

## Chair's Report (CUSF) November 2017

**MEETINGS:** The new academic year has begun and CUSF has once again become active. With Labor Day on September 4<sup>th</sup>, it moved the ExCom meeting to the 11<sup>th</sup> and the Council meeting to the 20<sup>th</sup>. The BOR had a meeting on the 15<sup>th</sup> and the big event was the raises for three of the presidents. Seeking a reaction to the raises, I was quoted in the Baltimore Sun and I believe we came out okay in this respect. I should note that the BOR made the salary decision in closed session at the end of the public meeting so I was unaware of the decision until I arrived home and checked emails.

## AAAC (Provosts) Committee (October 6, 2017)

The following items were items discussed at the AAAC meeting on October 6<sup>th</sup>. The topics discussed give a good perspective of the current issues and I should note, many of these issue originated with CUSF.

<u>Title IX: New Guidelines from the Feds</u> - Implementation of the new guidelines are progressing. One of the issues they are addressing is the "evidentiary standard." UMPC has a higher standard with "clear and convincing evidence." The other universities use a "preponderance of evidence" as their standard regarding sexual and other conduct issues.

<u>Amazon Proposal</u> – Amazon.com is moving east with an RFP for a location on the east coast. This is more of an IT center rather than a distribution center. Maryland has proposed seven areas which is not advantageous. In terms of the proposal, there are three criteria: 1) walking campus accessible with public transportation, 2) size of city or town, it needs to be gorgeous, and 3) there needs to be an educated workforce that will be dealing with the cloud.

<u>TURFA</u> - CUSF had a presentation by Martha Siegal on TURFA. Provosts indicated that they needed to focus on organized ways to service retired faculty on campuses. George Mason has a good program. Other topics discussed were 1) encouraging "terminal leave" which needs to be renamed, 2) "support systems" including parking, library and other privileges, and 3) developing a system where faculty have an "identity on campus." Several of the campuses shared current practices in this regard.

<u>FLMA and Family Leave Policies</u> – Representatives from the Office of Attorney General and USM will discuss a review of the proposed revisions to these two policies (see also commentaries). The biggest change for faculty will be the "*rolling calendar*." With the rolling calendar the year begins when the leave begins and not with the calendar year.

<u>Academic Dishonesty in the Digital Age</u> – Again, this was a CUSF issue discussed by the provosts. The provosts had a robust discussion of the topic. Issues included 1) the time frame for appeals extending beyond the semester, particularly for adjuncts, 2) the affect of prosecuting dishonesty on adjuncts, evaluation, and continued employment, and 3) the need for faculty development and training. The provosts considered developing a work group consisting of but not limited to 1) an IT person, 2) student affairs representative, 3) legal office representative.

<u>Workload</u> – There was a discussion of revising workload from 12 credit hours to a system based on student credit hours. Elizabeth Troop from FSU facilitated the discussion.

<u>Inclusion and Diversity</u> – The workgroup meets on Monday (i.e. October 9<sup>th</sup>). CUSF needs to be more involved (see Task 3.4 (AI-304) in the Action Plan: Inclusion and Diversity Committee).

**COMMENTARIES:** For October, there is one commentary with this report. It is the second in a series of commentaries on academic dishonesty. The purpose of this commentary is to set the stage. With the assistance of the EdPolicy committee, we are planning to do a panel discussion at the December CUSF meeting. Cheating, plagiarism and academic dishonesty are issues affecting everyone.

## Chair's Commentary 1711.1: A Potpourri on Academic Dishonesty

The following commentary is a potpourri on academic dishonesty. The commentary last month helped to set the stage. It concluded that the issue of cheating is pervasive. The issue is still being debated whether academic dishonesty is more prevalent in online or brick and mortar institutions. There are numerous studies available supporting either side. Perhaps this debate is really a red-herring. Academic dishonesty is pervasive in both settings.

