

DIVERSITY & INCLUSION

CE 4200

PROFESSIONAL ENGINEERING PRACTICE ISSUES

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Fall 2021 SEMESTER

CONTEXT... BOK3E

CIVIL ENGINEERING LEADERSHIP

Professional Engineering Practice Issues

BOK3E Outcomes

1. Mathematics
2. Natural Sciences
- 3. Social Sciences**
4. Humanities
5. Materials Science
6. Engineering Mechanics
7. Experimental Methods and Data Analysis
- 8. Critical Thinking and Problem Solving**
- 9. Project Management**
10. Engineering Economics
11. Risk and Uncertainty
12. Breadth in Civil Engr Area
13. Design
14. Technical Depth
15. Sustainability
16. Communication
- 17. Teamwork and Leadership**
- 18. Professional Attitudes**
19. Lifelong Learning
20. Ethical Responsibility
- 21. Professional Responsibilities**

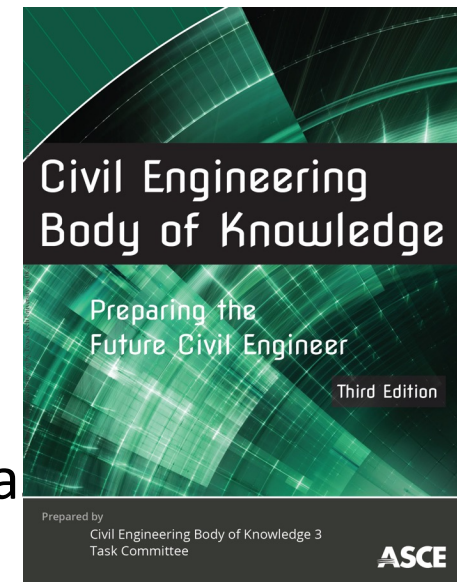


Table 2-17a. Teamwork and Leadership (Cognitive Domain).

Cognitive Domain Level of Achievement	Demonstrated Ability	Typical Pathway
1 Remember (remember previously learned material)	Identify concepts and principles of teamwork and leadership, including diversity and inclusion.	Undergraduate education
2 Comprehend (grasp the meaning of learned material)	Explain concepts and principles of teamwork and leadership, including diversity and inclusion.	Undergraduate education
3 Apply (use learned material in new and concrete situations)	Apply concepts and principles of teamwork and leadership, including diversity and inclusion, in the solutions of civil engineering problems.	Undergraduate education
4 Analyze (break down learned material into its component parts so that its organizational structure may be understood)	Select concepts and principles of effective teamwork and leadership, including diversity and inclusion, in the solutions of civil engineering problems.	Mentored experience
5 Synthesize (put learned material together to form a new whole)	Integrate concepts and principles of effective teamwork and leadership, including diversity and inclusion, into the solutions of civil engineering problems.	Mentored experience
6 Evaluate (judge the value of learned material for a given purpose)	Evaluate the effectiveness of leaders and teams in the solution of civil engineering problems.	

Table 2-17b. Teamwork and Leadership (Affective Domain).

Affective Domain Level of Achievement	Demonstrated Ability	Typical Pathway
1 Receive (be aware of, be willing to receive, and be attentive to a particular phenomenon or behavior)	Acknowledge the importance of teamwork, leadership, diversity, and inclusion.	Undergraduate education
2 Respond (actively participate in an activity, attend to a task, and react to motivation)	Practice concepts and principles of teamwork, leadership, diversity, and inclusion.	Undergraduate education
3 Value (attach value to a particular object, phenomenon, or behavior)	Value the need for teamwork, leadership, diversity, and inclusion.	Mentored experience
4 Organize (sort values into priorities by contrasting different values, resolving conflicts between them, and creating a unique value system)	Display effective teamwork and leadership, including support of diversity and inclusion.	Self-developed
5 Characterize (follow a value system that controls behavior that is pervasive, consistent, predictable, and a defining characteristic)	Advocate for teamwork, leadership, diversity, and inclusion.	

Understanding the Outcome

“A team composed of diverse individuals, e.g. race, ethnicity, gender, engineering discipline, or non-engineer, leads to better creativity and more diligence and hard work in the entire team.”

