Preparing Generation Z for the Teaching Profession

Tim Carter Arkansas Tech University

Generation Z, also known as the Homeland Generation, is the most recent generational cohort to enter the university setting. As with other generational cohorts, various shaping factors have impacted this group contributing to its unique and defining characteristics. When carefully considered, these characteristics may provide insight into how to meet the learning expectations of this generational cohort. Therefore, the purpose of the present paper is to examine the unique shaping factors, characteristics, and learning expectations of Generation Z and to provide recommendations concerning how colleges of education can leverage these aspects to better prepare these future education professionals.

ver the past thirty years, the emphasis upon generational cohorts and their unique characteristics has continued to expand. In their seminal 1990's work, Generations, William Strauss and Neil Howe proposed that generational cohorts have each been impacted by various shaping factors that congeal a generation around common shared experiences and themes. Based upon these shaping factors, each generational cohort enters the education environment, the work force. and the business marketing environment with diverse and unique perspectives. In their efforts to describe different generations in their seminal work, Strauss and Howe conducted extensive selfreport survey and historical research in an these determine attempt to primary characteristics for each generational cohort, the values shared, and the experiences that were most influential to particular groups.

Although not in exact agreement on the bracket dates of respective generations, most generational researchers view a generation as lasting for a period of approximately 15-20 years. Generational researchers typically suggest the following dates for the last five generational cohorts.

- 1. Builder/Traditionalist/Wisdom Generation – mid to late-1920's to early to mid-1940's
- 2. Baby Boomers/Boomer Generation early to mid-1940's to early 1960's
- 3. Generation X early to mid-1960's to early 1980's
- 4. Millennial Generation early 1980's to late 1990's
- 5. Generation Z late 1990's to mid-2010's (Elmore, 2017; Howe, 2014; Howe & Strauss, 2000).

According to Strauss and Howe (1997), generational cohorts are fairly predictable in how they progress within the culture. These researchers suggest that groups do not simply "add-on" characteristics of the generation before it. Instead, various shaping factors impact groups so that generational changes ebb and flow based on what is occurring within a particular culture. In fact, if particular aspects are missing in one generation (e.g., lack of parenting, lack of structure, lack of financial security, etc.), this missing element may be one of strong points of emphasis within the next generation. This is particularly true when these aspects have been lacking in the generation's formative years and into young adulthood. Although it is never advisable to

create "cookie cutter" stereotypes of generational cohorts, examining general trends can prove to be beneficial.

Therefore, a number of researchers, marketers, and educators have sought to consider these different generational cohort characteristics in order to better understand and/or educate respective generations. Of the different generational cohorts, the most studied has been the Millennial Generation. With the advent of the digital age and increased Internet access in the early 1990's, attempts to conceptualize this generation accelerated rapidly with much detailed information supplied (e.g., Carter, 2008; Chronicle of Higher Education, 2007; Howe & Strauss, 2000, Lancaster & Stillman, 2002; Oblinger, 2003; Raines, 2002).

The recent generational emphasis has now begun to shift to what generational researchers have termed Generation Z or the Homeland Generation. Here, the term Generation Z will be used since it appears to be the most popular moniker of this group. The earliest members of this cohort are now in their latter years of secondary school and in their initial years of college. Colleges of education have recently begun to encounter this new generation. Therefore, it is important to understand their characteristics sooner than later as colleges of education will be attempting to prepare these students for the teaching profession in which they will initially be teaching others of their same generational cohort.

Based upon the initial findings related to this very large cohort (one of the largest if not the largest cohort in history), several characteristics have been observed. Such characteristics include an unfavorable view of risk-taking behavior, a family composition that is the most ethnically-diverse in the history of the United States, and a greater turn towards tradition (both towards religion and education) (Seemiller & Grace, 2016). Seemiller and Grace note that a belief in the

value of a college education is strong among this group as is the belief that a college education is very cost prohibitive. Many of these members suggest they value education but also note a caution to the degree to which they may be able to afford this pursuit.