The primary focus of this commentary is on how people cheat, plagiarize and commit academic dishonesty. It starts with the old ways. No much new here. Next, paper mills are big business and not always ethical. Corporate America has entered the field of academic dishonesty. Third is top ten list of plagiarism sources used by students. Number eight on the list, Med Library, is a little disconcerting. The fourth item addresses the changing norm where students may no longer view cheating as cheating. Fifth, the case of Wolfram/Alpha suggests how technology and the internet have changed the educational process and the definition of cheating. This is followed by how changes in the classroom can reduce cheating and plagiarism. The seventh item takes us into the world of a mill paper writer who surprising demonstrates some level of ethics regarding his topic selection. Although brief, the eighth item suggests that detection methods may be less than effective. Ninth, a very unsettling thought is that students can hire surrogate tutors to not only compete their courses but their entire course of study. Last, the potpourri tries to tie things together and provide some direction regarding solutions.

In addition, I would like to thank Elizabeth Brunn, Chair of the Education Policy Committee of CUSF and her committee for much of the background material presented in this commentary. They helped to make this commentary possible. In addition, the committee is working on a white paper on this topic which, hopefully, will be available in December.

1) <u>Traditional Methods of Cheating</u> – If there is a wikihow on how to cheat, cheating is considered mainstream, commonplace, and at least tolerated. Wikihow is a step-by-step how-to-do-it website (wikiHow). It includes most of the traditional ways of cheating including some new techniques used in the digital age such as innovative ways to use a calculator. It is not until the third section titled a benign "Avoiding Pitfalls" that wikihow suggests that using these techniques may be inappropriate. One of the take-aways from reviewing this and similar sites goes to the changing culture where students no longer consider cheating as inappropriate behavior. This theme is picked up in Item #4 and elsewhere also. Two

additional sites are provided below (*Edusson Writing Services*, 2016 and Scott, 2012). They delineate the traditional methods of cheating. Some of the typical methods include the cheat sheet, notes in the mechanical pen, temporary tattoo on the forearm, Google it in the bathroom, behind enemy lines, smart watch, the stretched rubber band, gum wrapper method, back of the necktie, fake calculator app, etc. Not much new here, but it is the starting point for the discussion.

Sources: wikiHow, How to Cheat Using a Cheat Sheet. <a href="https://www.wikihow.com/Cheat-Using-a-Cheat-Sheet">https://www.wikihow.com/Cheat-Using-a-Cheat-Sheet</a>
Edusson Writing Services, (2016). 49 Ways to Cheat on a College. August 17<sup>th</sup>.
<a href="https://edusson.com/blog/49-ways-to-cheat-on-college">https://edusson.com/blog/49-ways-to-cheat-on-college</a>
Scott, D., (2012) 50 Ways Technology Can Help You Cheat in School. Complex. September 5th. <a href="http://www.complex.com/pop-culture/2012/09/50-ways-technology-can-help-you-cheat/the-paper-length-method">http://www.complex.com/pop-culture/2012/09/50-ways-technology-can-help-you-cheat/the-paper-length-method</a>

2) <u>Paper Mills Are Big Business</u> – What Rodney Dangerfield did as an individual in the 1986 movie *Back to School*, Corporate America is now doing as an industry. They write papers, take online classes, provide examination databases, and do homework assignments. They have names like Essays Free, Big Nerd, OP Papers, Paper Store, Paper Masters, and Academic Term Papers. Some of these sites are free. Other firms like Chegg are big business, legal and run their paper mills and tutor services.

Operating out of Santa Clara, California, Chegg has an estimated \$254 million dollars in revenues with 770 employees. It has stockholders. Chegg is an example of big business invested in higher education. Originally, Chegg lost money renting textbooks and then changed its business plan to include what they would term "student study aids." Student study aids include tutors who write papers and learning platforms that contain everyone else's work (e.g. tests and papers). In their financial report, Chegg noted that "With 30 million annual unique visitors according to comScore, we continue to be confident that this acquisition is an enormous opportunity for students, for Chegg, and for our shareholders. There have been over 1.5 billion citations created to date with more than 400 million new ones added in 2016 alone. Already we are exceeding the expectations we have for the business and it is quickly becoming a core part of the Chegg Services platform." They actively recruit students and for a fee around \$90 per year they provide students access to all the resources in their repository.

