The Rules of Convergence

Dumitrana Mircea

Faculty of Educational Sciences, Psychology and Social Work

Aurel Vlaicu University of Arad

Email: mdumitrana79@gmail.com (Author of Correspondence)

Romania

Abstract

Observers and supervised teachers sit together and discuss some of the teaching skills before teaching as the criterion for the development. Observers and trainee teachers can arrange pre-harvesting matches where the positive aspects of fertility may be discussed. Make observer sheets for how to collect information and keep records while watching observer lessons. At the end of the reading, according to the predetermined criteria, the teachers and the instructors will sit together and give the result through constructive criticism. Without watching the observer, patiently listening to the teacher's speech. Do not comment on the person who is hurt by the personality of a trainee teacher, for his less productivity. In some cases, the trainee teachers should identify them and make positive discussions about them.

Keywords: Convergence; Digital Convergence; Contractual; Importance.

1. Introduction

Convergence means the act of converging and especially moving toward union or uniformity. Convergence is the tendency of group members to become more alike over time. This is what's known in business terms as "company's culture." Convergence is useful if you consciously choose to spend time with people you'd like to become more like. At the same time, breaking away from groups that aren't serving you is painful but necessary to grow.

2. Idea of Convergence

In Technology, Convergence is the coming together of two different entities, and in the contexts of computing and technology, is the integration of two or more different technologies in a single device or system. A good example is the convergence of communication and imaging technologies on a mobile device designed to make calls and take pictures - two unrelated technologies that converge on a single device. Convergence is considered a new trend because technological capabilities were only recently established to allow for cheaper and widespread implementation. The simple concept of convergence allows multiple tasks to be performed on a single device, which effectively conserves space and power. Convergence also means that groups have a tendency to police themselves. The norms of the group work like gravity—violate them, and others will exert an influence on the rebel to bring them back in line. As the proverb goes: "The tallest blade of grass is the first to be cut." Convergence is the process where several media channels come together to exist and operate in synergy. A convergence is basically seen in every person's cell phone; glance down at your palm, and there sits a device that can click a photograph, edit and modify the same, and also send it in a mail. Some people like to define convergence simply by stating it to be a merger of mass media and communication outlets. In some cases, multi-utility of the same gadget or media is also attributed to be a convergence. With the advancement of time and technology, manufacturers of technology are engaged in a race to manufacture devices that have maximum number of media converged within them.

3. Divergence

Divergence is the tendency of group members to become less like other group members over time. Convergence is the tendency of group members to become more alike over time. In business, this is sometimes called a company "culture," in the sense that people who work there tend to have similar characteristics, behaviors, and philosophies. Divergence is the tendency for groups to become less like other groups over time. Since group behavior often evolves to clearly distinguish members of one group from another, the norms of most groups constantly change to resist being confused with another group or imitator.

Divergence explains why fashions among the socialite class in New York City change so quickly and dramatically. In certain social circles, dress is a way to signal your wealth or status. When the latest fashions start appearing in Target so people can imitate the look, fashions change to compensate. This constant divergence keeps the group affiliation signal valid.

4. Theme of Convergence

Convergence theory is also sometimes referred to as the "catch-up effect." When technology is introduced to nations still in the early stages of industrialization, money from other nations may pour in to develop and take advantage of this opportunity. These nations may become more accessible and susceptible to international markets. This allows them to "catch up" with more advanced nations.

If capital is not invested in these countries, however, and if international markets do not take notice or find that opportunity is viable there, no catch-up can occur. The country is then said to have diverged rather than converged. Unstable nations are more likely to diverge because they are unable to converge due to political or social-structural factors, like lack of educational or job-training resources. Convergence theory, therefore, would not apply to them.

