

Augmented Skills of Educators Teaching Generation Z

Evangelin Whitehead

Abstract

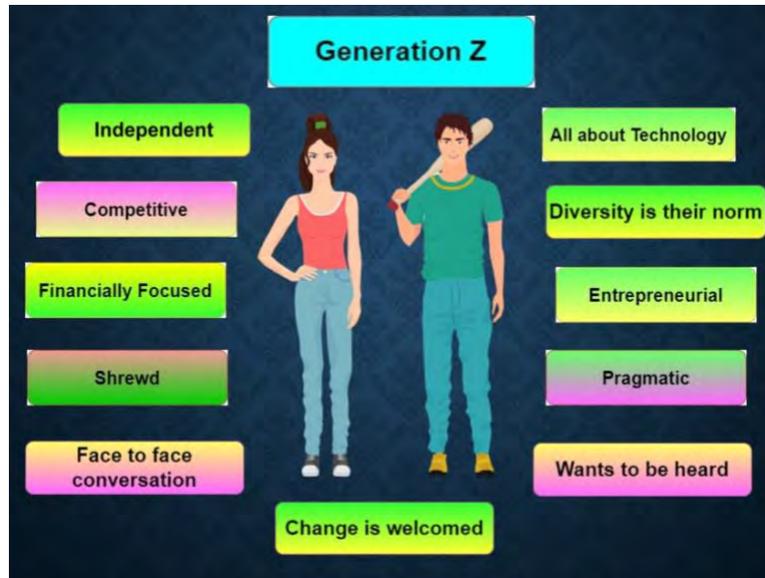
Learners from different generations have enrolled and graduated from educational institutions for many decades, but educators have been using the same strategies despite what generation they teach in their classrooms. A new generation of students has occupied today's classrooms who are called 'Generation Z' or Gen Z for short, and they are colloquially called 'Zoomers'. They have unique characteristics and expectations, and they were raised with technology. They are digitally connected all the time, and it is necessary to check the quality of education given to them. Educational quality is a crucial topic worldwide and it is the need of the hour to discuss the quality of educators. To a large extent, teachers are considered the key factor in determining, and improving the quality of our educational systems. Presently, our teachers are expected to provide a quality hybrid delivery of teaching that best fits Gen Z learners. In the present century, teachers face greater challenges than ever before. The augmented skills of educators with modern, innovative, and creative strategies are the most in demand in this digital world. As new skills and technologies take over all the fields, educators also need to up-skill and re-skill themselves. This white paper discusses the augmented skills of the educators who teach Generation Z and the future generations to come.

Keywords: *Gen Z, Zoomers, hybrid instruction*

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Tom Hierck, an Education Consultant and Author, writes that, " 21st Century kids are being taught by 20th Century adults using a 19th century curriculum and techniques on an 18th century calendar." He calls it the "Systemic Dilemma." Let us first consider today's learners before discussing today's and tomorrow's educators. Today's classrooms are occupied with 'Gen Z'ers.' Seemiller and Grace (2016) state that Generation Z considers themselves loyal, thoughtful, compassionate, open-minded, and responsible.

People who were born between 1960 and 1980 are called "Digital Immigrants." A digital immigrant is a person who was raised prior to the digital age. These individuals are often in Generation X. They did not grow up with computing or the internet, and so have had to adapt to the new language and practice of digital technologies. The digital age started somewhere around the 1970s when personal computers were introduced. People who were born between 1980 and 2000 are called "Digital Natives". This generation of people grew up in the era of technology, including computers and the internet. Digital natives are accustomed to technology and computers from an early age and see it as an essential and fundamental part of their daily lives. Millennials, often known as Generation Y were born between 1980 and 1994. Generation Z is the newest generation born between 1996 and 2015. Our schools and colleges are now occupied by this Generation Z group.