Other firms providing similar services include *Course Hero*. Founded in 2006, it generates between \$25 to \$50 million dollars a year. Located in London, *Immerse Learning* has 90 employees and earns approximately \$35 million dollars annually. Operating out of Coconut Grove Florida, *Open English* employs 900 employees with an estimated annual revenue of \$75 million dollar. The services provided by these companies are not illegal. These businesses continue to provide papers, data sets of tests, and tutorial services that can be used to undermine the educational process.

Addendum: For those interested, a sampling of several sites which exemplify the points made above is provided below. Simply visiting their homepage reveals the slickness of the industry in servicing students needs. Also, it reinforces the normative change toward academic dishonesty which has changed with the new millennials. Visiting these websites, one would never know that it was cheating (see Item #4: Cheating May Not be Considered Cheating). The following sites provide a good introduction to the services provided and of course, the problem facing faculty and administrators. The first is <a href="https://paymetodoyourhomework.com/">https://paymetodoyourhomework.com/</a> Note the testimonials and watch the YouTube video with the owner. It is very revealing. She notes that it is not illegal, but.... We could rest our case alone with this interview. Next, visit <a href="https://www.boostmygrade.com/">https://www.boostmygrade.com/</a> Scroll down a little and note the heading "Take my online course for me." They are advertising academic dishonesty. For more depth, go to Item #9: "Having a Tutor Complete Your Degree for You." Last, visit Nerdify, The Best Homework. Scroll down a little

and review their services. It suggests that Rodney Dangerfield's 1986 movie *Back to School* was prophetic of the future corporate academic services.

## Source:

 $\underline{\text{http://investor.chegg.com/Press-Releases/press-release-details/2017/Chegg-Reports-Q4-and-Full-Year-2016-Financial-Results/default.aspx}$ 

https://gonerdify.com/lp3a?utm\_source=ppc&utm\_medium=adwords&utm\_device=c&utm\_term=do%20your%20homework&utm\_mtype=p&utm\_content=222092777198.ad-var2&utm\_campaign=GoNerdify\_Tutoring\_Help\_Middle\_Web&utm\_adgroup=h\_w-help\_6367&gclid=EAIaIQobChMI4c75gbuZ1wIVm7jACh1

3) <u>Top 10 Sources of Plagiarism</u> – Turnitin, a popular anti-plagiarism software provider, conducted a study of 112 million content matches in 28 million student papers that were submitted to the company between June 2011 and July 2012. As a methodological note, their analysis does not include sources that their program does not detect. Also, methodologically, the focus of their study is on writing plagiarism and it does not include tutoring or other non-writing services. Regardless, it provides a good overview.

A couple of quick comments. First, if additional depth is desired, go to the source article listed below for a summative description of each source. (*Warmoth, 2015*). Remember, these sources are from Turntin's perspective. Second, Wikipedia being number one is not unexpected. Third, at least six of these sources are paper mills or similar sites where materials can be downloaded for a price. Fourth, I find the use of Medlibrary.com a little disconcerting. Ranked 8<sup>th</sup>, it is a specialize market with fewer people accessing it and this alone can easily account for its lower ranking. Regardless, the take-away is that future doctors, surgeons, and medical personnel may be less knowledgeable than the patients think they are. This may be an unsettling thought. As a footnote, several parallel studies have been conducted. The may be a new item or two and the rankings may change somewhat, but the results are essentially similar.