Convergence theory also allows that the economies of developing nations will grow more rapidly than those of industrialized countries under these circumstances. Therefore, all should reach an equal footing eventually. The opening of schools address is a time to reflect on where we've been, discuss where we're going and how we'll get there. Its part cheerleading and celebration, part press conference and part vision for the present and future. As the Superintendent celebrated MDCPS' many accomplishments -- BROAD Prize recipients, rising student achievement, record high graduation rates – he also conceded that there was still far to go. His goal is to improve our 80% high school graduation rate to 90% by 2015. "Together, we will close the opportunity gaps which still exist in our community so that we may move closer to eliminating the achievement gaps we know still exist in our schools," he said. In South Florida, and throughout America, the most successful public schools are in wealthier zip codes, and the worst public schools are in the poorest neighborhoods. In Miami-Dade County, 73% of students live at or below poverty. These are students with fewer opportunities. They have less access to computers and the Internet, less access to information, less support systems in place – both at home and in their community -- to help them succeed. And, "Just as much as poverty can't be an excuse, the exclusion of poverty as a factor is immoral," said Carvalho. I was reminded of the old proverb, "It takes a village." The phrase is uttered so often, that it's become trite and cliché. But, it is no less true. In fact, it may be truer today – when our economic success is tied to our workforce skill and education level-than ever before. And then I thought of the word convergence, the

merging of distinct technologies, industries or devices into a unified whole. I thought of convergence and what it has meant to journalism and mass communication, the emergence of new forms of storytelling, of the necessity – especially in our global economy-- to become more innovative and more collaborative. It may seem too idealized, too much of a utopian fantasy, but the best way to reform education is to converge, to involve teachers, parents, the business community. We are all stakeholders. For decades politicians have cried that both education and family values are in crisis. The evidence increasingly shows that the only way to fix either is to work together to fix both. If we can help today's kindergartner learn how to read, give him the tools and the support that he needs to continue achieving, to continue making learning gains that will carry him through high school and college, he is much more likely to grow up to be both a professional and an involved father.

5. Basic Concept of Education

Education in its general sense is a form of learning in which knowledge, skills and habits of a group of people are transferred from one generation to next through teaching, training, research, or auto didacticism (www.wikipedia.com). By education, people's moral values can be improved, especially students'. I think education is the best way to teach people about moral values. This is the process of receiving or giving systematic instruction, especially at a school or university. Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. Educational methods include storytelling, discussion, teaching, training, and directed research. Education frequently takes place under the guidance of educators, however learners may also educate themselves.

6. Character of Education

a) Character education is a national movement creating school that foster ethical, responsible, and caring young people by modeling and teaching good character through emphasis on universal values that we all share. It is the intentional, proactive effort by school, districts, and states to instill in their students important core, ethical values such as caring, honesty, fairness, responsibility, and respect for self and others.

b) Character education is teaching children about human basic human values, including honesty, kindness, generosity, courage, freedom, equality, and respect. The goal is to raise children to become morally responsible, self-disciplined citizens.

c) Character education is the deliberate effort to develop good character based on core virtues that are good for the individual and good for society.

d) Character education is any deliberate approach by which school personnel, often in conjunction with parents and community members help children and youth become caring, principled, and responsible.

7. Basic Concept of Teaching

Teaching is a process intended for learning by inducing a behavioral change in the taught. It is an art of communicating a message with impact on audience. Pedagogy is an art or profession of teaching. A good teaching system aligns teaching method and assessment to the learning activities stated in the objectives so that all aspects of this system are in accord in supporting appropriate student learning. Learning outcomes are statements of what is expected that the student will be able to do as a result of a learning activity. Learning outcomes are an explicit description of what a learner should know, understand and be able to do as a result of learning. Teaching, the profession of those who give instruction, especially in an elementary or a secondary school or in a university. The entire teaching corps, wherever its members may be located, shares most of the criteria of a profession, namely (a) a process of formal training, (b) a body of specialized knowledge, (c) a procedure for certifying, or validating, membership in the profession, and (d) a set of standards of performance—intellectual, practical, and ethical—that is defined and enforced by members of the profession. Teaching young children and even adolescents could hardly have been called a profession anywhere in the world before the 20th century. It was instead an art or a craft in which the relatively young and untrained women and men who held most of the teaching positions "kept school" or "heard lessons" because they had been better-than-average pupils themselves. They had learned the art solely by observing and imitating their own teachers. Only university professors and possibly a few teachers of elite secondary schools would have merited being called members of a profession in the sense that medical doctors, lawyers, or priests were professionals; in some countries even today primary-school teachers may accurately be described as semiprofessionals.

