might ask questions during a chat or interact with participants. Often they will provide resources to others via links or blog posts of their own.

In his blog post "Leaders Strive to be Tomorrow...Today," Jimmy Casas, principal of Bettendorf High School in Iowa received 28 comments from fellow educators. These educators wrote responses to Casas' post and many received replies directly from Casas in the comments' section. Of the 28 comments, nine were replies directly from Casas to his readers' comments. In this blog post, Casas is facilitating the conversation, since all of the comments are directed to him and none of the commenters react to other people's comments. However, many of the commenters reply with comments that they plan to begin blogging themselves as a result of this post; therefore they will become the leaders and facilitators of their own blogs. One particular post is from Principal Dianne Holmes:

Dianne Holmes, Principal November 17, 2013 at 8:43 AM Jimmy

Thanks for a great post. It has inspired me to be more faithful to my blog to reflect and write more. Dianne

Reply

Jimmy Casas November 17, 2013 at 9:27 AM

Thank you for giving it a read Dianne! Keep writing and telling your story. Go be

great today! - jimmy (Casas, 2013b, p. 2)

At the YouMedia center in Chicago, teens from around the city have begun to informally facilitate learning and participation in education. In roles that are often reserved for adults, teens are inspiring and mentoring their peers.

Too often, we assume that socializing and fun is hostile to academics, and that "peer pressure" pulls kids away from learning. Responsible adults see their role as limiting access to games and entertainment, and drawing kids away from their peers in order to insist on attention to schoolwork and learning. In YouMedia, you'll see a very different dynamic. Young people are invited to hang out, play with games, and mess around informally with technology. They deep dive into media literacy projects that are supported by knowledgeable peers and mentors. Engagement thrives when young people are allowed to experiment, socialize, and take ownership of the agenda; there's absolutely no reason why the content of that activity can't be adult-sponsored learning. When young people are supported in pursuing their own choices and interests, and when they are allowed to mobilize peer activity around those interests, suddenly socializing, fun, and peer pressure drive learning rather than detracting from it. (Ito, 2011, p. 3)

Knowledge can also be facilitated in the comments section of a blog. Readers who are responding to the blog post, adding their own thoughts and ideas and engaging in discussion with the author. The following exchange took place in the comments section of Bjerede's blog post about "Disrupting Pedagogy":

Heather Staker / November 5, 2013

Thanks for this thoughtful post. I'm glad you find the work on hybrid theory helpful and agree that many schools are using online learning to sustain their traditional model, rather than to disrupt it into a new way of learning that is personalized and student-centered. Disrupting Class predicts two waves of disruption. The first wave entails the traditional course format migrating to an online medium. But the second is the one that excites us all the most I think, and that is when the learning model itself is disrupted. To your point, the current metrics of success are not necessarily geared toward channeling this disruption to its highest quality. States have a lot of work to do to define and measure student outcomes in ways that encourage the best programs to be developed and grow.

Marie Bjerede / November 6, 2013

@Heather – thank you so much. I'm optimistic about the trajectory for technology and the potential for richer ways to measure student outcomes. It would be very interesting to collect a wider set of metrics to see how they correlate to different definitions of success in life, such as academic performance, college completion, salary, etc, and also to see how they correlate to the capacity of students to use the freedom of mastery-based learning and the power of high quality content to accelerate their education. It might be particularly illuminating to get at the non-cognitive measures that precede and underlie academic achievement – the popular literature has proposed numerous candidates (from grit to focus to disposition) over the past five years or so with citations of research that imply a host of formal metrics and interventions. (Bjerede, 2013, p. 3)

In this example, both the original author and commentator are exchanging ideas and facilitating knowledge both for each other and for the wider audience, who can access these comments on the public blog post.

In his blog post "Qualities of Effective Principals," Eric Sheninger (2011) writes about school improvement efforts of leaders and acts as a facilitator of knowledge for the audience of his blog.

School improvement efforts rely heavily on quality leadership. Educational leaders are tasked with establishing a collective vision for school improvement and initiating change to spur innovation, ensure student learning, and increase achievement. (p. 1)

Similarly, Leibowitz, in her blog post reflecting on the ISTE conference, writes about the shift from facilitator to activator that Fullan discussed. By sharing these thoughts in her blog, Leibowitz is facilitating the acquisition of this knowledge and understanding to her audience.

Michael Fullan, in true motion leader style, motivated me (ok I was already motivated, but supported me) to shift my perspectives on the role of teacher and by extension the role of principal from facilitator of learning to activator of learning. (Leibowitz, 2012, pp. 1-2)

Couros (2013a) addresses this issue in his blog by discussing the impact that

people inside and outside of an organization can have on that organization. These facilitators exist in both education and the business world and their power is often rooted in the social networks to which they belong.

Jamie Notter and Maddie Grant identify these people and their impact in the business world: 'Social media has created influencers among people traditionally outside an organization's database of members or donors or customers. These are people whose activities and opinions can have tangible, measurable financial effects (good or bad); people on the periphery but who have social capital (i.e., trust) among their own networks. (p. 4)

Couros continues to address the topic of leadership in this blog post, discussing how everyone in the organization can facilitate learning for others.

In education, the focus has to move from distinct roles, to the idea that everyone can be both a teacher and a learner. Organizations, as a whole, should model what they expect from students on a micro level; that they are willing to learn and grow. With a focus on sharing on a mass scale, ideas often come to the forefront, and not necessarily people (although people that either *have or share* the best ideas will stick out). As we tell our students the day they walk into kindergarten, "You need to share," this should also be the focus for organizations that are looking to move forward and create innovation. Sharing should then not be the exception, but the default. (Couros, 2013a, p. 4)

Couros suggests that it is no longer just leaders by title or positional authority that can provide guidance and leadership for an organization, but that anyone in the organization can facilitate knowledge through sharing ideas and resources.

When these spikes are created, leaders have to be comfortable that great ideas can come from anyone, anywhere and at any time. **The focus for leadership should not be on** *their ideas***, but the** *best ideas***.** This process also often creates strong influencers, that may not have any formal leadership position, yet have tremendous pull with others through their sharing of ideas. (pp. 3-4)

Educators who participate in Twitter chats may not be the leader or moderator of the chat, but can still facilitate conversations and exchange of ideas by engaging in

#techcoach chat, educator Lisette Casey shares a resource with everyone in the chat about the SAMR model of technology integration, "Lisette Casey DE

@lisettecasey@danielle6849 are you familiar with the SAMR model
http://bit.ly/alh5UR #techcoach 7:41 PM - 30 Aug 2012" (Russell, 2012, p. 70). Other chat participants acknowledge their facilitator status at their schools: "Krissy Venosdale

@venspired@MsGraves214 I don't have a title, so I'm just the "Geek" who will help out with whatever tech issue is needed. :) #techcoach7:53 PM - 30 Aug 2012" (Russell, 2012, p. 57). Others realize that their role at school may be shifting due to changing demands and the introduction of more technology: "Chad Ackerson @chad_ackerson A5 I teach library half day now. With more tech coming, I see more time needed. Less teaching library more co-teaching in classes #techcoach 8:18 PM - 30 Aug 2012" (Russell, 2012, p. 23). Often roles may change from leader to facilitator due to the changing needs of the organization.

During one #PTchat, one participant introduced himself as a leader of an organization in Washington DC. Though not the moderator of the chat, he was certainly a facilitator of discussion and of knowledge sharing throughout the chat.

S. Kwesi Rollins @Kwesibaby58 I'm Kwesi Rollins, Director of Leadership Programs @IELconnects. Washington, DC. http://www.iel.org. #ptchat 8:03 PM - 18 Sep 2013. (Mazza, 2013, p. 8)

Similarly, Todd Whitaker's contribution to #SATchat was as a facilitator and not a leader, although he is a well-known author in the field of education. "**Todd** @ToddWhitaker The Friday Focus was the best leadership tool I ever used and one of the

cornerstones of it was staff morale. #satchat 6:54 AM - 6 Oct 2012" (Currie, 2012, p. 43).

Jerry Blumengarten is a well-known facilitator of knowledge and information.

Self-dubbed the Internet Librarian, @cybraryman1, as he is known on Twitter will often join live Twitter chats and share resources and information from his website. While Jerry is a leader on #edchat, the original educational Twitter chat, he acts as a facilitator on many other chats during the week.

Jerry Blumengarten @cybraryman1 @LawfulTrainer Have your children help make dinner. (math skills). My Cooking pg: http://www.cybraryman.com/cooking.html (Cooking with kids) #ptchat 8:44 PM - 18 Sep 2013 (Mazza, 2013, p. 109)

During #satchat, two participants facilitated a conversation about how best to reward and recognize staff. One suggested a special parking reward. Their exchange follows:

Jim Brown @jbrowncwc #satchat we select a teacher of the month and i give them my parking space for the month. They love it 7:11 AM - 6 Oct 2012

Nancy Carroll @ncarroll24 @jbrowncwc Parking space is a great idea. We used to do this but stopped. It's the little things that make a difference. #satchat 7:12 AM - 6 Oct 2012 (Currie, 2012, pp. 84-86)

On the #1to1techchat, there was an extended exchange between chat participants, each sharing ideas and resources, facilitating the conversation and knowledge between them.

Their conversation is below:

Bill Chapman @classroomtools@Steph_SMac & a great deal of it is propaganda. Knowing how to evaluate the validity of information is critical! @ShawnMcCusker #1to1techat 8:12 PM - 4 Sep 2013. (McCusker, 2013, p. 25)

Shawn McCusker @ShawnMcCusker@classroomtools A1 and by extension, knowing how to access and analyze is protection against manipulation wouldn't you say? #1to1techat 8:13 PM - 4 Sep 201. (McCusker, 2013, p. 27) **Bill Chapman** @classroomtools@Steph_SMac @toconnor851 & on what evidence is it based, & is that evidence verifiable? Also are conclusions from it

reasonable? #1to1techat 8:16 PM - 4 Sep 2013. (McCusker, 2013, p. 31)

Brett Hoffman @hoffmanteambretNot always. teach S to use as a base source to get deeper, follow citationsRT @nathan_stevens: Misinformation = Wikipedia #1to1techat 8:19 PM - 4 Sep 2013. (McCusker, 2013, p. 38)

Paul Solarz, an elementary school teacher from Illinois also facilitated the chat by sharing resources with the group: "Paul Solarz @PaulSolarz A4 - Each ePortfolio entry we do has ?s asking Ss to analyze & reflect on their learning. My pretend one: http://psolarz.weebly.com/0---mr-solarz-sample-portfolio.html ...#1to1techat 8:49 PM - 4 Sep 2013" (McCusker, 2013, p. 93).

Finally, in another exchange between educators on the #1to1techchat, two participants facilitated the conversation along with the chat moderator, Shawn McCusker.

Nathan Stevens @nathan_stevens @ShawnMcCusker alt final? Question, students show be creating, teachers asks question to guide students. Feed on that Socrates #1to1techat 8:53 PM - 4 Sep 2013. (McCusker, 2013, p. 101)

Shawn McCusker @ShawnMcCusker @nathan_stevens that the trick. We should have them constructing both the questions and the activities. #1to1techat 8:56 PM - 4 Sep 2013. (McCusker, 2013, p. 106)

Sam Blanco @SamBlancoBCBA @ShawnMcCusker @nathan_stevens Yes! Student involvement at each point. #1to1techat 8:57 PM - 4 Sep 2013. (McCusker, 2013, p. 107)

Nathan Stevens even suggests an alternative chat question, a task usually reserved for the moderators of the chat.

These chat participants and the bloggers use the systems and structures of education on social media to facilitate knowledge and information. They engage in discussions, ask questions and share resources. While some educators are leaders in their schools and on social media, others act as facilitators, engaging their peers in knowledge

sharing and the exchange of ideas on Twitter and blogs.

Process for Dissemination, Transcription and Interpretation

The systems and structures of formal and informal education and discourse on social media can be used to relay information. These ideas are transcribed, interpreted, and then disseminated via websites, archives of chats, tweets about the archives, blog posts about chats and tweets about blog posts. This creates a reciprocity between the vehicles of social media, blending one format into the other. Sometimes a conversation will begin on one platform and then carry over to another platform. An exchange on Twitter will sometimes inspire a blog post, or, sometimes a blog post link is shared as a resource during a Twitter chat. The comments section of a blog is also a place where the writer and the readers can interact and the blog post itself can be interpreted.

Principal Jimmy Casas of Bettendorf, Iowa writes a blog at jimmycasas.blogspot.com called *Passion...Purpose...Pride*. This blog is available to read online and is also linked to his Twitter profile at https://twitter.com/casas_jimmy for which he has 6,301 followers as of Saturday January 11, 2014. Casas is also listed as a contributing writer on the Connected Principals Blog here:

http://connectedprincipals.com/contributors/jimmy-casas where often his posts are crossposted between his personal blog and this collaborative blog site. When Casas writes a blog post or sends a tweet, his many followers can access his writing and other resources that he shares with them via the system of social media. This researcher was able to navigate to Casas' blog site in order to read past blog posts, which were all readily available with links on his site: http://jimmycasas.blogspot.com/.

When readers comment on a blog post, they are responding to what was shared on the blog, and will sometimes write about how they plan to disseminate this information to others. This can be seen on Ito's blog post "When Youth Own the Public Education Agenda."

Sat, Feb 12, 2011, @ 14:04

1- Evonne Heyning

Very helpful, thanks for writing such a comprehensive study on digital youth habits and trends. I'll be sharing a bit of this info with the Gov2.0LA leaders meeting this weekend as we talk about youth and mobile engagement. (Ito, 2011, p. 4)

On Marie Bjerede's post on "Disrupting Pedagogy," a comment was posted by Heather Staker of the Christensen Institute. Staker's comment serves to further interpret Bjerede's post and add additional information. Their exchange (below) exemplifies the interaction between author and audience.

Heather Staker / November 5, 2013

Thanks for this thoughtful post. I'm glad you find the work on hybrid theory helpful and agree that many schools are using online learning to sustain their traditional model, rather than to disrupt it into a new way of learning that is personalized and student-centered. Disrupting Class predicts two waves of disruption. The first wave entails the traditional course format migrating to an online medium. But the second is the one that excites us all the most I think, and that is when the learning model itself is disrupted. To your point, the current metrics of success are not necessarily geared toward channeling this disruption to its highest quality. States have a lot of work to do to define and measure student outcomes in ways that encourage the best programs to be developed and grow.

Marie Bjerede / November 6, 2013

@Heather – thank you so much. I'm optimistic about the trajectory for technology and the potential for richer ways to measure student outcomes. It would be very interesting to collect a wider set of metrics to see how they correlate to different definitions of success in life, such as academic performance, college completion, salary, etc, and also to see how they correlate to the capacity of students to use the freedom of mastery-based learning and the power of high quality content to accelerate their education. It might be particularly illuminating to get at the non-

cognitive measures that precede and underlie academic achievement – the popular literature has proposed numerous candidates (from grit to focus to disposition) over the past five years or so with citations of research that imply a host of formal metrics and interventions. (Bjerede, 2013, p. 3)

Often an educator will write a blog post after attending a conference or visiting another school. They seek to disseminate their newly gained knowledge to their blog audience. This process can be seen in several of the blogs that this research accessed, including posts by Holford, Leibowitz and Couros. From Holford's visit to Parker School:

At Parker I met a terrific group of people who sparked with ideas, collegial energy and creative thinking. We worked on a few ideas together. I don't know what will come of any of them but with those intellectual resources on tap whatever Parker does will probably be something imaginative, exciting and true to the Parker tradition.

Thank you Parker people and thank you Meg for giving me the opportunity to experience a little of your school. (Holford, 2013, p. 1)

From Leibowitz's attendance at ISTE 2012:

The definition of a motion leader is one who motivates the unmotivated in a way that the unmotivated then thank them for, Michael Fullan, ISTE Conference, 2012, Session Title: Stratosphere: Integrating Technology, Pedagogy and Change Knowledge (Leibowitz, 2012, p. 1)

Michael Fullan activated my learning even further, leaving me not only with a direction, but also with some concrete steps as to how to move forward. And, again, it's not about the technology. Wisdom I gleaned included:

- Offer respect to others before it is earned
- Engage in impressive empathy, meaning empathy even for those who stand in your way
- Invest in capacity building human capital and social capital
- Build social contagion
- Eliminate non-essentials
- Focus on a small number of ambitious goals. (Leibowitz, 2012, p. 2)

From Couros' (2013b) attendance at several keynote addresses:

Now for the great lessons that I have learned from others watching them speak. My brother Alec, who helped me get into speaking, showed me the power of

visuals and media to supplement ideas in a talk and was a great way to engage the audience.

Dean Shareski taught me that is important to empower the audience to do something great, not for them to feel lesser in their work.

Jenny Magiera showed me that laughter and learning go hand-in-hand and it is way easier to connect people t with an idea when they are smiling. (pp. 2-3)

A reader comments on the same post by Couros (2013b), showing his interpretation of the blog post.

William D. Parker December 6, 2013 at 1:34 am Good stuff. I feel the same way about learning. Whether I am sitting in a waiting room, buying something at the store, watching a movie, or observing a teacher, I find I myself trying to understand how each of these environments is serving others. It is thrilling to still be a student, no matter our stage in life. (p. 4)

In another post, Couros discusses the importance of the dissemination of knowledge to educate others. The obligation we have as educators the share via social media, our learning and understanding, to engage with other educators.

If your job is to create a culture that embraces any type of learning, how much impact does it have when we only see one person at a time and share it with no one? Sitting down and taking the time to write a blog, tweet some ideas, or use any other online community is not only beneficial in the reflection process, but also brings ideas to a larger community. (Couros, 2013a, p. 2)

During several of the Twitter chats analyzed during this research, participants disseminated information and ideas to others through their tweets. Some contained ideas embedded directly into the tweet, others shared links to other resources. For example: "Lisette Casey DE @lisettecasey@danielle6849 are you familiar with the SAMR model - http://bit.ly/alh5UR #techcoach 7:41 PM - 30 Aug 2012" (Russell, 2012, p. 70) and another example: "Dana Sirotiak @Sirotiak02 Mommy Time Management Tips

http://www.pinterest.com/pin/234539093067185030/ ... via @pinterest #ptchat 8:47 PM
- 18 Sep 2013" (Mazza, 2013, p. 114). "Dana Sirotiak @Sirotiak02 5 Time

Management Tips for Busy Families

http://www.pinterest.com/pin/184295809721122865/ ... via @pinterest #ptchat 8:47 PM

Often, within the course of the chat, participants would comment on how they interpreted the information and how they planned to implement the new ideas after the chat. For example: "Craig Badura @mrbadura Going to try and night called "Tech Tailgates" to inform community about Integrationist position, what I do. #techcoach 8:24 PM - 30 Aug 2012" (Russell, 2012, p. 16). "Craig Badura @mrbadura Going to run "Tech Tailgates from 5:30-630 before last 3 home football games. #techcoach 8:24 PM - 30 Aug 2012" (Russell, 2012, p. 15).

Chat participants will also dig deeper into a topic, interpreting the information on a higher level and discussing implications for students and teachers. For example:

Brett Hoffman @hoffmanteambretNot always. teach S to use as a base source to get deeper, follow citations RT @nathan_stevens: Misinformation = Wikipedia #1to1techat 8:19 PM - 4 Sep 2013 (McCusker, 2013, p. 38).

and

- 18 Sep 2013" (Mazza, 2013, p. 114).

Kathy Bellew @kat_byte A3 Ss need to know that everything on the Internet is not fact. Need to disseminate and evaluate. Ts can lead #1to1techat 8:35 PM - 4 Sep 2013. (McCusker, 2013, p. 71)

Often during chats, the moderators and participants will discuss explicitly how social media can be used to transcribe, disseminate and interpret information to other educators. Both Mazza and McCusker share links to their chat archives during the chats.

Joe Mazza @Joe_Mazza All #PTchat archived conversations can be found here at @IELconnects http://iel.org/ptchat/archives.html ... 8:58 PM - 18 Sep 2013. (Mazza, 2013, p. 136)

Joe Mazza @Joe_Mazza Those asking about the NEW #PTchat Radio segments -> We have 4 in the cue. Stay tuned to @BAMRadioNetwork who are publishing shortly 8:59 PM - 18 Sep 2013 (Mazza, 2013, p. 138).

and

Shawn McCusker @ ShawnMcCusker For those of you new to the chat we keep our archives here

https://docs.google.com/document/d/1onmwHblRlbPGVoSYgp0fqtQm0Kk6L9N 3ixjihH9rt-c/edit ... #1to1techat 8:32 PM - 4 Sep 2013. (McCusker, 2013, p. 65)

During #satchat, the topic of social media as a vehicle for dissemination of information is mentioned specifically by both a moderator and a participant.

Leslie Esneault @leshhs1A2: SM has made it even easier to spread the word about teacher/student achievement and improvement -twitter shouts and FB brags. #satchat 6:50 AM - 6 Oct 2012. (Currie, 2012, p. 34)

Bill Krakower @wkrakower A2 We can now share what students and staff do with one another through SM. It is easier to share great ideas with one another #satchat 6:51 AM - 6 Oct 2012. (Currie, 2012, p. 36)

Sometimes participants wonder which tool is best to follow a chat. During #1to1techchat, moderator Shawn McCusker mentions Tweetdeck as a solution that he favors.

Bonnie Strejc @MrsStraitsClass@ShawnMcCusker thanks! Is there something better than tweetchat to keep up? #1to1techat 8:07 PM - 4 Sep 2013. (McCusker, 2013, p. 14)

Shawn McCusker @ShawnMcCusker@MrsStraitsClass Tweetdeck is my preferred tool. #1to1techat 8:07 PM - 4 Sep 2013. (McCusker, 2013, p. 15)

Finally, during an exchange between three educators on #1to1techchat, they discussed the movement of education from physical to virtual spaces and resources and

how social media and the Internet have allowed for wider access and dissemination of information.

Bill Chapman @classroomtools A2 - Do you remember life before search engines? Finding info then was very time consuming - indexes, trips to libraries, etc. #1to1techat 8:28 PM - 4 Sep 2013. (McCusker, 2013, p. 58)

Sam Blanco @SamBlancoBCBA@classroomtools Though I do still feel nostalgic for card catalogues... #1to1techat 8:28 PM - 4 Sep 2013

Deb Socia @dsocia@classroomtools Readers' Guide to Periodicals, Card catalogues, encyclopedias... #1to1techat 8:29 PM - 4 Sep 2013

Bill Chapman @classroomtools@SamBlancoBCBA There was actually a huge battle in SF when the public library decided to get rid of theirs. #1to1techat 8:29 PM - 4 Sep 2013. (McCusker, 2013, pp. 59-61)

Blogs and Twitter chats have both contributed to the wider dissemination, transcription and interpretation of knowledge and ideas. These vehicles of social media allow educators to access, read and interpret information that they might not have had access to otherwise. Readers and chat participants can interact with blog writers and with each other, can interpret and respond to new ideas and can share resources with each other, all through the blog or the twitter chat. The chat archives serve as a transcript of a real time event, capturing the questions, answers and exchanges between educators that took place in real time during the chat. The archive itself then provides access to other educators who were not primary participants, this further disseminating the information.