Figure 1*Characteristics of Generation Z*

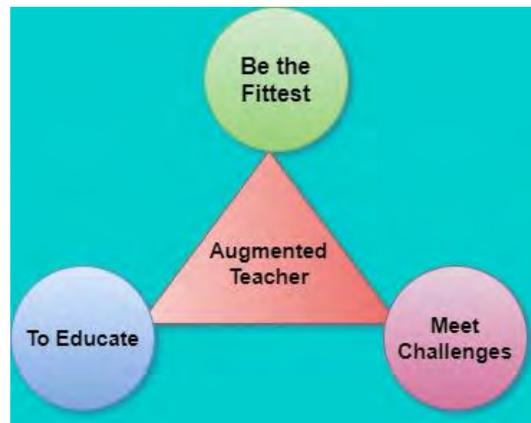
Our Gen Z'ers are relaxed and very flexible in their learning environments, they are multimodal learners; they have shorter attention spans and they enjoy informal and stimulating environments. They prefer active learning and they are good at discovery learning. They are multi-taskers and they prefer interaction and collaboration. They are techno friendly and techno dependent. They are driven by instant gratification, and are mostly confident and achievement-oriented. They learn through all five senses and are always in need of on-demand training.

We talk a lot about 21st century learners and their knowledge, skills, and learning preferences. But we talk less about the qualities of the teachers in the present scenario. Should teachers have 21st century mindsets? Are they life-long learners? Are they adventurous, innovative and imaginative? Are they really outsiders to traditional systems of learning? Do we continue to value what teachers know over who they are? If we value who they are, how might we attract these vibrant role models to teaching? To answer these questions, we must analyze

the quality and skills of our educators. Our teachers were the ‘Sage on the Stage’ earlier. They are now referred to as ‘Guide by the Side,’ ‘facilitators, resource persons,’ and ‘co-constructors of learning.’ To teach these ‘Gen Z’ers, the 21st century teacher should be augmented with multiple layers of skills. What is augmentation? Augmentation is the noun for any process or amount that makes something bigger or greater (Oxford Dictionary). Qualification and experience alone are not sufficient for today’s teachers. They must be augmented with multi skills for proficiency. “The key competences of 21st century teachers are not finite and their development should be supported by transversal capabilities and skills such as critical thinking, creativity, sense of initiative, problem solving, risk assessment, decision-making and constructive management of feelings” (Gordon et al., 2009, p.26).

Figure 2

Three-dimensional Development of an Augmented Teacher



A three-dimensional development is required for an augmented teacher in the 21st century. 1. She must be fully educated and qualified. 2. She should be the fittest to educate and impart learning to the students. 3. She must face all challenges. The significance of professional development is a never-ending process. Professionals cannot settle and stop learning after obtaining a graduation and starting a career. Wagner (2008) refers to the skills of augmented

teachers as survival skills, and he lists them as: critical thinking and problem solving; agility and adaptability; collaboration and leadership; initiative and entrepreneurialism; accessing and analyzing information; effective oral and written communication; and curiosity and imagination.

The Mudaliar Commission Report (1952) stated, “We are convinced that the most important factor in the contemplated educational reconstruction is the teacher, his personal qualities, his educational qualifications, his personal training, and the place he occupies in the community.” In a research survey, Boag (1989) found that the effective teacher has the following 15 most rated qualities: 1. Enthuse students. 2. Treat them as individuals. 3. Know the subject. 4. Be loving and warm. 5. Teach to learn. 6. Empathize with students. 7. Relate to others. 8. Be fair, firm and flexible. 9. Be organized. 10. Prepare students for life. 11. Manage classroom. 12. Have high self-esteem. 13. Have a sense of humor. 14. Be a complete person. 15. Take risks.

According to the National Board for Professional Teaching Standards (NBPTS, 2002) in the United States, five core dispositions are necessary for effective teachers. They stated the five fundamental claims as: 1. Teachers are committed to students’ teaching and learning. 2. Teachers know the subjects they teach and how to teach those subjects to students. 3. Teachers are responsible for managing and monitoring student learning. 4. Teachers think systematically about their practice and learn from experience, and 5. Teachers are members of learning communities. To be an effective teacher in the new paradigm, according to Trilling and Fadel (2009), one must shift from teacher-directed to student-centered learning, from direct teacher instruction to interactive exchange with and among students, from teaching content knowledge to giving students, the necessary skills and from teaching content to problem solving processes. The new paradigm of teachers is augmented with the new skills of this digital world. A good teacher can instill a love of learning, inspire hope, and ignite the imagination.

