

# UCLA

## InterActions: UCLA Journal of Education and Information Studies

### Title

Using routines to improve diversity in higher education institutions

### Permalink

<https://escholarship.org/uc/item/7cs2t44d>

### Journal

InterActions: UCLA Journal of Education and Information Studies, 13(2)

### Author

Hoover, Jeffrey C.

### Publication Date

2017

### DOI

10.5070/D4132032319

### Supplemental Material

<https://escholarship.org/uc/item/7cs2t44d#supplemental>

### Copyright Information

Copyright 2017 by the author(s). All rights reserved unless otherwise indicated. Contact the author(s) for any necessary permissions. Learn more at <https://escholarship.org/terms>

Peer reviewed

In today's sociopolitical climate where globalization and diversification are the norm, many higher education institutions (HEIs) are striving for increased diversity and multiculturalism within their student bodies. The problem is that increasing diversity and multiculturalism in HEIs is often pursued with short-lived and superficial attempts rather than institutionalized practices. It is these institutionalized practices that will be the primary focus of this review because of their great potential for encouraging lasting diversity and multiculturalism in HEIs.

While the desire for increasing diversity is fairly straight forward as an abstract goal, HEIs should pursue this goal strategically in order to make progress because diversity is a rather broad term and there are many potential strategies that could be attempted to increase diversity. Conversations around diversity often center on visually observable differences (Jackson, Joshi, & Erhardt, 2003), although there are numerous unobservable factors that are also forms of diversity (Roberge & van Dick, 2010). With this in mind, *diversity* is being defined to mean incorporating individuals with observable differences (e.g., race, ethnicity, gender) as well as including individuals with less subtle, internal differences (e.g., sexual identity, religious beliefs, personality traits) (Roberge & van Dick, 2010).

#### **Historical Limitations on Diversity in HE**

Traditionally, HEIs have been founded based on elitism (Herron, 2013; Weiner, 2009). Consequently, these institutions have traditionally catered to a restricted set of demographics. The result is that HEIs are generally lacking in diversity, even though increasing levels of diversity has long been considered important.

In 1859, John Stuart Mill said, "The interests of truth require a diversity of opinion" (Mill, 1859/1974, pp. 114). While Mill may or may not have intended this to be taken as a call for increasing diversity under the definition being used in this paper, the quote certainly speaks to the historical precedent of wanting to increase diversity. Because of the numerous factors that affect why students will attend a given HEI, increasing diversity in HEIs is more complicated than merely recruiting and admitting more individuals from diverse backgrounds. Leaders of HEIs must consider factors within their HEIs that will encourage the attendance of diverse individuals as well as factors that encourage diverse individuals to remain at these HEIs. One method for effectively pursuing this goal of increasing diversity is through routines, or institutionalized processes that may provide an avenue for implementing salient change in increasing the diversity present in HEIs. The goal of this manuscript is to synthesize the existing literature pertaining to routines as they impact diversity in order to present a list of recommendations designed to improve diversity in HEIs.

#### **Benefits of Diversity in Higher Education**

Because of the importance attributed to attaining diversity within society as a whole, researchers have sought to determine the consequences of increasing levels of diversity. In the pursuit of research on the benefits of diversity, researchers have found benefits for institutional diversity (i.e., have a diverse group of people who are within the institutional system) and for interactions between diverse individuals.

Institutional diversity provides benefits in several domains. First and foremost, having a diverse student body engaging in activities will encourage diversity in course content, which has been shown to produce educational benefits (Nelson Laird, Engberg, & Hurtado, 2005; Chang, 2002; Antonio, 2004). Additionally, research has demonstrated that students with little interracial interactions still benefit from HEIs with higher levels of diversity (Chang, Denson, Saenz, & Misa, 2006).

Interactions between diverse individuals produce a vast array of educational benefits (Chang et al., 2006; Whitla et al., 2003), and these interactions have been shown to produce more benefits in comparison to institutional diversity (Gurin, Dey, Hurtado, & Gurin, 2002; Hurtado, 2005; Milem, Chang, & Antonio, 2005). Gurin and colleagues (2002) used two longitudinal databases to analyze diverse experiences, which were defined as course content and their classmates, with family (e.g., socioeconomic status), demographic (e.g., gender), and academic (e.g., grade point average) factors as control variables. Gurin et al. (2002) examined these variables to determine their effects on learning (e.g., intellectual engagement, academic achievement) and democracy (e.g., citizen engagement, racial and cultural engagement) outcomes. Their study demonstrated benefits in decision-making and democracy-related outcomes (Gurin et al., 2002). Further, researchers have found improvements in critical thinking (Chang et al., 2006), problem solving (Chang et al., 2006), self-confidence (Chang et al., 2006), prejudice (Slavin, 1995), perspective taking (Jayakumar, 2008), academic achievement (Slavin, 1995), and additional support for improvements in democracy-related outcomes (Gottfredson et al., 2008; Hu & Kuh, 2003; Hurtado, 2005; Milem et al., 2005).