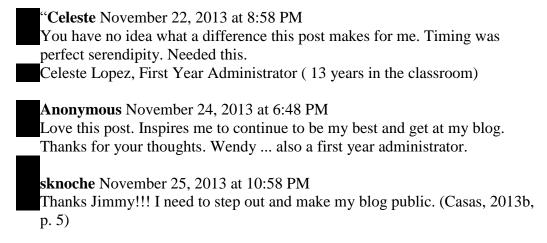
Resultant Change/Spheres of Influence for the Individual (are people discussing what they learned? How they will apply it?)

The systems and structures of formal and informal education on social media can lead to changes for individual educator and educational leaders. By engaging in dialogue

online, via blogs and Twitter, educators influence others and are influenced by others.

Depending on the size of their social network and number of followers, these educators can share ideas and resources to a global audience.

In his blog post "Leaders Strive to be Tomorrow...Today," Jimmy Casas, principal of Bettendorf High School in Iowa receives 28 comments from fellow educators. Several of these comments mentioned the educators' plans to start or make public their own writing as a result of Casas' post. Three comments in particular mention the resultant change for the individuals reading this post:



As a result of Casas' blog post, other educational leaders were influenced to begin blogging about their experience as educators and administrators.

Jenna Shaw, in her blog post, "Tweeting in a Glass House," writes about how an experience she had on social media influenced her perspective as an educator and a blogger.

I am glad I saw this because it forced me to reflect upon what I was posting. It caused me to think twice before sending something out into the universe that could be hurtful. Even if the subject never reads the comment doesn't make it acceptable for me. It allowed me to ask myself, "If one of my students wrote this

comment about a peer, would it be hurtful?" That makes it pretty easy for me to decide whether or not to post.

I understand the temptation, and I have been guilty of it myself, but we need to be better than that. Especially if we want any hope of transferring digital citizenship to our students. (Shaw, 2013, p. 2)

Shaw is seeking to share this experience with her readers and influence their behavior as well. Later, in the comments section of her blog, Shaw and one of her readers share the following exchange. This dialogue demonstrates the influence that Shaw's post had on the individual reader.

Unknown June 30, 2013 at 9:04 PM

Thank you for sharing this ---

I always stop and wonder before I tweet something about the person next to me isit that what I want them to see if they were the next person to follow me on twitter.

As you state, I have seem our "professional learning network" be quite cruel as they chat about people nearby -- and I, like you, cringe.

True -- many times I wish to tweet exactly what my thoughts might be -- but then I remember "tweet people like you wish to be tweeted" and that helps. Thank you for posting this -- good to read!

Jennifer

Jenna Shaw July 11, 2013 at 11:44 AM

"Tweet people like you wish to be tweeted" is a fantastic motto! Thank you for sharing that. (Shaw, 2013, p. 2)

In their research study on the use of Twitter for professional development called "The End of Isolation," Alderton et al. (2011) described why educators connect on Twitter for professional learning and what influence that has on the individual.

Purpose for Twitter: The survey asked the participants to describe what they saw as their purpose for using Twitter. All of them responded that Twitter allows them to build connections with educators beyond those in their immediate vicinity. These connections are purposefully made as a way to find and share resources and

to provide and receive support. For example, Participant 8 stated, "My primary purpose is to connect with other teachers, so that I can learn from them and share resources that I find." Similarly, Participant 9 wrote, "I am the only biology teacher at my school. I use it [Twitter] as a means of obtaining advice, resources and collaboration I also use it to find out about new tech tools." Participant 6 also specifically explained that using Twitter helps her stay informed about her local community by following news organizations and local businesses. Participant 1 described how connecting with other educators helps to keep her informed: "I know that when a link comes through Twitter, it has caught the interest of likeminded professionals and people. That means it is likely to be of value to me. This process of information filtering saves me tons of time because I'm getting good information quickly---I'm using the network to sift through content for me. (p. 356)

The researchers also examined what benefit the educators perceived from their participation on Twitter. "In the survey, participants were asked how using Twitter has benefited them professionally. Four unique themes emerged from their responses:

Access to resources Supportive relationships Increased leadership capacity Development of a professional vision (Alderton et al, 2011, p. 360)

The study also included in what ways, specifically, the educators on Twitter were influenced by their participation.

Nine of the ten participants specifically described increased access to practical resources and ideas as a benefit. For example, Participant 8 stated, "I have been able to implement ideas from others in my own classroom, and share my own ideas which people have helped me improve." Similarly, Participant 2 wrote, "It's great to be able to connect with people who are useful resources. They can point me to activities, lessons, etc. that will directly impact my students." Participant 1 describes the importance of this type of networking in the face of decreasing school budgets: There isn't a week that goes by that I don't stumble across a resource and/or instructional strategy that I can use immediately in my classroom. Not a single week. The same resources and strategies would take me months to come up with or track down on my own. Considering the limited amount of time that I have for planning and professional development—which has been cut completely from our district's budget for next year—this kind of access to immediate, valuable information is amazing. (pp. 360-361)

Finally, they study examined the influence that their participation on Twitter had on their professional practice:

In addition to describing the perceived benefits of using Twitter, the researchers wanted to know if our participants could identify specific impacts that Twitter has had on their professional practice. To do this, the researchers included a critical event recall question (De Laat & Lally, 2003) on the survey. Nine of the ten participants described at least one tangible impact that their Twitter network has had on their teaching. The tenth participant, Participant 7, did not describe a specific critical event, but did provide an abstract explanation of how Twitter has impacted him. Three of the participants were able to identify specific web tools found via Twitter that they incorporated into their teaching, and three participants described activities that they either received or developed based on interactions with other educators on Twitter. Two participants described how interactions with educators on Twitter impacted the development of a course or program. Two participants also described how Twitter has lead to participation in professional development opportunities. One participant explained how an educator on Twitter helped her properly prepare materials for a laboratory activity. Finally, one participant described how Twitter lead to a collaborative project with students from a different school. (Alderton et al., 2011, p. 362)

This study clearly shows the influence that Twitter has on individual educators and their leadership and professional practice.

In her blog post reflecting on an ISTE conference, Leibowitz writes about the influence that one presenter, Michael Fullan had on her own educational leadership.

Michael Fullan, in true motion leader style, motivated me (ok I was already motivated, but supported me) to shift my perspectives on the role of teacher and by extension the role of principal from facilitator of learning to activator of learning. (Leibowitz, 2012, pp. 1-2)

Leibowitz continues in her post to describe some of the specific ways in which she was influenced by Fullan's presentation.

Michael Fullan activated my learning even further, leaving me not only with a direction, but also with some concrete steps as to how to move forward. And, again, it's not about the technology. Wisdom I gleaned included:

- Offer respect to others before it is earned
- Engage in impressive empathy, meaning empathy even for those who stand in your way
- Invest in capacity building human capital and social capital
- Build social contagion
- Eliminate non-essentials
- Focus on a small number of ambitious goals. (Leibowitz, 2012, p. 2)

George Couros, in his blog post "To Those That Have Heard Everything," reflects on how observing keynotes from other presenters has influenced him as an educator and as a keynote speaker.

Now for the great lessons that I have learned from others watching them speak. My brother Alec, who helped me get into speaking, showed me the power of visuals and media to supplement ideas in a talk and was a great way to engage the audience.

Dean Shareski taught me that is important to empower the audience to do something great, not for them to feel lesser in their work.

Jenny Magiera showed me that laughter and learning go hand-in-hand and it is way easier to connect people t with an idea when they are smiling. (Couros, 2013b, pp. 2-3)

I honestly could not tell you much about their content, because in reality, I feel the people that I have listed talk about many similar things. That being said, all of those lessons can apply to any position, whether you are a speaker, principal, or teacher, or a combination of any of those. There is a lot to be learned even when sometimes we act like we have seen this all before. (Couros, 2013b, p. 3)

In another blog post, "Embrace and Open Culture," Couros discusses the influence that sharing resources can have on individuals in an organization. By sharing experiences and observations, individuals can benefit from others' experience.

Within the previous posts in this series, *Embracing an open culture* is vital to the success of them all. Think of this process—one we often do in different areas of school: we have a coordinator or leader in some specific area that works one-on-one with individual teachers and they see things that others don't. (Couros, 2013a, p. 2)

The "open culture" to which Couros refers allows for greater access to information and therefore greater influence on more individuals in the organization who can learn from each other.

During a Twitter chat, the sphere of influence and resultant change for the individual is based on resources shared during the chat and interactions between moderators and participants. When responding to a chat question posed by a moderator, the participants share their ideas to the rest of the group. They may express how they were changed or how their ideas could influence others. For example, during #PTchat, posted the following response for handing extracurricular overload with children: "Gwen Pescatore @gpescatore25 A2: If youve a good line of communication with your child - simply listening to them. Let them choose activities. Not rocket science #ptchat 8:17 PM - 18 Sep 2013" (Mazza, 2013, p. 44).

During a chat, participants will sometimes comment on how they were influenced as individuals. During #1to1techchat, one participant mentions that this was her first Twitter chat:

Bonnie Strejc @MrsStraitsClass Hi everyone! bonnie from Illinois. First twitter chat :) #1to1techat 8:04 PM - 4 Sep 2013. (McCusker, 2013, p. 6)

Later in the same chat, Strejc shares how individual students can be influenced by 1:1 technology:

Bonnie Strejc @MrsStraitsClass A2: kids take ownership of their learning instead of being passive bystanders #1to1techat 8:24 PM - 4 Sep 2013. (McCusker, 2013, p. 50)

Other chat participants in the #1to1techchat reflect on the infleunce that this chat has had

on them as educators.

Ginny Moe @GinnyMoeRHSB @SamBlancoBCBA This is a great chat - the only one I am a regular for - I have learned A LOT #1to1techat 8:50 PM - 4 Sep 2013

Kathy Bellew @kat_byte Favorite every one! MT @SamBlancoBCBA: @ShawnMcCusker I'm a little overwhelmed by how many resources I've gained from this chat! #1to1techat 8:50 PM - 4 Sep 2013. (McCusker, 2013, p. 96)

Education on social media, whether formal or informal, can influence the educators who participate. These educators can then influence individual students, teachers and administrators in their learning communities. While there is shown to be an influence of and by individuals, there can also be an influence at the organizational level.

Resultant Change/Spheres of Influence for the Organization

The systems and structures of formal and informal education and discourse on social media such as blogs and Twitter can influence whole organizations and not just individuals. Their participation on social media inspires them to bring ideas and information back to their larger organization, whether that is a department, a school or a whole district. These people discuss the impact that their education on social media can have on their organization.

In his blog post "Leaders Strive to be Tomorrow...Today," Jimmy Casas, principal of Bettendorf High School in Iowa receives twenty eight comments from fellow educators. Several of these comments mention the influence that Casas' writing has had on their own leadership in their schools. This blog, therefore can act as a sphere of influence on the schools and districts of those reading and reacting to it. For example:

Andrew Sharos November 19, 2013 at 12:37 PM

Finally had a chance to read this and I must say, the twittersphere is a better place with your voice and your words. Wonderfully written, powerfully passionate, and inspiring to me as a "wanna-be leader!" Thanks for sharing Jimmy.

and

Don Miller December 8, 2013 at 6:51 AM

Great post Jimmy, I strive each and everyday to make a difference in my life and the lives of those around me, but the B3's are definitely there and do sap some of the energy. Thank you for reminding me to look past them and always seek to do better and be better. – Don. (Casas, 2013b, p. 5)

The teens involved in the YouMedia project through the Chicago Public Library were influenced by a city-wide reading project and then incorporated that project into their own work at YouMedia. In her blog post, Mimi Ito reflects on this organizational influence.

One example is the program they design around the Mayor's One Book One Chicago initiative, where Chicagoans are encouraged to read one book at the same time. Just last month, YouMedia organized a series of new media projects around Toni Morrison's *A Mercy*. During my visit to YouMedia, I was treated to a series of multimedia projects reflecting teens' interpretations and understanding of the novel. (Ito, 2011, p. 2)

Later, in the comments section of the blog post, a reader shares how this blog post will be shared to a larger organizational meeting later that week.

Comments Sat, Feb 12, 2011, @ 14:04 **1-** Evonne Heyning Very helpful, thanks for writing such a comprehensive study on digital youth habits and trends. I'll be sharing a bit of this info with the Gov2.0LA leaders meeting this weekend as we talk about youth and mobile engagement. (Ito, 2011, p. 4)

In a separate blog post entitled "Disrupting Pedagogy," Bjerede writes about the organization-wide shifts that must occur to improve instruction in schools.

Disrupting the structural elements of class, while necessary, is not sufficient to enable students to take ownership of their learning. Although many constraints

about seat time have been removed, students are still held back by the immaturity of available content and assessments. What is needed next is a disruption of pedagogy – the lecture-and-test (direct instruction) pedagogy is an artifact of the days when one teacher imparted facts and knowledge to tens or hundreds of students at once, a straightforward way to teach, but hardly the best way to learn. As education science knows, and as the best teachers find ways to practice, student learning needs to be authentic, have meaning, be social and based in experiences and needs to somehow be connected to what students already know in order for them to meaningfully understand. Great educators, regardless of the constraints placed on them, find ways to shift towards constructivist (or other authentic) practices, themselves disrupting teacher-proof curriculum in their rooms. This shift, subtle though it can be, is generally missing in digital learning technologies and is one of the key reasons that technology's impact on learning is often so limited. (Bjerede, 2013, p. 1)

In her post on "Tweeting in a Glass House," Jenna Shaw tries to convince her readers that it is time for an organization level shift in how we approach digital citizenship with students.

I am glad I saw this because it forced me to reflect upon what I was posting. It caused me to think twice before sending something out into the universe that could be hurtful. Even if the subject never reads the comment doesn't make it acceptable for me. It allowed me to ask myself, "If one of my students wrote this comment about a peer, would it be hurtful?" That makes it pretty easy for me to decide whether or not to post. I understand the temptation, and I have been guilty of it myself, but we need to be better than that. Especially if we want any hope of transferring digital citizenship to our students. (Shaw, 2013, p. 2)

In Eric Sheninger's blog post "Qualities of Effective Principals," he writes about how the qualities and actions of an effective leader can influence an entire organization.

What do good principals do? The audience at the leadership institute identified what they perceived to be the top elements. These included the following items below where I have added some of my personal thoughts:

• Great communicator: Principals need to be able to communicate what the school is all about. School leaders don't always do the best in terms of epitomizing effective communication. In terms of evaluations, we can't keep telling teachers that they are doing good work when they are not. Being a direct communicator is often lost during discussions on teacher performance.

- <u>Difference maker</u>: Principals need to be able to keep the focus on important initiatives and culture characteristics that have an impact on student learning and achievement. They establish accountability measures to hold teachers and students accountable for learning. Great principals see solutions, not just problems.
- Risky, but not too risky: Principals have to be willing to try new things and have a mindset to keep trying until improvement is the end result. They need a backstop of support that allows them to fail in these efforts. The most effective decision makers take risks, but do not bet the farm or take quantum leaps without knowing the end result.
- Manage by walking around: Principals that consistently walk around know the students, can better identify areas where teachers can improve, and set the tone for practices to be emulated throughout the building. The human factor is extremely important. Great principals establish a positive school culture by treating people the way they would like to be treated. How we smile, say hello, and engage in conversations all are important factors in setting a positive tone.
- Address problems: Strong principals will do the hard, dissatisfying work associated with addressing and removing ineffective staff. This requires addressing problems head on with a positive attitude. When hiring new staff, principals need to go to great efforts to hire educators that align best with the vision of the school.
- Cares about students and staff: Effective principals never give up on kids and their support staff. They are the epitome of instructional leadership and will show teachers how to become more effective based on evaluative data. (Sheninger, 2011, pp. 1-2)

By sharing his learning and reflection with his readers, Sheninger seeks to influence other school systems beyond his own. Similarly, Leibowitz, in her blog post, shares what she learned from attending an ISTE session with Michael Fullan influenced her leadership.

By writing this post, Leibowitz seeks to influence the organizations of other school leaders.

Michael Fullan, in true motion leader style, motivated me (ok I was already motivated, but supported me) to shift my perspectives on the role of teacher and by extension the role of principal from facilitator of learning to activator of learning. (Leibowitz, 2012, pp. 1-2)

Michael Fullan activated my learning even further, leaving me not only with a

direction, but also with some concrete steps as to how to move forward. And, again, it's not about the technology. Wisdom I gleaned included:

- Offer respect to others before it is earned
- Engage in impressive empathy, meaning empathy even for those who stand in your way
- Invest in capacity building human capital and social capital
- Build social contagion
- Eliminate non-essentials
- Focus on a small number of ambitious goals. (Leibowitz, 2012, p. 2)

In the comments section of George Couros' blog post, "To Those That Have Heard Everything," one reader responds to the post with a comment about how every member of the organization can influence the overall growth of students.

Barry *December 6, 2013 at 12:46 pm* Thank you for sharing your thoughts. I appreciate you mentioning how various people have impacted your growth as an educator and speaker. I encourage others to acknowledge the educators in our buildings, the ones we see every day, letting them know how they impact our growth as well. They need not be in the classroom to be educators...you may find them in the dining hall, sweeping the hallway, or driving the bus. Keep your eyes open, you may find a lesson in there... (Couros, 2013b, p. 4)

In his blog post, "Leading Innovative Change Series: Embrace and Open Culture,"

Couros states that it is through sharing information openly on social media that

organizations can truly benefit from the experiences of the individuals that are a part of
that organization.

If your job is to create a culture that embraces any type of learning, how much impact does it have when we only see one person at a time and share it with no one? Sitting down and taking the time to write a blog, tweet some ideas, or use any other online community is not only beneficial in the reflection process, but also brings ideas to a larger community. (Couros, 2013a, p. 2)

Couros continues in this post to discuss ways in which organizations are influenced by new ideas that are shared on social media.

Many schools are creating "mini-spikes" of innovation where geography is not a

factor, and sharing and learning can happen 24/7. Parkland School Division, a school district that is spread over a large geographic area spanning over 100 miles, uses the hashtag #psd70 to connect educators, students, parents, community, as well as to invite in educators from around the world to share their learning. This is a huge opportunity for a school district that has a school with less than 50 students, as well as places that are far from a major city. (Couros, 2013a, p. 3)

Couros also discusses how powerful it can be for an organization to connect people with resources and other people in order to help them improve education. It is through these connections that the entire organization can be elevated.

Sharing is also vital in creating connections. If you see something amazing with one teacher, and see potential for growth in another teacher, instead of being the sole bearer of knowledge and skill, why not look at ways of connecting the two? (Couros, 2013a, p. 2)

Couros details how individuals inside and outside of the organization can have an impact on the organization through social media.

Jamie Notter and Maddie Grant identify these people and their impact in the business world: 'Social media has created influencers among people traditionally outside an organization's database of members or donors or customers. These are people whose activities and opinions can have tangible, measurable financial effects (good or bad); people on the periphery but who have social capital (i.e., trust) among their own networks.' Notter and Grant. (Couros, 2013a, p. 4)

Couros argues that the entire organization participates in innovation.

In education, the focus has to move from distinct roles, to the idea that everyone can be both a teacher and a learner. Organizations, as a whole, should model what they expect from students on a micro level; that they are willing to learn and grow. With a focus on sharing on a mass scale, ideas often come to the forefront, and not necessarily people (although people that either *have or share* the best ideas will stick out). As we tell our students the day they walk into kindergarten, "You need to share," this should also be the focus for organizations that are looking to move forward and create innovation. Sharing should then not be the exception, but the default. (Couros, 2013a, p. 4)

Couros suggests that leadership and organizational change must not be limited to those

within the organization, but expanded beyond the organizations in order to infuse new ideas.

Many large organizations have the belief that leadership should always be developed within—which it should be to an extent—but there has to be a balance of bringing in an outside view. When you have people that have been trained within a system, by the system, you are more likely to repeat the same patterns that have always existed. As Jamie Notter and Maddie Grant share, "Innovation has an inherent distaste for best practices because it is about new solutions, not copying existing solutions." (Couros, 2013a, p. 4)

Couros mentions the School Administrator Virtual Mentor Program, #SAVMP, that he started in 2013. By creating an organization for school leaders to gather and exchange ideas using social media, Couros is influencing the organization which he created as well as the organizations to which each administrator belongs at their school or district.

Opportunities like the "School Admin Virtual Mentor Program" which brings mentorship to current and future administrators, gives the much needed outsider view to what we do in our organization (for free). If we want thinking outside of the box, we have to look outside of it by tapping into what social media can deliver. We often bring out the innovators within our organization, while also bringing innovators into our work. To create innovative practice within schools, we must go past an inward-only focus. (Couros, 2013a, p. 5)

Couros also mentions an example of organizational change in education that was modeled after changes in the entertainment industry.

These solutions may be fairly new to education, but other organizations have tapped into this opportunity. The entertainment industry, for example, which was staunchly against the notion of open and free sharing, sees the opportunity of tapping into passionate people to create something better. Instead of paying a ton of money to one person to create a new theme for Hockey Night in Canada, the Canadian Broadcasting Corportation (CBC) decided they would "crowdsource" the opportunity, and give people that are passionate about music the ability to participate in creating something powerful. The focus is on creating the "best," and with the myriad of options that this process (crowdsourcing) would create, you are more likely to find that. (Couros, 2013a, p. 5)

During Twitter chats, many educators share the influence that they have had on their school or district organization after participating in a chat. The ideas and resources that are shared during chats can be brought back to their home schools and implemented. "Danielle Hartman @danielle6849 @Matt_Arguello I just used it for new teacher training. It went great! #techcoach 8:02 PM - 30 Aug 2012" (Russell, 2012, p. 42). Some educators express frustration that they are trying to effect change in their districts but are met with resistance to the new ideas. "Eric Holshoe @mrholshoe #techcoach I've been trying to get my district to create the position. I show other teachers how to use their tech to its full potential.7:38 PM - 30 Aug 2012" (Russell, 2012, p. 73). One participant in #techcoach chat realizes the impact his work could have at a district level to effect change. "Eric Holshoe @mrholshoe @danielle6849 #techcoach #5 I want to do for my district what I do for my school. I could reach more teachers and ultimately more students. 8:19 PM - 30 Aug 2012" (Russell, 2012, p. 21). In the #1to1techchat, one participant shares how special education classes were having success trying a new idea. "Ginny Moe @GinnyMoeRHSB @SamBlancoBCBA Hey, wow! Some of our spec ed classes using them to great results. #1to1techat 8:06 PM - 4 Sep 2013" (McCusker, 2013, p. 10).