In addition, Generation X members are the ones who have primarily parented the members of Generation Z. As such. Generation Z tends to be more financially conservative, pragmatic, and would prefer to deal with root causes rather than symptoms of issues, which mirrors characteristics of Generation X. Along with these features, Generation Z has indicated a desire to be involved with transformational rather than transactional activities in their world. In other words, they would rather have a career than engenders transformation in the culture than a career that simply provides them with financial prosperity. Likewise, Generation Z has received realistic rather than idealistic parenting in a post- 9/11 world. They have learned that collective security at times is more pressing than individual rights and privileges, and they have learned that terrorism and volatility are ever present (Elmore, 2017; Howe, 2014). experiences have further demonstrated the need for addressing root causes of issues and a need for transformational impact.

Further and not surprisingly, as children of Generation X primarily, \mathbf{Z} Generation is more financially conservative than their Millennial Generation counterparts. According to Seemiller and Grace (2016) and Howe (2014), these students have a penchant for entrepreneurial activity particularly as they have seen a number of individuals in the latter part of the Millennial Generation and within Generation Z do well in finding ways to make money through YouTube, mobile app creations, and other technological and practical efforts.

This group also tends to have a self-reliant attitude and values personal face-to-

face interactions. They are more cautious with their use of social media after watching the previous generation endanger themselves and their future prospects through publishing sometimes inappropriate or questionable content on social media. They are apt to use media tools in which information can be quickly deleted, and they are much more likely than the Millennial Generation members to create "fake" identities when using certain social media tools that are then subsequently shared solely with close peers (Seemiller & Grace, 2016).

Not surprisingly, in the digital age, the use of mobile technologies is of particular emphasis among Generation Z members. For example, Statcounter (2016) notes that mobile and tablet formats outpaced desktop formats in worldwide usage of the Internet for the first time in 2016. From a practical perspective, this means the Generation Z cohort is accustomed to using mobile and tablet formats as the primary tools to access and interact with information provided through the Internet. Moreover, just as the Millennial Generation used the cell phone as a text messaging tool as its primary purpose during their formative years (Carter, 2008), Generation Z has been engaged in extensive use of wireless technology applications (apps), non-verbal symbolic communication (e.g., emojis), and wireless access on a global scale. This increased use of mobile technologies will likely proliferate the networking capabilities of this generation previously impassable boundaries (e.g., GSMA Intelligence, 2017). Generation Z uses such tools while continuing to use text messaging extensively with the added and extended graphic elements. In fact, whole conversations can now occur via emojis in social interactive platforms. This current generation is capable of communicating even more rapidly with their peers than previous generations with these new developments in technology.

Within social media applications, Facebook remains the first choice in digital interactions (Statcounter, 2017). However, according to various researchers, Generation Z seems to be moving away from Facebook and similar digital recording tools and further into social media tools that allow greater interaction privacy, non-permanent storage of images and information, and where personal information can be guarded more carefully (Elmore, 2017; Seemiller & Grace 2016). They have seen the previous generation harmed by the open sharing of personal information on social media and they have responded platforms, accordingly. This fits well with their reported adverse reaction to risk-taking behavior.

Due to societal events, parental approaches experienced. changes communication formats, and observations of the current global environment, the members of Generation Z have been at least somewhat "shaped" as a cohort by these factors. As noted by educational experts such as Danielson (2007), Eggen and Kauchak (2015), Vygotsky (1978), and others, it is essential that educators understand this cohort's background experiences, shared understandings, and previous learning in order to educate them more effectively. In the case of the Generation Z cohort, all members of this group will not share identical characteristics, but there are some general characteristics, as aforementioned, would be useful to consider during their future educators. preparation as conjunction with founding educator practice securely within educational theory, generational research can provide a useful supplement in understanding and more effectively preparing future teachers from the Generation Z cohort entering the colleges of United education across the States. Contingent upon this premise, proposed are four initial considerations that may be of particular benefit when teaching this group.

Use of Mobile Technologies

As noted previously, the use of mobile and tablet formats has become a common experience of Generation Z students. They have used these tools as the world has moved from a majority usage of wired desktop Internet access to wireless mobile Internet access. They have lived within this change, and they have helped precipitate it. Public schools have identified these trends and have responded accordingly. For example, Future Source Consulting (2017) reports that sales of mobile devices to school districts have continued trending upward with a growth of 18% in 2016. According to this consulting firm, as districts continue to expand their 1:1 programs, these sales will likely continue to trend in the positive direction.