### **Overview of Pertinent Concepts**

This literature review will explore a variety of organizational theories that pertain to the functioning of HEIs, and then these concepts will be applied to increasing diversity within institutions. First, the article will discuss routines and institutional learning in HE settings. Routines affect institutions' functionality: how they serve institutional purposes (e.g., reducing uncertainty), how they are adopted (e.g., mimicry, innovation), how they are institutionalized (i.e., making routines permanent), and how they can be changed over time (e.g., meta-routines, altering routines). Related to institutional learning, previous research findings will present modes of learning (e.g., single loop learning, double loop learning)

and will discuss how these modalities address routines' shortcomings (e.g., ignoring causal factors, failing to reflect on routines' effectiveness) as a means of increasing diversity. Subsequently, previous research regarding diversity will provide information about the general benefits of increased diversity, impediments to increasing diversity (e.g., isomorphisms, filtering, homogenous social groups in adolescence), challenges associated with increased levels of diversity (e.g., higher levels of intergroup conflict), and the difficulty of evaluating the effectiveness of routines in increasing diversity (e.g., ambiguousness in the definition of diversity). Finally, routines and learning will be applied together towards the issue of improving diversification of HEIs. This examination of the intersection of diversity and routines and learning will culminate in a series of recommendations designed to assist HEIs in adopting routines that can increase diversity.

### **Institutional Routines**

Before routines can be discussed in-depth, a standardized definition is required. A *routine* is a process that has "become habitual because of repetition and which is followed regularly without specific directions or detailed supervision by any member of the organization" (Stene, 1940, pp. 1129). As an example, consider how students arrange themselves in a classroom during a lecture. They almost universally seat themselves so that they face the front of the room in preparation for lectures. No one has mandated that these students face the speaker during the lecture. The students are free to face any direction they choose, but they have developed this routine through repeated practice and continue to follow it regularly without specific instruction.

**Implementing new routines.** Having discussed what constitutes a routine, the discussion now turns to implementing new routines. Organizations initially adopt routines for various reasons, but the underlying reason is often reducing uncertainty within the organization (Greve & Taylor, 2000). Uncertainty is a significant concern because it reduces the efficiency with which they can act (Hillman, Withers, & Collins, 2009). HEIs can reduce their concerns regarding uncertainty "through the stabilizing influence of embedded routines and repetitive practices such as training, education, hiring and certification routines and ceremonies in celebration" (Lawrence & Suddaby, 2006, pp. 233).

Researchers have identified two primary methods for new routines. These methods are *innovation*, which involves an organization creating its own routine to use, or *mimicry*, which involves replicating a routine that has been implemented elsewhere.

**Implementing routines through innovation.** According to Greve and Taylor (2000), innovation increases uncertainty because of the inherent risk potential associated with the creation process. If successful, creating new routines allows leaders to design routines specifically for the institution's context (Nadler

& Tushman, 1989), which may provide additional benefits. As one example, competitive advantages can be procured through innovation (Burgelman & Sayles, 1986). Consider a hypothetical HEI that creates a new process for determining whether freshmen need tutoring to improve their performance in their classes. If a created solution addresses specific needs of its students, the institution may attain a higher retention rate and subsequently a higher graduation rate, which is a competitive advantage when recruiting against other HEIs.

A drawback of creating a new routine, however, is that outcomes are often difficult to predict, which is especially problematic if the stakes are high (Greve & Taylor, 2000). Because of the difficulties associated with predicting outcomes, innovation is often limited by satisficing (March, 1981). Through satisficing, institutions may create individualized processes in order to find a sufficient routine without searching for the ideal solution. Consequently, satisficing reduces some of the risk without eliminating innovation. Consider the above example of a HEI creating a new routine for freshman evaluation and a tutoring program to increase its retention rate. This institution may innovate until it reaches an increase in retention rates (i.e., satisficing to find a sufficient routine) without continuing until the maximum retention rate has been achieved (i.e., finding the ideal routine).

***Implementing routines through mimicry.*** Although innovation provides potential benefits to institutions' unique situations, mimicry allows for imitation of successful routines from other institutions (Massini, Lewin, & Greve, 2005). Most leaders are reactive and adjust to the innovations of their competitors (Greve & Taylor, 2000), often because they perceive themselves to be at a competitive disadvantage (Massini et al., 2005). While popular with leaders, mimicry has limits in terms providing new information (Greve & Taylor, 2000), which is likely because mimicked routines cannot be identical to the original routines (March, 1981). Furthermore, mimicry often fails to account for the original context that prompted the innovation of the routine, which potentially limits its effectiveness (Nadler & Tushman, 1989).

Iwao (2015) provides an example of mimicry. A car company mimicked a Toyota assembly line strategy because the company believed that mimicking the routine would increase their competitiveness with Toyota (Iwao, 2015). The company failed to consider that the mimicked strategy was dependent on other strategies that were being implemented at Toyota, and the overall result was a decrease in productivity (Iwao, 2015).

### **Evaluating New Routines**

Regardless of their origin, enacting new routines is associated with environmental demands (Hannan & Freeman, 1984). Institutions inherently have a level of agency that allows them to attempt to adapt to the demands of the environment (Hannan & Freeman, 1984), and routines are one method for

adapting to environmental demands. Institutions may enact new routines in hopes of instigating change and improving outcomes (Feldman, 2000). This attempt at adaptation typically occurs, in part, when performance is below the expected level (Lant & Montgomery, 1987) as new routines serve as a method for improving performance.

While institutions seek to improve outcomes by implementing new routines, they should evaluate new routines to determine their effectiveness. Feldman (2000) describes several potential outcomes stemming from a new routine: negative outcomes; unintended but positive results; or intended outcomes that falls short of the ideal result. In the spirit of agency, Feldman (2000) asserts that institutions have the ability to adjust routines in hope of honing them towards the desired outcome over time.