8. Convergence in Education

This tendency to meet (convergence) results in a common result or conclusion. We see convergence in nature as the location where airflows or ocean currents meet. When airflows meet, the result can be anything from a cloudy day to a raging storm. The meeting of warm and cold ocean currents results in an equal distribution of temperature on earth and plentiful fishing grounds. How? When cold and warm currents come together, the warm current rises, maintaining earth's temperature, while the cold current stirs up nutrients, fueling the production of phytoplankton blooms that feed fish and marine mammals.

9. Digital Convergence in Education

Digital convergence brings opportunity and challenge to education. Individual and, in some cases, student-owned devices allows for access to multiple sources of information as easily as it allows for access to information that may disrupt learning. In other ways, digital convergence holds the potential to alter the balance of power in teaching and learning, where tradition holds that the teacher controlled what was learned as well as which resources were used to garner that learning. The concept of digital convergence refers to the merging of previously discrete and separately used technologies, as well as the almost 'invisible' integration and use of technologies as a part of our everyday life. Key drivers here are the ubiquitous reach and presence of the internet, and our ability to access it via an increasingly broad range of devices. In addition, the 'intelligence' of both the devices we use and the services they connect to presents opportunities for us to engage with our surroundings in ways not previously imagined. This can be recognised in the almost everyday acceptance of things like Google Maps which presents you with not only a map of where you are, but locates you within it based on the geolocation of the device you are using - and then highlights facilities and events close to you based on a profile of your needs and preferences built up over time. The rapid advancement of the 'Internet of Things" is another example of this. Here everyday items are connected to the Internet - from fridges and microwaves in our homes, to cameras and traffic controls linked to sensors in roads in our streets. The data that is feed to and from these things helps build a web of information that is available to us, and frequently fed to us on an individual basis, depending on our needs at the time.

The concept of digital convergence will bring both challenges and opportunities to those working in education. On the one hand, the proliferation of individually owned devices, be they smart phones or watches for example, means that students can now access information at any time they wish - whether that be something that supports their learning, or something that may be a distraction to their learning. This will inevitably change the balance of power in regular classrooms where teachers have traditionally been the ones who have 'controlled' the flow of knowledge and what is learned. Another significant impact for educators may be in the development of personalized learning pathways, not the pre-determined sorts of 'adaptive' software we've seen in the past, but more intuitive and responsive to the mix of the learners current location, level of progress, availability of support etc. upon which a highly tailored set of outcomes and feedback may be established and monitored.

Even in light of those challenges, convergence in education triggers a move away from predetermined sorts of adaptive software to software that is more intuitive and responsive to the learners' prior knowledge, level of progress, and readiness for learning. For a thorough discussion, please see this article on digital convergence.

10. Instructional Convergence

We've explored convergence as collaborations in nature, technology, and educational technology. Now, we look at convergence in human interaction. For example, in ophthalmology, convergence is the coordinated turning of the eyes to bear upon a near point. That focus on a near point brings us to instructional convergence. As any educator will tell you, we have "eyes" in the form of networks, devices, and information. Our work strengthens as we coordinate these "eyes" to bear upon the near point—the drive to move each student forward. Instructional convergence uses multiple information sources, such as technology, data, and knowledge of exceptional teaching, and deep understandings about how students learn. Simply stated, instructional convergence is the place where data, learning analytics, and teacher expertise meet. The result of instructional convergence is informed instruction that leads to greater student outcomes. The conclusion is that now is the time to implement it.