1. Wikipedia 6. Answers. YAHOO.com

2. Oppapers.com 7. Answers.com

3. Slideshare.net 8. Medlibrary.org

4. Coursehero.com 9. Bignerds.com

5. Scribd.com 10. Papercamp.com

**Source:** Warmoth, B., (2015). Technologies that Will Change the World. *The Atlantic*. November 4<sup>th</sup>. <a href="https://www.educationdive.com/news/the-top-10-internet-sources-college-students-use-for-writing-may-depress-yo/88176/">https://www.educationdive.com/news/the-top-10-internet-sources-college-students-use-for-writing-may-depress-yo/88176/</a>

4) Cheating May Not be Considered Cheating – It may be a generational issue. It may be about changing the norm or attitude toward cheating. It may require redefining the norm. In a national survey by Rutgers' Management Education Center of 4,500 high school students, the study found that 75 percent of those surveyed engaged in serious cheating. Relevant to this discussion, the study found that "Some 50 percent of those responding to the survey said they don't think copying questions and answers from a test is even cheating." (Slobogin, 2002) Also, note that this was a survey of high school students and that several studies not referenced here found that the attitudes toward academic dishonesty begins long before reaching college.

Typifying the changing attitude that cheating may not be cheating, one of the students surveyed noted that "I actually think cheating is good. A person who has an entirely honest life can't succeed these days." (Slobogin, 2002) Another student noted that "I believe cheating is not wrong. People expect us to attend 7 classes a day, keep a 4.0 GPA, not go crazy and turn in all of our work the next day. What are we supposed to do, fail?" (Slobogin, 2002)

Donald McCabe, the Rutger professor who conducted this survey cited several reasons for this change in attitude. Some the reasons cited include it is easy for students to rationalize their behavior. They question why they should be held to a higher standard when adults aren't. And they noted the pressure to succeed as justification.

A study of 300 students by Kessler International reinforced the attitude toward student cheating found in previous study (Farkas, 2017). Relevant to this discussion, 54 percent indicated that cheating was OK. Other highlights of the study are listed below.

- 86 percent claimed they cheated in school.
- 54 percent indicated that cheating was OK. Some said it it is necessary to stay competitive.
- 97 percent of admitted cheaters say they have never been caught.
- 76 percent copied word for word someone else's assignments..
- 12 percent indicated they would never cheat because of ethics.
- 42 percent said they purchased custom term papers, essays and thesis online.
- 28 percent said they had a service take their online classes for them.
- 72 percent indicated that they had used their phone, tablet or computer to cheat in class.

For the new millennials, the internet provides unfettered access to information. It is viewed as "common knowledge" which is another way of saying that plagiarism isn't really plagiarism. It is attitudinal. The norm toward academic dishonesty needs to change. Students view academic dishonesty as acceptable behavior for surviving in a competitive world. When confronted with a purchased paper from an essay mill, one student replied "I didn't cheat. I bought that paper and here is the receipt." Need more be said?

**Sources:** Slobogin, K., (2002). Survey: Many students say cheating's OK. http://edition.cnn.com/2002/fyi/teachers.ednews/04/05/highschool.cheating/

Farkas, K., (2017). 86 percent of college students say they've cheated. Its easier than ever with mobile devices. <a href="http://www.cleveland.com/metro/index.ssf/2017/02/cheating\_in\_college\_has\_become.html">http://www.cleveland.com/metro/index.ssf/2017/02/cheating\_in\_college\_has\_become.html</a>

5) The Case of Wolfram/Alpha – In the potpourri on academic dishonesty, just when one thinks they have their bearings on academic dishonesty, there is the case of Wolfram/Alpha to confuse the issue of what is cheating. The following discussion is taken from an article by Biddle (2017) and it raises several questions including the changing role of education and what constitutes cheating and plagiarism.

Biddle (2017) notes that "It [Wolfram/Alpha] works by breaking down the pieces of a question, whether a mathematical problem or something like "What is the center of the United States?", and then cross-referencing those pieces against an enormous library of datasets that is constantly being expanded." Unlike most of the search engines, it provides one answer rather than a list of possible answers.