Within these educational purchases of mobile and tablet technologies in K-12 education, the Google Chromebook has outpaced all other tools purchased within the United States. Based on annual shipments, Future Source Consulting notes that in 2016 Google Chromebooks accounted for a 58% share of sales with Windows at 22% and iOS at 14% respectively. In fact, Google Chromebooks have grown rapidly in popularity within the last three years gaining a greater market share as Windows and iOS have both declined. This is reflected in local studies conducted in Arkansas which found that the Google Platform and Google Chromebooks were the most popular with teachers among mobile devices (Carter, Gunter. Bean. & Reeves, 2016). international shipment records outside the United States for mobile computing devices, Windows owns the largest share at 65% followed by Android with 17% and Google Chromebooks with 6% (an actual increase over the last three years) (Future Source Consulting, 2017).

With the continuing upward trend of mobile computing purchases in the United States' public school classroom; particularly involving Google Chromebooks, colleges of education must consider how we are preparing our future teachers for this environment. Is the use of mobile devices being employed to model and facilitate planning. instruction. and assessment practices? Do preservice teachers receive ample opportunity to learn to use these mobile technologies in their preparation? Is there access to more than "plugged" devices? Are these future teachers being adequately prepared for a mobile computing educational environment using 1:1 learning programs, and does this preparation occur beyond the educational/instructional media course that education programs require? manv Continuing the constructivist learning approaches that colleges of education attempt to model to their students with the addition of the application of mobile technologies will likely become even more vital in the coming vears.

Blended Learning Environments

The concept of blending learning environments is not new to education. Researchers and learning community experts such as DuFour and Eaker (1998), Piaget (1995), Senge, Cambron-McCabe, Lucas, Smith, Dutton, and Kleiner (2000), and Vygotsky (1978)proposed theories supporting these sorts of approaches a number of years ago. It has been noted by such theorists and researchers that learners do better when operating in an environment designed with a community of learners in mind. In this type of environment, learners engage at various levels with various resources (digital, print, peers, teacher, etc.) to learn in a deeper fashion. Organizations such as the Alliance for Excellent Education (2017) have used this perspective to encourage blended learning environments. This group compares productive learning environments to the work that occurs in the job setting where people work both individually and in team to accomplish the objectives that have been established.

For Generation Z, this blended learning approach is likely to be beneficial since this group's characteristics have included a desire for face-to-face interaction, pragmatic approaches to problems, a selfreliant attitude, desires to work independently and in team settings, and the ability to quickly access multiple resources to accomplish goals and objectives (Howe, 2014; Seemiller & Grace, 2015). With such characteristics. blended learning environments would seem to provide ample opportunity for learning to occur effectively with this cohort.

For example, a classroom might involve students working independently along the perimeters with their mobile 1:1 device. They could then move into small group settings to share what was gained independently and to discuss various factors that might benefit the group and identify shortfalls of information or skills. The teacher may have an area available where s/he can meet with students individually or in small groups to discuss the information and auerv students concerning understanding or ability pertaining to the knowledge or skill being developed. This environment would involve interaction with independently multiple resources socially. Such approaches mirror thoughts of both Piaget (1995) and Vygotsky (1978) and draw theoretical support from their works.

Following a simpler model of doing collaborative work without the opportunity for individual work may very well frustrate these learners. The Millennial Generation seemed to thrive on using multiple resources and group think exercises within the

classroom setting. However, initial indications are that Generation Z will prefer an environment where both independent and social elements are present. In this context, blended learning environments where both individual and social learning processes are used should prove to be highly beneficial to Generation Z.

Real-world Problem Solving

As noted previously, Generation Z has so far indicated a desire to be involved with transformational rather than simply transactional activities in which roots of problems rather than solely the symptoms are addressed. Such a perspective lends itself to problem-solving and project-based learning approaches. In addition, these characteristics would seem to particularly value these learning approaches when paired with real-life issues instead of projects designed for learning decontextualized information or skills.

