

**MEMORANDUM**  
**Educational Technology Committee**  
**Fairfield University**

TO: Academic Council

FROM: Mark Scalese, S.J., Chair, Educational Technology Committee

DATE: January 29, 2014

RE: Report to the Academic Council

**Background.**

This report from the Educational Technology Committee (ETC) to the Academic Council (AC) is to carry out the charge given to the ETC by the AC at its meeting on September 9, 2013:

**MOTION.** Following the decision to discontinue the use of the course management software aspect of Mentor, the AC charges the ETC to provide a full report to the AC at its November meeting on this matter that includes what led to the decision, how the decision was made, and the appropriateness of the decision.

**Timeline/Chronology.**

The ETC met 9 times during the fall 2013 semester. During its first meeting on **September 11**, the committee elected Prof. Mark Scalese chair and voted to fulfill the motion from the AC. The committee drew up an initial schedule: meet with CIO Paige Francis and members of her ITS team on September 25; meet with Prof. Curt Naser the following week, on October 2; discuss what it learned on October 9; and if necessary, have a followup meeting with CIO Francis and/or Prof. Naser on October 16 (Appendix A). For reasons that will be explained below, that timetable did not work out as planned.

On **September 13**, Prof. Scalese emailed Prof. Naser, inviting him to meet with the ETC on Oct. 2. Prof. Naser confirmed his willingness to meet and that Oct. 2 would be a suitable date.

On **September 18**, Prof. Scalese emailed the ETC, confirming the timetable of meetings on 9/25, 10/2, and 10/9, and suggesting some questions the committee could pose to ITS on 9/25 (Appendix B). This email also acknowledged that Larry Miners agreed to serve on the committee during the fall semester in place of Ron Salafia, who had a conflict during with the time slot which the committee had scheduled for its meetings.

Before the September 25 meeting, reading materials were emailed to the committee by Prof. Vishnu Vinekar and AVPAA Christine Siegel. These materials included: 1) a memo on the reasons for the Mentor shutdown compiled by select faculty of the Dolan School of Business (DSB) and Engineering; 2) a response to this memo by Prof. Naser; 3) a Q&A report between the DSB faculty and Prof. Naser; 4) a timeline of IT use at Fairfield University from 1993-2013; 5) a 2010 PowerPoint presentation from VPSA Pellegrino about FERPA basics; 6) selected links on the Fairfield University website related to FERPA compliance. Additional files were forwarded to the committee from Profs. Amalia Rusu and Susan Rakowitz concerning FERPA and SVPAA Fitzgerald's remarks about Mentor to the general faculty. (See Appendices C-K)

On **September 25**, the ETC met with CIO Francis and the following members of her ITS team: Russ Battista, Director of Administrative Computing; Jay Rozgonyi, Director of Academic Computing; Bryan Skowera, Director of Network Services; and Curt Swartzlander, Database Administrator. Prof. Joy Gordon also attended the meeting as an observer (Appendix L).

On **September 26**, Prof. Naser emailed Prof. Scalese an extensive report about the events leading up to the Mentor shutdown (Appendix M). Prof. Scalese forwarded this to the ETC. He also emailed Prof. Naser handouts which CIO Francis had distributed at the Sept. 25 meeting in addition to a summary of his understanding of what ITS presented at that meeting (Appendices N-O).

On **October 2**, University General Counsel Darin Callahan emailed Prof. Scalese, advising him that Mr. Don Bodnar was the official spokesperson for Axiom Education and as such, should represent that company at the meeting with the ETC (Appendix P). In light of this email, the meeting with Prof. Naser that afternoon was postponed. Subsequent emails between Profs. Naser and Scalese rescheduled the meeting for October 23 and clarified that Prof. Naser would accompany Mr. Bodnar to the October 23 meeting.

On **October 10**, Atty. Callahan emailed Prof. Scalese again, stating that lawyers from

both the university and Axiom Education were discussing the contractual relationship between the two parties. In light of that, Callahan requested that Axiom representatives be removed from the Oct. 23 meeting agenda (Appendix Q). That day, Prof. Naser emailed Prof. Scalese stating that he still intended to meet with the ETC on Oct. 23.

In light of these developments, Prof. Scalese wrote to the Executive Committee of the AC on **October 11** for advice about how to proceed. Prof. Irene Mulvey emailed a reply on **October 13** (Appendices R-S). Prof. Scalese forwarded this to the committee, which decided to proceed with the October 23 meeting.