For the STEM disciplines Wolfram/Alpha provides the equation, the answer, and a detailed step-by-step answer explaining how the answer was obtained. Normally, instructors use the step-by-step answer as a way to verify that the student understands the methodology of their work. A student submitting the results provided by Wolfram/Alpha is circumventing the process of having to figure out the homework assignment themselves where they have to show their work to prove that they understand what they are doing. Is this cheating or simply using the technology that is available?

Wolfram/Alpha is a tool that was designed as an instructional tool. It has replaced the slide rule and calculator. This is not a criticism of this tool. Rather it delineates its profound impact on the traditional educational process. In some circles, its use may be considered cheating since it is not the student's work being submitted. It is the program's. This is an age old problem. Conceptually, it is no different than learning the multiplication tables versus using a calculator to do the multiplications and having the calculator show how the calculations were performed. Also, it indicates the changing educational paradigm where students have unfettered access to information on the Internet and how these new tools are changing the learning process.

**Source:** Biddle, P., (2017). AI Is Making I Extremely Easy for Students to Cheat. *Backchannel*. July 5<sup>th</sup>. <a href="https://www.wired.com/story/ai-is-making-it-extremely-easy-for-students-to-cheat/">https://www.wired.com/story/ai-is-making-it-extremely-easy-for-students-to-cheat/</a>

6) <u>Curriculum Changes</u> – Building on the previous point, the educational paradigm may be changing in the digital age also. Bishop and Cine (2017) note that the concepts of "cheating" and "intellectual property" are in flux regarding what is acceptable. They suggest that it is often an issue between those who view academic dishonesty as an "ethical transgression" and those who structure the learning environment to be more engaging and to reduce cheating and plagiarism. The role of the university is changing in the digital age. Traditionally, the University and its faculty are the purveyors of knowledge. Increasingly, the Internet is becoming the purveyor of knowledge. This means that there is a fundamental change in the role of the instructor in the educational process.

Bishop and Cine (2017) note that students are encouraged to collaborate with each other in group projects which often results in the submission of similar work by students. Also, they note that some research suggests that changing the curriculum can reduce cheating. Examples include having students submit drafts as they build their project toward its conclusion, using a series of quizzes rather than one or two big examinations, using an experiential learn model that immerses students into real project based situations, and having assignments where students relate the material to their lives. It is a curriculum strategy of creating smaller more personalized tasks and assignments that make it harder to cheat. These curriculum changes tend to be more engaging and reduce cheating. Making the curriculum more relevant is always a good instructional strategy. Regardless, changing the structure of the learning process doesn't address the fundamental ethical issues of cheating and plagiarism.

**Sources:** Bishop, MJ., and Cine, M., (2017). Academic Dishonesty and Online Education (Part 1): Understanding the Problem. *EvoLLLution*. September 28<sup>th</sup>.

https://evolllution.com/revenue-streams/distance\_online\_learning/academic-dishonesty-and-online-education-part-1-understanding-the-problem/

Bishop, MJ., and Cine, M., (2017). Academic Dishonesty and Online Education (Part 2): Strategies for Supporting Academic Dishonesty in the Digital Age. *EvoLLLution*. October 6<sup>th</sup>.

https://evolllution.com/revenue-streams/distance\_online\_learning/academic-dishonesty-and-online-education-part-2-strategies-for-supporting-academic-honesty-in-the-digital-age/

Bishop, MJ., and Cine, M., (2017). Academic Dishonesty and Online Education (Part 3): UMUC's Approach to Digital Academic Dishonesty. *EvoLLLution*. October 12<sup>th</sup>.

https://evolllution.com/revenue-streams/distance\_online\_learning/academic-dishonesty-and-online-education-part-3-umucs-approach-to-digital-academic-dishonesty/

7) <u>Inside a Paper Mill</u> – Paul Bateman is a ghost writer who writes for an essay mill. In his article in the *Times Higher Education*, he explains "Why I write for an essay mill." The following items are taken from his article (*Bateman*, 2013), and provides insight into the industry. For his services, he notes that he can earn up to £150 (\$197) for a standard essay of 2,000-3,000 words which he notes is an evening's work. He indicates that longer essays can fetch up to £2,000 (\$2,625).