11. Media-Education Convergence

Technological convergence- the digitization of all media content which allows them to flow across platforms; Economic convergence- the horizontal integration of the entertainment industry; Social convergence- consumers are multitasking and navigating through the new media rich environments; Cultural convergence- the rise of a new participatory culture by giving the average person the tools needed to recreate and recirculate content; Global convergence- the crossbreed of culture that results from a plethora of media content; and finally, my emphasis, Educational and Informational convergence- the distance learning paradigm, which is influencing and changing the traditional methods of teaching and learning. As a result of media convergence, new pedagogies and theories of education have arisen. Open, distance and blended learning are on the rise, which are supported by media tools, media rich environments and technology. Moreover, complimentary to the change is the practice of transmedia storytelling which can be considered a student-centered pedagogical approach to education. Today, a film moves across media and it can have different parts such as a book, game and mobile component. This creative practice, where a story is at the center of media, is known as transmedia storytelling. The practice of transmedia storytelling is further examined here for its employment in education. The concept of Transmedia Storytelling Edutainment with the acronym TmSE is proposed and defined as using stories from popular entertainment to create educational components around a discipline. I argue that these self-contained parts can be utilized as teaching aids, in conjunction with traditional learning tools, when the context of the material is complementary to the subject matter. The stories may be transmedia franchises; however, they are not limited to this classification, although the more popular stories that are distributed on multimedia platforms may have a better hook to capture learners' attention. In educational terms, the 'hook' can be demonstrated in Gagnè's Nine Events of

Instruction (1985) which lists 'gain attention' as the first event (Clark, 30 June 2010). TmSE is contextualized as the producers of commercial product such as films and the student produced narratives in the form of web-based stories, also referred to as digital stories and mashups. Mashup videos are web-based stories that use pre-existing sources to create new content by recombining and modify existing digital works, which are extremely prominent on the Internet today. Therefore, TmSE encompasses both media tools and narrative in online education, but it is not limited to online, and may consist of ancillary derivate that do not include moving image such as scenario based activities. Screenplays are by definition writing for the screen. A screenplay with it is picture making and scene building abilities may have pictorial superiority over a textbook. According to Medina (2008), 'when it comes to memory, researchers have known for more than 100 years that pictures and text follow very different rules. Put simply, the more visual the input becomes, the more likely it is to be recognized – and recalled. The phenomenon is so omnipresent it has been given its own name: the pictorial superiority effect, or PSE' (p. 233). Medina believed the tendency is so pervasive that even when people read, most try to visualize what the text is telling them. In six short years, Education Reimagined grew from a Convergence dialogue among leaders across the educational spectrum to an independent national organization that began in January of 2019. Education Reimagined is dedicated to transforming the educational system to one that is learner-centered – designed to focus on the individual needs of each child.

Our new case study captures how Convergence brought together unlikely allies and helped them agree on a vision for the future of learning. Through the Convergence process, dialogue stakeholders, from all sides of the education debates, came to a common understanding of what learners need to succeed and thrive in the 21st century. Their vision statement now serves a guidepost that communities and educators can adapt to create learner-centered schools and systems that work best for them. When the dialogue concluded, the stakeholders asked Convergence to continue to convene them as they dedicated themselves to bringing this powerful new vision to communities nationwide.

Today, Education Reimagined involves hundreds of educators, policy advocates, students, and other leaders who are working together to collectively to advance the vision. They serve as a powerful hub for the learner-centered education movement, driven by the Convergence commitment to honor diverse perspectives and build trusting relationships that drive positive change.

12. Convergence in Research

Let me begin with research. Much thought of those involved in research occurs within the context called the Golden Triangle of research encompassing Information technology — Biotechnology — Nanotechnology.