Later in the #1to1techchat, a few participants discuss the organizational change to libraries since the creation of digital resources.

Bill Chapman @classroomtools A2 - Do you remember life before search engines? Finding info then was very time consuming - indexes, trips to libraries, etc. #1to1techat 8:28 PM - 4 Sep 2013. (McCusker, 2013, p. 58)

Sam Blanco @SamBlancoBCBA@classroomtools Though I do still feel

nostalgic for card catalogues... #1to1techat 8:28 PM - 4 Sep 2013.

Deb Socia @dsocia@classroomtools Readers' Guide to Periodicals, Card catalogues, encyclopedias... #1to1techat 8:29 PM - 4 Sep 2013.

Bill Chapman @classroomtools@SamBlancoBCBA There was actually a huge battle in SF when the public library decided to get rid of theirs. #1to1techat 8:29 PM - 4 Sep 2013. (McCusker, 2013, pp. 59-61)

The systems and structures of education on social media can influence both individuals and entire organizations. By opening an organization to outsiders through social media, there are possibilities for information exchange, sharing of knowledge and new ideas. Couros and others argue that in order to innovate and improve, organizations must be open to these influences.

Public Opinion of the Discourse

The systems and structures of formal and informal education on social media such as blogs and Twitter are subject to the court of public opinion. This researcher wondered what has been written about Twitter and blogs in education? Are participants on Twitter chats or commenters on blog posts discussing that they like them or find them useful? Do these educators plan to participate again? Do the participants share their experience using social media for professional learning by telling others?

Bettendorf, Iowa High School principal Jimmy Casas writes a blog at jimmycasas.blogspot.com. In his blog post "Leaders Strive to be Tomorrow...Today," Casas receives 28 comments, including nine of his own replies to his commenters. All of the comments are positive and supportive in nature. The commenters express gratitude that Casas shared and published the post. One comment in particular reflects the public

opinion best:

Joan Young November 17, 2013 at 9:09 PM

Wow! You have shared so many important nuggets of wisdom here; one that really stands out for me: Excellence doesn't negotiate. Thank you for sharing your journey and leading by example. (Casas, 2013b, p. 4)

Mark Anderson, in his blog post, "Twitter & My PLN" discusses the public opinion of joining Twitter.

One of the most interesting things I learned about Twitter before I even tried it was that it is like Marmite. It polarises. I'm constantly amazed at how many people feel the need to criticise Twitter - it's superficial, it's useless, it's boring, you can't say anything useful in 140 characters, and so on... Never one to be influenced by the crowd, I signed up. I'll start with the conclusion. I have found more resources and got more useful advice for professional development in 3 months on Twitter than in the previous 5 years without it. I'll go further. The more I use it, the more useful it gets. David Carr, writing in the New York Times has written an excellent article describing the growing impact of Twitter and explaining why it is set to become part of the infrastructure of the Internet. (Anderson, 2011, p. 2)

In Carr's *New York Times* article from 2010, he describes the aspects of the Twitter structure that he most appreciates.

The expressive limits of a kind of narrative developed from text messages, with less space to digress or explain than this sentence, has significant upsides. The best people on Twitter communicate with economy and precision, with each element — links, hash tags and comments — freighted with meaning. Professional acquaintances whom I find insufferable on every other platform suddenly become interesting within the confines of Twitter. (Carr, 2010, p. WK1)

In Jenna Shaw's blog post, she describes one of the more negative ways that some people use Twitter, which could lead to an unfavorable public opinion.

So, I was browsing Twitter while I was on the plane ride home from San Antonio and I was pretty disheartened by what I was reading. Teachers, like, a lot of them, tweeting about their travels home. Tweeting, more specifically, about strangers around them. What they are wearing, eating, smell like, the stories they told. These posts were not nice and some of the statements were incredibly mean.

These unsuspecting people are traveling just like anyone else and they are being made fun of on public forums.

In school, we call this cyber bullying.

I make this point because I was watching comments made by adults traveling back from an educational technology conference; some were bloggers that I believe take digital citizenship seriously. They were making comments almost exactly like the comments I have seen make middle school girls cry. (Shaw, 2013, pp. 1-2)

In George Couros' blog post "To Those That Have Heard Everything," he describes how a presenter can be viewed unfavorably based on how they structure their presentation and engage their audience.

There are great elements of teaching and leadership in many keynotes/talks/ presentations, and if you think that you know all of the content being presented, you need to shift your focus. You can learn from the great speakers as well as the bad ones.

For example, I remember seeing a keynote at a conference who started off with saying something that was totally lost on the audience and was a great way to show he was smart, but he made the audience feel dumb. He lost them immediately. Because of that, I really try to focus on taking something complex and making it simple so that is relatable to people, especially in larger settings. (Couros, 2013b, p. 2)

In another post, Couros shares how public opinion and the opinions of those outside of an organization can have an effect on that organization because of the power of social media.

Jamie Notter and Maddie Grant identify these people and their impact in the business world: 'Social media has created influencers among people traditionally outside an organization's database of members or donors or customers. These are people whose activities and opinions can have tangible, measurable financial effects (good or bad); people on the periphery but who have social capital (i.e., trust) among their own networks.' Notter and Grant (Couros, 2013a, p. 4)

During Twitter chats, many educators make efforts to influence public opinion by sharing

their ideas and connecting with their community through social media. During the #techcoach chat, Tweeter Craig Badura shares a few ideas for sharing information with the wider community.

Craig Badura @mrbadura Going to try and night called "Tech Tailgates" to inform community about Integrationist position, what I do. #techcoach 8:24 PM - 30 Aug 2012. (Russell, 2012, p. 16)

Craig Badura @mrbadura If we don't tell our story, someone else is going to tell it. #techcoach 8:29 PM - 30 Aug 2012. (Russell, 2012, p. 10)

Craig Badura @mrbadura @lisettecasey It's a great opportunity to showcase awesome things happening at school as well. #techcoach 8:28 PM - 30 Aug 2012. (Russell, 2012, p. 10)

During the #PTChat, several educators publicly expressed their opinions about educational issues at various points in the discussion.

Josh Stumpenhorst @stumpteacher @Joe_Mazza Best way to balance academics and recreation is to allow kids to be kids at home and have no HW. #ptchat 8:00 PM - 18 Sep 2013. (Mazza, 2013, p. 1)

Lisa @lisaodavis Can't forget the social implications of doing/not doing sports for kids. #ptchat 8:26 PM - 18 Sep 2013. (Mazza, 2013, p. 68)

Mrs. Malespina @SOMSlibrary We glorify athletes not academics. Should be the other way around! #ptchat 8:29 PM - 18 Sep 2013. (Mazza, 2013, p. 74)

During #1to1techchat, two educators debate the value of Wikipedia, an online resource that is often the center of public debate in schools. Many educators question the validity and reliability of Wikipedia as a resource for research, since it is publically constructed.

Nathan Stevens @nathan_stevens Misinformation = Wikipedia #1to1techat 8:18 PM - 4 Sep 2013. (McCusker, 2013, p. 35)

Brett Hoffman @hoffmanteambret Not always. teach S to use as a base source to get deeper, follow citations RT @nathan_stevens: Misinformation = Wikipedia #1to1techat 8:19 PM - 4 Sep 2013. (McCusker, 2013, p. 38)

Finally, during the #1to1techchat, educators shared and discussed their memories of researching in libraries before the digital age. Their discussion leads to a mention of the people of San Francisco, who protested when the public library planned to remove its old fashioned card catalogue.

Sam Blanco @SamBlancoBCBA@classroomtools Though I do still feel nostalgic for card catalogues... #1to1techat 8:28 PM - 4 Sep 2013

Deb Socia @dsocia@classroomtools Readers' Guide to Periodicals, Card catalogues, encyclopedias... #1to1techat 8:29 PM - 4 Sep 2013

Bill Chapman @classroomtools@SamBlancoBCBA There was actually a huge battle in SF when the public library decided to get rid of theirs. #1to1techat 8:29 PM - 4 Sep 2013. (McCusker, 2013, pp. 59-61)

The systems and structures of education on blogs and Twitter can be polarizing in the court of public opinion. While many educators are passionate about their participation and contribution to the discourse on social media, others criticize and only point out the negatives. It is likely that for every blog post and tweet, there will be just as many opinions about their value to education.

What were the Obstacles to the Evolution of Public Acceptance and Validation?

Public opinion about the use of social media for education and professional development varies widely. There are many obstacles to the public acceptance and validation of the platform of blogs and Twitter for professional learning and discourse. These obstacles may come from within, such as a fear of trying something new, or may come from outside, due to a lack of understanding of the platform and the purpose in using a tool like Twitter to engage in professional discourse.

Bettendorf, Iowa High School principal Jimmy Casas writes a blog at

jimmycasas.blogspot.com. In his blog post "Leaders Strive to be Tomorrow...Today," Casas mentions his own hesitation about starting blogging a year prior to this post.

One year ago I created a blog and posted my first blog, entitled, "A Renewed Sense of Purpose" (http://tinyurl.com/pjrgds4). I will admit I was reluctant to write a post because, one, I did not believe I had anything to share that anyone would want to read and two, I was not very confident in my writing. One month prior I had sat down at dinner with @gcouros and @patrickmlarkin and together they both tried to convince me that I needed to share my story with others. For the next month, I continued to put off starting a blog, each time using the excuse that I would do it tomorrow. And of course, tomorrow became the next day and then the next day and so on. Why did I continue to find an excuse not to start? Simply put, I was scared. (Casas, 2013b, p. 1)

This fear could be seen as an obstacle for Casas and others to begin blogging, but, by overcoming his fear and starting this blog, Casas has modeled how educators can utilize the systems and structures of social media to learn together and exchange ideas. As a result of his presence on social media, specifically his blog at http://jimmycasas.blogspot.com/ and on twitter at https://twitter.com/casas_jimmy, Casas has expanded his impact to over 6,000 followers on Twitter and received recognition for his leadership in the field of education with a Bammy award and was named the 2012 Iowa Secondary Principal of the year (http://connectedprincipals.com/ contributors/jimmy-casas). Overcoming this obstacle and using social media for professional growth and learning was a significant feat for Casas.

Another obstacle to public acceptance and validation of innovative changes to education like social media is the hesitation to accept new ideas and products in the educational market.

So where are the great apps, digital content, tools, and services? Why do most educational apps either look like direct instruction or like drill that assumes direct

instruction has already taken place? There are two main reasons:

- 1. Technologists remember schooling as content transfer and test. They believe they are serving education when they make these two elements more efficient so they create more instructional videos and apps for drill some better than others.
- 2. Those who see the opportunity to improve teaching and learning by making it authentic call it constructivist, constructionist, connectivist, recontextualized, or what have you, the point is to make learning real regardless off the baggage such words quickly accumulate are faced with a relatively small market since school is pretty much a monopoly and at the moment, the metric of success for a digital tool is primarily whether or not it improves summative test scores. And the market outside of schools is comparatively small.

As a result, most edtech innovators are forced to look and behave like incumbents in order to get a foot in the door of institutional purchasing. Fortunately, the theory of hybrid innovation not only explains the obstacles to disrupting school, it also predicts ways in which innovative products can reach students. (Bjerede, 2013, p. 2)

Another obstacle to public acceptance is the love/hate relationship that some people have with social media.

One of the most interesting things I learned about Twitter before I even tried it was that it is like Marmite. It polarises. I'm constantly amazed at how many people feel the need to criticise Twitter - it's superficial, it's useless, it's boring, you can't say anything useful in 140 characters, and so on... Never one to be influenced by the crowd, I signed up. I'll start with the conclusion. I have found more resources and got more useful advice for professional development in 3 months on Twitter than in the previous 5 years without it. I'll go further. The more I use it, the more useful it gets. David Carr, writing in the New York Times has written an excellent article describing the growing impact of Twitter and explaining why it is set to become part of the infrastructure of the Internet. (Anderson, 2011, p. 2)

Yet another obstacle can be the misuse of social media. The actions of certain individuals that breach the ethics and morals of the profession of education. Jenna Shaw writes about this phenomenon in her blog post, "Tweeting in a Glass House."

So, I was browsing Twitter while I was on the plane ride home from San Antonio and I was pretty disheartened by what I was reading. Teachers, like, a lot of them,

tweeting about their travels home. Tweeting, more specifically, about strangers around them. What they are wearing, eating, smell like, the stories they told. These posts were not nice and some of the statements were incredibly mean. These unsuspecting people are traveling just like anyone else and they are being made fun of on public forums.

In school, we call this cyber bullying.

I make this point because I was watching comments made by adults traveling back from an educational technology conference; some were bloggers that I believe take digital citizenship seriously. They were making comments almost exactly like the comments I have seen make middle school girls cry. (Shaw, 2013, pp. 1-2)

Still others point to a lack of speed as an obstacle. Educators, such as George Couros, seek to effect change at a rapid pace and are frustrated by the rate at which organizations change. Public acceptance for change sometimes requires patience on the part of the innovative educators. Couros reflects, "My mentor would say to me when I was frustrated with what I sometimes felt was a slow pace by others was, 'not everyone is you'. Because something makes sense to me, it does not necessarily mean it is common practice for others" (Couros, 2013b, p. 2).

Couros points to fear of change that serves as an obstacle to many organizations acceptance of new and innovative ideas. "By opening what you do to outsiders, what people within an organization know as "best practice," often can show opportunities for growth in the way we do our work. This is often why so many leaders are afraid of this very thing. In that case, the ego of leadership seems to be more important than doing what is best for kids" (Couros, 2013a, pp. 4-5). Couros continues in his post to encourage this risk taking for leaders. "If your practices are amazing, sharing them with other educators gives them the opportunity to help more kids. If practices are weak, it

often brings in new ideas to help your kids. There is no loss in this situation for students, yet ego sometimes (often) gets in the way" (Couros, 2013a, p. 5).

Educators on Twitter chats share obstacles to public acceptance and validation as well. These obstacles can be availability of resources, expectations and shared beliefs of the community. In the #techcoach chat, educator Eric Holshoe expresses frustration that his role and reach is not expanded in his district. "Eric Holshoe @mrholshoe @danielle6849 #techcoach #5 I want to do for my district what I do for my school. I could reach more teachers and ultimately more students. 8:19 PM - 30 Aug 2012" (Russell, 2012, p. 21). During the #PTChat, educators discuss the expectations of the community and the pressure that this puts on student involved in extracurricular activities.

theASIDEblog @theASIDEblog Too often team sports put demands on kids to be superstars starting at age 5. Needs to be a balance. #ptchat 8:13 PM - 18 Sep 2013. (Mazza, 2013, p. 33).

Lisa @lisaodavis@theASIDEblog Does that come from the coaches? kids? parents? #ptchat 8:13 PM - 18 Sep 2013. (Mazza, 2013, p. 34)

theASIDEblog @theASIDEblog Repetitive stress injuries are on the rise because of constant athletic push on the young. #ptchat 8:14 PM - 18 Sep 2013. (Mazza, 2013, p. 35)

Later in the #PTChat, participants express the societal values that can act as obstacles for students.

Gwen Pescatore @gpescatore25 A2: If youve a good line of communication with your child - simply listening to them. Let them choose activities. Not rocket science #ptchat 8:17 PM - 18 Sep 2013. (Mazza, 2013, p. 44)

Lisa @lisaodavis Can't forget the social implications of doing/not doing sports for kids. #ptchat 8:26 PM - 18 Sep 2013. (Mazza, 2013, p. 68)

Finally, skepticism and a nostalgia for the past can both act as obstacles to public acceptance.

Nathan Stevens @nathan_stevens Misinformation = Wikipedia #1to1techat 8:18 PM - 4 Sep 2013. (McCusker, 2013, p. 35)

Sam Blanco @SamBlancoBCBA@classroomtools Though I do still feel nostalgic for card catalogues... #1to1techat 8:28 PM - 4 Sep 2013

Deb Socia @dsocia@classroomtools Readers' Guide to Periodicals, Card catalogues, encyclopedias... #1to1techat 8:29 PM - 4 Sep 2013

Bill Chapman @classroomtools@SamBlancoBCBA There was actually a huge battle in SF when the public library decided to get rid of theirs. #1to1techat 8:29 PM - 4 Sep 2013. (McCusker, 2013, pp. 59-61)

Anything new has the potential to be met with obstacles. These obstacles can be in the form of societal values, norms, public opinion and existing systems and structures in education. While the obstacles may seem insurmountable, many educators have found success on social media as a system and structure for education. Evidence of public acceptance and validation of social media as a tool for education can be seen on blog posts, in comments sections and during Twitter chats.

What were the Enhancers to the Evolution of Public Acceptance and Validation?

There are also enhancers to the public acceptance and validation of the systems and structures of formal and informal education on social media. One example is the partnership between the City of Chicago and the YouMedia program at the Chicago Public Library.

One example is the program they design around the Mayor's One Book One Chicago initiative, where Chicagoans are encouraged to read one book at the same time. Just last month, YouMedia organized a series of new media projects around Toni Morrison's *A Mercy*. During my visit to YouMedia, I was treated to a

series of multimedia projects reflecting teens' interpretations and understanding of the novel. (Ito, 2011, p. 2)

Educators also describe the benefits of using social media for education and professional development. In Alderton et al.'s (2011) research study, they found that educators found social media, specifically Twitter, as a beneficial tool for professional development.

Nine of the ten participants specifically described increased access to practical resources and ideas as a benefit. For example, Participant 8 stated, "I have been able to implement ideas from others in my own classroom, and share my own ideas which people have helped me improve." Similarly, Participant 2 wrote, "It's great to be able to connect with people who are useful resources. They can point me to activities, lessons, etc. that will directly impact my students." Participant 1 describes the importance of this type of networking in the face of decreasing school budgets: There isn't a week that goes by that I don't stumble across a resource and/or instructional strategy that I can use immediately in my classroom. Not a single week. The same resources and strategies would take me months to come up with or track down on my own. Considering the limited amount of time that I have for planning and professional development---which has been cut completely from our district's budget for next year---this kind of access to immediate, valuable information is amazing. (pp. 360-361)

Mentorship of educational leaders to help them overcome obstacles can act as enhancers, too. "My mentor would say to me when I was frustrated with what I sometimes felt was a slow pace by others was, 'not everyone is you'. Because something makes sense to me, it does not necessarily mean it is common practice for others" (Couros, 2013b, p. 2).

Communication can also be an enhancer for public acceptance and validation of social media as a system and structure for education. Districts who utilize hashtags to connect learning and bridge school who may be geographically separate. The sense of community that this creates can lead to public acceptance of the system for professional

growth and learning.

Many schools are creating "mini-spikes" of innovation where geography is not a factor, and sharing and learning can happen 24/7. Parkland School Division, a school district that is spread over a large geographic area spanning over 100 miles, uses the hashtag #psd70 to connect educators, students, parents, community, as well as to invite in educators from around the world to share their learning. This is a huge opportunity for a school district that has a school with less than 50 students, as well as places that are far from a major city. (Couros, 2013a, p. 3)

The use of a district hashtag to connect teachers and students can create a professional learning community across a district. Examples of district hashtags are popping up all over Twitter, including #Bettpride, #Leydenpride, #engage109, #D214PLC and #sd36learn.

Surrey School District in British Columbia has also done something similar by using the hashtag #sd36learn. As one of the largest districts in the province, it is dispelling the myth that large usually equals a lack of innovation. By creating a place, as Stephen Johnson says, where "hunches" can come together, they are more likely to bring new and better ideas to the forefront. (Couros, 2013a, p. 3)

Couros discusses outside influencers as having the ability to enhance public acceptance and validation.

Jamie Notter and Maddie Grant identify these people and their impact in the business world:

'Social media has created influencers among people traditionally outside an organization's database of members or donors or customers. These are people whose activities and opinions can have tangible, measurable financial effects (good or bad); people on the periphery but who have social capital (i.e., trust) among their own networks.' Notter and Grant. (Couros, 2013a, p. 4)

Couros states in his blog that these outside influences can enhance a school leader's practice, as well. BY reaching outside of their organization for new ideas and resources, the leaders can be more effective in their own practice. He cites the "School Admin"

Virtual Mentor Program," #SAVMP, as an example.

Opportunities like the "School Admin Virtual Mentor Program" which brings mentorship to current and future administrators, gives the much needed outsider view to what we do in our organization (for free). If we want thinking outside of the box, we have to look outside of it by tapping into what social media can deliver. We often bring out the innovators within our organization, while also bringing innovators into our work. To create innovative practice within schools, we must go past an inward-only focus. (Couros, 2013a, p. 5)

Couros also describes the how the public is more likely to accept a concept, such as crowdsourcing, that they have experienced in other sectors, such as the entertainment industry. He cites an example from the Canadian Broadcasting Corporation.

These solutions may be fairly new to education, but other organizations have tapped into this opportunity. The entertainment industry, for example, which was staunchly against the notion of open and free sharing, sees the opportunity of tapping into passionate people to create something better. Instead of paying a ton of money to one person to create a new theme for Hockey Night in Canada, the Canadian Broadcasting Corporation (CBC) decided they would "crowdsource" the opportunity, and give people that are passionate about music the ability to participate in creating something powerful. The focus is on creating the "best," and with the myriad of options that this process (crowdsourcing) would create, you are more likely to find that. (Couros, 2013a, p. 5)

During several Twitter chats, educators mention ideas and concepts that have led to greater public acceptance of social media as a system and structure of education. They cite some of their own successes with technology for learning and share ideas that have worked for their students. These teachers model the use of social media for education and professional development and share resources with each other and the greater educational community on Twitter. For example, on the #techcoach chat, Craig Badura describes how he tries to spread the word to his school community about technology integration at his school. "Craig Badura @mrbadura Going to try and night called

"Tech Tailgates" to inform community about Integrationist position, what I do.

#techcoach 8:24 PM - 30 Aug 2012" (Russell, 2012, p. 16). Badura also tweets about the importance of educators telling their own story via social media. "Craig Badura

@mrbadura If we don't tell our story, someone else is going to tell it. #techcoach 8:29

PM - 30 Aug 2012. Craig Badura @mrbadura @lisettecasey It's a great opportunity to showcase awesome things happening at school as well. #techcoach 8:28 PM - 30 Aug 2012" (Russell, 2012, p. 10).

Other educators share resources that they have compiled so that other educators can benefit from the information. By sharing resources and good ideas, educators enhance the public acceptance of social media as a valuable educational system and structure. For example, Jerry Blumengarten tweets during #PTchat: "Jerry Blumengarten @cybraryman1 @LawfulTrainer Have your children help make dinner. (math skills). My Cooking pg: http://www.cybraryman.com/cooking.html (Cooking with kids) #ptchat 8:44 PM - 18 Sep 2013" (Mazza, 2013, p. 109).