When he writes an essay, he describes his job is one of personalizing the documents he writes. He indicates that he knows all the tricks used by the software programs used to detect plagiarism. He writes at the level of the student. A third rate student who submits a first rate paper may draw suspicion. If a student seeks only to pass, he will misspell a word or two or write at a lower academic level. It is all about personalization of the essays that he writes.

The paper mill agencies are sophisticated and as the following passage suggests, they offer a wide range of services.

"The agencies maintain sophisticated databases of available work, and there is often more demand than we can handle. If you perused their lists, you would be shocked. They feature everything form first-year undergraduate assignments on Dickens (so easy! Who would need to cheat? To PhD theses on molecular biology – not to mention the odd MBA on business ethics."

Believe it or not, he has ethical standards. He notes that what he is doing is not illegal. Also, he notes that he stays away from applied fields indicating that "it is my only ethical standard as a ghostwriter. I will not help a nurse to qualify on false pretenses: who knows, it might be my parents who find themselves in their care." Yet, reading between the lines, his quote acknowledges that what he is doing is wrong or not the student's work. Therein lies the issue.

**Source:** Bateman, P., (2013). Why I write for an essay mill. How a 'freelance ghostwriter' haunts the sector. <a href="https://www.timeshighereducation.com/comment/opinion/why-i-write-for-an-essay-mill/2006074.article">https://www.timeshighereducation.com/comment/opinion/why-i-write-for-an-essay-mill/2006074.article</a>

8) <u>Detection Methods May Not Work</u> – The following study was conducted by three WCU professors as reported in Leef (2016) listed below. Their research project set up a fake Introduction to Psychology course with fifteen students in it with the express intent of seeing if the instructors could detect the cheating and the companies used. A second objective was to determine if the evidence collected would be sufficient for a conviction in a disciplinary hearing. Unfortunately, their conclusion was that the instructors were not able to detect the cheating nor were they able to determine the company providing the materials.

There will always be cheating and academic dishonesty. Relying on technology can help solve the problem, but it is not a panacea. There is an adage that the cheaters are one step ahead of those defending against it. The issue may be one of limiting cheating to within a tolerable or acceptable level.

**Source**: Malesky, A., Baley, J., and Crow, R., (2016) Academic Dishonesty: Assessing the Threat of Cheating Companies to Online Education.

https://www.researchgate.net/publication/293014885\_Academic\_Dishonesty\_Assessing\_the\_Threat\_of\_Cheating\_Companies\_to

<u>Online\_Education</u> as reported in Leef, G., (2016). The New College Cheating; Why Not Buy Your Degree, <a href="https://www.jamesgmartin.center/2016/10/new-college-cheating-not-buy-degree/">https://www.jamesgmartin.center/2016/10/new-college-cheating-not-buy-degree/</a>

9) <u>Have a Tutor Complete Your Degree for You</u> – Tutors provide a valuable service for students. But when do they cross the line and do the student's work that the student should be doing? Tutors can be hired to complete the course for you. Derek Newton (2015) documented his outreach to one of these companies which offered these services, **No Need to Study**. He asked if they could complete an online English course at Columbia University. Their customer service department responded and not only could they supply the tutor to complete the class for him, they could guarantee a grade of at least a "B" in the course. For the service, the fee was \$1,225.15. In the article, he quipped that the extra 15 cents seemed to make if official. He earned or should I say his tutor earned an "A" for him in the course.