Because evaluating routines is dependent on individual HEI contexts, the methodological process of evaluating routines is somewhat unstructured and judgment-based. Cyert and March proposed that the routine evaluation process involves using a routine, evaluating the outcome, and determining whether to adjust the routine (as cited in Rerup & Feldman, 2011). Institutional leaders use their professional expertise to determine whether the routine has achieved the goal. If the goal has not been achieved, HEI leaders must decide whether to consider the outcome a success (i.e., satisfice) (March, 1994). If the result is not good enough, the HEI leaders may choose to engage in trial and error attempts to improve the outcome (i.e., innovation), or they may replicate a routine from another organization (i.e., mimicry) (Rerup & Feldman, 2011). After choosing how to proceed, Cyert and March's framework posits that the evaluation process will repeat with the HEI leaders analyzing the outcome and determining whether a new or modified routine should be implemented after each outcome cycle (as cited in Rerup & Feldman, 2011).

### **Maintaining Routines**

Once routines are evaluated and established, organizations tend to maintain the processes that are currently in place (Greve & Taylor, 2000), which makes implementing new routines difficult. Lawrence and Suddaby (2006) refer to this as institutional inertia, and routines are often preserved due to their inertia. For this reason, the prior sections pertaining to the evaluation and improvement of routines are essential.

For an example of institutional inertia, consider using American College Test (ACT) scores as admission materials to HEIs. Alon and Tienda (2007) analyzed data from nearly 30,000 high school students in cohorts from 1982 and 1992 as well as admission data from the University of Texas at Austin to determine how demographic, family, and academic variables impact where students go to college. In their study, Alon and Tienda (2007) found that standardized test scores were a significant predictor in where students go to

college, and colleges and universities continue to use ACT scores despite the multiple biases that may negatively affect diversity.

**Meta-routines.** Iwao (2015) discusses meta-routines, which are the methods for studying changes in routines. Put another way, meta-routines are the examination of higher order processes that serve to guide the development of routines over time (van Driel & Dolfsma, 2009). These meta-routines demonstrate an organization's tendency to choose types of solutions for given problems (van Driel & Dolfsma, 2009). For example, a HEI may analyze its previous actions in attempts to increase on-campus diversity. During this examination, leaders may notice that they see a pattern in the routines that have been implemented. Hypothetically, these leaders may notice that the institution has historically bolstered routines aimed at recruiting traditionally underrepresented populations without altering routines that may affect daily campus life. These hypothetical leaders have identified one of their institution's meta-routines. In identifying that meta-routine, they have identified a preference for a specific solution (e.g., increasing recruitment efforts), and these leaders can alter the future implementation of routines so that the institution considers solutions that are outside of its normal tendency and potentially improve outcomes.

### **Institutional Learning**

While learning is traditionally conceptualized at a student or individual level, institutions can also learn. *Learning* is defined here as analyzing results stemming from the current state of the institution and using that information to influence how it will proceed in the future. Learning is essential to meta-routines because of how it guides the development of routines over time (van Driel & Dolfsma, 2009). By definition, using learning to alter the development of routines directly coincides with an institution's meta-routine and thus demonstrates the relationship between institutional learning and meta-routines. Without effective learning, routines cannot be expected to improve over time, and routines that are stagnant cannot be relied upon to generate change, especially if that change is difficult to attain. In research examining institutional learning, research has identified single and double loop learning as two processes used to learn. Multiple researchers have detailed the differences between single and double loop learning (e.g., Argyris 1976, Argyris 1982, Bensimon, 2005, Paul, 2003), and each provides benefits that may be helpful in generating effective meta-routines.

**Single loop learning.** *Single loop learning* refers to the process of addressing a problem without considering the underlying issue that caused the problem to begin with (Argyris, 1995; Bensimon, 2005; Paul, 2003). Consider the problem that many HEIs face in increasing diversity at the student level. Single loop learning would be for administrators to increase recruitment efforts

towards underrepresented populations without considering other complications that may deter students from underrepresented populations from joining the institution.

Implementing single loop learning has multiple downsides. Single loop learning can cause defensiveness and closed-mindedness (Argyris 1976) as well as potentially preclude reflection (Peschl, 2006). This prevalence of defensiveness manifests itself through the assignment of blame, and the assignment of blame is subject to attribution biases (Argyris, 1994). Together, these problems can inhibit learning, which is the reason that Argyris (e.g., 1982, 1994, 1995) and others (e.g., Bensimon, 2005; Tagg, 2007; Peschl, 2006) have been a proponent of enacting double loop learning.

**Double loop learning.** *Double loop learning* refers to the process of addressing problems through examination of the underlying processes that may have caused the error (Argyris, 1995; Bauman, 2002). In order to see an example of double loop learning, consider again the example of HE administrators attempting to increase diversity at the student level. Administrators using double loop learning would examine issues pertaining to recruitment and retention of diverse students in addition to making efforts to recruit more diverse students. In implementing changes using a double loop learning technique, administrators may implement changes designed to address student concerns within the institution, such as encouraging the use of a broader array of instruction technique. The point is that administrators will be considering impediments to diversity rather than solely focusing on increasing diversity levels.

Because of the previously described negative consequences associated with single loop learning, institutions can unintentionally hinder progress by failing to examine underlying processes that may be causing problems. Consequently, institutions must create an environment conducive to growth through the implementation of double loop learning. The immediate advantage of double loop learning is that the institution's future actions will likely be improved. Phillips (2005) examined law firm data from 1946 through 1996 and found a generational effect impacting whether there were women in partner positions at the firm, based on whether these firms had a history of female partners as well as the presence of female partners and associates. Along the same line of reasoning, routines facilitating double loop learning can then be institutionalized and used to improve future processes because of generational effects associated with their repeated use over time (Phillips, 2005). Finally, effective routine monitoring is often a result of implementing double loop learning.