Take three events which have occurred within the last three months: On November 12, IBM held an industry leadership forum in San Francisco where the focus was on "on-demand" computing, the ability to receive computing cycles, and their attendant capabilities, at the time and to the extent that they are needed. In September, Dr. Elias A. Zerhouni, Director of the National Institutes of Health (NIH), laid out a series of far-reaching initiatives known as the NIH Roadmap for Medical Research. It is intended to transform the nation's medical research capabilities and to speed the movement of research discoveries to improve health.

And, on November 25, Congress sent to the President the 21st Century Nanotechnology Research and Development Act of 2003, establishing the National Nanotechnology Initiative and authorizing nearly $4 billion over the next four years for research and development in this evolving field.

And so, each of these events represents one leg of the three elements of the Golden Triangle of Research: Information technology — Biotechnology — Nanotechnology.

Each of these three research "legs" represents a convergence, itself, of inter- and multi-disciplinary forces in and of themselves, creating new discoveries and often, new science.

It is not likely that I need to define the three "legs" of the golden triangle of research for this audience, but as a scientist, I am aware that it is important that we start on common ground.

a) Information Technology

Information Technology (IT) encompasses all technologies used to create, exchange, store, mine, analyze, and evaluate data in its multiple forms — including some not yet conceived of. It is the technology that is driving "the information revolution," and is the driving force in every industry today — transforming most, and enabling new areas of research.

b) Biotechnology

Aspects of biotechnology play a part in research endeavors from brewing beer to developing insect-resistant crops to cloning. Using the basic components of life (such as a yeast cell or a length of DNA), biotechnology techniques can create new products and new manufacturing methods.

c) Nanotechnology

Nanotechnology is the science of manipulating and characterizing matter at the atomic and molecular levels. It is one of the most exciting scientific fronts today, and considered by many to be the next industrial revolution. It is an area of scientific discovery with the potential to enable a wealth of innovative technologies in medicine, information technologies, energy production, national defense and security, food, agriculture, aerospace, manufacturing, and sustainable environments.

13. Recommendation

We need to educate our own citizens to work in a global environment. To do so requires a rethinking and convergence of elements which define the educated individual.

It would behoove us to educate our engineers and scientists more broadly, giving them a broader world view, including elements of a liberal arts education, with special emphasis on cultures and communication.

We need to educate our young people for leadership, and especially global leadership — involving team-based problem-solving and inter-and multi-disciplinarily; appreciation of differences and diversities; utilization of vision, culture, and values; enabling them to think beyond our borders and beyond the borders of single problems.

Into this mix, we must stir a component of ethics education. ABET Engineering Criteria 2000 has built ethics into its engineering criteria for engineering education accreditation. We, who are educators, should enhance the practice of including students in undergraduate research, since this helps to foster their interest in ethics content and concepts. Interest in ethical issues is one of the "spillovers" of team-based problem solving and multidisciplinary.

Finally, as an educator and President of a research university, I believe strongly that we must educate for entrepreneurship — educate for team-based market recognition, assessment of market opportunities, and education for execution.

These sessions are to be focused on:

a) teaching convergence and responsible science via the concept of "grand challenges;"
b) incorporating convergence into curricula and continuing education programs;
c) developing mechanism(s) to keep abreast of the changing workforce education needs;
d) identifying how best to "synchronize" or properly coordinate changes in educational
e) institutions and society with changes in funding agencies;
f) understanding the science of team science and its role in convergence education;
g) elucidating new technologies for advancing convergence in education and training; and
h) coordinating and fostering global convergence education via enhanced communication
i) amongst national science funding agencies and multilateral fora to coordinate and foster
j) Global convergence education.

14. Convergence of Cultures

This brings me to the last segment of the contemporary phenomenon of convergence — the convergence of cultures. Science has always been global — imagine, if you will, a national multiplication table. Now it is the turn of business — corporations now conduct business, communicate, negotiate, and manufacture around the globe, in multiple time zones, in many countries, among people of diverse languages and traditions.

In order to have been successful, corporations have had to learn and to lead the way in multicultural communications and endeavors. And, they have been exceptionally successful.