Prior to the October 23 meeting, Prof. Scalese exchanged emails with Mr. Bodnar and Prof. Naser, trying to clarify the capacity in which Prof. Naser would meet with the ETC. Prof. Naser stated that he would attend the meeting as the faculty member who had developed the Mentor system.

On the morning of **October 23**, Prof. Naser emailed Prof. Scalese that Profs. Chris Huntley and Joy Gordon would assist him in making his presentation to the ETC that afternoon. The following faculty members attended the meeting as observers: Rick DeWitt, Vagos Hadjimichael, Laura Nash, David Schmidt, Norm Solomon, and Michael Tucker. After the meeting, Profs. Naser and Huntley emailed copies of PowerPoint presentations they had made, and Prof. Scalese forwarded these to the committee. (Appendices T-V)

On **October 30**, the ETC met in Executive Session to discuss the Sept. 25 and Oct. 23 meetings. The committee decided to invite representatives from the Office of the Senior Vice President for Academic Affairs to its next meeting (Appendix W). Prof. Scalese invited SVPAA Fitzgerald on **October 31**, who replied that he and AVPAA Siegel would attend.

On **November 6**, the ETC met with SVPAA Fitzgerald and AVPAA Siegel. Afterwards, the committee went into Executive Session and during its discussion, decided to send follow-up questions via email to CIO Francis and Prof. Naser (Appendix X). Between **November 8-13**, Prof. Scalese exchanged questions and follow-up emails with them. Prof. Naser sent an additional follow-up email on Dec. 1. (Appendices Y-EE)

On **November 13**, Profs. Rusu and Scalese visited the office of CIO Francis and reviewed copies of the 2009 and 2013 contracts between the university and Axiom Education. The ETC met again that same day to sift through all it had learned. The

committee decided to write to the AC again, asking for clarification about how to proceed with its mandate. (Appendix FF). The same afternoon, Prof. Scalese received an email from COO Kevin Lawlor in support of CIO Francis and ITS (Appendix GG).

Between **November 15-18**, Prof. Scalese exchanged emails with Profs. Rakowitz and Mulvey. Prof. Mulvey sent a memo to the ETC on November 18, suggesting a possible structure for its report (Appendix HH).

On **November 20**, the ETC discussed Prof. Mulvey's memo and began compiling a timeline of its activities during the fall semester (Appendix II). Due to time constraints, Profs. Jaclyn Conelius and Scalese completed the timeline on **December 2** and forwarded it to the committee (Appendix JJ).

On **December 4**, the ETC met and discussed the timeline. Then it began discussing and assembling the sequence of events that led to the shutdown of Mentor (Appendix KK). Due to time constraints, Profs. Larry Miners and Scalese met on **December 6** to complete this task. Between **December 6-10**, they crafted individual answers to the first 2 points of the AC motion: what led to the shutdown and how the decision was made. After collating their drafts, they decided to recast the 3 points from the AC as follows: 1) what led to the decision and how it was made, 2) why the decision was made, and 3) the appropriateness of the decision. This new draft was forwarded to the committee on **December 10**.

On **December 11**, the ETC met to discuss the draft and the recasting of the 3 points from the AC. The committee agreed to the new points and spent the duration of the meeting discussing the preliminary draft of the report. The committee decided to post the draft on Google Drive so members could continue to make amendments during the holiday recess (Appendix LL).

Subsequent revisions of the report were completed by various members of the committee by **January 24**, after which it was submitted to the voting members for approval. The final draft was approved on **January 29, 2014**.

## **Report on the shutdown of Mentor**

### **#1 What led to the decision and how it was made.**

Fairfield University has had a long relationship with Eidos, and then Mentor. Eidos was created in 2001 by Professor Curt Naser and it evolved from a program for tracking General Faculty committee assignments, to a system that included faculty reporting, applications for the Institutional Review Board (IRB), a Course Management System (CMS), and program assessment. As those capabilities were added to Eidos, Prof. Naser was given access to the necessary data in Banner by then-Academic Vice President Orin Grossman and University Registrar, Robert Russo.