Other educators attack misconceptions that can act as barriers to public acceptance. During the #1to1techchat, Brett Hoffman replies to a tweet questioning the validity of Wikipedia. Hoffman explains how he utilizes this web resource with his students. "Brett Hoffman @hoffmanteambret Not always. teach S to use as a base source to get deeper, follow citations RT @nathan_stevens: Misinformation = Wikipedia #1to1techat 8:19 PM - 4 Sep 2013" (McCusker, 2013, p. 38). Later in the same #1to1techchat, Shaelyn Farnsworth writes about how technology can make learning resources more accessible to her students. Shaelynn Farnsworth @shfarnsworth

Technology also makes primary sources for students more accessible! #1to1techat 8:34 PM - 4 Sep 2013" (McCusker, 2013, p. 70).

The obstacles and enhancers to public acceptance and validation of social media as a system and structure of education are shifting towards a greater acceptance.

Educators who participate in social media on Twitter and blogs for their professional learning are writing about the positive impact that these systems and structures are having on their learning. While there are obstacles standing in the way of public acceptance, in the years since blogging and Twitter were created, the public acceptance and validation of these tools has increased. Educators and research studies about these tools are indicating a positive effect on teaching and learning.

Power of Grassroots Creation for Success/Participation and Professional Authority

If we pay attention to what young people do when they are socializing and having fun with these new media, it's clear that they are both highly engaged and learning a great deal. For most young people, however, this is about learning how to get along with their friends, what it takes to get a date, or how to get to the next level in Halo, and not the kinds of academic learning and civic engagement that schools are concerned with. As a parent and educator who is also an anthropologist committed to appreciating youth perspectives, I stand at the cusp of two different learning cultures--one that is about youth-driven social engagement and sharing, and the other that is embodied in educational institutions' adult-driven agendas. (Ito, 2011, p. 1)

Who are the people behind Twitter chats and blog posts? They are regular educators, teacher and administrators, who use social media for professional development. They interact with colleagues around the world and across the hall. They have created these learning communities one tweet and blog post at a time, re-envisioning the system and

structure of education as we know it.

Disrupting the structural elements of class, while necessary, is not sufficient to enable students to take ownership of their learning. Although many constraints about seat time have been removed, students are still held back by the immaturity of available content and assessments. What is needed next is a disruption of pedagogy – the lecture-and-test (direct instruction) pedagogy is an artifact of the days when one teacher imparted facts and knowledge to tens or hundreds of students at once, a straightforward way to teach, but hardly the best way to learn. As education science knows, and as the best teachers find ways to practice, student learning needs to be authentic, have meaning, be social and based in experiences and needs to somehow be connected to what students already know in order for them to meaningfully understand. Great educators, regardless of the constraints placed on them, find ways to shift towards constructivist (or other authentic) practices, themselves disrupting teacher-proof curriculum in their rooms. This shift, subtle though it can be, is generally missing in digital learning technologies and is one of the key reasons that technology's impact on learning is often so limited. (Bjerede, 2013, p. 1)

For example, Bettendorf, Iowa High School principal Jimmy Casas writes a blog at jimmycasas.blogspot.com. He is the sole author of this blog and publishes it using the free to use blogging platform called Blogger, owned by Google. His blog is publically accessible to anyone on the Internet. Casas writes posts about educational leadership topics that are often cross posted on his Twitter account and on the Connected Principals Blog (http://connectedprincipals.com/). As a current high school principal and by addressing educational leadership issues and sharing his experience through the structure of his blog, Casas models using social media for professional development as a principal of a high school, thus using professional authority.

Steve Anderson discusses the systems and structures of social media and professional learning on his blog, as well.

'Personal Learning Networks are all the rage at the moment. As with a lot of "modern" things, they're existed for a long time but have now got a snappy new

name. It used to be called "advice from friends and colleagues". But in the era of social media the word *friend* has taken on a new meaning. Social media has provided me with a lot of friends who I've never met and never spoken to. I've exchanged a few tweets with them, commented on or received comments on a blog article, or maybe read a few forum posts, and as a result these people are, in Web 2.0-speak, *friends*. A PLN can take advantage of lots of different services – Facebook is perhaps the best-known, Ning is also very popular and offers The Educator's PLN, but there are lots of others, each with their own advantages and disadvantages. Of all the available services, the one I find the most fascinating (and the most useful) is Twitter.' (Anderson, 2011, p. 1)

Anderson also writes about the power of the professional authority of those educators on Twitter.

The first thing is that there are some very well known experts out there on Twitter and they are not posting about a latte machiato in Starbucks, they are providing links and opinions on bleeding edge research. New developments and products appear there immediately and feedback appears almost as quickly. Advice on new software and internet services appears within hours (sometimes minutes) of release. If you're interested in what's new in your field, then Twitter is a great place to start.' The article continues to talk on about the various virtues on Twitter and give more reasons as to why it is a great thing. As the author (@olafelch) states, the opportunities for professional development by utilising Twitter are exponential. Now you might think this is just a post for teachers, well it is not – students of all ages can network and gain lots of information from building your own PLN in areas that you want to learn more about... (Anderson, 2011, p. 2)

Tom Murray also discusses the grassroots structures of Twitter chats for professional learning.

Each week, educators from around the world take part in various conversations on Twitter known as "chats." These conversations have become an excellent way for educators to connect on relevant topics, share resources and best practices, all while challenging each other's thinking. The premise of a Twitter chat is simple. Each lasts for 60 minutes, moderators pose questions on a predetermined topic, and participants use a consistent hashtag (#) to communicate. (Murray, 2013, p. 1)

George Couros models the grassroots nature of social media for professional development. He discusses wanting to share resources with his professional learning

community on his blog and on Twitter for free before he publishes the ideas in a more traditional structure: a book.

I wanted to try my hand at writing a series of blog posts on "Leading Innovative Change." As I am looking at writing a book on the same topic, I thought I would put some ideas out there and hopefully learn from others on these topics. I also want to give these ideas away for free. These posts are for anyone in education, but are mostly focused on school administrators. (Couros, 2013a, p. 1)

Couros captures the essence of educators coming together to learn on social media on his blog.

A "spike" is a place where there is a large amount of people with one main area of interest that come together to create some of the best work in their field. It is not the only place, but these specific areas are usually known for excellence. So if I asked you where the "spike" is for educators, where would that be? Well, because most places on Earth have a school, if we think of a "spike" being in a physical place, it would be hard to identify where that one place would be. This is where social media comes in. Passionate educators are using things like Twitter and hashtags, such as #edchat to come together, ask questions, share ideas and create innovative ideas. (Couros, 2013a, p. 3)

Schools and districts are also fostering this grassroots movement of utilizing social media for professional discourse. Couros cites two examples in his blog.

Many schools are creating "mini-spikes" of innovation where geography is not a factor, and sharing and learning can happen 24/7. Parkland School Division, a school district that is spread over a large geographic area spanning over 100 miles, uses the hashtag #psd70 to connect educators, students, parents, community, as well as to invite in educators from around the world to share their learning. This is a huge opportunity for a school district that has a school with less than 50 students, as well as places that are far from a major city. (Couros, 2013a, p. 3)

Surrey School District in British Columbia has also done something similar by using the hashtag #sd36learn. As one of the largest districts in the province, it is dispelling the myth that large usually equals a lack of innovation. By creating a place, as Stephen Johnson says, where "hunches" can come together, they are more likely to bring new and better ideas to the forefront. (Couros, 2013a, p. 3)

Couros also suggests that the professional authority of educators and leaders needs to

shift to all participants. The entire organization can contribute to the overall improvement of the system of education and the learning of the members of the community.

In education, the focus has to move from distinct roles, to the idea that everyone can be both a teacher and a learner. Organizations, as a whole, should model what they expect from students on a micro level; that they are willing to learn and grow. With a focus on sharing on a mass scale, ideas often come to the forefront, and not necessarily people (although people that either *have or share* the best ideas will stick out). As we tell our students the day they walk into kindergarten, "You need to share," this should also be the focus for organizations that are looking to move forward and create innovation. Sharing should then not be the exception, but the default. (Couros, 2013a, p. 4)

Educators participating on Twitter chats also seek ways to improve their organizations and contribute to their learning community. Twitter chats, in general, are a product of grassroots creation. They were created by educators, for educators. Twitter chats are informal systems of education. Educator Eric Holshoe shares his desire to help fellow educators with technology integration, "Eric Holshoe @mrholshoe #techcoach I've been trying to get my district to create the position. I show other teachers how to use their tech to its full potential. 7:38 PM - 30 Aug 2012" (Russell, 2012, p. 73). Another educator shares a framework for technology interrgartion with the people participating in the #techcoach chat, "Lisette Casey DE @lisettecasey@danielle6849 are you familiar with the SAMR model - http://bit.ly/alh5UR #techcoach 7:41 PM - 30 Aug 2012" (Russell, 2012, p. 70). Others on the #techcoach chat exchange ideas for engaging staff members in technology training.

Emily Graves @MsGraves214 what do you call your voluntary meetings? looking for something catchy to excite the staff. #techcoach 7:50 PM - 30 Aug 2012. (Russell, 2012, p. 61)

Krissy Venosdale @venspired @MsGraves214 Totally Tech Tuesdays; starting them this year; informal, fun, and hopefully informative! :) #techcoach 7:51 PM - 30 Aug 2012. (Russell, 2012, p. 60)

During another chat, #PTChat, a participant introduces himself and his role in education.

His role brings professional authority to the chat and his contributions.

- **S. Kwesi Rollins** @Kwesibaby58 I'm Kwesi Rollins, Director of Leadership Programs @IELconnects. Washington, DC. http://www.iel.org . #ptchat 8:03 PM 18 Sep 2013. (Mazza, 2013, p. 8)
- **S. Kwesi Rollins** @Kwesibaby58 I work w/schools, districts, and communities on leadership development, family-community engagement & early childhood education #ptchat 8:03 PM 18 Sep 2013. (Mazza, 2013, p. 9)

In #satchat, participant Todd Whitaker, published author and educator, shares his advice to the others in the chat. Again, Whitaker's contribution stems from his professional authority. "**Todd** @ToddWhitaker The Friday Focus was the best leadership tool I ever used and one of the cornerstones of it was staff morale. #satchat 6:54 AM - 6 Oct 2012" (Currie, 2012, p. 43). In #PTChat, Sherri Wilson cites a government study to back up her claims in the chat, employing professional authority.

Sherri Wilson @ptaswilson A1: Study in 90s showed positive effect of extracurricular activities on student engagement #ptchat http://nces.ed.gov/pubs95/web/95741.asp 8:10 PM - 18 Sep 2013. (Mazza, 2013, p. 23)

Blogs and Twitter chats are the products of grassroots creation. These social media tools for education, whether formal or informal serve as a system and structure of education for teachers, administrators and students. Participants often employ professional authority as the basis for their claims in chats and on blog posts. They will cite studies and best practices in education to share ideas and analyze resources and

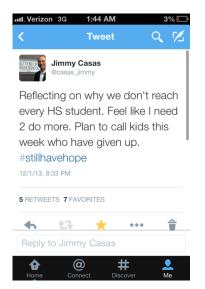
strategies for instructional improvement.

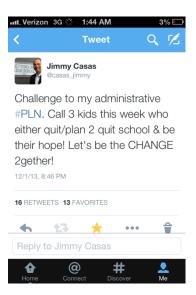
Power of Moral Authority for Shared Beliefs, Purposes and Values

The systems and structures of formal and informal education on social media have led to the creation of a virtual PLN for many educators. These educators join this shared community in order to expand their learning opportunities and to discuss and debate educational topic with their colleagues around the world. Social media gives them the tools to share ideas and learn from others. These educators are encouraging to each other and help each other grow professionally. Often, on blog posts and during Twitter chats, educators will explicitly address their shared beliefs, purposes and values.

Bettendorf, Iowa High School principal Jimmy Casas writes a blog at jimmycasas.blogspot.com. In a recent post, Casas addresses the issues of high school dropout and what principals and other educational leaders can do to curb this trend.

I came across a stack of paperwork for early graduate students that needed to be signed and as I began to examine each student record closely, my mind wandered off a bit. Instead of rejoicing in the fact that these students had met the criteria for early graduation, my mind wandered to those students who over the course of the last couple of years and had given up and quit school. I quickly began to pull up their pictures on our student information system so I could look at their faces again. In doing so, it became personal to me. As their principal, I couldn't help but feel I had not done enough. After an hour or so of doing this, I sent out the following tweets.





There is not a single one of us who has not at one time or another hid behind the standard line, "I don't have time to....." The hard truth is we determine what we have time for and what we don't have time for. All of us can dig deep down far enough to find the time when something matters a great deal to us. In this case, our efforts netted five students returning to school beginning January 6th. Like the starfish story, we may not have reached all of them, but I am hoping it will make a difference with these students and they in turn impact our lives and inspire us to continue to reach out to those who have given up. (Casas, 2013a, p. 1)

By sharing his values with his audience, Casas is utilizing the power of moral authority

to inspire educational leaders to overcome the obstacles of supporting high school drop-outs.

In her blog post, "When Youth Own The Public Education Agenda," Mimi Ito writes about the difference between the adult purpose for social media and the youth purpose. She addresses how, as educators we are at the intersection of these two ideals and must help navigate them to maximize learning opportunities.

If we pay attention to what young people do when they are socializing and having fun with these new media, it's clear that they are both highly engaged and learning a great deal. For most young people, however, this is about learning how to get along with their friends, what it takes to get a date, or how to get to the next level in Halo, and not the kinds of academic learning and civic engagement that schools are concerned with. As a parent and educator who is also an anthropologist committed to appreciating youth perspectives, I stand at the cusp of two different learning cultures--one that is about youth-driven social engagement and sharing, and the other that is embodied in educational institutions' adult-driven agendas. (Ito, 2011, p. 1)

Ito describes how the purpose of the YouMedia program at the Chicago Public Library meets the needs of youths and still fulfills the mission of the library as a public learning space.

Unlike any other library experience I had growing up, YouMedia is loud, sociable, and hip -- but it's still all about the public mission of the library to serve as a point of access to culture, information, and the media of the day, staffed by smart guides to knowledge and literacy. (Ito, 2011, p. 1)

Later in her post, Ito discusses how effective the youth culture in at the YouMedia program for fostering learning and collaboration amongst participants. The shared purpose and values of the youths that participate in the program help support and inspire others to achieve.

Too often, we assume that socializing and fun is hostile to academics, and that

"peer pressure" pulls kids away from learning. Responsible adults see their role as limiting access to games and entertainment, and drawing kids away from their peers in order to insist on attention to schoolwork and learning. In YouMedia, you'll see a very different dynamic. Young people are invited to hang out, play with games, and mess around informally with technology. They deep dive into media literacy projects that are supported by knowledgeable peers and mentors. Engagement thrives when young people are allowed to experiment, socialize, and take ownership of the agenda; there's absolutely no reason why the content of that activity can't be adult-sponsored learning. When young people are supported in pursuing their own choices and interests, and when they are allowed to mobilize peer activity around those interests, suddenly socializing, fun, and peer pressure drive learning rather than detracting from it. (Ito, 2011, p. 3)

Ito ends her post by addressing what it might be like of the shared values of society for education were implemented not just by schools, but by other elements of society. The shared beliefs, purpose and values of society reflected in the formal and informal structures of education.

Imagine what it would mean to think of public education as a mission shouldered not only by schools, but by a wide range of public institutions committed to knowledge and learning? When we think of public education, do we include the efforts of those in public and independent media, who develop radio, television, movies and games with an educational mission? Do we include organizations like Mozilla, Wikipedia, Creative Commons, and the Internet Archive committed to the production of knowledge in the public interest and in the public domain? Do we think of the efforts in broadband policy that seek to make the online knowledge accessible to families across the country? To me, these are all efforts in public education that are often overlooked in our often exclusive focus on schools. (Ito, 2011, p. 3)

In her blog post, "Disrupting Pedagogy," Marie Bjerede writes that in order to engage students in learning through technology, our approach and purpose must shift to reflect more authentic practices.

Disrupting the structural elements of class, while necessary, is not sufficient to enable students to take ownership of their learning. Although many constraints about seat time have been removed, students are still held back by the immaturity of available content and assessments. What is needed next is a disruption of

pedagogy – the lecture-and-test (direct instruction) pedagogy is an artifact of the days when one teacher imparted facts and knowledge to tens or hundreds of students at once, a straightforward way to teach, but hardly the best way to learn. As education science knows, and as the best teachers find ways to practice, student learning needs to be authentic, have meaning, be social and based in experiences and needs to somehow be connected to what students already know in order for them to meaningfully understand. Great educators, regardless of the constraints placed on them, find ways to shift towards constructivist (or other authentic) practices, themselves disrupting teacher-proof curriculum in their rooms. This shift, subtle though it can be, is generally missing in digital learning technologies and is one of the key reasons that technology's impact on learning is often so limited. (Bjerede, 2013, p. 1)

In her blog post, "Tweeting in a Glass House," Jenna Shaw writes about the shared moral values in society that should be reflected when using social media. Shaw addresses the issue of cyberbullying on social media and how educators must model the moral and ethical behavior that we expect from our students.

So, I was browsing Twitter while I was on the plane ride home from San Antonio and I was pretty disheartened by what I was reading. Teachers, like, a lot of them, tweeting about their travels home. Tweeting, more specifically, about strangers around them. What they are wearing, eating, smell like, the stories they told. These posts were not nice and some of the statements were incredibly mean. These unsuspecting people are traveling just like anyone else and they are being made fun of on public forums.

In school, we call this cyber bullying.

I make this point because I was watching comments made by adults traveling back from an educational technology conference; some were bloggers that I believe take digital citizenship seriously. They were making comments almost exactly like the comments I have seen make middle school girls cry. (Shaw, 2013, pp. 1-2)

Shaw then continued in her post to address how she planned to change her own behavior based on these shared moral values and purpose.

I am glad I saw this because it forced me to reflect upon what I was posting. It caused me to think twice before sending something out into the universe that

could be hurtful. Even if the subject never reads the comment doesn't make it acceptable for me. It allowed me to ask myself, "If one of my students wrote this comment about a peer, would it be hurtful?" That makes it pretty easy for me to decide whether or not to post.

I understand the temptation, and I have been guilty of it myself, but we need to be better than that. Especially if we want any hope of transferring digital citizenship to our students. (Shaw, 2013, p. 2)

Later, in the comments section, a reader of Shaw's blog left the following comment. The comment and Shaw's reply are below.

Unknown June 30, 2013 at 9:04 PM

Thank you for sharing this --- I always stop and wonder before I tweet something about the person next to me is....it that what I want them to see if they were the next person to follow me on twitter. As you state, I have seem our "professional learning network" be quite cruel as they chat about people nearby -- and I, like you, cringe.

True -- many times I wish to tweet exactly what my thoughts might be -- but then I remember "tweet people like you wish to be tweeted" and that helps. Thank you for posting this -- good to read!

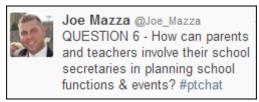
Jennifer

Jenna Shaw July 11, 2013 at 11:44 AM

"Tweet people like you wish to be tweeted" is a fantastic motto! Thank you for sharing that. (Shaw, 2013, p. 2)

Tom Murray describes the purpose of a Twitter chat in his blog post, "Utilizing Twitter Chats for Professional Development."

Each week, educators from around the world take part in various conversations on Twitter known as "chats." These conversations have become an excellent way for educators to connect on relevant topics, share resources and best practices, all while challenging each other's thinking. The premise of a Twitter chat is simple. Each lasts for 60 minutes, moderators pose questions on a predetermined topic, and participants use a consistent hashtag (#) to communicate. Here's an example from a recent #ptchat:



(Murray, 2013, p. 1)

In their research report, "The End of Isolation," Alderton et al. (2011) studied the shared purpose that educators had for participating in Twitter chats for professional development.

Purpose for Twitter: The survey asked the participants to describe what they saw as their purpose for using Twitter. All of them responded that Twitter allows them to build connections with educators beyond those in their immediate vicinity. These connections are purposefully made as a way to find and share resources and to provide and receive support. For example, Participant 8 stated, "My primary purpose is to connect with other teachers, so that I can learn from them and share resources that I find." Similarly, Participant 9 wrote, "I am the only biology teacher at my school. I use it [Twitter] as a means of obtaining advice, resources and collaboration I also use it to find out about new tech tools." Participant 6 also specifically explained that using Twitter helps her stay informed about her local community by following news organizations and local businesses. Participant 1 described how connecting with other educators helps to keep her informed: "I know that when a link comes through Twitter, it has caught the interest of likeminded professionals and people. That means it is likely to be of value to me. This process of information filtering saves me tons of time because I'm getting good information quickly---I'm using the network to sift through content for me. (p.356)

Alderton et al. also found that the shared values and behaviors of the educators impacts their participation in the chats.

Finally, tone does matter. Participants explained that they choose to follow people who are open, positive, and constructive. Participant 7 wrote that he believes "people online who reciprocate acts of generosity, praise, encouragement, and useful criticism will be the best contacts for collaboration." Participant 2 commented, "If their tweets are friendly, I'm also more likely to network with them." Participant 4 simply stated, "In short, the only people I refuse to network with are selfish, bigoted or vacuous people." (Alderton et al., 2011, p. 357)

In his blog post, Eric Sheninger, Principal of a high school in New Jersey, shared

the values and tenets of effective school leaders. He elaborates his vision for effective leadership that he leadership that he leadership conference.

What do good principals do? The audience at the leadership institute identified what they perceived to be the top elements. These included the following items below where I have added some of my personal thoughts:

- Great communicator: Principals need to be able to communicate what the school is all about. School leaders don't always do the best in terms of epitomizing effective communication. In terms of evaluations, we can't keep telling teachers that they are doing good work when they are not. Being a direct communicator is often lost during discussions on teacher performance.
- <u>Difference maker</u>: Principals need to be able to keep the focus on important initiatives and culture characteristics that have an impact on student learning and achievement. They establish accountability measures to hold teachers and students accountable for learning. Great principals see solutions, not just problems.
- Risky, but not too risky: Principals have to be willing to try new things and have a mindset to keep trying until improvement is the end result. They need a backstop of support that allows them to fail in these efforts. The most effective decision makers take risks, but do not bet the farm or take quantum leaps without knowing the end result.
- Manage by walking around: Principals that consistently walk around know the students, can better identify areas where teachers can improve, and set the tone for practices to be emulated throughout the building. The human factor is extremely important. Great principals establish a positive school culture by treating people the way they would like to be treated. How we smile, say hello, and engage in conversations all are important factors in setting a positive tone.
- Address problems: Strong principals will do the hard, dissatisfying work associated with addressing and removing ineffective staff. This requires addressing problems head on with a positive attitude. When hiring new staff, principals need to go to great efforts to hire educators that align best with the vision of the school.
- Cares about students and staff: Effective principals never give up on kids and their support staff. They are the epitome of instructional leadership and will show teachers how to become more effective based on evaluative data. (Sheninger, 2011, pp. 1-2)

Sheninger addresses the shared purpose for effective leadership: school improvement.