Later in the article, he equates the cost of completing an undergraduate course using tutors. He notes that if a person pays \$1,000 for a three credit course, they may pay \$40,000 for an entire bachelors degree. And, the student never has to attend class. They simply hire others to complete their degree. Given the cost of a typical undergraduate degree, he notes that an extra \$40,000 is not an unreasonable expense for someone with moderate means. It is the modernized version of Rodney Dangerfield's movie *Back to School*.

The article was written from the perspective that online programs are prone to these abuses. However, brick and mortar institutions are not immune to these services either. Students in large lecture classes have had surrogates complete examinations for them. Also, brick and mortar institutions that provide a limited array of online courses are potentially susceptible to these services also. Often, GEP courses are vulnerable, whether offered during the semester or more frequently offered online during intersession when student are off-campus. Regardless, online courses may be more prone to using tutors as student surrogates.

There are technological measures that institutions can utilize. For example, the IP address of the student's computer can be identified when they log onto university sites. An IP address from India might raise suspicion regarding who is really completing the course. Regardless, these are technical issues and often, the online services are one step ahead of the institutions. Also, it should be noted that these services constitute fraud and can be prosecuted as such. Regardless, students can and do have surrogates complete part of, or in-full their degree requirements. This is an issue of maintaining "product integrity."

**Source**: Newton, D., (2015). Cheating in Online Classes Is Now Big Business: The growth in courses available on the web has led to a growth in paid services that will impersonate students and do their work for them. *The Atlantic*, November 5. <a href="https://www.theatlantic.com/education/archive/2015/11/cheating-through-online-courses/413770/">https://www.theatlantic.com/education/archive/2015/11/cheating-through-online-courses/413770/</a>

10) <u>Solutions and Suggestions</u> – The purpose of this and the previous commentary was to document the problem and to raise awareness to the issues associated with academic dishonesty. This commentary focuses on how people cheat and plagiarize. The purpose of this item is to begin to identify the multifaceted strands that can be used to address the problem.

First, the **norm** regarding plagiarism, cheating and academic dishonesty needs to be clarified. It needs to be adjusted for new technologies. Students need to know that cheating and plagiarism are unacceptable and wrong. When 75 percent of the students admit to serious cheating and when 50 percent of the students believe cheating and plagiarism are acceptable behaviors, there is a normative problem with what

constitutes academic dishonesty. The norm needs to be changed to where less than 20 percent of the students admit to serious cheating and 80 percent of the students believe cheating and plagiarism are unacceptable behaviors. Students need to know what is unacceptable and faculty and administrators need to work together to create an academic environment that lets students know what is acceptable as well as unacceptable.

The role of **faculty** and **administrators** in facilitating the problem or in addressing solutions to the problem have not been addressed in these commentaries. Let me say that faculty and administrators are part of the problem. They are part of the solution also. Faculty and administrators need to work together to address the issue.

Next, the **System, State and Legislator** need to be involved. The use of tutors acting as surrogate students is fraudulent and laws may need to be strengthen in this area. The Office of the Attorney General (OAG) can be a key player be utilized in prosecuting fraud. In addition, there are other measures that the OAG can take.

**Changing the curriculum** to reduce cheating and plagiarism is always a good strategy. However, it sidesteps and doesn't address the ethical issues. Indicative of the changing curriculum and how people access information is that every reference in this commentary is from the internet.

Better use of **technology** can help. Turnitin, checking IP addresses, "web crawlers" and other sophisticated technologies are useful and can provide significant assistance. Web crawlers can be used to ferret out violators on the internet. Maryland is a leader in cyber-forensics and could apply this technology here. Regardless, better technology alone is not the answer.

Probably the most critical change to be made is to clarify what constitutes plagiarism, cheating and academic dishonesty. It starts with students, but includes faculty, administrators and the public. It is about changing normative behavior. It is difficult to hold students accountable when they don't think what they are doing is wrong and when everyone else has a similar view. With a normative change, all of the other approaches become workable.