While the previous discussion has mostly discussed single and double loop learning in terms of their functionality, the aspirational nature of double loop learning is also important so that institutions are actively improving routines over time. This improvement is a result of inquiry into issues as well as testing



hypotheses (Argyris, 1995), reducing barriers to gaining understanding (Argyris, 2002), and facilitating discourse between parties (Iverson, 2007). Together, these components serve to foster an environment that is conducive to improving routines and institutional functioning by engendering characteristics essential to the double loop learning process.

**Evaluating routines with double loop learning.** Genuine reflection is key to successfully enacting double loop learning because of the in-depth examination required to determine the causes underlying problems (Wooten & James, 2004). Schön (1983, 1987) describes reflection-in-action and reflection-on-action, and Greenwood (1998) describes reflection-before-action. Each of these reflection paradigms demonstrates the various opportunities for reflection that are key to engaging in proper double loop learning. Institutions and their leaders are able to reflect on what they are currently doing (reflection-in-action), what they were doing (reflection-on-action), and what they are going to do (reflection-before-action). These reflection paradigms are used in conjunction rather than in a mutually exclusive fashion. Each action presents a method for examining processes for potential problem areas, and each may reveal potential sources of difficulty. Through this extensive exploration, leaders gain understanding about causal factors, which should generate improved outcomes in the future.

As a part of reflecting on routines, administrators may find that their actions are disconnected from the stated goals of the institution. Argyris (1976) notes that there are frequently two forms of theories designed for guiding routine implementation. The first is espoused theories, which are endorsed verbally or symbolically by leaders (i.e., leaders may state that increasing diversity is a goal yet do nothing to pursue that goal). The second is theories-in-use, which are theories that are ascertained through the behaviors and operations of the institution. The defining difference between these two concepts is that theories-in-use describe actions that are being engaged in, whereas espoused theories may be in name only.

There can be multiple reasons for the divergence of espoused theories and theories-in-use. One is that espoused theories may indicate a lack of authority to pursue these goals (Argyris, 1976). Another is that leaders may use actions to target problems rather than attempting to understand the causal factors involved (Argyris, 2002; Wooten & James, 2004). Ignoring causal factors typically results in single loop learning because time is not taken to understand the cause of the problem. Genuine reflection should be used to address differences in espoused theories and theories-in-use in order to keep progressing towards the institutional goal.

**Diversity**

Having undergone a brief discussion on routines and learning processes, attention will now be turned to the issue of diversity. Again, diversity is defined to mean including individuals with observable differences (e.g., race, ethnicity, gender) as well as including individuals with less subtle internal differences (e.g., sexual identity, religious beliefs, personality traits) (Roberge & van Dick, 2010).

While society has stated its goal of achieving increased diversity in HEIs, society, and the workplace, there are differing opinions for what is the ideal amount of diversity (Guri-Rosenblit, Sebkova, & Teichler, 2007). Because of the different norms, opinions, and ideals of individuals in society, it is highly improbable that a single, unified goal for how much diversity should be present will ever be agreed upon. Further, the goal of increasing diversity in unobservable traits and opinions to a sufficient degree is a rather nebulous goal in itself, which complicates the evaluation of whether the goal has been attained. Consider the topic of religions at an HEI. Are all religions represented at the university? Furthermore, are all religions equally represented and do these religions influence “enough” of the discourse on the institution’s campus? These questions are practically impossible to answer and demonstrate the problem of attempting to define a unified goal for levels of diversity.

**Benefits associated with increasing diversity.** As noted in the introduction, there are numerous benefits to increasing diversity in HE settings. These benefits encompass a broader selection of courses and course content (Nelson Laird et al., 2005; Chang, 2002; Antonio, 2004) in addition to improved critical thinking (Chang et al., 2006), decision making (Gurin et al., 2002), problem solving (Chang et al., 2006), democracy-related outcomes (Gottfredson et al., 2008; Gurin et al., 2002; Hu & Kuh, 2003; Hurtado, 2005; Milem et al., 2005), academic achievement (Slavin, 1995), and other domains.

**How routines can inhibit institutional diversity.** Although there are numerous benefits to increasing diversity as noted previously, routines have the ability to preclude increases in diversity through isomorphisms and filtering. *Isomorphisms* are defined as processes in which institutions become more similar to one another (DiMaggio & Powell, 1983; Meyer & Rowan, 1977), and *filtering* is defined as organizations using the same standards for admission and promotion of its members (DiMaggio & Powell, 1983).

With respect to isomorphisms, institutions are likely to maintain the current diversity levels by becoming more similar. In other words, HEIs that are not currently diverse are likely to perpetuate the marginalization of underrepresented populations through isomorphisms rather than promoting the presence of these populations through increasing diversity. Thus, the lack of diversity essentially becomes a self-sustaining cycle.

Filtering presents a similar obstacle. Filtering would suggest that the processes and criteria used for hiring and promoting members are likely to

perpetuate problems associated with a lack of diversity (DiMaggio & Powell, 1983). Take, for example, your mental image of a HE president. There is likely little variation between people in the mental images that are constructed. The constructed image is likely of a middle-aged white male. This man likely has a fairly serious demeanor along with an intense personality. This man is probably wearing some sort of a business suit in the mental image, and the man is likely perceived as having been involved with elite HEIs. This mental image is the product of filtering that has been traditionally used by HEIs. These institutions hire and promote employees based on the same set of standards, and these standards culminate in the same “type” of person reaching the top of the organizations (i.e., the mental image of a HE president listed above).