Now more than ever schools need great leaders. As the reform movement

continues to swell across the country more eyes will be on the principal, as well as other district leaders, and their ability to ensure student learning and increase achievement. The task now at hand is to develop a plan on how to support principal effectiveness while developing an evaluation tool that will help us do the best job possible for the students that we serve. (Sheninger, 2011, p. 3)

S. Leibowitz, in her blog post, "From Facilitator to Activator," reflects on her vision for effective technology integration into instruction. She writes about the shared purpose for educational technology integration and the role of the school leader.

Leibowitz reflects on her learning at an ISTE conference during a session by Michael Fullan.

Michael Fullan activated my learning even further, leaving me not only with a direction, but also with some concrete steps as to how to move forward. And, again, it's not about the technology. Wisdom I gleaned included:

- Offer respect to others before it is earned
- Engage in impressive empathy, meaning empathy even for those who stand in your way
- Invest in capacity building human capital and social capital
- Build social contagion
- Eliminate non-essentials
- Focus on a small number of ambitious goals. (Leibowitz, 2012, p. 2)

Leibowitz's main takeaway from the conference was the shared values and purpose for education and for being a connected educator. She realized the importance of connecting as a school leader on social media and working with other educators with shared beliefs and values.

I spent the rest of the conference attending some fantastic sessions, learning some impressive technology tools, but most essentially, connecting and engaging with others who care deeply about learning. At a conference about what is current, I focused on what is enduring. (Leibowitz, 2012, pp. 2-3)

George Couros, on his blog, reflects on the importance of engaging educators on social media and the shared purpose and benefit of connecting with others. He also

writes about the support that educators need in order to get connected and be open to professional development via blogs and Twitter.

I was a little surprised to see a tweet from someone talking about how we shouldn't be talking about "being connected" with people anymore because everyone should just be doing it. I found it rather interesting as a great teacher would differentiate learning for students and understand that people are are different points in their journey, not simply say, "you should all get this by now". It should be no different with educators. **Differentiation is not just for kids**, and if we treat people like that when we are in an administrative position, you will lose more people along the journey then you will gain. I understand the "push" that many people make, and have been guilty of doing this myself, but the support has to be there. (Couros, 2013b, p. 1)

Couros himself is influenced by the shared values of other educational leaders, such as Will Richardson. "Will Richardson continuously teaches me to ask tough questions, and to push people to think deeply about their work" (Couros, 2013b, p. 3). In response to this reflection, a reader on Couros' blog left the following comment, reflecting the shared values of educators on social media.

Barry *December 6, 2013 at 12:46 pm* Thank you for sharing your thoughts. I appreciate you mentioning how various people have impacted your growth as an educator and speaker. I encourage others to acknowledge the educators in our buildings, the ones we see every day, letting them know how they impact our growth as well. They need not be in the classroom to be educators...you may find them in the dining hall, sweeping the hallway, or driving the bus. Keep your eyes open, you may find a lesson in there..." (Couros, 2013b, p. 4)

Couros expresses his desire to give back to the community of educators on social media. Even though he plans to publish a book, he seeks to share information and ideas with those educators on his personal learning network. The idea of giving back to the community of learners and contributing to the greater good of educators on social media is one of the shared values of education on blogs and Twitter.

I wanted to try my hand at writing a series of blog posts on "Leading Innovative Change." As I am looking at writing a book on the same topic, I thought I would put some ideas out there and hopefully learn from others on these topics. I also want to give these ideas away for free. These posts are for anyone in education, but are mostly focused on school administrators. (Couros, 2013a, p. 1)

Couros also encourages educators to employ this practice in their schools, too.

Sharing is also vital in creating connections. If you see something amazing with one teacher, and see potential for growth in another teacher, instead of being the sole bearer of knowledge and skill, why not look at ways of connecting the two? (Couros, 2013a, p. 2)

Couros addresses the shared values of educators on social media and the "open culture" found there amongst educators (p. 5).

Social media, and the open culture it has created, has made our culture and mindset "participatory." 'One of the reasons social media has grown so fast is that it taps into what we, as human beings, naturally love and need and want to do—create, share, connect, relate.' Notter and Grant If our culture is shifting to this, wouldn't this become the expected norm that many new educators (and current students) would expect to live within our schools? While we live in a world where people are used to *creating, sharing and connecting*, schools can no longer ignore this cultural shift. They must embrace the idea that we are lucky to live in a time of such technological advance and openness that will make the opportunity to be *innovative* that much easier. (Couros, 2013a, pp. 5-6)

Couros explains that districts are beginning to heed this call to share resources and ideas on social media. The shared values and purpose of using social media for education is supported by the creation of district hashtags on Twitter as a means of engaging educators and publicizing the shares values of the organization. Couros cites two examples of this on his blog:

Many schools are creating "mini-spikes" of innovation where geography is not a factor, and sharing and learning can happen 24/7. Parkland School Division, a school district that is spread over a large geographic area spanning over 100 miles, uses the hashtag #psd70 to connect educators,

students, parents, community, as well as to invite in educators from around the world to share their learning. This is a huge opportunity for a school district that has a school with less than 50 students, as well as places that are far from a major city. (Couros, 2013a, p. 3)

Surrey School District in British Columbia has also done something similar by using the hashtag #sd36learn. As one of the largest districts in the province, it is dispelling the myth that large usually equals a lack of innovation. By creating a place, as Stephen Johnson says, where "hunches" can come together, they are more likely to bring new and better ideas to the forefront. (Couros, 2013a, p. 3)

Couros states that the culture of sharing ideas and resources is part of the values of the organization and it is the purpose of social media for professional development.

In education, the focus has to move from distinct roles, to the idea that everyone can be both a teacher and a learner. Organizations, as a whole, should model what they expect from students on a micro level; that they are willing to learn and grow. With a focus on sharing on a mass scale, ideas often come to the forefront, and not necessarily people (although people that either *have or share* the best ideas will stick out). As we tell our students the day they walk into kindergarten, "You need to share," this should also be the focus for organizations that are looking to move forward and create innovation. Sharing should then not be the exception, but the default. (Couros, 2013a, p. 4)

Couros discusses how a culture of sharing can improve and organization. "If your practices are amazing, sharing them with other educators gives them the opportunity to help more kids. If practices are weak, it often brings in new ideas to help your kids. There is no loss in this situation for students, yet ego sometimes (often) gets in the way" (p. 5).

On #PTChat, educators discuss and debate some of the shared moral values that inform educational systems and structures. For example: "Josh Stumpenhorst @stumpteacher @Joe_Mazza Best way to balance academics and recreation is to allow kids to be kids at home and have no HW. #ptchat 8:00 PM - 18 Sep 2013" (Mazza, 2013,

p. 1). Later in the chat, participants discuss the positive effects of joining sports and extracurriculars. Their discussion represents some of the benefits to the individual student. This discussion reflects the morals and shared values of our society toward sports and teamwork.

Kevin Kelly Ph.D. @EmmausKevinK A1 Being part of a team has positive effects. It introduces a coach or mentor as an added teacher to help S's, keep them focused #ptchat 8:10 PM - 18 Sep 2013." (Mazza, 2013, p. 21)

Joe Mazza @Joe_Mazza Team sports can encourage collaboration/social skills amongst kids of all ages. Important to have the right child-centered "coach" #ptchat 8:11 PM - 18 Sep 2013. (Mazza, 2013, p. 24)

Reed Gillespie @rggillespie Builds discipline, time management, teamwork, life skills. I know I learned more about life playing sports than I did in any class #ptchat 8:11 PM - 18 Sep 2013 (Mazza, 2013, p. 27)

Later in the same chat, educators discuss the downside of too many extracurricular activities on kids – again expressing their beliefs and values.

Jerry Blumengarten @cybraryman1 Extra curriculars are wonderful but do not over program your children. They need time for themselves & family activities #ptchat 8:22 PM - 18 Sep 2013

Gwen Pescatore @gpescatore25@Sirotiak02 Sports can be extremely competitive these days...parents need to be the little voice reminding kids to play for fun. #ptchat 8:22 PM - 18 Sep 2013

Lisa @lisaodavis @Sirotiak02 @gpescatore25 @DrJoeClark That is so sad!! Kids are individuals!! That's what makes them so amazing! #ptchat 8:22 PM - 18 Sep 2013. (Mazza, 2013, p. 58)

Joe Mazza @Joe_Mazza It's important for teachers & parents to talk abt balance in their own lives. Role model for kids is tough. We're all very busy #ptchat 8:24 PM - 18 Sep 2013 (Mazza, 2013, p. 63)

Finally, the educators share their ideas for striking a balance in education and extracurricular activities. They stress the importance of connecting with kids and

keeping communication open with them, so that kids can help maintain that balance.

Again, their conversation on Twitter is informed by the values of society.

Mrs. Malespina @SOMSlibrary @Sirotiak02 use car time as time to talk to your kid. I learn a lot from our time in the car #ptchat 8:36 PM - 18 Sep 2013. (Mazza, 2013, p. 90)

Sherri Wilson @ptaswilson A5 Also I always tried to schedule time for the family to spend together, even if it was just a quick meal. #ptchat 8:40 PM - 18 Sep 2013

A.Lawful. Trainer. @LawfulTrainer Use preparing dinner 2 learn family recipes and catching up with your kids day.works like a charm in my house #ptchat 8:40 PM - 18 Sep 2013

John Fritzky @JohnFritzky A 5: #ptchat Have a no device time, where no one in the family is allowed to connect w a device. Sit and connect w/ each other.8:40 PM - 18 Sep 2013. (Mazza, 2013, pp. 100-101)

Jerry Blumengarten @cybraryman1 @LawfulTrainer Have your children help make dinner. (math skills). My Cooking pg: http://www.cybraryman.com/cooking.html (Cooking with kids) #ptchat 8:44 PM - 18 Sep 2013. (Mazza, 2013, p. 109)

On #satchat, Educators discuss the shared belief of finding creative ways to praise educators. They discuss how social media itself can be utilized to improve recognition of staff and help make educators feel valued.

John Falino @johnfalino1 Facebook, twitter, emails to community, newsletters, faculty mtgs etc. Telling a person s/he is doing a good job goes long way too #satchat 6:39 AM - 6 Oct 2012. (Currie, 2012, p. 10)

Chris Stogdill @ChrisStogdill My philosophy is to recognize effort & character. This builds a positive school culture. #satchat 6:39 AM - 6 Oct 2012. (Currie, 2012, p. 10)

Todd @ToddWhitaker The Friday Focus was the best leadership tool I ever used and one of the cornerstones of it was staff morale. #satchat 6:54 AM - 6 Oct 2012. (Currie, 2012, p. 43)

Finally, on #1to1techchat, educators discuss the shared belief that access to technology and information is critical for educators and students. They express the belief that students need to be taught how to analyze information, since technology and social media make the information so easily accessible to those who have access to the tools.

Shaelynn Farnsworth @shfarnsworth A1: New London Group cites a growing disparity between those w/ access to tech./information & those w/out surpassing SES #1to1techat 8:11 PM - 4 Sep 2013. (McCusker, 2013, p. 21)

Bill Chapman @classroomtoolsA1 - Gathering information is how we come to know the world. It is also used to manipulate our behavior/beliefs. Eval critical! #1to1techat 8:11 PM - 4 Sep 2013. (McCusker, 2013, p. 21)

Tim O'Connor @toconnor851A1 technology gives Ss access to many different sources. Must be able to determine bias #1to1techat 8:11 PM - 4 Sep 2013. (McCusker, 2013, p. 22)

Bill Chapman @classroomtools@Steph_SMac & a great deal of it is propaganda. Knowing how to evaluate the validity of information is critical! @ShawnMcCusker #1to1techat 8:12 PM - 4 Sep 2013. (McCusker, 2013, p. 25)

Shawn McCusker @ShawnMcCusker@classroomtools A1 and by extension, knowing how to access and analyze is protection against manipulation wouldn't you say? #1to1techat 8:13 PM - 4 Sep 2013. (McCusker, 2013, p. 27)

These educators share a concern that those students without access to technology will be at a disadvantage in school and in life. This concern could be expanded to educators who are not utilizing technology and social media to expand their learning opportunities and connect to educators for professional development.

Educators on social media for professional development have a shared sense of purpose and a shared belief in being a connected educator. Their contributions to the educational community are measured in their participation in virtual personal learning networks on blogs and Twitter. Their contribution to the greater good of education and

their desire to seek out new learning and professional growth by participating in Twitter chats and writing, reading and commenting on blog posts creates a learning community whose shared values in being a connected educator are shaping the current system of education.

Communal Learning Spaces (Physical / Virtual)

Social media has created a virtual communal learning space on Twitter and on blogs. Educators from all over the world gather and interact on social media, breaking down barriers of time and space. These educators have created a virtual PLN to which they contribute ideas and resources regularly.

The blogging platform of Blogger has become a virtual learning space for the readers of Jimmy Casas' blog *Passion...Purpose...Pride* at http://jimmycasas.blogspot.com/. As a high school principal in Bettendorf, Iowa, Casas engages educators from around the world through his blog posts. He regularly writes new blog entries and takes the time to respond to comments directly in the comments section of each post. By writing a blog, instead of, let's say, keeping a journal or writing a school newsletter, the audience for Casas' work is greatly expanded due to the accessibility of information on the Internet.

In Mimi Ito's blog post about YouMedia at the Chicago Public library, she reflects on the communal learning space for teenagers that have been created there.

Last month, I paid a visit to the YouMedia space in Chicago Public Library's Harold Washington Library Centre in downtown Chicago. The space was teeming with teens sitting on bright comfy sofas, chatting and eating, playing Rock Band, mixing music, heads down in front of laptops, and getting feedback from digital media mentors. (Ito, 2011, p. 1)

Ito writes that this communal learning space is very different from a traditional library, and more reflective of the current youth culture.

Unlike any other library experience I had growing up, YouMedia is loud, sociable, and hip -- but it's still all about the public mission of the library to serve as a point of access to culture, information, and the media of the day, staffed by smart guides to knowledge and literacy. (Ito, 2011, p. 1)

Ito describes the impact of this learning space in her blog post, "When Youth Own the Public Education Agenda."

The energy level and buzz in the space is similar to what I see when young people are with their same-aged peer group, immersed in online gaming, gossiping, or sharing YouTube videos, but this is an intergenerational space framed by educational goals--an open public space, an institution of public education, where learning and literacy are seamless with youth-driven activity. (Ito, 2011, p. 3)

In this youth-centered environment, the culture of learning is prevalent and helps define the relationships between the teens there.

Too often, we assume that socializing and fun is hostile to academics, and that "peer pressure" pulls kids away from learning. Responsible adults see their role as limiting access to games and entertainment, and drawing kids away from their peers in order to insist on attention to schoolwork and learning. In YouMedia, you'll see a very different dynamic. Young people are invited to hang out, play with games, and mess around informally with technology. They deep dive into media literacy projects that are supported by knowledgeable peers and mentors. Engagement thrives when young people are allowed to experiment, socialize, and take ownership of the agenda; there's absolutely no reason why the content of that activity can't be adult-sponsored learning. When young people are supported in pursuing their own choices and interests, and when they are allowed to mobilize peer activity around those interests, suddenly socializing, fun, and peer pressure drive learning rather than detracting from it. (Ito, 2011, p. 3)

The good news is that the success of this communal learning space has led to more funding to expand the program to more cities.

If we think of the mission of public education as providing learning opportunities to all young people and not only about supporting public schools, YouMedia

represents some of the best of what public education has to offer in the 21st Century. The Obama administration has recognized this, and the Institute of Museum and Library Services recently announced that they would work with the MacArthur Foundation in scaling the YouMedia effort to thirty more libraries across the country. (Ito, 2011, p. 3)

Ito goes on to describe other organizations that can contribute to the education of youth and could create more virtual learning communities.

Imagine what it would mean to think of public education as a mission shouldered not only by schools, but by a wide range of public institutions committed to knowledge and learning? When we think of public education, do we include the efforts of those in public and independent media, who develop radio, television, movies and games with an educational mission? Do we include organizations like Mozilla, Wikipedia, Creative Commons, and the Internet Archive committed to the production of knowledge in the public interest and in the public domain? Do we think of the efforts in broadband policy that seek to make the online knowledge accessible to families across the country? To me, these are all efforts in public education that are often overlooked in our often exclusive focus on schools. (Ito, 2011, p. 3)

The power of communal learning spaces on blogs and Twitter are their ability to erase the boundaries of time and space. Blog posts written at one time can receive comments months or years later. Conversations can continue between reader and writer well into the future. The impact of someone's work is not limited to one place or time.

4- Jordan Rizzo Tue, Jan 29, 2013, @ 9:55

I am absolutely fascinated with YouMedia. It is the perfect mix of traditional learning styles and new technology of today's world. I think this is exactly what teens need in order to succeed and I would love to see more programs of this nature come about in the near future. The fact that teens can go there and learn from each other and their mentors will motivate them to do their best with each project. I also liked how their website is open to everyone, so kids from all over can interact and receive feedback from one another. With having so much help and support, I believe the teens will feel more comfortable to take risks. Hopefully after much recognition, we will see new, interesting ways to educate our kids. Thanks for this very intriguing post! (Ito, 2011, p. 4)

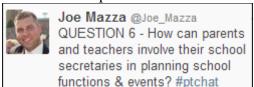
In his blog, Steve Anderson describes the learning and professional development

that takes place on social media.

Personal Learning Networks are all the rage at the moment. As with a lot of "modern" things, they're existed for a long time but have now got a snappy new name. It used to be called "advice from friends and colleagues." But in the era of social media the word *friend* has taken on a new meaning. Social media has provided me with a lot of friends who I've never met and never spoken to. I've exchanged a few tweets with them, commented on or received comments on a blog article, or maybe read a few forum posts, and as a result these people are, in Web 2.0-speak, *friends*. A PLN can take advantage of lots of different services – Facebook is perhaps the best-known, Ning is also very popular and offers The Educator's PLN, but there are lots of others, each with their own advantages and disadvantages. Of all the available services, the one I find the most fascinating (and the most useful) is Twitter. (Anderson, 2011, p. 1)

Tom Murray also describes how educators gather on social media as a communal learning space. In his post, "Utilizing Twitter Chats for Professional Development," Murray explains the structure of a chat.

Each week, educators from around the world take part in various conversations on Twitter known as "chats." These conversations have become an excellent way for educators to connect on relevant topics, share resources and best practices, all while challenging each other's thinking. The premise of a Twitter chat is simple. Each lasts for 60 minutes, moderators pose questions on a predetermined topic, and participants use a consistent hashtag (#) to communicate. Here's an example from a recent #ptchat:



(Murray, 2013, p. 1)

In school leader Josie Holford's blog post, "A School With Designs on the Future," she reflects on her visit to Parker School. Although there were no students present during her visit, Holford (2013) comments on the learning environment she noticed there. "So, while school is not school without students it can still be a place where it is clear that learning is valued. And in any good school it is the teachers that make the difference" (p. 1).

Leibowitz discussed the impact of attending a recent education conference. She writes that the most powerful part for her was connecting with other educators. She values the communal learning space that this conference created for her.

I spent the rest of the conference attending some fantastic sessions, learning some impressive technology tools, but most essentially, connecting and engaging with others who care deeply about learning. At a conference about what is current, I focused on what is enduring. (Leibowitz, 2012, pp. 2-3)

When George Couros reflected on his blog about being a connected educator, he realized that not everyone is at the same place in their creation of a personal learning network on social media and that leaders need to provide support for educators who are seeking this type of professional development in a virtual learning community.

I was a little surprised to see a tweet from someone talking about how we shouldn't be talking about "being connected" with people anymore because everyone should just be doing it. I found it rather interesting as a great teacher would differentiate learning for students and understand that people are are different points in their journey, not simply say, "you should all get this by now." It should be no different with educators. **Differentiation is not just for kids**, and if we treat people like that when we are in an administrative position, you will lose more people along the journey then you will gain. I understand the "push" that many people make, and have been guilty of doing this myself, but the support has to be there. (Couros, 2013b, p. 1)

Couros (2013b) also reflected on the importance of interacting with the physical learning community as well as the virtual learning community. "Adam Bellow showed me to honour and value the people sitting in front of you and although you can share a similar message, it is important to show that you are focused on that audience" (p. 3).

In his blog post, "Leading Innovative Change Series: Embrace an Open Culture," George Couros writes about contributing to the community of learners with ideas and resources in order to support the community.

If your job is to create a culture that embraces any type of learning, how much impact does it have when we only see one person at a time and share it with no one? Sitting down and taking the time to write a blog, tweet some ideas, or use any other online community is not only beneficial in the reflection process, but also brings ideas to a larger community. (Couros, 2013a, p. 2)

Couros also encourages educators to connect with others in order to create a community of educators on social media as well as in a school or district. He advocates for the creation of physical and virtual learning spaces.

Sharing is also vital in creating connections. If you see something amazing with one teacher, and see potential for growth in another teacher, instead of being the sole bearer of knowledge and skill, why not look at ways of connecting the two? (Couros, 2013a, p. 2)

In that same blog post, Couros describes the concept of a communal learning space on social media for educators' professional learning.

A "spike" is a place where there is a large amount of people with one main area of interest that come together to create some of the best work in their field. It is not the only place, but these specific areas are usually known for excellence. So if I asked you where the "spike" is for educators, where would that be? Well, because most places on Earth have a school, if we think of a "spike" being in a physical place, it would be hard to identify where that one place would be. This is where social media comes in. Passionate educators are using things like Twitter and hashtags, such as #edchat to come together, ask questions, share ideas and create innovative ideas" (Couros, 2013a, p. 3)

Couros explains how schools and districts are creating virtual communal learning spaces by using a common Twitter hashtag in order to connect their ideas and resources together.

Many schools are creating "mini-spikes" of innovation where geography is not a factor, and sharing and learning can happen 24/7. Parkland School Division, a school district that is spread over a large geographic area spanning over 100 miles, uses the hashtag #psd70 to connect educators, students, parents, community, as well as to invite in educators from around the world to share their learning. This is a huge opportunity for a school district that has a school with

less than 50 students, as well as places that are far from a major city. (Couros, 2013a, p. 3)

Surrey School District in British Columbia has also done something similar by using the hashtag #sd36learn. As one of the largest districts in the province, it is dispelling the myth that large usually equals a lack of innovation. By creating a place, as Stephen Johnson says, where "hunches" can come together, they are more likely to bring new and better ideas to the forefront. (Couros, 2013a, p. 3)

Couros (2013a) quotes Thomas Friedman when describing the impact of the virtual learning spaces created by educators on social media. "When the world is flat, you can innovate without having to emigrate.' Thomas Friedman" (p. 3). Couros writes that some leaders are afraid to open the walls of their organizations to a virtual learning community, but Couros argues that this is limiting and not in the best interest of students.