Between 2009 and 2010, a number of changes occurred. At the recommendation of then-Senior Vice President Billy Weitzer and AVP Grossman, Prof. Naser formed Axiom Education with two business partners and began the process of bringing Eidos up to industry standards. This involved designing and building a new system, Mentor, to replace Eidos. At that time (2009), a contract was signed between Axiom Education and Fairfield, granting the university several benefits, including free use of the Mentor CMS, royalty payments to Fairfield University, and joint ownership of Mentor's intellectual property (IP) between Fairfield University and Prof. Naser. That same year, Orin Grossman stepped down as AVP and Paul Fitzgerald took over as Senior Vice President for Academic Affairs. Blackboard purchased Angel (the other CMS in use by Fairfield University at the time), and immediately announced its intention to discontinue it. That occasioned a review of two alternative CMS to replace Angel, Blackboard and Moodle. The review was conducted by the Educational Technology Committee (ETC) and Computing and Network Services (CNS), which concluded by endorsing Blackboard. SVPAA Fitzgerald decided to use both Blackboard and Eidos because the latter CMS was being commercialized and several schools had spent years tailoring Eidos for external accreditation purposes as well as internal assessment needs. Michael Graham-Cornell was also hired as director of CNS.

Prof. Naser says that when Mentor was ready to come on-line in 2011, CNS Director Graham-Cornell did not authorize the same data-feed from Banner that had been granted to Eidos by AVP Grossman (and which continued until a few months ago). He was only allowed to use limited data fields from Eidos to feed the necessary data to the Mentor CMS as well as additional services in Mentor such as IRB, student data and course evaluation reporting. SVPAA Fitzgerald says that this was because there were concerns about the level of access Eidos had to Banner, and he asked CNS Director Graham-Cornell to build safeguards to ensure that Mentor only received the data it needed to function as a CMS, as well as for IRB, assessment and accreditation. According to SVPAA Fitzgerald, CNS Director Graham-Cornell felt that

Prof. Naser may have had a conflict of interest regarding Mentor, as both the faculty member who had developed the system and promoted it among the faculty, and as the CEO of the company licensing it to the university.

After being on campus for several months in the fall of 2012, an outside consultant named Patrick Lepore, hired by VPF/CFO Julie Dolan, advised restructuring CNS and hiring a Chief Information Officer (CIO). Lepore's report eventually led to the hiring of Paige Francis as CIO in January 2013 and the subsequent restructuring of CNS into Information and Technology Services (ITS). Prof. Naser reports that on January 28, 2013, he met with CIO Francis, Vice President for Student Affairs Tom Pellegrino, and CNS Director Graham-Cornell (who soon thereafter resigned his position and left the university). During this meeting, Prof. Naser discussed the suite of features in Mentor and expressed his desire that CNS take charge of pushing data to Mentor directly from Banner so he could shut down the Eidos system. He also claims that toward the end of this meeting, CIO Francis expressed concern that there were two course management systems at Fairfield and indicated a preference for Blackboard.

During the spring of 2013 a number of structural changes were put into place as CNS was reorganized into ITS. The university made plans to assume the administration of Banner, ending a 20-year relationship with SunGard/Ellucian. Some Ellucian employees were hired by the university. CIO Francis also hired Russ Batista and Kurt Schwatzlander, both of whom she knew from her earlier role as IT Director at Arkansas Community College, to direct network services and administer university databases respectively. According to CIO Francis, the primary areas of focus were security and uniformity of university systems.

CIO Francis contacted Prof. Naser on April 1, proposing that the university renegotiate its contract with Axiom Education to a standard Software as a Service (SaaS) agreement. She says that based on her professional experience, outside auditors look favorably upon uniform, standard software agreements and relationships. The new agreement would rework the relationship between Axiom Education and the university from co-owners of Mentor to that of vendor and customer. The university would relinquish its 50% share in the Mentor IP as well as the royalty payments that Fairfield University would be paid by Axiom. Prof. Naser notes that the new agreement also stopped the royalty payments he had been sharing with the university under the 2009 contract, a decision made unilaterally by the university without providing him consultation from the Office of Technology Management. Nevertheless, Prof. Naser's partners voted in favor of the proposal and the new contract was signed on July 31. ITS formally took control of Mentor on August 1, after which two meetings were held to begin transferring the administration of Mentor from Axiom Education to ITS.

The first meeting, on August 8, was very brief. CIO Francis says that it was scheduled for 90 minutes but lasted only 10 minutes because one of Prof. Naser's Axiom Education co-workers did not show up and he had nothing to show them. Prof. Naser says that it was preliminary and was really an organizational meeting.