We can bring these lessons home — and we must — because the U.S. workforce is changing and many of the same factors which corporations have managed successfully overseas, are now operative upon our own shores.

15. Convergence Theory

Convergence theory became popular in the 1960s when it was formulated by the University of California, Berkeley Professor of Economics Clark Kerr. Some theorists have since expounded upon Kerr's original premise with the opinion that industrialized nations may become more alike in some ways than in others. Convergence theory is not an across-the-board transformation because although technologies may be shared, it's not as likely that more fundamental aspects of life such as religion and politics would necessarily converge, though they may. The idea that societies move toward a condition of similarity—that they converge in one or more respects—is a common feature of various theories of social change. The notion that differences among societies will decrease over time can be found in many works of eighteenth and nineteenth century social thinkers, from the prerevolutionary French philosophes and the Scottish moral philosophers through de Tocqueville, Toennies, Maine, Marx, Spencer, Weber, and Durkheim (Weinberg 1969; Baum 1974). More recently, the study of "postindustrial" society and the debate over "postmodernist" aspects of contemporary society also reflect to some degree the idea that there is a tendency for broadly similar conditions or attributes to emerge among otherwise distinct and dissimilar societies.

In sociological discourse since the 1960s, the term convergence theory has carried a more specific connotation, referring to the hypothesized link between economic development and concomitant changes in social organization, particularly work and industrial organization, class structure, demographic patterns, characteristics of the family, education, and the role of government in assuring basic social and economic security. The core notion of convergence theory is that as nations achieve similar levels of economic development they will become more alike in terms of these (and other) aspects of social life. In the 1950s and 1960s, predictions of societal convergence were most closely associated with modernization theories,

which generally held that developing societies will follow a path of economic development similar to that followed by developed societies of the West. Structural-functionalist theorists, such as Parsons (1951) and Davis (1948), while not actually employing the terminology of convergence theory, paved the way for its development and use in modernization studies through their efforts to develop a systematic statement of the functional prerequisites and structural imperatives of modern industrial society; these include an occupational structure based on achievement rather than ascription, and the common application of universalistic rather than particularistic evaluative criteria. Also, beginning in the 1960s, convergence theory was invoked to account for apparent similarities in industrial organization and patterns of stratification found in both capitalist and communist nations.

Some examples of convergence theory include Russia and Vietnam, formerly purely communist countries that have eased away from strict communist doctrines as the economies in other countries, such as the US, have burgeoned. State-controlled socialism is less the norm in these countries now than is market socialism, which allows for economic fluctuations and, in some cases, private businesses as well. Russia and Vietnam have both experienced economic growth as their socialistic rules and politics have changed and relaxed to some degree.

European Axis nations including Italy, Germany, and Japan rebuilt their economic bases after World War II into economies not dissimilar to those that existed among the Allied Powers of the United States, the Soviet Union, and Great Britain.

More recently, in the mid-20th century, some East Asian countries converged with other more developed nations. Singapore, South Korea, and Taiwan are now all considered to be developed, industrialized nations.

16. Conclusion

I would argue that the very convergence of the sciences and technologies is helping to drive the convergence of cultures. A great discussion contains whole with important heads. In this article, we can learn many aspects of acting role. This is an important discussion indeed.

Reference

1. Journal Article, The Convergence of Educational Systems and the Role of Vocationalism, W. Norton Grubb, Comparative Education Review, Vol. 29, No. 4 (Nov., 1985), pp. 526-548
2. Hammerman, W. (Ed.). (1980) Fifty years of resident outdoor education, 1930-1980, Martinsville: American Camping Association.
3. Hammerman, D., Hammerman, E., & Hammerman, W. (2000). Teaching in the outdoors, (4th ed.), Danville, IL: Interstate Publishers.

4. https://www.renaissance.com/edwords/convergence/

5. https://www.thoughtco.com/convergence-theory-3026158