By opening what you do to outsiders, what people within an organization know as "best practice," often can show opportunities for growth in the way we do our work. This is often why so many leaders are afraid of this very thing. In that case, the ego of leadership seems to be more important than doing what is best for kids. (Couros, 2013a, pp. 4-5)

Couros himself created a communal learning space for educational leaders. The "School Admin Virtual Mentor Program" partners new and experienced administrators together via social media for learning and support. This is a more formal structure of education on social media.

Opportunities like the "School Admin Virtual Mentor Program" which brings mentorship to current and future administrators, gives the much needed outsider view to what we do in our organization (for free). If we want thinking outside of the box, we have to look outside of it by tapping into what social media can deliver. We often bring out the innovators within our organization, while also bringing innovators into our work. To create innovative practice within schools, we must go past an inward-only focus. (Couros, 2013a, p. 5)

Couros also describes the impact that virtual learning communities can have on the

physical learning communities.

Social media, and the open culture it has created, has made our culture and mindset "participatory." 'One of the reasons social media has grown so fast is that it taps into what we, as human beings, naturally love and need and want to do—create, share, connect, relate.' - Notter and Grant. If our culture is shifting to this, wouldn't this become the expected norm that many new educators (and current students) would expect to live within our schools? While we live in a world where people are used to *creating*, *sharing* and *connecting*, schools can no longer ignore this cultural shift. They must embrace the idea that we are lucky to live in a time of such technological advance and openness that will make the opportunity to be *innovative* that much easier. (Couros, 2013a, pp. 5-6)

When educators participate in Twitter chats, they begin by introducing themselves to the community of learners. These friendly introductions include names, job titles or roles in education and location of the educator. The following examples of introductions are typical of all Twitter chats and exemplify the virtual communal learning space that social media can create, bridging distance and bringing educators from all over the world together to learn.

Emily Graves @MsGraves214 Emily Graves = Elem integrator @ Fieldston Lower within Ethical Culture Fieldston School #techcoach 7:33 PM - 30 Aug 2012. (Russell, 2012, p. 76)

Lisa @lisaodavis Hi Everyone! Lisa - PTA exec board member and mom of 3. From Long Island, NY:) Psyched for @Bammys this weekend!! #ptchat 8:01 PM - 18 Sep 2013

Sherri Wilson @ptaswilson I'm Sr. Manager of Family Engagement at @NationalPTA right outside our nation's capital! #ptchat 8:01 PM - 18 Sep 2013 **Joe Clark** @DrJoeClark Joe, superintendent from NE Ohio. #ptchat 8:01 PM - 18 Sep 2013

Melissa Goulet @MeGoulet1#ptchat I am Missy and I teach high school chemistry in New Hampshire. This is my first ever live chat, I hope I am doing this right 8:01 PM - 18 Sep 2013. (Mazza, 2013, pp. 2-3)

Evan Scherr @EvanScherr Evan, Educational Technologist in Sasebo, Japan.

#ptchat 8:05 PM - 18 Sep 2013. (Mazza, 2013, p. 13)

Christine Smith @CsmithChristine Good morning #satchat! Christine Smith, VP of intermediate school in central NJ 6:32 AM - 6 Oct 2012

Lisa Neale @lisaneale Good Morning! Lisa Neale, Principal in a rainy Ontario, Canada. #satchat 6:33 AM - 6 Oct 2012

Jay Posick @posickj #satchat Jay Posick, principal in Merton, WI. 6:33 AM - 6 Oct 2012

Louiza Hebhardt @equilibriumctc Louiza Hebhardt, teacher & counsellor, director EQUILIBRIUM teacher wellbeing services, Adelaide, South Australia #satchat 6:33 AM - 6 Oct 2012. (Currie, 2012, pp. 4-5)

Sam Blanco @SamBlancoBCBA I'm Sam from Brooklyn, NY. I'm focused on using devices with students with autism. #1to1techat 8:05 PM - 4 Sep 2013. (McCusker, 2013, p. 8)

Neither class, geography, nor job title prevent these educators from connecting with each other on their virtual learning community. Twitter chats have the power to transcend all of these obstacles and create a communal learning space.

At the end of #PTchat, Joe Clark comments that he is looking forward to connecting with the other participants during the next week's chat. "Joe Clark @DrJoeClark Great #ptchat tonight! Also enjoyed extended discussion with @rggillespie. Hope to see everybody next week. Same time, same sandbox. 8:59 PM - 18 Sep 2013" (Mazza, 2013, p. 139). On #1to1techchat, educators reflect on the power of technology and virtual connections for students. "Kyle Beatty @kylefcs A2: So many answers at the tips of their fingers. Collaboration. Participation from silent Ss. #1to1techat 8:23 PM - 4 Sep 2013" (McCusker, 2013, p. 46). Another educator mentions the global reach of social media. "Bonnie Strejc @MrsStraitsClass @kylefcs realtime

discussion with global peers now possible. New perspectives #1to1techat 8:27 PM - 4
Sep 2013" (McCusker, 2013, p.56). Another participant in #1to1techchat shares how her
students participate in a virtual learning community. "Shaelynn Farnsworth

@shfarnsworth Focus in my room - being part of a global community while maintaing
their Midwest voice! Struggled to see their view as valid #1to1techat 8:30 PM - 4 Sep
2013" (McCusker, 2013, p. 63).

Educators who participate in Twitter chats for professional development will often discuss their participation in and enjoyment of these virtual learning communities. Several educators wrote about their feelings towards the #1to1techchat at the end of the chat.

Ginny Moe @GinnyMoeRHSB @SamBlancoBCBA This is a great chat - the only one I am a regular for - I have learned A LOT #1to1techat 8:50 PM - 4 Sep 2013

Kathy Bellew @kat_byte Favorite every one! MT @SamBlancoBCBA: @ShawnMcCusker I'm a little overwhelmed by how many resources I've gained from this chat! #1to1techat 8:50 PM - 4 Sep 2013 (McCusker, 2013, p. 96). **Monica Babaian** @txlibrarianbabs I felt the same way about last week's chat. This is one of my favorite chat groups. @SamBlancoBCBA @ShawnMcCusker #1to1techat 8:51 PM - 4 Sep 2013. (McCusker, 2013, p. 97)

Shawn McCusker @ShawnMcCusker @SamBlancoBCBA ITs like this every week. Work at your own pace, find what matters to u, follow those who resonate w your needs #1to1techat 8:52 PM - 4 Sep 2013. (McCusker, 2013, p. 99)

Kyle Beatty @kylefcs Good job, Shawn! @ShawnMcCusker This chat goes by so fast. Love the side conversations tonight. #1to1techat 9:04 PM - 4 Sep 2013

Tim O'Connor @toconnor851 @ShawnMcCusker Thanks for moderating Shawn! I learned a lot! #1to1techat 9:04 PM - 4 Sep 2013. (McCusker, 2013, pp. 119-120)

These educators' enthusiasm for their virtual learning community, for the personal

learning network that they have created on Twitter, is evident by these tweets.

Communal learning spaces, whether traditional physical spaces or virtual spaces created on social media are important to educators' professional development. Educators can gather on social media and erase the limitations of time and distance that would ordinarily separate them from each other. They share resources and ideas; they support each other, mentor each other and inspire continuous growth and improvement. Blogs and Twitter chats play a crucial role in the formal and informal systems and structures of education on social media. The both act as vehicles for educators to connect and engage each other in professional growth and learning, any time, any date, any place.

CHAPTER V

CONCLUSION

But, to put the matter quite simply - the enthusiastic conviction of present-day educationists; their undisguised belief that what they are doing or proposing to have done is startlingly novel and indeed revolutionary; their readiness to advertise their views by calling them 'The *New* Education' and their classroom practices by calling them 'progressive' and referring to their institutions as 'Schools of *Tomorrow*'; to classical scholars all this seems (at least when they are speaking among themselves) naive: amazingly so....But it is especially when scholars read the Dialogues of Plato that they seem (to themselves) to find clear and unmistakable expression of almost all the beliefs, practices, emphases, and even slogans which present-day educationists acclaim as ultra-modern. (Lodge & Frank, 1970, p. 234)

Just as today's educational leaders must work to shape the future of education for our society, they can turn to the past knowing that the thoughts, ideals and philosophies of those that came before them, even of Socrates, Plato and Aristotle, are guiding and supporting them even today. Throughout this research process, this researcher has found evidence of the systems and structures of formal and informal education and discourse in ancient and modern times. A close examination of primary and secondary sources, utilizing the methodology of historical documentary research, has led this researcher to the following four research questions.

Research Questions

1. According to select primary sources from 400 B.C. - 322 B.C. (heretofore referred to as ancient times) and historical secondary sources about that time

- period, what was the system and structure of formal and informal education and discourse?
- 2. According to select primary and secondary sources from 1990-2013 (heretofore referred to as modern times) what is the system and structure of formal and informal education and discourse?
- 3. How do the systems and structures of formal and informal education and discourse of ancient times compare and contrast to the systems and structures of formal and informal education and discourse of modern times?
- 4. What are the implications of this study for today's educational leaders?

Throughout the research process, this researcher utilized the following lenses while examining the select primary sources from 400 BC - 322 BC and historical secondary sources about that time period and select primary and secondary sources from 1990-2013 to determine how the systems and structures of Socrates, Plato and Aristotle's practice and the systems and structures of educational leaders on social media, specifically Twitter and blogs address:

- A. Equity in primary participation
- B. To whom is thought and information disseminated following primary participation?
- C. Who formally leads?
- D. Who formally facilitates?
- E. Process for dissemination, transcription and interpretation
- F. Resultant change/spheres of influence for

- a. the individual
- b. the organization
- G. Public opinion of the discourse
- H. The evolution of public acceptance and validation
 - a. What were the obstacles?
 - b. What were the enhancers?
- Power of grassroots creation for success/participation and professional authority
- J. Power of moral authority for shared beliefs, purposes and values
 - a. The notion of a contribution to the greater good/collective knowledge of a PLN
- K. Communal learning spaces

Answers to Research Questions

Considering the components of the investigation, the following are the answers to the research questions.

Question 1: According to select primary sources from 400 B.C.- 322 B.C. (heretofore referred to as ancient times) and historical secondary sources about that time period, what was the system and structure of formal and informal education and discourse?

In ancient times, between 400 B.C. and 322 B.C., the systems and structures of formal and informal education and discourse had two common themes: the service and improvement of the State and the attainment of knowledge by the individual. For most of

this time, the purpose of education of youths was to prepare them to better serve the State and contribute to society.

The structure of schools was developing and changing during this time, as well. While there were schools for young children to attend, often gender and class would limit access to further education. Boys were sent to additional schooling, while girls were either sent to separate schools or trained at home for more domestic duties. Those families that were not from the wealthy class would limit their children's years of education, instead needing them to return home to contribute to the family's work or trade.

As the Sophists gained in popularity and acceptance, educational leaders such as Socrates, Plato and Aristotle were able to shape the systems and structures of education at that time. Socrates began to engage youths and other members of Greek society out in public. He was often found in the agora, the public marketplace, talking to people, asking questions and engaging them in discourse and debate. This was a very unorthodox way of educating the public, for which Socrates was eventually condemned. Later, his protégé Plato founded the Academy and later Aristotle founded the Lyceum. These more formal structures of education served to educate young men and could be compared to today's university structure. Though greatly influenced by the questioning techniques and philosophy of Socrates, these more formal structures of education were more acceptable to the ancient Greek society. These ancient peripatetic schools gained in popularity and influenced generations of youths. No longer was the focus of education only on the service to the state, but also on the improvement and advancement of the

individual. Though critics believe that this shift in focus from the greater good and public service to individual advancement may have led to the downfall of Athens.

In ancient times there was great inequity of access to formal education. Though the philosophers believed that there was no reason to treat and educate men and women differently, the practice at the time was to separate boys and girls into different schools, to train the boys to become soldiers and leaders in their community and to prepare girls to be wives and mothers. Most of the time, girls were relegated to the home, where they were trained in domestic duties. They were often given the responsibility of directing the works of the household slaves. It was unclear if the actions and the policies of the time ever aligned with the philosophies of those in power. Socrates, Plato and Aristotle all believed that girls and women should be educated and trained alongside men, but there is inconsistent evidence as to whether this actually occurred in the structures of education at that time.

The State of Athens influenced its systems and structures of formal and informal education and discourse. Schools were created in order to support the future of the State and to help create leaders in that system. The entire society was committed to and invested in the education of youth, because they knew that this was directly tied to the future of their society. The entire focus of education was, therefore, on creating leaders, understanding the shared morals and values of the society and becoming a contributing member of Athenian society.

As a result of this shared purpose of education, there was greater public acceptance and support for the educational structures. Citizens realized that education

had the power to protect their way of life, both physically, as in the preparation of soldiers, and philosophically, as in the instruction and discourse in art, music, arithmetic, reading and writing. The systems and structures of education at the time were squarely rooted in shared beliefs, religion and the morals of the society. The main focus was the contribution to the greater good of Athens.

The arrival of the Sophists, the work of Socrates and the creation of the schools of Plato and Aristotle marked a change in the systems of education in Athens. This higher education in service to the self, instead of solely service to the state, marked a major shift in educational philosophy. By shifting to more academic and philosophical pursuits instead of a purely military and public service focus, the informal structure of Socrates' school and the more formal schools of Plato and Aristotle at the Academy and the Lyceum forever changed the system of education.

As students pursued a more leisurely lifestyle, they sought spaces where they could interact with and learn from their teachers. This intellectual engagement between student and teacher was the foundation of the peripatetic schools. Plato and Aristotle built these communal learning spaces out of a demand for a place where youth could gather and learn together. This grew out of the practice of Socrates of engaging youths in discussions at the gymnasium and in the agora. The students craved this intellectual stimulation and relished in the dialogues and discourse. The schools still provided an education that reflected shared beliefs and a common interest, but these had evolved over time from the original systems of education in ancient Greece.

In ancient times, education and communication was limited due to the lack of technology and transportation options available. The interaction of people was often defined by where they lived, what class they were in, what their gender was and to which family they belonged. These limitations all had an impact on the systems and structures of both formal and informal education and discourse. Much of what we know about this time period is through the archeological record and writings preserved from the time. Since much, if not all, of the work of Socrates, Plato and Aristotle was presented face to face and delivered orally, through dialogues, discourse and lectures, it is only through the written work of their students that today's educators can learn from the past. This information was passed down through generations of learners, reaching through time, to influence educational leaders of today and gently guide them with ancient wisdom.

Question 2. According to select primary and secondary sources from 1990-2013 (heretofore referred to as modern times) what is the system and structure of formal and informal education and discourse?

This research focused on the systems and structures of formal and informal education and discourse on social media, specifically Twitter and blogs. These systems and structures allow for unprecedented equity and access to education. Educators from around the world gather virtually on social media to learn, share information and discuss topics of interest. Educational leaders are able to take control of their own learning and influence the learning of others by writing and sharing on blogs and during Twitter chats.

Educators are becoming the designers and authors of both formal and informal systems and structures of education. By starting a blog, an educational leader provides a

forum for their voice in the public sphere. They can tell the story of their school or district, share their educational philosophy and communicate with their community.

Blogs are widely read and quoted, becoming a more accurate source of information that the local newspaper, which is written from second instead of first hand knowledge of the school. The educational leaders are using social media, like blogs, to tell their own stories about their schools and to help shape public opinion and acceptance of educational initiatives. By engaging stakeholders through social media communication, leaders can send a clear message about the events and priorities of a school or district.

When educators participate in Twitter chats, the boundaries of place are completely removed. The personal learning community that is created through these interactions on social media is often made up of educators from around the world. The technology of social media makes it possible for educators to connect and learn together. These informal systems of education are becoming more popular and effective for some educators that the formal systems of education and more traditional professional development.

The grassroots creation of Twitter chats and blogs started by educators and for educators has developed into a critical system and structure of education for today's learners. Teachers and administrators regularly spend time writing, reading and responding to blog posts. In many classrooms, a blog has replaced the class newsletter. For leaders, a school or district blog has become a main vehicle for communicating with and engaging stakeholders.

Districts are also beginning to change their approach to professional development. Teachers who once relied on administration to deliver professional development a few times a year at an in-service or took graduate credits for salary advancement are now seeking their own professional learning through social media. Educators are participating in Twitter chats which are available seven days a week, throughout the year, free of charge. Educators are writing, reading and commenting on blog posts in order to share ideas and resources.

There is a shared set of beliefs of educators who utilize social media for professional development. Those that participate subscribe to a culture of sharing and openness. They freely share and exchange ideas, challenge each others thoughts, and practices and encourage each other to continue their pursuits. During all of the Twitter chats and blog posts that were analyzed, educators shared resources and ideas to improve teaching and learning. They inspired each other and offered gratitude for the facilitators of this information.

The leadership structure in education is shifting as a result of social media, too. Blogs and Twitter chats give voice to educators around the world, allowing "leaders" to emerge in these informal systems and structures even when they are not necessarily leaders by role or title in the more formal systems and structures. These educators are taking charge of their own learning and professional growth. They are forming personal learning networks on social media so that they can become more effective educators and improve student learning and engagement.

Information is disseminated through blogs and Twitter to audiences far beyond those that may have originally participated in the learning. Educators can share their reflections after attending a conference or a lecture to their blog site. Others can then read, reflect and comment on this information, adding their own ideas and continuing the discourse. Sometimes an educator will share a link to an article or a blog post during a Twitter chat. This knowledge exchange and resource sharing is made possible by the ease of access to the technology. Educators can now learn from each other and facilitate learning across space and time due to social media. A blog post written months or years earlier might still spark comments or discussion. A chat that took place years before can still be read and enjoyed through access to the chat archive. The technology facilitates the expanded access and sharing of this knowledge and information.

The public opinion of the systems and structures of education on blogs and Twitter chats is something that is interesting to note. Participants on social media are strong voices of support for the system as being effective. Regularly participants thanked each other or expressed gratitude for the information shared and the efforts of the leaders and facilitators. While those critics on the outside might question the validity of social media for professional development, the participants are the biggest proponents and voices of the benefits of this system.

The communal learning space created by social media is open and accessible to any educator who chooses to engage in it. By writing a first blog post or participating in a first Twitter chat, educators around the world are starting on an educational journey in which they will be able to interact with and engage in discourse that started thousands of

years before, in the agora and in the Academy and the Lyceum. Just as these systems and structures of education were once new and revolutionary, so is today's learning facilitated by social media, which leads to the third research question.

Question 3. How do the systems and structures of formal and informal education and discourse of ancient times compare and contrast to the systems and structures of formal and informal education and discourse of modern times?

Nathan Stevens @nathan_stevens @ShawnMcCusker alt final? Question, students show be creating, teachers asks question to guide students. Feed on that Socrates #1to1techat 8:53 PM - 4 Sep 2013. (McCusker, 2013, p. 101)

The parallels between ancient and modern systems and structures of formal and informal education and discourse are quite remarkable.

In 335 Aristotle returned to Athens to establish in the Lyceum his own school of philosophy, since the contrast between his own thought and that of the Academicians had now become more marked, both because his own ideas and methods had developed, and because the work of the Academy had now degenerated into mere exposition and comment. Here he continued to teach for eighteen years. The aim of Aristotle was broader than that of the Platonic or of the other schools; it was nothing less than to produce an encyclopaedia of all the sciences, - an organization of all human knowledge. (Monroe, 1932, p. 266)

This could easily be compared to the creation of the website Wikipedia! Then more about Aristotle's work:

The whole question of authorship is complicated by the fact that the list of the 146 Aristotelian writings, made by the librarian of the great library at Alexander about 220 B.C., does not contain the name of a single one of his works, at least under the title by which we now know them. On the other hand, concerning the accepted works, it is quite as generally admitted that the substance, the spirit and the general form, if not the exact wording, are wholly Aristotelian. Where the efforts of the school supplemented those of the master, they were wholly under the dominance and direction of the latter, so that the same may be said of resulting collaborations. (Monroe, 1932, p. 267)

This is tied to today's issues of copyright, Creative Commons and authorship - who owns the ideas on Twitter or social media- the original author or the contributors or commenters? On blogs and Twitter, ideas and information are constantly morphing into each other, building idea upon idea. As new educators join the conversation, they each add knowledge and understanding to the learning community, whilst gaining new knowledge and experience themselves. This new knowledge can then be brought back to their own organizations, lifting up the entire society of educators, one blog post and chat at a time.

The participation in social media for professional development is a purely voluntary activity. Educators from around the world and across the United States spend countless hours of their own time contributing to their personal learning networks, or PLN's as they are known on Twitter, as space famous for its use of acronyms to preserve precious character counts and survive within the 140 character limit.

Plato told us in his *Republic Book VII*, "Because a freeman ought to be a freeman in the acquisition of knowledge. Bodily exercise, when compulsory, does no harm; but knowledge which is acquired under compulsion has no hold on the mind" (Monroe, 1932, p. 216). Today's educators on social media realize the truth of this statement and are living proof of the power of a personal learning network. The vibrant community of educators on social media stretches far and wide and is growing day by day, with new blogs and Twitter chats starting all the time.

Educational systems and structures of modern and ancient times were both created in service to the state. The system of public schools in the United States and the

structures of schools in ancient Athens both serve to learn civics and create an informed citizenry in order to contribute to society.

Plato was less concerned with the education of the ordinary citizen than with the problem of how to train political technicians, experts in political affairs who could act as advisers to kings or as leaders of the people. It may be that this was an aristocratic prejudice; but it was a remarkable anticipation of what was in fact to become the normal mode of effective political action after the triumph of Macedonia, when the system of absolute monarchy was imposed on the Hellenised world. The role played under Plato by the Academy as nursery of counsellors-of-state was later assumed by the Stoic schools at the beginning of the Hellenistic era....History gives many examples of such overlapping: something that seems to be a survival from a past that is dead and gone turns out to be a pointer to the future. (Marrou, 1956, p. 65)

Just as Plato and Aristotle were incubating the leaders of their day, Twitter and blogs are helping to develop the educational leaders of today. As Ito wrote:

Imagine what it would mean to think of public education as a mission shouldered not only by schools, but by a wide range of public institutions committed to knowledge and learning? When we think of public education, do we include the efforts of those in public and independent media, who develop radio, television, movies and games with an educational mission? Do we include organizations like Mozilla, Wikipedia, Creative Commons, and the Internet Archive committed to the production of knowledge in the public interest and in the public domain? Do we think of the efforts in broadband policy that seek to make the online knowledge accessible to families across the country? To me, these are all efforts in public education that are often overlooked in our often exclusive focus on schools. (Ito, 2011, p. 3)

The communal learning space that social media has fostered on Twitter and blogs allows educators to connect as never before. George Couros said it best in his recent blog post:

A "spike" is a place where there is a large amount of people with one main area of interest that come together to create some of the best work in their field. It is not the only place, but these specific areas are usually known for excellence. So if I asked you where the "spike" is for educators, where would that be? Well, because most places on Earth have a school, if we think of a "spike" being in a physical place, it would be hard to identify where that one place would be. This is where social media comes in. Passionate educators are using things like Twitter

and hashtags, such as #edchat to come together, ask questions, share ideas and create innovative ideas. (Couros, 2013a, p. 3)

Plato had the same idea for the Academy, "In founding the Academy, therefore, Plato showed his originality not in the mere idea of scholars working together in the same building but in the type of work to be carried on there" (Beck, 1964, p. 227).