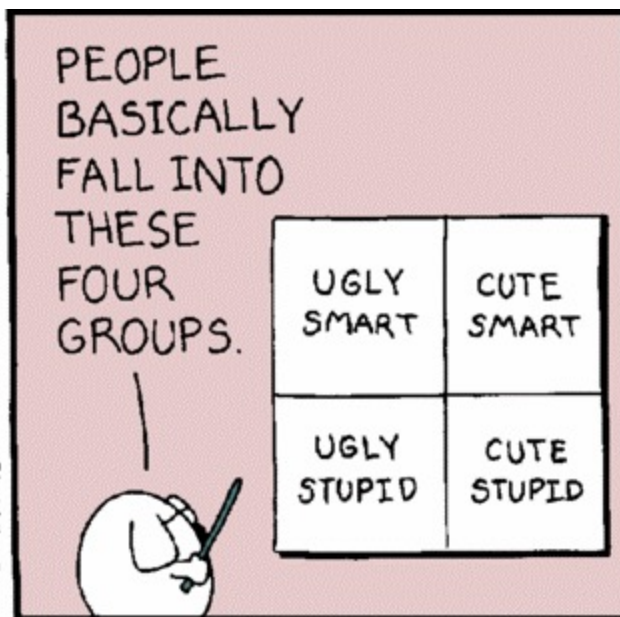
CLASS EXERCISE

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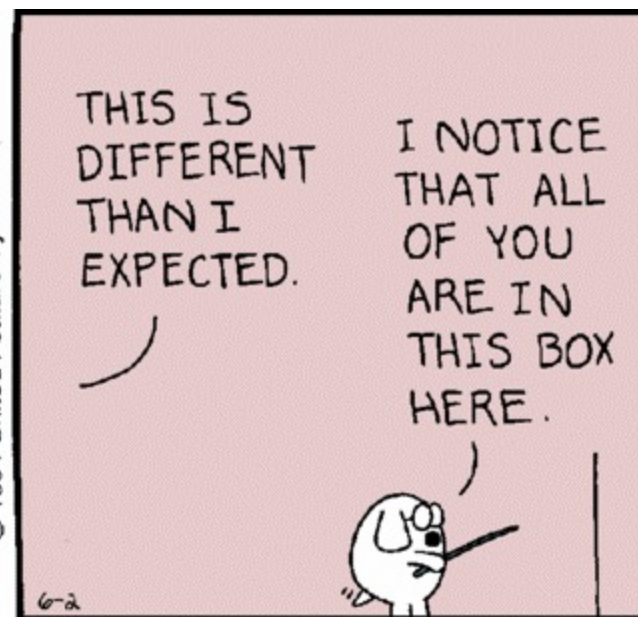
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di·ver·si·ty

: the condition of having or being composed of differing elements : VARIETY

especially : the inclusion of different types of people (such as people of different races or cultures) in a group or organization

Synonyms: contrast, difference, dissimilarity, distance, distinctiveness, otherness

Antonyms: likeness, community, likeness, resemblance, sameness, similarity

CLASS EXERCISE

BOK claims diversity and inclusion leads to:

- better creativity
 - more diligence
 - hard[er] work in the entire team
-
1. Successful examples/ illustrations...
 2. Practices that did not work so well...
 3. Questions you have about diversity and inclusion...

Consider a practical application



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LECTURE 13: DIVERSITY & INCLUSION


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Availability: Item is hidden from students.


TED TALK: How Can Groups Make Good Decisions?

 8:37
Mariano Sigman and Dan Ariely
How can groups make good decisions?
Posted Nov 2017
Rated Informative, Fascinating

TED TALK: The Power of Diversity Within Yourself

 9:44
Rebeca Hwang
The power of diversity within yourself
Posted Jul 2018
Rated Inspiring, Beautiful

TED TALK: How Diversity Makes Teams More Innovative

 11:05
Rocio Lorenzo
How diversity makes teams more innovative
Posted Oct 2017
Rated Inspiring, Informative

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OBSERVATIONS FROM BUSINESS

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Diversity And Inclusion Matters To The Workforce Of The Future

FORBES Human Resources Council

“The idea of diversity and inclusion has permeated the world of business. Everyone seems to be talking about it in the context of establishing a society where traditionally underrepresented groups get their fair share of opportunities....”