A second meeting was scheduled for Tuesday, August 20. (There is some discrepancy between the various accounts as to why there was a nearly 2-week gap between the two meetings.) CIO Francis and ITS administrators say that they expected this meeting would be a comprehensive boot camp tutorial about how Mentor worked, because under the new license agreement, they were now responsible for running Mentor at Fairfield. According to them, this should have included a user's manual with documentation about Mentor's system architecture. Prof. Naser reports that during the meeting he demonstrated an overview of the Mentor system for ITS, and he volunteered the assistance of Axiom Education help staff until they were comfortable and able to support the system on their own. He also answered questions about Mentor's operation from ITS. During this exchange, ITS says that they became increasingly concerned about Mentor's security because they perceived a lack of expertise in its software architecture; and every set of questions led to even more concerns. But according to Prof. Naser, no one from ITS voiced any concerns about Mentor's design or its security during this meeting.

CIO Francis and ITS claim that August 20 was the first time they became concerned about possible FERPA violations and security vulnerabilities in the Mentor system. Associate Vice President for Academic Affairs Christine Siegel says that the next day, CIO Francis asked for an immediate meeting with SVPAA Fitzgerald which was scheduled for August 22. During this meeting, she expressed grave concerns about Mentor's security. This was the same date on which CIO Francis emailed Prof. Naser about several concerns ITS had identified with the Mentor software. (We are not sure which came first -- the meeting with SVPAA Fitzgerald or the emails with Prof. Naser.) These concerns included the ability for faculty and staff to view or access student information -- such as gender, ID numbers, or class schedules -- which CIO Francis felt violated FERPA guidelines. As a result, CIO Francis asked Prof. Naser to remove these data fields in Mentor so faculty or staff would not see this information and only see a much more restricted "need to know" set of data. She asked that these changes be completed by Friday, August 30.

Prof. Naser notes that it is difficult for the programmers at Axiom Education to make changes to the Mentor system within a short time frame -- in this case, in little more than a week. Nevertheless, they made the changes CIO Francis requested within 18

hours, by Friday afternoon, August 23. Because of the weekend, the changes could not be fully deployed until Monday morning, August 26, and Prof. Naser informed the CIO about that. By his account, the changes were fully implemented by 6:00 a.m. on August 26, five days earlier than the deadline. As will be explained below, the CIO and ITS did not consider the fixes to be sufficient to allay their concerns. At 5:41 p.m. on August 26, CIO Francis sent Prof. Naser an email. She thanked him for his prompt response to the concerns she raised on August 22, but informed him that Fairfield University would not be using the course management portion of Mentor for the upcoming academic year. The next day, on August 27, she and SVPAA Fitzgerald made the decision public with a joint email announcement.

Everyone in the University administration we spoke to confirms that the decision to shutter the Mentor CMS ultimately resided with CIO Francis, that her job description entitled her to make it, and that she had the requisite qualifications to do so. She says that before reaching that decision, she consulted with her ITS administrative team, with Fairfield University leadership, and with the CIOs of other Jesuit colleges and universities, and that she attempted to vet issues with other institutions using the Mentor CMS. (Prof. Naser tells us that one other institution besides Fairfield uses the CMS portion of Mentor. SVPAA Fitzgerald adds that this is the elementary school where Prof. Naser's children had attended in the past. We do not know the result of the CIO's efforts to contact this school.) SVPAA Fitzgerald confirms that CIO Francis did consult with him and that he supported her decision, but even if he had not, as CIO she ultimately answered only to the university president, and most probably he would have acceded to her expertise and experience.

Both SVPAA Fitzgerald and CIO Francis acknowledge that they were well-aware their announcement on August 27 was only one week before the start of classes on September 3, and that they realized it would wreak havoc with the faculty. SVPAA Fitzgerald says that is why he insisted the CIO marshal every ITS resource to help faculty to migrate their courses to Blackboard in time. For her part, CIO Francis says that she made the decision to shutter Mentor even though she knew it would result in a huge workload for her staff, and that this lends credence to the urgency she felt was necessary in making it. Nevertheless, she was willing to push them hard because she wanted to mitigate the impact of the Mentor decision on faculty as much as possible.