Lodge and Frank reminded us that the concept of social media as a platform for education has been around much longer than social media itself.

In our schools, experience is not left to itself, but is selected and amplified in accordance with the community value-judgement. Highly specialized techniques are brought to bear. The traditional background and outlook of the social group are imparted to the rising generation in accordance with an approved plan; and the natural reaction-tendencies of the youthful organisms are modified until they take on the patterns regarded by the community as desirable. In the narrower sense, then 'Education' is understood as *socially controlled experience*. (Lodge & Frank, 1970, p. 11)

The systems and structures of informal education and discourse on social media are rooted in the ancient tradition of Socrates.

From:Xenophon *Memorabilia* I, 1.10; cf. IV, 1.1: Socrates was constantly out in the open. Early in the morning he went to the *peripatoi* and the gymnasia; when the Agora filled up, he could be seen there; and for the rest of the day he would always be wherever he might associate with (*sunesesthai*) the most people. (Lynch, 1972, p. 42)

From Dikaiarchos (Plutarch, *An seni res publica gereda sit* XXVI, 796d=Dikaiarchos, fr. 29, Wehrli) "Socrates at any rate was a philosopher, although he did not set up benches or establish himself on a throne or observe a fixed hour for conversing (*diatribe*) or walking (*peripatos*) with his acquaintances (*gnorimoi*); instead he played with them whenever he had a chance and served in the army or went to the Agora with some of them... (Lynch, 1972, p. 44)

Today's educators use Twitter and blogs in the same way that Socrates used the agora and the gymnasium.

Just like the scholars of ancient times, educators today are seeking to extend their knowledge and connection with the world. Many educators are dissatisfied by the state of our school and by the quality of professional development that they receive from their districts, so they are turning to social media to form their own professional learning network and they are reaping the rewards of this effort.

...but no sooner did individualism and the desire for pleasant diagogic life come into competition with the state than a culture was demanded which it had no means of supplying. Here the Sophists found their opportunity. The young men were to be met everywhere-in the streets, the market-place, the gymnasia, the taverns, the homes, etc. The Sophist had only to show himself in order to be surrounded by a knot of them. He had but to seat himself at the exedra, or lay himself down under a tree in the gymnasium, and they crowded round to hear his wisdom-his manifold stores of unfamiliar knowledge and his brilliant arguments on any theme proposed to him. (Davidson, 1894, p. 89)

And today:

Social media, and the open culture it has created, has made our culture and mindset "participatory." 'One of the reasons social media has grown so fast is that it taps into what we, as human beings, naturally love and need and want to docreate, share, connect, relate.' - Notter and Grant. If our culture is shifting to this, wouldn't this become the expected norm that many new educators (and current students) would expect to live within our schools? While we live in a world where people are used to *creating*, *sharing and connecting*, schools can no longer ignore this cultural shift. They must embrace the idea that we are lucky to live in a time of such technological advance and openness that will make the opportunity to be *innovative* that much easier. (Couros, 2013a, pp. 5-6)

The main contrasts between the ancient systems and structures of formal and informal education and discourse and the modern systems and structures on Twitter and blogs surround the equity of access. Whereas in ancient times, educational access was limited by gender and class, today's access to education on Twitter and blogs is much more open. The access to education in ancient times was also limited to geography and

only disseminated to those who were present for a lecture or a debate, or who read the notes of students who were in attendance. This lies in stark contrast to the systems of education on social where technology facilitates access to information no matter where an educator lives or works. A chat might attract educators from all around the world to gather and discuss educational topics. This synchronous type of interaction would have been impossible in Ancient Greece. As shown in the Twitter chats that were analyzed, educators from all over the world, and from all levels of education, may participate in the same chats at the same times. This ability to interact with a global PLN is only possible through social media. Although teachers in Athens sometimes arrived from other countries, it is not the same as interacting simultaneously with educators from around the world.

The gender disparities in educational leadership echo the disparities of access to education that females faced in ancient times. Today's social media certainly opens access to all, but in the recommendations for further research, one might want to consider a gender equity study of educators on social media.

Finally, modern systems and structures of education and discourse certainly have been shown to have roots in ancient times. The very language of education is based in Greek.

Note. - Most of our English vocabulary which has to do with education is derived from Greek. Thus, 'philosophy' is from *philo* (I love) and *sophia* (wisdom); 'logic' is the science of *logoi* or words; 'mathematics' originally meant the science of things learnt or discovered; 'geometry' is the measuring ge=the earth; 'geography' the drawing (grapho = draw or write) of the earth; 'arithmetic' is the

science of *arithmoi* or numbers. 'Physics' is derived from *physis* = nature; and nearly the whole vocabulary of the scientific laboratory will be found to be derived from the Greeks, the first scientists. (Robinson, 1933, p. 150)

Our connection as educators on social media in modern times can be as strong as our connection to the ancient civilization of Athens when we recognize that the modern day systems and structures may look different, but they are built on a solid foundation of ancient principles, started thousands of years ago by Socrates, Plato and Aristotle.

Question 4: What are the implications of this study for today's educational leaders?

The implications of connecting to the school community as well as the greater community of school leaders speak to the relevance of schools and institutions and the leaders themselves. Are connected educators more or less relevant than those not connected? Are connected schools having a greater impact on their community than non-connected schools? Schools of today face challenges of engagement of students, staff and parents.

Educational leaders must plan for the future. What does education on social media mean for the future of both higher education and professional growth models?

Educational leaders constantly have their email inboxes flooded with offers for workshops, conferences, administrator academies and graduate courses. These learning and professional growth opportunities range in cost from hundreds to thousands of dollars, but, the PLN opportunities and the ability to participate and learn from Twitter chats are completely free of charge, except, of course, for the time spent participating and the cost of a smartphone or a computer and of access to the Internet.

Collins and Halverson conclude with several points regarding what, exactly, needs to be re-thought. This will have the most impact on the superintendency. They are really suggesting that, as learning moves outside of the traditional classrooms and into the homes and workplaces and hands of people across the country, superintendents and policy makers must start asking different types of questions in order to work towards a viable solution. They suggest, we, as readers, "rethink learning, motivation, what is important to learn, careers, the transitions between learning and work, educational leadership, and the role of government in education" (Collins & Halverson, 2009, p. 129-143). Educators need to especially pay attention to rethinking educational leadership. They suggest that once students turn fourteen, that they should be free to pursue their own learning paths, leading towards a particular career or field of interest. They should be able to work, go to school or alternate between. They suggest the need for "personalized learning counselors" (p. 140) who would help guide students toward the individual, "personalized learning" that they desire (p. 142). These individuals would be certified and licensed by the state in a way similar to doctors (p. 142). If the first visit were paid for by the state, this might lead to greater equity for students who are less affluent. Perhaps a life-coach would follow someone throughout his or her lifetime to help guide educational and career choices. They also suggest that education can meet the needs of not just youths, but adults as well, thus expanding the traditional role of educational leaders. The authors call for the educational leaders of the future to help rethink the entire system of education as we know it. They draw the comparison to the effect that Horace Mann had on the 20th century educational system and they call for a

new leader to make similarly revolutionary changes to individualize learning and meet the needs of the 21st century learner.

Social media has the power to enable such changes in education. By creating a PLN on social media, based on the PLC research of DuFour and the Communities of Practice research of Wenger, educators can create the ideal learning environment. How school leaders can create both the right atmosphere for communities of practice and professional learning communities to thrive in their schools/districts through social media, and also participate in such communities is a challenge of educational leadership.

Today's educational leaders also need to take ownership of their own message in order to communicate their vision and engage stakeholders. "Craig Badura @mrbadura If we don't tell our story, someone else is going to tell it. #techcoach 8:29 PM - 30 Aug 2012 (Russell, 2012, p. 10). In ancient times, since most of the instruction was delivered verbally and lectures and dialogues were not written, the leaders of the time relied on their students to share their message. It is thanks to these students who used the tools and technology of writing that we can still study the work of Socrates, Plato and Aristotle today. It is thanks to the educators on social media who reflect, write and share ideas on Twitter and blogs that other educators can engage in learning with and from them.

Just as the systems of education evolved during ancient times due to the demands of the people and the needs of the community, educational leaders must prepare for similar shifts in priorities. Leaders must be open to new methods of delivering information and interaction between teachers and students. It is up to the leaders to

envision the next systems and structures of education and discourse that will shape the future of education and professional development.

Some think that technology can isolate us from other people or make people selfabsorbed. Social media is connecting educators, breaking down barriers of isolation that educators can sometimes feel in their classrooms. Social media has the power to connect educators and leaders to other, like-minded individuals who can then come together to improve the educational landscape.

Many schools are creating "mini-spikes" of innovation where geography is not a factor, and sharing and learning can happen 24/7. Parkland School Division, a school district that is spread over a large geographic area spanning over 100 miles, uses the hashtag #psd70 to connect educators, students, parents, community, as well as to invite in educators from around the world to share their learning. This is a huge opportunity for a school district that has a school with less than 50 students, as well as places that are far from a major city. (Couros, 2013a, p. 3)

Leaders must take calculated risks in order to move an organization forward. By learning from those that came before us, educational leaders can build and grow their schools and districts on a solid foundation. Socrates, Plato and Aristotle all believed in the open exchange of knowledge and ideas in the systems and structures of education that they helped to create. Today's educational leaders must rise to this challenge and begin to embrace the power that social media holds. By engaging their staff, by communicating with stakeholders, and by expanding their own learning, all through social media, educational leaders can inspire the next era of education, one in which knowledge, resources and passion are openly shared and encouraged. Leaders must recognize the

changing needs of students and, just like Socrates, Plato and Aristotle; they must change the systems and structures of education to meet those needs.

Suggestions for Further Research

While this study was limited to a comparison between the systems and structures of formal and informal education and discourse in ancient Greece and the work of Socrates, Plato and Aristotle and the systems and structures of formal and informal education and discourse on social media, specifically blogs and Twitter chats in modern times, other researchers might want to explore related topics. For instance:

- An historical documentary research study could be done comparing and contrasting ancient Roman systems and structures of education to the modern systems and structures.
- 2. Alternatively, other social media tools could be examined, such as Facebook and Google + for the modern era systems and structures of education.
- 3. Another research study could be done using quantitative methodology to measure the participation rates, tweets, and RT's on Twitter chats.
- 4. Another study could compare participation and learning on one Twitter chat compared to another over a certain period of time.
- 5. A researcher might want to perform a qualitative or mixed methods study on the impact of participating in social media for PD vs. not participating on social media for PD, examining teacher satisfaction, student test scores or teacher retention rates.

- 6. Another study might examine the gender inequities on social media. How many members in a PLN on Twitter, for example, are men vs. women? Are educators more likely to follow or RT a male or a female educator profile? Perhaps a controlled study in which two Twitter accounts with similar profiles and backgrounds tweeted the same information, but one profile was listed as male and another female and then record and analyze the results of the study.
- 7. Finally, a researcher might want to study whether teachers or administrators are more likely to locate job openings, and then be interviewed and hired if they are connected educators who use social media to engage in professional learning.

Final Thoughts

It is the hope of this researcher that educational leaders will embrace social media for professional development. When leaders realize the power of developing a personal learning network for themselves and their organizations, they will find that they are contributing to the improvement of education as an entire system. Their teachers will be able to access and share ideas and experience and learn from others around the world. We need to throw open the doors of our schools and districts to new ideas and inspiration in order to engage students and improve instruction. Just like the ancient leaders developed new systems and structures of formal and informal education, so, too, must the educational leaders of today create a learning environment that supports the learning of students and teachers. This new environment can gives voice to new ideas and challenges the system of education and professional development as we know it.

Teachers who are not currently utilizing social media for professional development will benefit form the guidance and leadership of educational administrators who model the use of social media for their own learning. These leaders will need to gently guide teachers past their own insecurities and biases and towards the learning opportunities that await them on social media. By presenting the medium through the light of this research, educational leaders may be able to more convincingly present social media as a valuable use of teachers' limited time and resources.

We stand on the shoulders of these ancient philosophers, inspired by their wisdom and vision of thousands of years before, continuing their tradition of excellence in knowledge, discourse and education.

$\begin{array}{c} \text{APPENDIX A} \\ \text{BLOG POST SAMPLE} \end{array}$

Looking Back on 3 Bad New Principal Assumptions

October 21, 2012

By Joe Mazza

A little over 5 years ago, I arrived at Knapp Elementary School as a brand new 29 year-old principal. The leader I replaced was very active in the community and had spent much of his career at the school. There was a certain culture that I was entering, and understanding and adapting to this was my first task as principal. Reflecting back, I can now see some glaring blindspots I missed during those first couple of years. The biggest "swing and misses" I took during those early days were following through on assumptions "I thought" were good for my learning community.

Assumption #1: The principal is at the top of the chain of command. He or she need not be accessed unless everyone else has been exhausted.

Fact: When working with students, staff & families, the principal is in fact the person who can put the child in the best place to take advantage of all available resources and knowledge. Being on a team means it's all hands on deck at all times.

5 Years Later: I've moved my office out to the front lobby hallway and walk-ins are always welcome – students, staff or families. I'm not the President and therefore I do not need the "Oval Office" security and access restrictions that go along with it.

Assumption #2: The principal doesn't need to attend all of the events. Getting to one per month is sufficient.

Fact: Students, staff & families need to connect with us in and out of school to build true relationships and hone-school partnership. Yes we're tired after working 10 hours before the night event even starts, but it is *these very investments we make* in our schools that helps everyone around us raise their game for the kids.

5 Years Later: I attend every event I am physically able to. I miss only if I am somewhere learning in support of our school goals. I walk the building daily tweeting recognitions of students, staff & families from our @KnappElementary Twitter account as well as highlighting this work in newsletters, announcements and other communication mediums. These events require a great deal of planning and orchestration. We need to welcome, honor & respect them as such.

Assumption #3: It is my job to know all the right answers and make decisive decisions in the best interests of my students, staff & families

Fact: The school does not belong to me. The school belongs to the students, staff & families. I am the lead learner and collaborator. It is my job to make sure that as we move forward, we do so in a collaborative and transparent way. One of the reasons social media

has been successful in our school is because these tools compliment our core values in being a transparent and collaborative learning community. It is the face to face conversations and relationships that we build amongst all stakeholders that truly matter. **5 Years Later:** Two-way communications have become the default. We rarely broadcast information out without expecting and encouraging a response. Use of polls, leadership teams, student voice, surveys, tweets, forms, forums, fishbowl conversations are used to allow conversational opportunities with the intention of *rowing together in the same direction*.

Don't assume anything but... you are in the most important position to support the social, emotional, academic needs of students, staff & families in your role as school principal. What are the highlights of what you've learned during the first 3-5 years on the job? http://connectedprincipals.com/archives/6566

But, besides the post, there were also comments left on the blog that the author responded to:

8 Responses to Looking Back on 3 Bad New Principal Assumptions

Tim Slack on October 22, 2012 at 5:58 pm

What a great post! I can safely say that pretty much the entire post rang true with me. There is such a learning curve and the experiences we gain every single day do wonders to improve our schools and our leadership. Just checked out your Twitter account and will be interested to see how you use it within your school. Always looking for ideas @stritaottawa!

REPLY

http://connectedprincipals.com/archives/6566?replytocom=58700 - respond Joe on October 23, 2012 at 2:59 am

Thanks, Tim. Agree – big learning curve but being open to change is so important. Teachers, parents, leaders & students.

REPLY

http://connectedprincipals.com/archives/6566?replytocom=58732 - respond *Joni Samples* on October 22, 2012 at 7:02 pm

Hi Joe, This was a great post. I agree with the previous commenter. I so appreciate your awareness of what the role of principal is. You are the lead, but not the president. You are the facilitator and connector for students, parents, and staff. Thank you for your insight, and look I'm on Twitter!!

REPLY

http://connectedprincipals.com/archives/6566?replytocom=58709 - respond

Joe on October 23, 2012 at 3:00 am

Hi Joni! Great to see you on Twitter. The role has certainly evolved as have the needs of my stakeholders. It's up to me to change according to their needs, and for our superiors to do the same for people like us.

REPLY

http://connectedprincipals.com/archives/6566?replytocom=58733 - respond Zac Cousins on November 1, 2012 at 4:38 pm

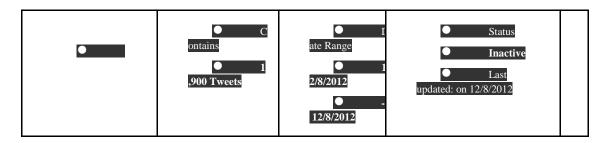
Hey Joe! I have caught on to some of your pieces through EdWeb today and I am just inspired. I am an AP at an Intermediate School in VA and I meeting with my principal this afternoon about getting and app started and utilizing twitter! Great stuff! Thanks.

http://connectedprincipals.com/archives/6566

APPENDIX B TWITTER CHAT SAMPLE

http://www.tweetarchivist.com/4fad02bd/1

#satchat



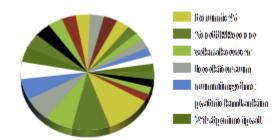
Like what you see? Create your own archive right now!

Try It Now Free

Data Visualizations

Click each chart to enlarge, interact & embed.

Top User Analytics



http://www.tweetarchivist.com/4fad02bd/1/User

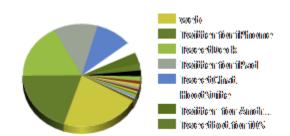
Word Cloud Visualization

TOOLSEDCHATWEB20TEACHERSTECHSCHOOLUSINGTWITTERSTUDE NTSVIA

Top Urls

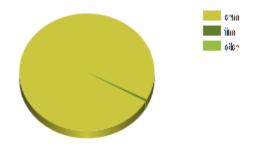
- 1. http://pinterest.com/esheninge...
- 2. http://blogs.edweek.org/edweek...
- 3. http://edublogawards.com/vote-...
- 4. http://bit.ly/RHMuQu
- 5. http://wp.me/p2DvGR-11

Tweet Source Analytics



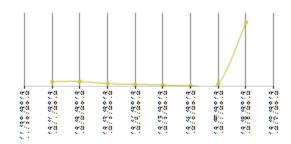
http://www.tweetarchivist.com/4fad02bd/1/source

Top Languages Analytics



http://www.tweetarchivist.com/4fad02bd/1/lang

Tweet Volume Over Time



http://www.tweetarchivist.com/4fad02bd/1/Volume

User Mention Twitter Analytics

@ScottRRocco@bcurrie5@21stprincipal@patrickmlarkin@wkrakower@Archer MHHS@cybraryman1@pammoran@tomwhitby@NMHS_Principal@runningdmc

Twitter Hashtag Analytics

#edchat#cpchat#njed#edcampnj#edtech#edcamp#uk#edadmin#commoncore#atplc #edreform

Images Shared



http://www.tweetarchivist.com/4fad02bd/1/media

Influencer Index

1. Influencer Index Unavailable.

Content from Twitter

Recent Tweets From This Archive



nadineseyepatch

<u>#satchat</u> how much longer before text books and learning are abandoned and we all just start training for a sports team by the 3rd grade?

12/8/2012 1:39:13 PM UTC



http://twitter.com/nadineseyepatch/status/277406983529844738

LindaBeeKay

TY, everyone, 4 incredibly rich convo this morning! Taking many potential resources from today's #satchat, & coming away feeling empowered!

12/8/2012 1:39:11 PM UTC



http://twitter.com/LindaBeeKay/status/277406974835048449

Lindavdberg1

"<u>@wkrakower</u>: Q6 ~ Do you allow teachers to find tools and bring them into the classroom? <u>#satchat</u>" Do we <u>@HFCRD37</u> <u>@hfcrd37sta</u>?

12/8/2012 1:39:04 PM UTC



http://twitter.com/Lindavdberg1/status/277406945898553345

NELSD_Super

Hoping that more <u>#nelsd</u> admins & teachers can participate in <u>#satchat</u> Added many to my pln. Cool experience too!

12/8/2012 1:38:47 PM UTC



http://twitter.com/NELSD_Super/status/277406876554100736

AshworthAnn

#satchat I'm retired but tech integration is part of DESE educator eval @andycinek

12/8/2012 1:38:33 PM UTC



http://twitter.com/AshworthAnn/status/277406815422148609

andycinek

@AshworthAnn agree. But is it happening? #satchat

12/8/2012 1:38:27 PM UTC



http://twitter.com/andycinek/status/277406791061602305

dmastersvp

<u>@MissEsteves343</u> Jenn! So glad you made it this morning! I'm going to try to join in on the <u>#1stchat</u> on Sunday night too. <u>#satchat</u>

12/8/2012 1:38:22 PM UTC



http://twitter.com/dmastersvp/status/277406770576637952

bethlisser

Are you a 'chill' teacher? RT" <u>@rggillespie</u>: What hs students look for in their teachershttp://t.co/GiyPiMtX #satchat"

12/8/2012 1:38:17 PM UTC



http://twitter.com/bethlisser/status/277406748929826816

Drmitzner

RT ha!"@EdTechTexan: A5 Tell them it will save money. #satchat"

12/8/2012 1:38:14 PM UTC



http://twitter.com/Drmitzner/status/277406736971886592

lconley86

Great Great Great chat! Can't wait to look over all my new favorites! So worth getting up early for! Have a great weekend! #satchat

12/8/2012 1:38:08 PM UTC



http://twitter.com/lconley86/status/277406711059447808

edtechedgar

<u>#satchat</u> A5 to get my admin on board with anything - get them in classrooms! Yours, other successful schools; can't beat that.

12/8/2012 1:37:56 PM UTC



http://twitter.com/edtechedgar/status/277406659897331712

Sirotiak02

<u>@pammoran</u> The <u>#Satchat</u> should consider a live chat from home. Big Marker? Anymeeting? Google Hangout only holds 20.