**Addressing isomorphisms and filtering.** HEIs must do more than create routines designed to counteract isomorphisms and filtering because organizational members must have authority in order to be effective. Decoupling is defined as separating internal activity from an organizational structure (Meyer & Rowan, 1977), which presents a problem in terms of using routines to generate increased diversity. To demonstrate with an example, a hypothetical HEI may create a department tasked with promoting and ensuring multiculturalism without giving that department the institutional authority to pursue that goal. Consequently, the department promoting multiculturalism cannot perform its assigned duties because it lacks institutional authority. The appearance, however, is that multiculturalism is being encouraged, since there is a specific department that has been created to promote and ensure multiculturalism. Ultimately, decoupling results in an ineffective and superficial attempt to evoke change. If a sincere effort at increasing diversity is to be made, institutions’ members and departments must have the authority to implement those changes.

**Individual factors impacting diversity.** Beyond the organizational process of isomorphisms, filtering, and decoupling, there are also individual factors that interact with organizational reputation and perception that can limit diversity. Groups within organizations tend to form through distance from one another (Festinger, Schachter, & Back, 1950), similarity between members (Newcomb, 1960), and familiarity between members (Tenbrunsel, Wade-Benzoni, Moag, & Bazerman, 1994). These general principles affect organizations hiring and recruiting individuals, especially with respect to diversity.

Each of these three components interacts with how an organization is perceived by the community, and each influences the diversity within the organization. Regardless of the reality of the situation, an institution may be perceived as a place that caters to a “type” of person (e.g., ivy league universities are perceived as catering to the elite and predominately white demographic, historically black colleges and universities [HBCUs] are perceived as catering to African Americans). As a byproduct of being perceived in this manner, these

institutions will attract individuals similar to the perception; they will attract individuals within groups who perceive themselves as being catered to by the organization, and they will have a stronger attraction to those who are similar to perceptions from areas closer to the organization in geographical proximity. These three factors functionally decrease the diversity of individuals interested in the organization before the hiring and recruiting processes begin, which is problematic for increasing diversity. Conversely, a brief glance at the existing literature pertaining to HBCUs demonstrates multiple attempts that have been used to promote diversity and multiculturalism. While some of these changes in diversity have been mandated attempts to create diversity (Thomas-Lester, 2004), Gasman (2013) reviews a multitude of evidence suggesting that HBCUs have taken steps to increase and sustain the levels of diversity in their schools. As additional evidence, Conrad and Brier indicate increases in graduate programs (as cited in Closson & Henry, 2008), and Brown reported that increases in white enrollment could be expected to increase at HBCUs (as cited in Dwyer, 2006). In summary, even universities that are perceived as catering to a single demographic can make successful attempts to encourage diversity and multiculturalism.

As another potential detractor to diversity, people may also live in fairly homogenous social groups. As such, diversity likely means disrupting the previously experienced homogeneity (Gurin et al., 2002). Increasing diversity is challenging because of the three factors listed previously that typically increase similarity within groups. The consequence is that it may be relatively easy for individuals to enter an HEI that is similar to previous environments that lacked diversity, which may prolong the homogenous environment for individuals. The concern is that increasing diversity at the individual level may present enough of a challenge as to dissuade organizations from attempting to take actions designed to meaningfully increase diversity.

**Conflict associated with increased diversity.** Under circumstances where increased diversity has been actualized, increased conflict is likely to arise in the short-term following the increase in diversity (Jehn, Northcraft, & Neale, 1999). In their study, Jehn et al. (1999) surveyed employees with self-report measures within the context of their work groups in a large company regarding information, social category, and value diversity as well as relationship, task, and process conflict. Information diversity was defined as what the employees knew and the perspective they had regarding that information (Jehn et al., 1999). Social category diversity was defined as visible differences between individuals (e.g., age, gender, race) (Jehn et al., 1999). Value diversity was defined as what employees considered to be the most important aspect of their jobs (Jehn et al., 1999). Relationship, task, and process conflict were defined as conflicts between employees, conflicts about ideas and opinions concerning a task, and conflicts

about how job tasks should be completed and/or delegated, respectively (Jehn et al., 1999).

Jehn et al., (1999) found that differences in informational diversity are related to increased task conflict, that social category diversity resulted in increased relational conflict, and that value diversity was associated with increased task conflict, relational conflict, and process conflict. Generally speaking, diversity tends to lead to multiple forms of conflict. Since these negative effects resulting from conflict tend to lessen over time (Harrison, Price, & Bell, 1998), individuals can learn how to overcome their biases. Thankfully, diversity tends to become beneficial as the conflicts are resolved (Harrison et al., 1998). The key to overcoming biases appears to be increasing the amount of interracial interactions as well as other interactions involving diverse contexts. Biases are likely to remain in place if individuals consistently remain in homogenous environments that lack diversity. With increased diverse interactions, individuals are required to address their information processing biases in order to effectively operate within that social setting. Research has previously found that interracial interactions have temporarily negative effects on executive functioning as demonstrated in studies of cognitive abilities (e.g., Trawalter & Richeson, 2006). These researchers found that individuals must confront their prejudices, in order to overcome prejudices, which causes a temporary decline in executive functioning (Trawalter & Richeson, 2006). While these research findings are applicable at the individual level, organizations are likely to benefit through similar occurrences as well as benefiting by being composed of individuals who have confronted previous prejudices.

### **Combining Routines and Diversity**

Having discussed routines, learning, and diversity, attention will now be directed towards the intersection of these fields. To begin discussing the combination of routines and diversity, routines and their effectiveness must be recognized for their relation to diversity.

Routines fall into one of three categories: they generally promote diversity; they are generally neutral relative to diversity; or they generally inhibit diversity. For routines that are deemed to be promoting diversity, these routines should be kept, although it should be noted that any routine could be improved (Feldman, 2000). For example, a HEI that has implemented routines that have improved diversity levels and increased retention rates of these students should keep these changes. This institution may also attempt to improve its routines in the future in an effort to further increase diversity levels and retention rates.