With the growth of initiatives such as Project Lead the Way and the development of standards such as the Next Generation Science Standards (Achieve, 2017) and the Principles for Learning (Association for Career and Technical Education, et al., 2010), project-based learning in dealing with real-world problems is becoming a greater point of emphasis. Learned societies deem these approaches to be essential in helping students learn to interact within a global context where social and pragmatic approaches are used to address a host of issues within and across discipline fields.

Generation Z teachers will be the ones who will have experienced these points of emphasis to some degree, and the earliest members of this cohort will be the teachers who will be teaching the mid and latter members of this same cohort. To do this effectively, they will likely need to experience specific training in project and

problem-based learning methodologies in a variety of subject areas. Additionally, they need to have an ability to use the aforementioned technologies as supporting tools in this development.

It appears that colleges of education will need to be actively involved in helping these future teachers develop the teaching skills to make effective use of these generational tendencies in line with the learning expectations of today's learned societies. Once again, this emphasis fits well within the tenets of constructivist learning theory. To accomplish this in greater measure, increased partnerships university STEM Centers, with local schools who are implementing these approaches, and with other educational shareholders will be essential in better preparing these future teachers for this type of learning environment.

Transformation and Entrepreneurship

Having been primarily parented through a pragmatic rather than idealistic approach by parents who tended to be financially cautious due to events in their own formative and young adult years (Strauss & Howe, 1991), it is not surprising that Generation Z members tend to be financially conservative. Generation Z's parents lived through troubling financial times during their formative years where they harkened back in their financial beliefs to the Wisdom Generation who held to "a penny saved is a penny earned" philosophy. Many young people of this generation, who have also been observers of the Millennial Generation's financial debts, have decided that finding ways to earn additional income through private pursuits is needed in their generation. Therefore, it is not surprising that they desire to find streams of income from entrepreneurial efforts (Seemiller & Grace 2016).

This desire coupled with a need to be involved in something transformational rather than solely transactional in their occupational pursuits would seem to make the teaching profession a very viable alternative. With reported teacher shortages across the country (e.g., Carver-Thomas & Darling-Hammond, 2017) and with a desire to be involved with a career that can be transformational. perhaps colleges education can use these desires to attract students to a profession where they can have a transformative impact on society with some promise of job security.

Additionally, noted as entrepreneurship seems to be an attractive concept to this particular cohort. Are there ways in which colleges of education can leverage this aspiration? In the past twenty years, entrepreneurial efforts in the teacher preparation field have continued to increase to the point that the Council for the Accreditation of Educator Preparation (2015) noted the following concerning Education Program Providers (EPPs) "an inclusive term referring to the sponsoring organization for preparation, whether it is... or an alternative pathway organization" (p. Entrepreneurial efforts such as those 3). alternative observed in pathway organizations seem to be expressed primarily outside the traditional preparation route. Perhaps, it would be wise for colleges of education to determine ways in which entrepreneurial efforts could occur and be encouraged within traditional pathways. Are there ways to leverage these entrepreneurial desires of Generation Z to benefit the individuals in this group, the teaching traditional profession. and program providers? Although this pursuit would complexity increase the of preparation at the university level, it might be considering. something worth Transformational definitions entrepreneurial pursuits may be key to

attracting and preparing this generation into the field of teacher education.

Summary and Conclusions

Generation Z is just beginning to enter the world of the university. They carry with them a host of characteristics and preferences that have been shaped just as previous generations have been shaped before them. They seem to exhibit some of their parents' characteristics while expressing them in unique ways in the culture in which they are developing.

Although the suggestions noted within this paper are based on initial examinations of this group, there will likely be more extensive information available as this large generational cohort continues to develop. Therefore, what has been suggested here are initial recommendations that may assist colleges of education in their attempts toward developing these future teachers. However, as with any generation, time will tell as to whether or not other factors may need to be considered as colleges of education look to prepare members of Generation Z as strong and capable professionals.

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- **Tim Carter** is the Department Head and a Professor of Curriculum and Instruction at Arkansas Tech University. His research interests include examining constructivist-based learning environments that consider generational characteristics.