Methodology

The construction of this article is purely based on primary and secondary data. As a primary source, a few instructors from the schools, colleges, and universities were interviewed with open-ended questions and their opinions and professional development activities. The sources of secondary data are research articles published in international, national, and local educational journals, e-books, websites, and general reports. Performance appraisal has become a term used for a variety of activities through which organizations seek to assess employees and develop their competence, improve performance, and allocate rewards (Fletcher, 2001). Hence, current performance appraisals of some of the universities in India and abroad were referenced to determine the required quality and skills of the educators. Desirable characteristics of an augmented educator are as depicted in Figure 3 below and discussed in subsequent sections of this article.

Figure 3

Characteristics of an Augmented Teacher

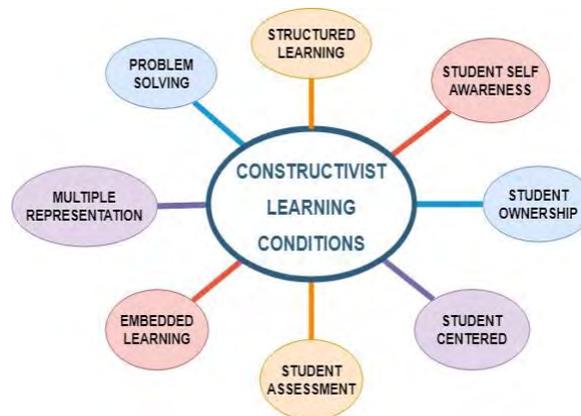


Constructivists

The teacher as a Constructivist gives opportunities to her learners to construct their own sense of what is being learned by building internal connections or relationships among the ideas and facts being taught. Constructivist teachers compare old views of knowledge to new constructivist views. In this view, knowledge is produced from existing beliefs and experiences. A constructivist teacher allows her students to take control of their learning. Constructivist classrooms provide learners with opportunities to plan and direct their learning.

Figure 4

How a Constructivist Teacher Creates a Learning Condition



In a constructivist's classroom, the learners are not passive recipients but active participants and the center of instruction. She creates a democratic learning environment. All activities are designed to be interactive and student-centered. She facilitates a process of learning where learners are encouraged to be responsible and autonomous. Reeve, Ryan and Deci (2004) suggest that it is important to create an environment where one may develop a sense of ownership and curiosity and that may, in turn, contribute to students' capacity to be life-long learners. A constructivist teacher creates a platform for life-long learning and she presents

problem concepts of emerging relevance to her learners. She focuses, structures and promotes learning around primary concepts. A constructivist teacher always seeks and values learners' ideas. She adapts curriculum and teaching styles to address learners' suppositions. She makes valuable and standardized assessments on her learners' learning and gets effective feedback.

Networked Facilitator

A networked facilitator moves fluidly between the physical and virtual networks to communicate, collaborate, and share ideas, data, strategies, and information. She is learner-centered and knowledge-centered, and supports the development of technological pedagogical content knowledge in the context of the needs of the learners. She creates a congenial environment in her classrooms where creativity flourishes. She changes and challenges herself to create a learning environment where her learners feel safe to share novel ideas. She promotes flipped and blended learning. She collaborates by sharing experiences in teaching and provides effective peer critique of pedagogy and assessment practices. The graphical image (Figure 5) illustrates the different characteristics of a networked facilitator. She is thorough in computer and mobile operations, and an expert in printing, copying, and photo sharing. She creates live or recorded YouTube and podcast streaming, and is knowledgeable about all digital resources, adept at social networking, and uses learning management systems.

