



Center for
**LifeLong
Learning
& Design**

University of Colorado at Boulder

**Wisdom is not the product of schooling
but the lifelong attempt to acquire it.
- Albert Einstein**

Discussion of Don Norman's article "In Defense of Cheating"

**Gerhard Fischer and Hal Eden
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**Course information environment (SWIKI):
<http://l3dswiki.cs.colorado.edu:3232/phd-intro>**

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Cheating

- **definition:** cheating = to use / copy **without** acknowledging the contributions of others
- what causes cheating: over-emphasized individual work and inappropriate grading system

Collaboration

- **definition:** collaboration = to use / copy **with** acknowledging the contributions of others

- Norman:
 - copying can be an alternative and should be encouraged → it brings about an education in which students will become more compelled to collaborate and be accountable.
 - this will bring about more honesty in the education system.

- school systems should focus on cooperation instead of competition

Boundary between Cheating and Collaboration

- "Copy from one, it's plagiarism; copy from many, it's research." -Wilson Mizner (1876-1933) — located by Abhishek Jaiantilal
- because of the author's overstatement, this article reminds me of all bad experience of group projects in school. I think both individual work and collaborative work are equally important. — Yingdan Huang
- There must be some reasonable interaction between the provider and the learner, and the provider must be cited. The first is a somewhat more abstract concept in many cases, but it suggests a "working with" relationship rather than a "working off" relationship. — Daniel Crumly

Desirability of Building on the Work of Others

- **interesting quotes / slogans:**

- NIH = “Not Invented Here”
- do not reinvent the wheel
- complex systems evolve faster if they can build on stable subsystems
- encourage collaboration, dissolve meaningless grading schemes that prevent these skill sets from being acquired

- **one of Norman’s objectives:** *“educators shift the focus from the individual student to the cooperative effort of a group of students working together to solve problems and mutually understand the subject matter”*

- **Daniel Crumly:** utilizing “two heads are better than one” and “building on the shoulders of giants” is better than “reinventing the wheel”.

Issues To Reflect Upon

- who **wins** and who **looses** by cheating
 - individual / student: “making the grade”
 - teacher
 - other individuals
 - society

- lifelong learning perspective
 - *“If the world of working and living relies on collaboration, creativity, definition and framing of problems and if it requires dealing with uncertainty, change, and intelligence that is distributed across cultures, disciplines, and tools—then graduate programs should foster transdisciplinary competencies that prepare students for having meaningful and productive lives in such a world.”*
 - schools as tool free environments
 - big switch theory

from Chih How Bong

When does Collaboration Become Cheating? MIT Talk

<http://web.mit.edu/newsoffice/1992/collaboration-1007.html>

Among the topics the colloquium will explore, the letter said, are:

- The effect on individual behavior of competitive pressures to succeed or survive.
- The need for greater clarity in defining the limits of allowable collaboration and teamwork in relation to individual achievement.
- The efficacy of academic honor codes and professional standards of ethics versus a common sense of human decency.
- The role of likely detection and well-publicized punishment in deterring dishonest practice

Related Concepts

- intellectual property laws
 - Apple \leftrightarrow Microsoft
 - music
- patent laws
- “copy left” (instead of “copyright”)

Mike MacFerrin

I've been a secondary math teacher for five years

- I've seen the practice, I've read the research, and I have an understanding (bred from personal experience in the classroom and on several district adoption committees) about what efforts are being made to address student learning and collaborative group work.
- Don Norman may be highly researched in the field of cognitive science & engineering... his vitae speaks to his authority on that. However, his research is wholly lacking on the current practices of today's teachers, and what needs to be done to remedy these practices.
- He is clearly not up-to-speed on teaching & learning in today's classrooms, despite how much he plays the part in his paper.
- To someone who has been in the profession of teaching for years, his ignorance seems appalling at best, insulting at worst.
- None of his ideas (cooperative work, mastery grading, eliminating the "curve") are new.

Peng Shao

Having several years of industry experience

- I have come to accept and even embrace the culture of "*stealing liberally*".
- In every workplace, my team members have been openly encouraged to ask each other for help with almost any work-related issue, to borrow each others code (with permission, of course), to share ideas, and to import open source applications from the internet.
- This led to open communication, unity of code base, and generally high levels of productivity. Of course you'd have to obtain permission before ripping off somebody else's code, but other than that, it was a free market.
- my experience in corporate recruiting revealed that a large number of 4.0 GPA students were turned down after the first round interviews. Despite the relative absence of 4.0s, our project group consisted of engineers who worked cohesively, worked hard, who each had a clear vision of the objectives. This led to high levels of productivity and adaptability to change.