For routines that are neutral or inhibiting to diversity, administrators must evaluate the routine to determine how to proceed. Routines should be changed strategically (Greve & Taylor, 2000) and in response to achievements falling below aspirations (Lant & Montgomery, 1987). In order for institutions to

achieve their aspirations, the administrators have to acknowledge that change is needed to accomplish an established outcome, and unsatisfactory routines can be altered in hopes of achieving the desired goal (Feldman, 2000). If leaders do not believe that merely altering the current routine will lead to the desired change, leaders will have to mimic or create a routine in an attempt to achieve the goal.

Consider a HEI that has implemented routines designed to increase its diversity, although the routines have resulted in low retention rates which result in no net gain in terms of diversity. This institution has achieved results, which are below the expected level (e.g., having a low retention rate that results in no net gain for diversity levels). The administrators are faced with the reality that they must change if they are to increase diversity. These administrators must either alter their present routines, or they can replace them with a new or mimicked routine.

As mentioned previously mimicry and innovation both provide benefits. The choice between the two relies on the contextual demands for the organization. There are unique benefits to be gained by implementing innovative routines (e.g., individualized solution to the problem at hand) (Burgelman & Sayles, 1986). In the previous example, implementing individualized routines could address the unique low retention rates that the institution is experiencing. On the other hand, implementing new routines provides additional uncertainty (Greve & Taylor, 2000), which is a negative for the organization. Ultimately, leaders will have to determine which option is the best course of action depending on the institution's specific needs.

### **Recommendations**

Having engaged in a review of the literature regarding routines, diversity, and the intersection of these topics, these research findings will be synthesized into a set of recommendations that can be implemented to improve diversity within HEIs. It is worth noting that these recommendations only address actions that can be taken within an institution. These recommendations do not consider other levels of contextual influence (e.g., national level influences) (Turner, Gonzalez, & Wood, 2008).

First, HEIs should continuously monitor the level of diversity resulting from their routines (Lillrank, 2003). Double loop learning should be applied to the findings from monitoring levels of diversity as a means of improving routines (e.g., Argyris, 1974; Argyris & Shön, 1978; Argyris, 1982; Bensimon, 2005; Peschl, 2006). Learning facilitates the process of increasing levels of diversity because learning encourages modifying practices to pursue the ultimate goal. Inadequate routines can be repaired or improved (Feldman, 2000), and adjustments can essentially be thought of as iterations in the improvement process. Accordingly, the results need to be carefully monitored because errors resulting from routines can potentially be magnified with subsequent iterations

(Argyris, 1982; Phillips, 2005). For example, an admission routine that discourages diversity will reduce diversity during each application cycle that it is active. Thus, institutions should take care to monitor their routines are generating desired outcomes in order to reduce the magnification of negative results.

Second, safeguards need to be in place to prevent decoupling, which has value at times because of benefits stemming from ambiguity (Meyer & Rowan, 1977). A sincere improvement in diversity, however, requires parties charged with improving diversity to be legitimated with the authority to pursue those improvements, which requires leaders to be aware of decoupling that inhibits diversity. To provide an example of this, consider campus institutions that are tasked with creating positive experiences for traditionally underrepresented populations in order to increase retention rates. These institutions must have the authority to make changes relative to creating more positive experiences, or there will be no substantial changes that could increase retention rates.

Third, HEIs should strive to implement recruitment processes that avoid a filtering effect (DiMaggio & Powell, 1983), which decreases diversity. Routines need to be implemented that encourage recruitment and admission metrics that are sensitive to diversity and do not marginalize any demographics. In the same manner, internal and external ranking measures need to be evaluated for their sensitivity to diversity. As has been seen with ACT and SAT scores, these test scores may be highly valued in external university rankings, despite their clear bias towards high SES levels, which marginalizes people of color (Alon & Tienda, 2007). As has been seen with class rank, internal ranking measures may be of more value to an institution by recognizing biases and reducing the magnitude of these biases in order to strive for an unbiased measure (Alon & Tienda, 2007). By improving evaluation instruments and the routines surrounding their implementation, institutions can avoid a filtering effect and improve diversity.

Fourth, increasing diversity requires the interruption of homogenous home environments. Within homogenous environments, individuals are not required to address differences in information processing resulting from diversity. When facing situations with increased diversity, information processing is much more relevant to effective communication and satisfactory performance (Jehn et al., 1999). These situations tend to generate higher levels of conflict (Jehn et al., 1999), which requires processes and resources to be in place to help resolve any tensions and conflicts that result. With sufficient institutional structure and information integration (Jackson et al., 2003), diversity can be utilized to improve performance (Jehn et al., 1999). One key element within this recommendation is that minority individuals cannot be the exception within the institution (Gurin et al., 2002). Information processing will not likely be improved until minority individuals are normalized within the institutional environment (Gurin et al.,

2002). In sum, minority individuals must be prevalent in HEIs, and steps should be taken to encourage and facilitate interactions between diverse individuals (e.g., having diversity forums where diverse students have discussions and grow through continued interactions with one another).

Fifth, routines and their effects must be thoroughly reflected upon so that problematic factors can be addressed. Cultural power differentials have to be examined when reflecting on routines (Ely & Thomas, 2001), and new routines cannot continue to legitimize the current marginalization of cultures or groups (Iverson, 2007). For example, students coming from affluent families may wield more influence on a college campus due to their monetary resources, and their exertion of that influence may perpetuate the marginalization of other cultures and groups. The institution should take steps to ensure that socially marginalized groups are not further marginalized through routines that are subject to monetary influences. Consequently, routines must be extensively evaluated so that they are well thought out methods for achieving the desired change without being subject to undue influences.