Figure 5

Characteristics of the Networked Facilitator



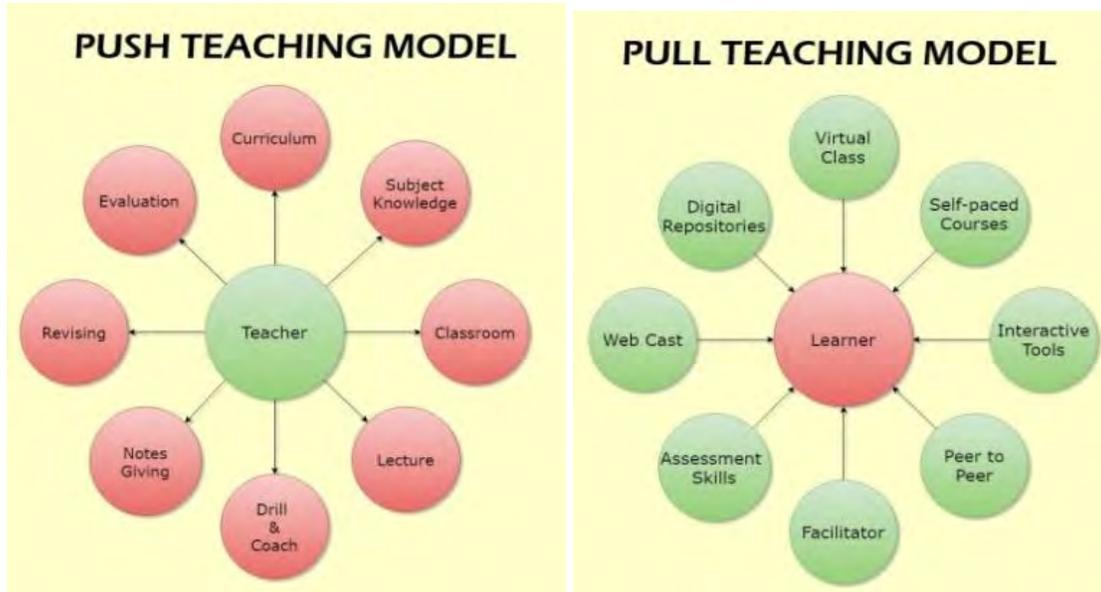
Synchronous and Asynchronous Instructor

This instructor has real time interactions with the students online. She gives and receives instant feedback, answers, acknowledgement, and questions from her learners. She is more connected, as with like face-to-face interactions. She establishes a sense of community, communication, and interpersonal participation. She uses audio tools, chat, broadcasting tools, interactive multi-media, phone, Whatsapp, podcasts, slideshows, PPT, teleconference, video conference, and webcast etc. She is good at asynchronous platforms, also allowing her students to learn at their own pace, while sending effective materials to them. She uses MOODLE or other platforms to educate her learners. She uses interactive teaching methods like flipped learning, blended learning, collaborative sessions, gamification, case studies, role plays, video lectures, and social media for discussions using learning management systems with interactive tools like Edpuzzle, Padlet, Whiteboard and Wakelet.

Push and Pull Teaching Models

Figure 6

Push and Pull Teaching Models



Traditional methods of teaching, the exclusive use of pushing methods, are no longer optimal. The present teachers are not ‘pushy’ anymore. They are using ‘pull’ dynamics in their physical and virtual classrooms as well. The objectives of learning are very clear to the learner in the pull model, and the teacher provides an engaging and valuable experience to the learners. If we look back, Operation Blackboard Scheme in 1986 introduced attractive learning aids to school students. Servaskisha Abigyan in 2001 brought Universal Primary Education and introduced active learning. The ABL and ALM methods were introduced. Figure 6 illustrates the differences between the push and pull models of teaching.

Emotional Intelligence

Lemov (2010) stated that a good teacher should be a self-oriented, well-read individual who creates a positive and emotionally safe environment in the class and addresses the whole

classroom. He also claimed that only then would the teacher be effective and productive. Augmented teachers are embedded with emotional intelligence with which they create a sense of self-awareness and identify their own emotions and thoughts. In the human brain, the limbic system is a seat of emotions, particularly the amygdala which is the spot of emotions in the brain. It regulates autonomic or endocrine function in response to emotional stimuli and is also involved in reinforcing the behavior of a human being. Limbic system management is a vast and special area, and it is very popular among educators. The facilitator with emotional intelligence can efficiently use the limbic system of students to address cortex educational messages. With thorough knowledge of the limbic system and its functions, augmented teachers effectively deal with the emotions of their students.