## **#2 Why the decision was made.**

During our meetings and subsequent communication with the various players in this situation, two competing narratives have emerged as to why the Mentor CMS was shut down. According to CIO Francis and ITS, the reasons primarily had to do with

possible FERPA violations in the display of student data, concerns about role-based user access controls, and concerns about 'data partitioning'. On the other hand, Prof. Naser asserts that CIO Francis was biased against Mentor and restructured the legal relationship between the university and Axiom Education in order to facilitate the eventual discontinuation of the Mentor CMS and its other services. He also claims that many of the issues cited by ITS about Mentor were actually true of Eidos, and therefore, the decision to shut down Mentor's CMS was based on misconceptions.

CIO Francis and ITS say that their initial concerns had to do with possible FERPA violations. As described above, CIO Francis was concerned that Mentor displayed students' gender, ID numbers, and class schedules beyond the appropriate "need to know" for Fairfield faculty and staff. For example, she mentions that faculty could see current students' full class schedules and even schedules from past semesters, or that with her limited IRB access she could see lists of student ID numbers. According to her, these constituted FERPA violations.

In turn, the FERPA issues led to greater concerns about role-based user access controls and how university data were 'partitioned' within the Mentor software architecture so that they would be secure. When they met with us on September 25, ITS said that role-based data access means that users of Mentor should only be able to see student data based on their roles at the university. For example, professors should only be able to see data about their students; chairs should only be able to see data about students with majors belonging to their departments; deans should only be able to see data about students in their schools, etc. ITS said that the problem with role-based access control in Mentor was that in a scenario when users logged in and the system administrator subsequently cut off their access or changed their user roles, the users could continue to access data in their old roles until they logged out.

Another concern ITS mentioned is that Axiom Education failed to provide a user manual or other documentation of the system architecture or database structure when Prof. Naser met with them on August 20. It is not clear if ITS made that expectation known ahead of time, but they say that providing such documentation is standard practice for commercial software vendors to institutional customers.

Lastly, when ITS staff met with selected faculty from the Dolan School of Business and Engineering in late August, the faculty report mentioned that ITS claimed that Mentor ran on outdated hardware. Later in the discussion, it emerged that Eidos, owned by Fairfield University, was what ran on outdated hardware, while Axiom's Mentor was hosted on servers run by Amazon Web Services. ITS was not sure if any of these servers were located outside the United States. If that were the case, then

Fairfield student data might cross U.S. borders, and ITS alleged that this may violate FERPA guidelines.

For his part, Prof. Naser charges that the preference for Blackboard expressed by CIO Francis at their January 2013 meeting was the motivation for her proposal to renegotiate the contract with Axiom Education in April. He was so concerned that the new contract would become step #1 in the eventual elimination of the Mentor CMS at Fairfield, that he set the price for it and Mentor's assessment systems to \$0.00. Thus, the university could not claim that it could not afford to pay for two CMS. (ITS points out that while this is true, the new contract also stipulated that Fairfield had to purchase the entire suite of Mentor software services to use the CMS, and that cost about \$21,000.)

Prof. Naser disagrees with the CIO's interpretation of the kind of information allowed under FERPA and under which circumstances. He contends that FERPA allows institutions latitude in determining who has access to student data and the extent of that data, and says that Fairfield has never articulated a policy about that. Furthermore, he notes that in late August when the decision was made, Self-Service Banner displayed some of the same information (such as student ID numbers) that had raised flags about Mentor for ITS, and these systems were not shut down.

Regarding the ITS claim about rudimentary access controls in Mentor that allowed users to go anywhere in Mentor and see almost anything, Prof. Naser demonstrated that was not the case. When he met with us on October 23, he gave Prof. Joy Gordon temporary administrator status within Mentor and showed us the pages she could access. Then while she was still logged in, he switched her status back to faculty. The very next page she tried to click on came up empty because she was no longer entitled to access it. CIO Francis and ITS contend that this fix only affects the user interface, that while certain data may no longer be visible on a given page, they still exist beneath the surface within the Mentor system, and would therefore be vulnerable to access by savvy hackers. They say that that was the extent of the fixes Prof. Naser delivered to ITS on August 26 and why they considered them to be insufficient. However, when Prof. Chris Huntley accompanied Prof. Naser to our meeting on October 23, he showed us that the switches in Mentor that manage role-based access are similar to those in open source content management systems, including those used by the White House, suggesting that this functionality indeed conforms to industry and U.S. government standards.