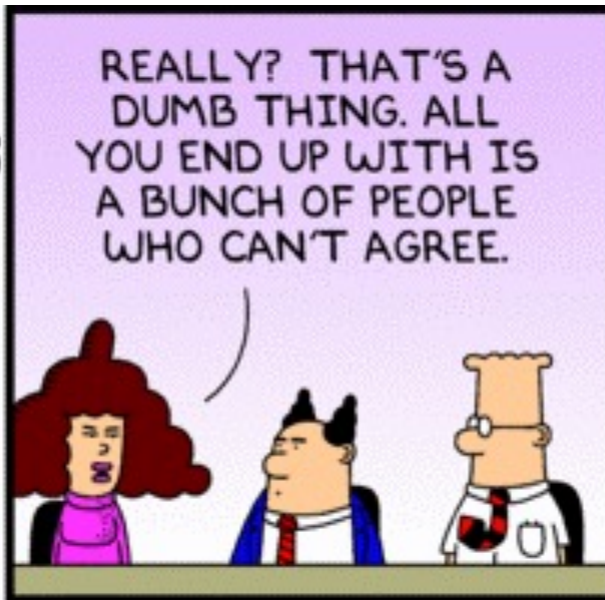


SOURCE:

<https://www.forbes.com/sites/forbeshumanresourcescouncil/2018/05/09/diversity-and-inclusion-matters-to-the-workforce-of-the-future/#c307a7771bbf>



Dilbert.com DilbertCartoonist@gmail.com



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Unleashing the power of inclusion

How can you advance inclusion? Organizations and the evolving workforce sometimes disagree.

How could your organization [Unleash the Power of Inclusion](#)? Every year, organizations allocate time, resources, and budget towards efforts to foster an inclusive culture—and interest is still increasing. Yet, from our survey results, we discovered that there often remains a disconnect between the expectations of today's workforce and inclusion in organizations.



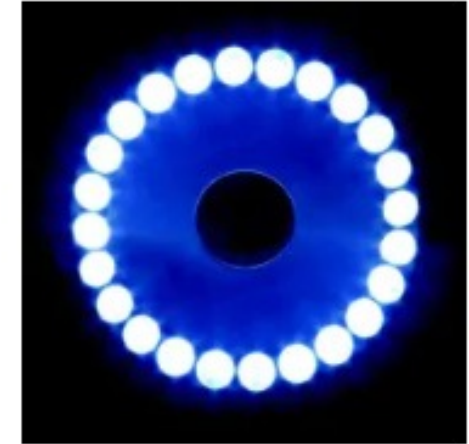
SOURCE: Deloitte Insights

The radical transformation of diversity and inclusion: The millennial influence

There is a growing generational gap in how diversity and inclusion are defined in today's workplaces.

In our report, [The radical transformation of diversity and inclusion: The millennial influence](#), we discovered that millennials are unique in viewing cognitive diversity as essential for an inclusive culture that supports engagement, empowerment, and authenticity—and they value inclusion as a critical tool that enables business competitiveness and growth. As millennials flood leadership ranks, their perspectives will demand a shift in traditional diversity and inclusion models.

[Read the report](#)



SOURCE: Deloitte Insights

What if the road to inclusion were really an intersection?

Traditional diversity and inclusion structures compartmentalize and prioritize certain aspects of identity over others.

How can leaders build inclusive cultures that leverage employee potential at work? It is time to refresh corporate efforts by taking an intersectional approach. This requires critically revisiting whether the existence of employee resource groups and targeted diversity programs are paradoxically non-inclusive.

Read more on [multidimensional diversity](#).



SOURCE: Deloitte Insights

“3 Requirements for a Diverse and Inclusive Culture”

GALLUP Workplace

STORY HIGHLIGHTS

- Diversity and inclusion require distinct acknowledgement and understanding
- However, diversity and inclusion are interrelated
- There are three key components to cultivating a diverse and inclusive workplace

SOURCE:

<https://www.gallup.com/workplace/242138/requirements-diverse-inclusive-culture.aspx>

Diversity

“Diversity represents the full spectrum of human demographic differences -- race, religion, gender, sexual orientation, age, socio-economic status or physical disability. A lot of companies consider lifestyles, personality characteristics, perspectives, opinions, family composition, education level or tenure elements of diversity, too.”

Inclusion

“Inclusion has to be understood as very different from diversity because simply having a wide roster of demographic characteristics won't make a difference to an organization's bottom line unless the people who fall into any one demographic feel welcomed. Inclusion refers to a cultural and environmental feeling of belonging.”

The 3 Requirements

1. Employees are treated with respect.

- A culture of inclusiveness is rooted in respect. Employees must be treated with and treat others with civility and decency.

2. Employees are valued for their strengths.

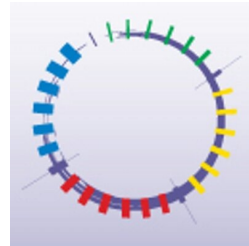
- Effective collaboration, productivity and profitability are, of course, why companies incorporate strengths development as a strategy.