Figure 7

Aspects of Emotional Intelligence in the Augmented Teacher



Self-esteem is the term used to describe how we view ourselves and how much we regard ourselves. The word "esteem" means "to regard highly or favorably." When I apply esteem to myself, then I highly regard myself. When it's low, I regard myself lowly. Augmented teachers never confuse self-esteem with humility, and they are never discouraged when faced with difficulties. The augmented facilitator is clear in this concept. She feels very confident about getting up on stage to perform. She feels confident regarding her work skills.

The Augmented Teacher has assertive skills, maintains good communication in personal and work relationships, and has the ability to quickly establish and maintain effective interpersonal relationships. She has the ability to manage anxiety and improve performance under pressure. She has the ability to understand and accept differences in others and diverse issues. She has good decision-making skills and is capable of planning, formulating, and implementing effective problem-solving procedures in stressful situations. Applying educational principles and personal practical knowledge helps a teacher to take decisions in challenging and tricky situations inside and outside the classroom. She has an admirable leadership quality as an ability to positively impact, persuade, and influence others. She has the driving strength to direct energy and motivation to accomplish personal meaningful goals. She is augmented with excellent time management skills to meet goals and assignments. She maintains good work ethics and is able to complete tasks and responsibilities in a timely and dependable manner. More than anything, she has good emotional management skills to control and manage emotions and improve performance under stressful conditions and situations.

Stress Management

Today, stress comes from all sides. It shatters relationships in workplace, undermining the overall culture. Augmented teachers have effective stress management and fear management skills. They engage in healthy lifestyle behaviors by reducing stress that occurs in their workplace, home, and society and they maximize the likelihood of living a long, healthy life. They practice coping and cognitive restructuring models to recognize maladaptive thoughts that disturb their mood, and they change them to more adaptive, rational thought patterns to improve their mood, reduce stress and negative emotions.

Social and Interpersonal Skills

Figure 8

Attributes to Improve Social and Interpersonal Skills



When it comes to interpersonal skills, a facilitator needs to master her communication skills. A newborn baby first listens to the sounds of his mother's voice, father's voice, and other sounds. As a result, listening is the first skill. Then he starts speaking, and he gets the second skill of speaking. Then he goes to school and starts reading the alphabet, words, and sentences. The supreme skill of writing comes finally. In this way, he learns his mother tongue and is very fluent in all communication skills. But when it comes to learning a second language, the process of acquiring skills is completely opposite. Learners first read and write, and they ignore listening and speaking. It is the reason why people struggle to learn a second language. A good teacher always listens first. She sets her mind to listening to others. Good communication is the key to success. As referred to in the NEA (2012) report, "communication competencies such as clearly articulating ideas through speaking and writing are closely linked to collaboration skills such as working effectively with varied teams, making necessary compromises in order to achieve a common goal and taking ownership and shared responsibility for collaborative work" (p. 14).

Non-verbal communication is another great skill for a facilitator. An augmented teacher has the ability to build rapport with various sections of society and create networks of people. A teacher with good emotional intelligence manages herself with self-instigations, builds up good self-inducement, is daring in her ventures, and does not get discouraged. She manages to get along with others while also managing her career and establishing her own fame and reputation.

Emotional Management

Augmented teachers practice self-control abilities to resist inappropriate behavior, dealing effectively with angry emotions, and they absolutely develop patience. They try to understand and accept learners' moods, emotions, drives, strengths, and shortcomings as well as to see how these affect their learning and behavior and act accordingly. Modelling calm behavior is the best practice in managing anger issues inside the classroom. They stay calm in crucial situations, and they do not shout and lose their temper, which may escalate the situation. They avoid arguing with the angry student or threatening him. They are very cautious about their body language, like avoiding crossing their arms, clenching their fingers, or placing their hands on their hips. They try to open the conversation with a positive statement and do not indulge in any conversation with the learner until she gets calm. They create a safe environment for handling situations that may be outside the classroom but not in a private setting. Compassionate mentoring plays an important role in guiding students toward consciousness about rage, sustaining the focus on rage, and dealing with the emotional fallout from it. They know how to manage their emotions. They find ways to handle fears and anxieties, anger and sadness. Teachers' eyes are the trackers, more powerful than any electronic device to track the emotions and learning interests of their learners in the regular classrooms. In the virtual classroom, it is possible to do the same when students are required to have their laptop cameras turned on.