12/8/2012 1:37:51 PM UTC



http://twitter.com/Sirotiak02/status/277406641111064578

andycinek

<u>@johntspencer</u> we encountered the same. "You know that google is taking our kids' ideas and selling them to china" <u>#satchat</u>

12/8/2012 1:37:51 PM UTC



http://twitter.com/andycinek/status/277406639831801856

Bcs_historydept

RT <u>@NMHS_Principal</u>: Some of my favorite Web 2.0 tools http://t.co/hS9KHToi#Satchat

12/8/2012 1:37:29 PM UTC



http://twitter.com/Bcs_historydept/status/277406548295294976

CBethM

<u>@edtechedgar</u> <u>@andycinek</u> I think someone was on the right page to offer to set up tech mentors. #satchat

12/8/2012 1:37:14 PM UTC



http://twitter.com/CBethM/status/277406485212971008

Actually AmHaris

#satchat ratchet

12/8/2012 1:37:07 PM UTC



http://twitter.com/ActuallyAmHaris/status/277406454913302528

edtechedgar

RT <u>@21stprincipal</u>: If admins want staff to use any tech tools, Web 2.0 or others, you have to use them yourself. <u>#satchat</u>

12/8/2012 1:36:37 PM UTC



http://twitter.com/edtechedgar/status/277406327930757120

pammoran

must read RT <u>@lf_caruso</u>: Impact of Eroding Teacher Salaries http://t.co/us4EHZzi#satchat #edu #edchat #njed #vachat

12/8/2012 1:36:35 PM UTC



http://twitter.com/pammoran/status/277406319433105408

$s_bearden$

<u>@HeyLeeAnn</u> There's an ISTE SIG on game based learning. Don't remember name but have folks using Second Life - met them at ISTE. <u>#satchat</u>

12/8/2012 1:36:32 PM UTC



http://twitter.com/s bearden/status/277406308276256768

AshworthAnn

<u>#satchat @andycinek</u> tech int. part of standards of effective teaching; teachers should be evaluated on use of tech to improve learning

12/8/2012 1:36:25 PM UTC



http://twitter.com/AshworthAnn/status/277406279050342400

Joe_Mazza

How should school leaders recognize holidays? "Culture Beyond Heritage" &@BAMRadioNetwork chat http://t.co/ZIRBqRRl #satchat #cpchat

12/8/2012 1:36:18 PM UTC



thomascmurray

RT <u>@Sirotiak02</u>: Great chat everyone!Thanks for sharing so many great ideas #satchatthanks to <u>@ScottRRocco</u> <u>@bcurrie5</u> <u>@wkrakower</u> for bein ...

12/8/2012 1:36:14 PM UTC



edtechedgar

Twitter and Google Reader. RT <u>@MissEsteves343</u>: <u>#satchat</u> A website that you cannot live without...

12/8/2012 1:36:06 PM UTC



ZywickiR

"<u>@ASCD</u>: How are poetry, social studies and <u>#CCSS</u> all related? <u>@ZywickiR</u> explains the connections: <u>http://t.co/A2ss9TV1</u>" <u>#satchat</u>

12/8/2012 1:36:01 PM UTC



http://twitter.com/ZywickiR/status/277406176348602368

maxlambmo

RT <u>@lconley86</u>: Any and all ideas on how to start an <u>#edcamp</u> in our district would be greatly appreciated! RT plz Thanks! <u>#satchat</u>

12/8/2012 1:36:00 PM UTC



millerg6

<u>#satchat http://t.co/kGNLW8IZ</u> The LC Philosophy and Capacity Building in Teachershttp://t.co/gKhR1Jpy

12/8/2012 1:35:51 PM UTC



wmchamberlain

RT <u>@wkrakower</u>: Last call to purchase a <u>#edcampnj</u> hoodie or hurricane relief t-shirt that will go to purchase books. <u>#satchat http://t.co</u> ...

12/8/2012 1:35:46 PM UTC



pammoran

<u>@edtechedgar</u> its part of our lookfors and we expect to see <u>#satchat</u>

12/8/2012 1:35:29 PM UTC



http://twitter.com/pammoran/status/277406044748144641

andycinek

<u>@lookforsun</u> for some they just use without regard because they see the value but many don't #satchat

12/8/2012 1:35:29 PM UTC



http://twitter.com/andycinek/status/277406042630008832

lf_caruso

Impact of Eroding Teacher Salaries http://t.co/C0TIIXOC #satchat #edu #edchat #njed

12/8/2012 1:35:26 PM UTC



http://twitter.com/lf_caruso/status/277406031645126658

lookforsun

<u>@DetroitDramaEd</u> I've been playing around w/it, will prob. do a bit this year, more this summer. <u>#satchat</u>

12/8/2012 1:35:19 PM UTC



http://twitter.com/lookforsun/status/277406003572641793

mr_brim

@MissEsteves343 edmodo #satchat

12/8/2012 1:35:14 PM UTC



http://twitter.com/mr_brim/status/277405979153408000

getwhatugive

Continue sharing articles, videos, images, ed tech, web 2.0, ed reform ideas and resources via our FB group https://t.co/X66IO9yu#satchat

12/8/2012 1:35:03 PM UTC



http://twitter.com/getwhatugive/status/277405934404378624

LindaBeeKay

<u>@andycinek #satchat</u> Your/My frame of mind, though. Changing others' frame of mind something that you usually have to start small with IMHO.

12/8/2012 1:34:56 PM UTC



http://twitter.com/LindaBeeKay/status/277405904104738816

Sirotiak02

RT <u>@wkrakower</u>: Last call to purchase a <u>#edcampnj</u> hoodie or hurricane relief t-shirt that will go to purchase books. <u>#satchat http://t.co</u> ...

12/8/2012 1:34:51 PM UTC



BYODRT

RT <u>@betavt</u>: <u>@onboardlearning @wkrakower</u> we've been paperless for years. E packets go out. Some still print, but many byod to mtgs <u>#satchat</u>

12/8/2012 1:34:51 PM UTC



BYODRT

RT <u>@posickj</u>: <u>@TheMrsLynch</u> <u>@lookforsun</u> Staff and students are also allowed to BYOD. <u>#satchat</u>

12/8/2012 1:34:49 PM UTC



andycinek

<u>@lookforsun</u> I agree. And tech integration is in the cc but I feel for universal acceptance it needs to be part of teacher evals <u>#satchat</u>

12/8/2012 1:34:48 PM UTC



edtechedgar

RT <u>@andycinek</u>: <u>#satchat</u> again..are their any admin in this chat who require (in contract) tech usage in teacher evals? If so, share

12/8/2012 1:34:45 PM UTC



http://twitter.com/edtechedgar/status/277405859099848704

thenerdyteacher

RT <u>@bcurrie5</u>: I just signed my school up for Digital Learning Day on February 6. Great way to model and pilot BYOD or 1:1 <u>#satchat</u> http: ...

12/8/2012 1:34:33 PM UTC



http://twitter.com/thenerdyteacher/status/277405808453627905

NELSD_Super

RT @lookforsun: @NELSD_Super Yes, yes, yes! #satchat

12/8/2012 1:34:29 PM UTC



http://twitter.com/NELSD_Super/status/277405790833373184

jsternke

RT <u>@mcleod</u>: New Google+ communities of interest to school leadershttp://t.co/KNe8V5EV #edadmin #satchat #edchat #cpchat #edreform #iaed ...

12/8/2012 1:34:29 PM UTC



http://twitter.com/jsternke/status/277405790476840960

edtechedgar

First time in <u>#satchat!</u> Amazed by the incredible people and resources!

12/8/2012 1:34:12 PM UTC



http://twitter.com/edtechedgar/status/277405721279209472

LauraGilchrist4

RT <u>@Sirotiak02</u>: Great chat everyone!Thanks for sharing so many great ideas #satchatthanks to @ScottRRocco @bcurrie5 @wkrakower for bein ...

12/8/2012 1:34:04 PM UTC



http://twitter.com/LauraGilchrist4/status/277405689549312000

BushjMS

<u>@onboardlearning</u> Me too. Know what happens when the spam is reported? <u>#satchat</u>

12/8/2012 1:34:00 PM UTC



http://twitter.com/BushjMS/status/277405670863671298

wkrakower

Last call to purchase a <u>#edcampnj</u> hoodie or hurricane relief t-shirt that will go to purchase books. <u>#satchat http://t.co/CLQuNXTm</u>

12/8/2012 1:33:58 PM UTC



http://twitter.com/wkrakower/status/277405661170630656

Sirotiak02

RT <u>@wkrakower</u>: If you did not hear <u>#edcampNJ</u> 2013 will be November 23, 2013 @ Linwood Middle School. Hope to see you there. <u>#satchat</u>

12/8/2012 1:33:56 PM UTC



http://twitter.com/Sirotiak02/status/277405652761055232

NELSD_Super

RT <u>@neldadee</u>: <u>@NELSD Super</u> Great! You joined a "hopping" discussion! My head is spinning:)<u>#satchat</u>

12/8/2012 1:33:54 PM UTC



http://twitter.com/NELSD_Super/status/277405643596517377

mbck

RT <u>@MPNEngaged</u>: <u>@thomascmurray</u> PURPOSE first. Technology WHEN appropriate. Must teach/problem solve WHEN tool is useful, too. #satchat

12/8/2012 1:33:45 PM UTC



http://twitter.com/mbck/status/277405609253539840

andycinek

<u>#satchat</u> again...are their any admin in this chat who require (in contract) tech usage in teacher evals? If so, share

12/8/2012 1:33:45 PM UTC



http://twitter.com/andycinek/status/277405608993505280

edtechedgar

Agree. RT <u>@thomascmurray</u>: <u>#satchat</u> - Admin must create an environment supportive of risk taking and innovation for any of this to matter!

12/8/2012 1:33:43 PM UTC



http://twitter.com/edtechedgar/status/277405598499340289

MissEsteves343

#satchat A website that you cannot live without...

12/8/2012 1:33:33 PM UTC



http://twitter.com/MissEsteves343/status/277405557730734080

ScottRRocco

<u>@BushjMS</u> yes, please report when you see it by clicking on the person's profile. We report all spam. <u>#satchat</u>

12/8/2012 1:33:33 PM UTC



http://twitter.com/ScottRRocco/status/277405557630070784

edtechedgar

RT <u>@thomascmurray</u>: <u>#satchat</u> - Admin must create an environment supportive of risk taking and innovation for any of this to matter!

12/8/2012 1:33:29 PM UTC



http://twitter.com/edtechedgar/status/277405540169170944

jafilosa

RT <u>@betavt</u>: <u>@ktvee</u> one of my schools has "appy hour" every few weeks after school to share resources. <u>#satchat</u>

12/8/2012 1:33:29 PM UTC



http://twitter.com/jafilosa/status/277405539514851328

onboardlearning

@BushjMS I've been actively reporting the spam. Hope it helps! #satchat

12/8/2012 1:33:24 PM UTC



http://twitter.com/onboardlearning/status/277405521609388032

LauraGilchrist4

@ScottRRocco #satchat was great--new tips and new IDEAS.

12/8/2012 1:33:24 PM UTC



http://twitter.com/LauraGilchrist4/status/277405521424830465

CynthiaStogdill

RT <u>@ktvee</u>: What if your school had <u>#edcamp</u> style 1 x a month? Gather for hour, post some session ideas; go collaborate? <u>#satchat</u>

12/8/2012 1:33:24 PM UTC



http://twitter.com/CynthiaStogdill/status/277405517641576448

ktvee

<u>@MrPowersCMS</u> What if even a few people showed up? Might get the ball rolling?<u>#satchat</u>

12/8/2012 1:33:17 PM UTC



http://twitter.com/ktvee/status/277405489480994816

Sirotiak02

Great chat everyone! Thanks for sharing so many great ideas <u>#satchat</u> thanks to <u>@ScottRocco</u> <u>@bcurrie5</u> <u>@wkrakower</u> for being Twitter rockstars

12/8/2012 1:33:13 PM UTC



http://twitter.com/Sirotiak02/status/277405472536023041

PrincipalArc

RT <u>@iplante</u>: Thanks <u>@ScottRRocco</u> <u>@bcurrie5</u> & <u>@wkrakower</u> Keep the convo going. Another at 7:30am PST today <u>#Satchat</u>

12/8/2012 1:33:12 PM UTC



http://twitter.com/PrincipalArc/status/277405471369994240

edtechedgar

RT <u>@HowePrincipal</u>: MT: "<u>@patrickmlarkin</u>: We hold <u>#edcamp</u> Tuesdays throughout the summer where teachers show up and share <u>#satchat</u>" gr8 i ...

12/8/2012 1:33:09 PM UTC



http://twitter.com/edtechedgar/status/277405456652185601

millerg6

@ktvee #satchat Our Own Little Ed Camp http://t.co/vNdp5Cjb

12/8/2012 1:33:06 PM UTC



http://twitter.com/millerg6/status/277405445642153986

wkrakower

If you did not hear <u>#edcampNJ</u> 2013 will be November 23, 2013 @ Linwood Middle School. Hope to see you there. <u>#satchat</u>

12/8/2012 1:32:59 PM UTC



http://twitter.com/wkrakower/status/277405414944018432

edtechedgar

RT <u>@pernilleripp</u>: RT <u>@stevehayes_rb60</u>: We assign mentor teachers to new teachers, why not assign tech mentors to non-tech teachers? <u>#satchat</u>

12/8/2012 1:32:58 PM UTC



http://twitter.com/edtechedgar/status/277405409315274753

LindaBeeKay

RT <u>@21stprincipal</u>: If admins want staff to use any tech tools, Web 2.0 or others, you have to use them yourself. <u>#satchat</u>

12/8/2012 1:32:58 PM UTC



http://twitter.com/LindaBeeKay/status/277405408946176000

Joe_Mazza

<u>@wkrakower</u> <u>@scottrrocco</u> <u>@bcurrie5</u> Thanks all. Have a great wknd <u>#satchat</u>

12/8/2012 1:32:54 PM UTC



http://twitter.com/Joe_Mazza/status/277405394429677569

Robitaille2011

Thank you <u>@ScottRRocco</u>: THANK YOU <u>#satchat</u> PLN. This was an AMAZING conversation today. Please follow the Eds you found informative."

12/8/2012 1:32:51 PM UTC



http://twitter.com/Robitaille2011/status/277405379888025600

pammoran

do we have a G+ satchat community group? #satchat

12/8/2012 1:32:46 PM UTC



http://twitter.com/pammoran/status/277405359398866944

NELSD_Super

1word - wow <u>#satchat</u>. Will b working on reflecting on everything shared/learned this am.

12/8/2012 1:32:39 PM UTC



http://twitter.com/NELSD_Super/status/277405330512683010

jafilosa

RT <u>@cybraryman1</u>: A5 Best way to get admin on board is to make sure they participate in this chat and build admin PLN on Twitter <u>#satchat</u>

12/8/2012 1:32:34 PM UTC



http://twitter.com/jafilosa/status/277405309549563904

cteduonline

Don't make it about the technology. Create an engaging learning activity that happens to be completed with a Web 2.0 tool. #satchat

12/8/2012 1:32:32 PM UTC



http://twitter.com/cteduonline/status/277405300804448256

betavt

<u>@ktvee</u> one of my schools has "appy hour" every few weeks after school to share resources. <u>#satchat</u>

12/8/2012 1:32:32 PM UTC



http://twitter.com/betavt/status/277405300150108161

MrPowersCMS

RT <u>@ktvee</u>: What if your school had <u>#edcamp</u> style 1 x a month? Gather for hour, post some session ideas; go collaborate? <u>#satchat</u>

12/8/2012 1:32:31 PM UTC



http://twitter.com/MrPowersCMS/status/277405296626921472

runningdmc

<u>@TheMrsLynch</u> I have my own. Just trying to ramp up wireless. <u>#satchat</u>

12/8/2012 1:32:29 PM UTC



http://twitter.com/runningdmc/status/277405290868117504

cybraryman1

@lookforsun Common Core requires the use of technology http://t.co/g0szny8P#satchat

12/8/2012 1:32:29 PM UTC



http://twitter.com/cybraryman1/status/277405290301890562

iplante

Thanks <u>@ScottRRocco</u> <u>@bcurrie5</u> & <u>@wkrakower</u> Keep the convo going. Another at 7:30am PST today <u>#satchat</u>

12/8/2012 1:32:27 PM UTC



pammoran

great session as usual @ScottRRocco @bcurrie5 #satchat

12/8/2012 1:32:26 PM UTC



http://twitter.com/pammoran/status/277405277140176896

wkrakower

Do not forget to vote for <u>#satchat</u> for the edublog awards <u>http://t.co/XqwmdrI7</u>

12/8/2012 1:32:23 PM UTC



http://twitter.com/wkrakower/status/277405262665625600

dmastersvp

Very fast moving convo today! Lots of info to comb through. Thank you! RT@JohnFritzky: Thanks #satchat! Fast conversation today! #satchat

12/8/2012 1:32:18 PM UTC



http://twitter.com/dmastersvp/status/277405242243567617

Reagan31

Thank you moderators. Talk next week. #satchat

12/8/2012 1:32:14 PM UTC



http://twitter.com/Reagan31/status/277405227861282816

BushjMS

I'm seeing some spam this morning. Is there a way to stop spam during chats? #satchat

12/8/2012 1:32:14 PM UTC



http://twitter.com/BushjMS/status/277405224375820288

FinkTeach

Wow, that hour flew by, great way to start my morming! Thx! #satchat

12/8/2012 1:32:09 PM UTC



http://twitter.com/FinkTeach/status/277405206650712064

edtechedgar

.@CBethM @andycinek providing support is HUGE as well. If tech doesn't work, teachers will never go back to it. #satchat

12/8/2012 1:32:05 PM UTC



http://twitter.com/edtechedgar/status/277405190099968000

Joe_Mazza

Bang! "<u>@millerg6</u>: Our supt <u>@cdsmeaton</u> uses Twitter as 1 tool to communicate w/ entire school comm & has introduced <u>#hs4</u> hashtag. <u>#satchat</u>"

12/8/2012 1:32:01 PM UTC



http://twitter.com/Joe_Mazza/status/277405171703750656

andycinek

<u>@johntspencer</u> yes! Thank you. How did you end the addiction to ms office? <u>#satchat</u>

12/8/2012 1:32:00 PM UTC



http://twitter.com/andycinek/status/277405167463317505

Sirotiak02

Pt 2 The responses were overwhelming, most agreed it has helped, some were already involved so their involvement stayed the same. #satchat

12/8/2012 1:31:55 PM UTC



http://twitter.com/Sirotiak02/status/277405146433064960

MPNEngaged

Crazy good learning on <u>#satchat</u>. Great way to wake up with coffee! Thanks everyone! Have a great day!

12/8/2012 1:31:54 PM UTC



http://twitter.com/MPNEngaged/status/277405144117833728

runningdmc

Got to the very end of <u>#satchat</u> before spam. Takes a special person to spam this chat.We're..sort of..unique. Not who I'd target:) <u>#satchat</u>

12/8/2012 1:31:46 PM UTC



http://twitter.com/runningdmc/status/277405106931109888

SherrySaysSo

<u>@21stprincipal</u> I try to refer every ? I get from teachers to a # or discovery for that reason. Then twitter becomes a resource <u>#satchat</u>

12/8/2012 1:31:43 PM UTC



http://twitter.com/SherrySaysSo/status/277405094469857280

lconley86

Any and all ideas on how to start an #edcamp in our district would be greatly appreciated! RT plz Thanks! #satchat

12/8/2012 1:31:35 PM UTC



http://twitter.com/lconley86/status/277405064287645696

wkrakower

Thanks to <a>@ScottRRocco <a>& <a>@bcurrie5 for starting this global conversation. <a>#satchat

12/8/2012 1:31:26 PM UTC



http://twitter.com/wkrakower/status/277405025486114816

ktvee

What if your school had <u>#edcamp</u> style 1 x a month? Gather for hour, post some session ideas; go collaborate? <u>#satchat</u>

12/8/2012 1:31:23 PM UTC



http://twitter.com/ktvee/status/277405013138096131

JohnWink90

12 Days of Christmas ideas that Leaders can do for their staff. http://t.co/Rz9sUJgx#leadership #cpchat #satchat

12/8/2012 1:31:21 PM UTC



http://twitter.com/JohnWink90/status/277405005353455617

CBethM

<u>@andycinek</u> Others see what is possible and they start taking baby steps. You want teachers invested not mandated to do something. #satchat

12/8/2012 1:31:18 PM UTC



KarinaM52396638

#Satchat I jeered so faithfully I was moving http://t.co/QZTDkLfZ

12/8/2012 1:31:18 PM UTC



kathytsadler

RT <u>@21stprincipal</u>: 4 tools I use to maintain paperless office: Dropbox, Evernote, Google Docs and Email <u>#satchat</u>

12/8/2012 1:31:11 PM UTC



lookforsun

<u>@TheMrsLynch</u> <u>@posickj</u> I'm sure it is, teachers don't make a lot of money, especially young teachers--they need that support. <u>#satchat</u>

12/8/2012 1:31:08 PM UTC



LindaBeeKay

RT <u>@cybraryman1</u>: A5 Best way to get admin on board is to make sure they participate in this chat and build admin PLN on Twitter <u>#satchat</u>

12/8/2012 1:31:08 PM UTC



http://twitter.com/LindaBeeKay/status/277404947623079937

iplante

RT <u>@WHS_Principal</u>: On overload right now with ideas, new/old resources to review.<u>#satchat</u> is true PD. Have a great day everyone! <u>#satchat</u>

12/8/2012 1:31:07 PM UTC

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VITA

Jill Maraldo is the daughter of Ruth Marrin Schlenger and Ernest Schlenger and Eric Wughalter and Janis Lopez Wughalter and the older sister of Jaime Yeh and Alison and Lauren Schlenger. She currently resides in a suburb of Chicago with her husband, Dean and their three sons Daniel, Joshua, and Jack.

Jill Maraldo attended public schools from kindergarten through high school graduation in New City, New York. She graduated the State University of New York at Buffalo in 1996 with a Bachelor's degree in English. In 1999 Jill Maraldo earned a Master of Science degree in Secondary Education from St. Thomas Aquinas College in Sparkill, New York. In 2004 she completed a Certificate of Advanced Study in Educational Administration from SUNY New Paltz. She joined the Deerfield Cohort of Loyola University Chicago's Doctoral program in 2010 to pursue her Ed.D. in Educational Administration and Supervision. Jill Maraldo has attained superintendent licensure in both New York and Illinois.

Jill Maraldo has worked in the field of education for the past 17 years. She began her career as a high school English teacher for nine years in New York at Clarkstown North High School and in Illinois. Maraldo then spent almost two years in the private sector working as an instructional designer ad project manager for online course development before returning to public education in 2009 as the Director of 21st Century skills and then as the Director for Innovative Learning for the Deerfield Public Schools

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DISSERTATION COMMITTEE

The Dissertation submitted by Jill Maraldo has been read and approved by the following committee:

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