3. Leaders do what is right.

- One of the reasons companies have diversity policies to begin with is simply because it's the right thing to do... But for that diversity strategy to promote a culture of inclusion too, leaders have to make their values and intentions clear. Leaders must intentionally create an environment where employees feel they can safely express themselves and where specific concerns can be raised with transparency and confidence.

Globally, the workforce is changing, the workplace is changing, the marketplace is changing.

“When we create organizational diversity, we create a fully stocked toolkit. When we practice inclusion, we become master craftspeople, building structures capable of standing strong, even when, or especially when, the landscape is shifting.”



-The Kaleidoscope Group

Diversity Doesn't Stick Without Inclusion

Harvard Business Review



- “Diversity” and “inclusion” are so often lumped together that they’re assumed to be the same thing. But that’s just not the case. In the context of the workplace, diversity equals representation. Without inclusion, however, the crucial connections that attract diverse talent, encourage their participation, foster innovation, and lead to business growth won’t happen. As noted diversity advocate Vernā Myers puts it, “Diversity is being invited to the party. Inclusion is being asked to dance.”

SOURCE: <https://hbr.org/2017/02/diversity-doesnt-stick-without-inclusion>

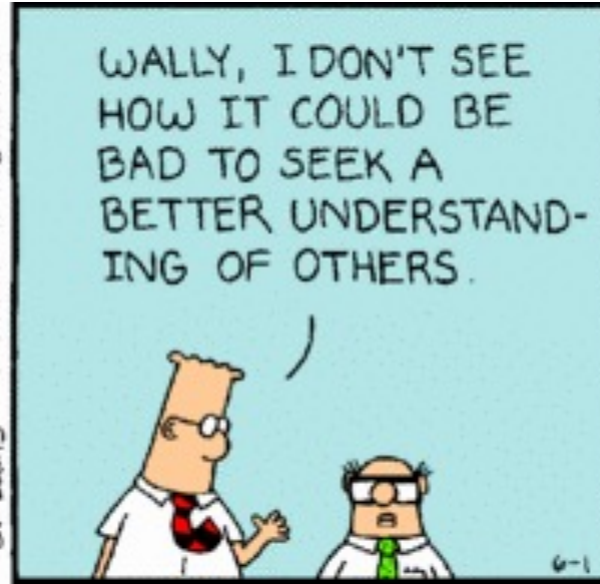
OBSERVATIONS FROM YOUR PROFESSOR

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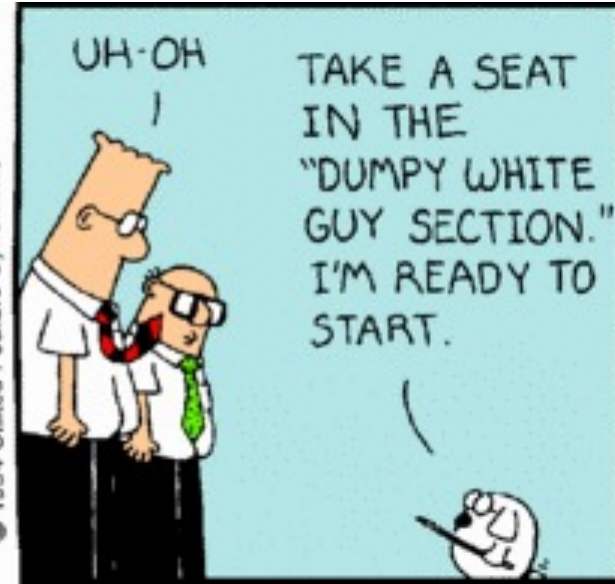
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Observations

1. We live in times where, more than ever, it is necessary that we hear from, and listen to, one another... all of us
2. Legal aspect... “equal employment opportunity” and “non-discrimination”
3. Business aspect... seek higher productivity
4. Cultural aspect... recognize and value uniqueness
5. Moral aspect... treat persons with respect

Open Forum Digest for Tuesday March 2, 2021



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Mar 2, 2021 9:29 AM

[Joseph D'Alessandro PE](#)

These 3 words have become buzz words, battle cries, slogans, mantras and talking points for all those who jump on the band wagon.

Our NSPE national and State Chapters , corporate America, all levels of government , military, social organizations , etc. all use these words.

I would like to hear an engineering perspective on the word " Equity ".

Joe D'Alessandro PE

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You call this a diplomatic
solution?



made with mematic No, I call it aggressive negotiations.

Thank you.

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