Counselor

A teacher as a counselor develops rapport with her students, and this is the first quality of an excellent teacher. She makes her students feel comfortable in her presence, at ease, and starts conversations. She maintains a good combination of verbal and non-verbal communication. She listens to her students carefully and does not interrupt the flow of thought. Through paraphrasing, she provides clarity to her students' thoughts. Instead of providing ready-made solutions on the spot, she makes her students think about ways to overcome the problem. Teachers with great counseling skills have a high level of integrity and trustworthiness for their students to share their most troubling issues, and they never share it with anyone or spread gossip. The teacher has active listening skills and shows a genuine interest in what her students tell her. She has good practice of self-control, shows patience and supportive body language when responding to the student's cues.

She evaluates her students objectively, with no personal bias based on their academic records or personalities. She understands the issue from the student's perspective as she is very empathetic and exploratory. She also has the skills to develop the conversation to make the student come out completely to find a solution. She maintains complete confidentiality. She makes her students understand that the information shared will remain confidential and not be disclosed to anyone. However, if the issues shared are harmful, then she should inform her management. Learners spend their entire growing years in schools and colleges with their teachers, and their teachers have a significant role to play in shaping the personalities of their students. We have a general opinion that counsellors are needed for students with complicated issues. Special trained counsellor recruitment is very common in western countries. But teachers are often the first source of support for students.

Research Skills

Herzallah (2011) stated that teachers' professional development activities include practicing teaching as a core activity, reflecting on their own and others' teaching practices, doing action research, attending lectures and workshops, participating in professional conferences, and developing communication skills. Research augmentation is an important and inevitable aspect of a present teacher. The research desire is there in the minds of all the teachers who like career growth. Developing effective skills does not happen overnight, and they extend their hard work until retirement and even after. Research is a group activity today. In the field of modern research, educational institutions and individual instructors have research ratings in the research field. The institution's rating increases with the individual rating. The answers to questions like: How many A* papers does a professor have? How many Scopus and Web of Science papers does she have? How many citations does she have? What is her H index and i10 index? It all decides her rating in research, which is reflected in her institutional rating. Hence, it is the educational institutions' high responsibility to provide financial and administrative support to faculty in order for them to continuously improve their research skills through activities such as research publications, participation in research conferences, and so on.

Develop an Inquiring Mind

An inquiring mind is a key skill in a changing and challenging world. The teacher with an enquiring mind always goes beyond the subject matter and tries to look at the bigger picture. People with an inquiring mind are constantly seeking out new information and are interested in novel advancements, concepts, insights, and perspectives. As a teacher, it is important to engage with the thriving academic and scientific community as much as possible and attend conferences, seminars, and workshops for teachers whenever possible in order to develop expertise in their

field. Researchers plan for a well-defined research strategy and methodology and they are adaptive to new methods.

Research Writing

Figure 9

Cycle of Research Writing



Researchers spend years of their lives building upon their research. But when it comes to academic research writing, many of them still struggle. Effective research writing is one of the crucial steps in getting a paper accepted. A researcher can have very effective and useful research, but excellent research communication, that is, research writing, will only reach her reader community. Research augmented teachers are efficient in research writing. They plan properly, brainstorm concepts and ideas, use graphic organizers, and prepare an outline. They revise writing by reorganizing it, refining word choices, and rearranging paragraphs. They again rewrite the paragraph with additional information. In the editing stage, they perform self-assessment, peer edit, and proofread. By presenting this paper to a journal, they seek to get it selected and published. Researchers often refer to and have a membership ID in the following repositories:

Table 1

Repositories

EGYANKOSH	www.egyankosh.ac.in
NATIONAL DIGITAL LIBRARY OF INDIA	www.ndl.iitkgp.ac.in
SHODHGANGA	www.shodhganga.inflibnet.ac.in
ESHODHSINDHU	www.ess.inflibnet.ac.in
SHODH SHUDDHI	www.pds.inflibnet.ac.in
GOOGLE SCHOLAR	www.scholar.google.com
WIDWAN	www.vidwan.inflibnet.ac.in
RESEARCHGATE	www.researchgate.net
ORCID	www.orcid.org
SCOPUS	www.scopus.com
PABLONS	www.publons.com