### **Conclusion**

Western society has placed a tremendous emphasis on improving diversity and creating cultures of inclusion, and there have been significant growths in this domain over the past decades. There is still tremendous room to improve, however. One method of improving diversity within an institution is strategically implementing routines that can be leveraged to improve and encourage diversity. Using routines to increase diversity and supporting members in resolving information processing conflicts can help improve productivity as well as improving the experiences of its members. A thoughtful double loop learning process is likely to assist in developing routines that successfully promote diversity, and this learning process can guide future alterations to routines in an attempt to increase diversity. Overall, improving routines can serve to increase diversity and create a better environment in HEIs.

### **References**

- Alon, S., & Tienda, M. (2007). Diversity, opportunity, and the shifting meritocracy in higher education. *American Sociological Review*, 72(4), 487-511.
- Antonio, A. L. (2004). The influence of friendship groups on intellectual self confidence and educational aspirations in college. *The Journal of Higher Education*, 75, 446-471.
- Argyris, C. (1976). Single-loop and double-loop models in research on decision making. *Administrative Science Quarterly*, 21(3), 363-375.
- Argyris, C. (1982). The executive mind and double-loop learning. *Organizational Dynamics*, 11(2), 5-22.
- Argyris, C. (1994). Good communication that blocks learning. *Harvard Business*



- Review*, 72(4), 77-85.
- Argyris, C. (1995). Action science and organizational learning. *Journal of Managerial Psychology*, 10(6), 20-26.
- Argyris, C. (2002). Double-loop learning, teaching, and research. *Academy of Management Learning & Education*, 1(2), 206-218.
- Argyris, C., & Schön, D. (1978). *Organizational learning*. Reading, MA: Addison Wesley.
- Bauman, G. L. (2002). Developing a culture of evidence: *Using institutional data to identify inequitable educational outcomes*. (Unpublished dissertation). University of Southern California, Los Angeles, California.
- Bensimon, E. M. (2005). Closing the achievement gap in higher education: An organizational learning perspective. *New Directions for Higher Education*, 131, 99.
- Brown, M. C. (2002). Good intentions: Collegiate desegregation and transdemographic enrollments. *The Review of Higher Education*, 25(3), 263-280.
- Burgelman, R. A., & L. R. Sayles. (1986). *Inside corporate innovation: Strategy, structure, and managerial skills*. New York, NY: Free Press.
- Chang, M. J. (2002). The impact of an undergraduate diversity course requirement on students' racial views and attitudes. *The Journal of General Education*, 51, 21-42.
- Chang, M. J., Denson, N., Saenz, V., & Misa, K. (2006). The educational benefits of sustaining cross-racial interaction among undergraduates. *The Journal of Higher Education*, 77(3), 430-455.
- Closson, R. B., & Henry, W. J. (2008). Racial and ethnic diversity at HBCUs: What can be learned when Whites are in the minority?. *Multicultural Education*, 15(4), 15.
- Cross, K. P. (1987). Teaching for learning. *AAHE Bulletin*, 40, 3-7.
- DiMaggio, P., & Powell, W. W. (1983). The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields. *American Sociological Review*, 48(2), 147-160.
- Dwyer, B. (2006). Framing the effect of multiculturalism on diversity outcomes among students at historically Black colleges and universities. *The Journal of Educational Foundations*, 20(1-2), 37-59.
- Ely, R. J., & Thomas, D. A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46(2), 229-273.
- Feldman, M. S. (2000). Organizational routines as a source of continuous change. *Organization Science*, 11(6), 611-629.
- Festinger, L., Back, K. W., & Schachter, S. (1950). *Social pressures in informal*

- groups: A study of human factors in housing* (No. 3). Redwood City, CA: Stanford University Press.
- Gasman, M. (2013, May). The changing face of historically black colleges and universities. Penn Center for Minority Serving Institutions, Retrieved from [http://repository.upenn.edu/gse\\_pubs/335](http://repository.upenn.edu/gse_pubs/335)
- Gottfredson, N. C., Panter, A. T., Daye, C. E., Wightman, L. F., Allen, W. A., & Deo, M. E. (2008). Does diversity at undergraduate institutions influence student outcomes? *Journal of Diversity in Higher Education*, 1, 80–94.
- Greenwood, J. (1998). The role of reflection in single and double loop learning. *Journal of Advanced Nursing*, 27(5), 1048-1053.
- Greve, H. R., & Taylor, A. (2000). Innovations as catalysts for organizational change: Shifts in organizational cognition and search. *Administrative Science Quarterly*, 45(1), 54-80.
- Guri-Rosenblit, S., Šebková, H., & Teichler, U. (2007). Massification and diversity of higher education systems: Interplay of complex dimensions. *Higher Education Policy*, 20(4), 373-389.
- Gurin, P., Dey, E., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330-367.
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review*, 49(2), 149-164.
- Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond relational demography: Time and the effects of surface and deep-level diversity on work group cohesion. *Academy of Management Journal*, 41: 96–107.
- Herron, J. (2013, Fall/Winter). Notes toward an excellent Marxist-elitist honors admissions policy. *Journal of the National Collegiate Honors Council*, 14(2), 17-24.
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404-1427.
- Hu, S., & Kuh, G. D. (2003). Diversity experiences and college student learning and personal development. *Journal of College Student Development*, 44, 320–334.
- Hurtado, S. (2005). The next generation of diversity and intergroup relations research. *Journal of Social Issues*, 61, 595–610.
- Iverson, S. V. (2007). Camouflaging power and privilege: A critical race analysis of university diversity policies. *Educational Administration Quarterly*, 43(5), 586-611.
- Iwao, S. (2015). Organizational routine and coordinated imitation. *Annals of Business Administrative Science*, 14(5), 279-291.
- Jackson, S. E., Joshi, A., & Erhardt, N. L. (2003). Recent research on team and organizational diversity: SWOT analysis and implications. *Journal of*