Prof. Huntley also pointed out that software system security is less a matter of programming architecture than it is a back-and-forth process in which customers

discover and report problems to vendors so they can be remedied. When asked about this, CIO Francis and SVPAA Fitzgerald say that it is not the responsibility of customers to point out flaws to software vendors or “do their job for them.” On the other hand, anyone with a smartphone knows that app developers regularly issue updates based on customer feedback. Indeed, if software companies did not respond to user complaints, they would not be in business for very long. Furthermore, members of our committee point out that security auditors look for evidence of this back-and-forth process between customers and vendors -- in this case, that Fairfield regularly informs Axiom about all security concerns it has about Mentor.

As for documentation about database structure or system architecture, Prof. Naser claims that such information is proprietary and is not required under the new 2013 contract. While the data belongs to the university, the database structure and SQL queries belong to Axiom Education.

Regarding the concerns about the locations of Amazon’s servers, Prof. Naser says they are located in Northern Virginia -- not outside the U.S. -- and that that information was readily available if ITS had asked for it.

Prof. Naser also points out that ITS had confused Eidos with Mentor, and many of their allegations were directed against Eidos. Eidos is owned by Fairfield University, while Mentor is owned by Axiom Education. He notes that when ITS met with DSB / Engineering faculty, they stated that Mentor runs on outdated hardware. However, the hardware and software configuration that they specified was that of the Eidos server which belongs to Fairfield University. Mentor runs on state-of-the-art hardware and software provided by Amazon, which is more advanced than the servers that ITS uses. In addition, CIO Francis stated that Mentor was never designed to be a big system; it was a small system that slowly grew over the years. This is a description of Fairfield University’s Eidos system, which grew as deans and chairs asked for functionality to be added. However, Axiom’s Mentor was designed from the ground up using all the functionality in Eidos as requirements guiding the architecture. ITS also stated that Mentor contains sensitive data, but Prof. Naser says that the data they pointed out used to be part of Eidos, not Mentor.

### **#3 The appropriateness of the decision.**

Was the decision to turn off the Mentor CMS appropriate? After months of looking into this question, we still have not been able to determine all the facts. While we believe that CIO Francis and ITS felt real urgency in turning off Mentor’s access to Banner, we are not sure how warranted that urgency was or whether it was necessary

to take action before the start of the fall 2013 semester. Moreover, as of this writing, ITS has not demonstrated to us the need to shutter Mentor permanently.

Based on the chronology we have been able to piece together, ITS had less than a month at best -- and a week at worst -- to “look under the hood” at how Mentor operated. We are willing to take CIO Francis at her word when she says that she had no initial concerns about Mentor and was preoccupied during the first half of 2013 with organizing ITS and preparing to take over the running of Banner from Ellucian. Before August 1, ITS may not have had an opportunity -- or reason -- to focus on Mentor’s inner workings because it was being managed by Axiom Education. It is not clear to us whether the ITS staff began looking at Mentor in earnest on August 1 or only after the meeting on August 20. In any case, we find it plausible that they did not have enough time to allay their concerns about the Mentor CMS before the start of school on September 3, and given that, that they felt the need to turn it off.

However, was that urgency warranted and did it necessitate the immediate shuttering of the Mentor CMS?

Prof. Naser tells us that apart from his email communication with CIO Francis on August 22, ITS has not communicated why it ultimately decided to shutter Mentor’s access to Banner, nor has it given Axiom Education the opportunity to make things right. Nothing CIO Francis or SVPAA Fitzgerald has told us contradicts this. Furthermore, as of Dec. 16, SVPAA Fitzgerald informed the university community that faculty data in the Mentor CMS will no longer be available after March 30. After months of looking into this matter, we have received no verifiable evidence to warrant this action. Since the university has signed a contract with Axiom Education that includes use of the Mentor CMS, we do not understand why ITS would not work with Axiom to fully address their security concerns and bring it back on-line.

Prof. Naser tells us that depending on the particular issues, the programmers at Axiom Education could address ITS’ concerns about Mentor within a matter of weeks. CIO Francis and ITS suggest that the flaws in Mentor are so grave -- and Axiom Education’s grasp of them so limited -- that the company is not capable of bringing Mentor up to industry standards anytime soon, regardless of what Prof. Naser says. One difficulty we face in evaluating the appropriateness of their decision, however, is that ITS has not been able to verify its allegations, or has chosen not to. On multiple occasions throughout the fall semester, we asked CIO Francis to show us the security problems ITS identified in Mentor. At first, she demurred through the use of architectural metaphors: how can one show that a bridge is about to fall down or a pipe is about to burst? However, the committee notes that engineers have methods to do

such verifications, not only with bridges and pipes, but also with software. The matter of verification became more important after Prof. Naser addressed the claims ITS made about weak role-based management in Mentor. When he met with us on October 23, his demonstration with Prof. Gordon appeared to refute what ITS had told us. When we pressed CIO Francis about this in several emails between November 8-13, she replied by stressing her deep qualifications and experience as well as that of her team. Essentially, she said, "You need to trust us," but did not show us any proof of her allegations.