Life and Career Skills

Figure 10

Life and Career Skills



Life and career skills involve in learning how to be adaptable to changes, flexible, self-directed, to manage objectives and time, work independently, engage with others effectively, lead and to act responsibly as a leader, (Partnership for 21st Century Skills, 2010, Appendix B). A 21st century teacher is augmented with the qualities of leadership and responsibility. Skilled teachers are leaders for their students. They are student friendly at the same time they enhance their instructional quality both inside and online classrooms. They collaborate, research, mentor, innovate and advise their learners. They are very flexible and adaptable in their classrooms. They effectively navigate the constant changes in the teaching and learning process and show novelty in the uncertainty that occurs in teaching. They always look forward to accomplishing their tasks and extending their endless support to the learners. They are augmented with the ability to manage learning tasks without having them directed by others. They always have a conscience that their nation is developed in their own classrooms. They actively participate in societal issues and never hesitate or fail to present their perspectives. They have great accountability for their tasks, responsibilities and accomplishments. The augmented teacher is solely responsible and accountable for creating and implementing the curriculum, grading and testing policies, assignments and assessments, and many other educational requirements and implications. They practice these qualities as life-long skills for their profession and personal life.

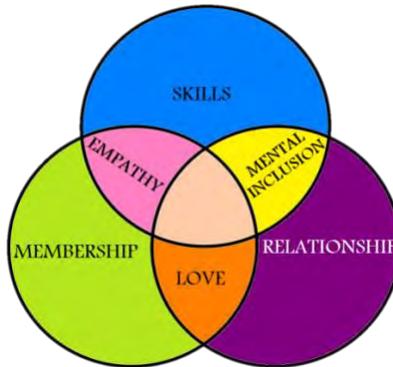
Augmented with Effective Strategies for Inclusive Education

Augmented teachers promote inclusive education in their classrooms, and they have the ability to understand their learners from different cultures and engage with them effectively. Inclusion is something that should happen in the mind of a teacher when they have good instruction that leads to a good outcome. They have a good instructional strategy for a good inclusive education. They understand that inclusion is not a set of strategies, inclusion is not a

placement issue, but inclusion is about belonging to a neighborhood, a school, a community or a group of friends. Figure 11 illustrates the overlapping of attributes that influence inclusion.

Figure 11

Attributes of Inclusion



They enable their students to feel a membership in their classrooms which is a major outcome of inclusive instruction, where the learner feels physical, mental, and emotional accommodation in the classroom and participates in all the instructional strategies and activities in a meaningful way. They create relationships among the learners who mingle with their peers and teachers on a one-to-one basis in the classroom. They receive help and give help to other peers in the classroom. Augmented teachers validate the experiences and feelings of people, not their color and caste. They avoid jokes or statements related to community, caste, and color and they avoid microaggressions in the classrooms. Teachers are trained in a variety of non-academic topics such as dealing with challenging students, suicide prevention, food allergies, and sexual assault.

Conclusion

Augmented educators are life-long learners. They want their students to be lifelong learners, and they also keep up with the latest developments in education. They are

knowledgeable about media, technology, and information literacy. Educators must enhance their computer literacy and improve their proficiency in using technology for academic purposes. They should equip themselves with the updated technology. Gen Z'ers prefer interactive learning platforms and they are involved directly in hands-on training in their learning process. The instructors need to improve their teaching styles to connect better with their learners. They should use learning management systems (LMS) like Google Classroom, Google Meet, Google Sites, Microsoft Team, Blackboard, Powerpoint presentations, podcasts and videos in their regular classroom teaching. They can effectively use Twitter and Whatsapp to connect with their colleagues and learners to share ideas and have discussions. Online quizzes, digital storytelling, padlet, and Kahoot are some of the applications for engaging students effectively. There are a number of teaching tools, such as drawing tools, video making tools, assessment tools, and simulation tools available online and educators should select suitable tools for their teaching learning process to meet the needs of Generation Z learners.

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