- Management*, 29(6), 801-830.
- Jayakumar, U. M. (2008). Can higher education meet the needs of an increasingly diverse and global society? Campus diversity and cross-cultural workforce competencies. *Harvard Educational Review*, 78, 615–651.
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: A field study of diversity, conflict and performance in workgroups. *Administrative Science Quarterly*, 44(4), 741-763.
- Lant, T. K., & Montgomery, D. B. (1987). Learning from strategic success and failure. *Journal of Business Research*, 15(6), 503-517.
- Lawrence, T. B., & Suddaby, R. (2006). Institutions and institutional work. In S. R. Clegg, C. Hardy, TB Lawrence, & WR Nord (Eds.), *Handbook of organization studies*, (pp. 215-254). London, UK: SAGE Publications Ltd.
- Lillrank, P. (2003). The quality of standard, routine and nonroutine processes. *Organization Studies*, 24(2), 215-233.
- March, J. G. (1981). Footnotes to organizational change. *Administrative Science Quarterly*, 26, 563-577.
- March, J. G. (1994). *Primer on decision making: How decisions happen*. Simon and Schuster.
- Massini, S., Lewin, A. Y., & Greve, H. R. (2005). Innovators and imitators: Organizational reference groups and adoption of organizational routines. *Research Policy*, 34(10), 1550-1569.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340-363.
- Milem, J. F., Chang, M. J., & Antonio, A. L. (2005). *Making diversity work on campus: A research-based perspective*. Washington, DC: Association of American Colleges and Universities.
- Mill, J. S. (1974). On liberty. London: Penguin. (Original work published 1859).
- Nadler, D. A., & Tushman, M. L. (1989). Organizational frame bending: Principles for managing reorientation. *The Academy of Management Executive*, 3(3), 194-204.
- Nelson Laird, T. F., Engberg, M. E., & Hurtado, S. (2005). Modeling accentuation effects: Enrolling in a diversity course and the importance of social action engagement. *The Journal of Higher Education*, 76, 448–476.
- Newcomb, T. M. (1960). *The acquaintance process*. New York, NY: Holt, Rinehart, and Winston.
- Paul, M. (2003). Double-loop diversity: Applying adult learning theory to the cultivation of diverse educational climates in higher education. *Innovative Higher Education*, 28(1), 35-47.
- Peschl, M. F. (2006). Modes of knowing and modes of coming to know. Knowledge creation and knowledge co-construction as

- socioepistemological engineering in educational processes. *Constructivist Foundations*, 1(3), 111-123.
- Phillips, D. J. (2005). Organizational genealogies and the persistence of gender inequality: The case of Silicon Valley law firms. *Administrative Science Quarterly*, 50(3), 440-472.
- Rerup, C., & Feldman, M. S. (2011). Routines as a source of change in organizational schemata: The role of trial-and-error learning. *Academy of Management Journal*, 54(3), 577-610.
- Roberge, M. E., & van Dick, R. (2010). Recognizing the benefits of diversity: When and how does diversity increase group performance?. *Human Resource Management Review*, 20(4), 295-308.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action* (Vol. 5126). New York, NY: Basic books.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. Hoboken, NJ: Wiley.
- Slavin, R. (1995). Cooperative learning groups and intergroup relations. In J. A. Banks & C. A. McGee Banks (Eds.), *Handbook of research on multicultural education*. New York, NY: MacMillan.
- Stene, E. O. (1940). An approach to a science of administration. *American Political Science Review*, 34(06), 1124-1137.
- Tagg, J. (2007). Double-loop learning in higher education. *Change: The Magazine of Higher Learning*, 39(4), 36-41.
- Tenbrunsel, A. E., Wade-Benzoni, K. A., Moag, J., & Bazerman, M. H. (1994). *The costs of friendship: The effects of strong ties on matching efficiency, individual effectiveness and barriers to learning*. Unpublished manuscript, Kellogg Graduate School of Management (DRRC), Northwestern University, Evanston, Illinois.
- Thomas-Lester, A. (2004, October 31). Enrollment is shifting at Black universities. *The Washington Post*. Retrieved from <http://www.washingtonpost.com/wp-dyn/articles/A12377-2004Oct30.html>
- Trawalter, S., & Richeson, J. A. (2006). Regulatory focus and executive function after interracial interactions. *Journal of Experimental Social Psychology*, 42(3), 406-412.
- Turner, C. S. V., Gonzalez, J. C., & Wood, J. L. (2008). Faculty of color in academe: What 20 years of literature tells us. *Journal of Diversity in Higher Education*, 1(3), 139.
- van Driel, H., & Dolfsma, W. (2009). Path dependence, initial conditions, and routines in organizations: The Toyota production system re-examined. *Journal of Organizational Change Management*, 22(1), 49-72.
- Weiner, N. (2009). Honors Is Elitist, and What's Wrong with That?. *Journal of the National Collegiate Honors Council*, 10(1), 19-24.

- Whitla, D. K., Orfield, G., Silen, W., Teperow, C., Howard, C., & Reede, J. (2003). Educational benefits of diversity in medical school: A survey of students. *Academic Medicine*, 78(5), 460-466.
- Wooten, L. P., & James, E. H. (2004). When firms fail to learn the perpetuation of discrimination in the workplace. *Journal of Management Inquiry*, 13(1), 23-33.