Everything CIO Francis and ITS say about Mentor's security vulnerabilities may indeed be true, and while they speak about them with credibility and conviction, their assertions are not as compelling as something we witnessed with our own eyes. Furthermore, another claim ITS made when they met with us on September 25 turned out to be incorrect. CIO Francis and Director of Administrative Computing Russ Battista told us that one incentive for renegotiating the 2009 contract with Axiom Education was to protect the university from liability because it shared ownership of Mentor. However, Prof. Naser claimed that the first contract specifically indemnified the university from legal claims. On November 13, Profs. Amalia Rusu and Mark Scalese had a chance to view the 2009 contract and confirmed that Prof. Naser was correct.

In addition, we have not been able to see any data in Mentor that are so sensitive that they warrant an immediate and permanent shutdown. If ITS' allegations of insufficient role-based access are true, then one professor would be able to have access in Mentor to another professor's class and see the class roster, the student's assignments, and grades the professor has given to those assignments. Members of the ETC have not had this experience in Mentor, and even if they did, they would not be able to see the other professor's final course grades in my.Fairfield. On the other hand, access to other professors' courses has actually occurred in Blackboard. Toward the end of the fall semester, some ETC members suddenly had access in Blackboard to courses other than their own -- apparently caused by the recycling of old Course Registration Numbers (CRNs) by the Registrar.

CIO Francis is a sitting member of our committee (as is another member of her ITS team, Jay Rozgonyi). We highly regard her as a colleague and respect her professional expertise. But in an institution dedicated to the pursuit of truth, where testing and verification are among the ways of ascertaining that truth, asking us to believe something based solely on trust is less than persuasive. Even Ronald Reagan, who did not always have a firm grasp of the truth, was famous for saying, "Trust, but verify."

At the same time, we wish to signal our respect and support for Prof. Naser. Not only is he a faculty colleague, but he developed Eidos and its subsequent Mentor iteration at the request of senior administration and in response to the needs of deans and faculty. While he was compensated for his efforts with stipends and course releases, his Eidos / Mentor work has been regarded as a genuine service to the university. We accept the importance that CIO Francis places on uniform licensing agreements and relationships with IT companies that do business with the university, as well as her expectation that their products conform to recognized industry standards. However, we are concerned that the work Prof. Naser did for the university in good faith has been disregarded and his reputation impugned now without the possibility of remedy. We are also concerned that the way the university renegotiated the Mentor IP with Prof. Naser established a bad precedent for future IP deals with other faculty. In addition, we are concerned that the work that deans, chairs and faculty did to tailor Eidos for their unique teaching, research, service and assessment purposes -- and then learned to use in Mentor -- has been for naught.

We recognize that given her job description, CIO Francis has the prerogative to shutter Mentor permanently, and we find it regrettable that apparently she has decided to do so. Shared governance at this university has been a delicate balancing act. *De jure*, the Board of Trustees and the administration have the authority to make decisions at Fairfield without the consent of the faculty. But *de facto*, the work of the faculty with students is the lifeblood of the university, and it is in the best interest of the institution that its professors feel valued and respected by those who make decisions that affect them. For those teachers who use them, course management systems are integral to the functioning of their courses, and professors develop personal attachments to them similar to what people can feel toward their computers or cell phones. Before this academic year, half of the faculty who used a CMS on campus preferred Mentor over Blackboard. As far as we are concerned, it is not a closed case that Mentor should be discontinued forever.

Therefore, we recommend that CIO Francis and ITS: 1) honor Fairfield's contract with Axiom Education, work with it to fix any remaining concerns in Mentor, and restore it to full functionality; or 2) demonstrate the severity of Mentor's alleged flaws in a transparent and convincing manner that justifies turning it off permanently.

Respectfully submitted,  
The Educational Technology Committee

Voting members:

Jaclyn Conelius, Amalia Rusu, Ron Salafia, Mark Scalese, SJ (chair), Stephanie Storms, Vishnu Vinekar, and Tommy Xie

