Virginia Polytechnic Institute and State University Intellectual Property Committee Meeting October 20, 2010, 12:00-1:00 p.m. 325 Burruss Conference Room

FULL COMMITTEE

The Intellectual Property Committee met October 20, 2010.

The following members were present: Bill Knocke (Chair), Mark Coburn, Robert Harvey, Kay Heidbreder, X.J. Meng, Joe Merola, Steve Sheetz, Steve Tatum, Cindy Wilkinson.

Invited guest member present: Carol Roberson

Those members and guest members not in attendance were: Foster Agblevor, Robert Broadwater, Steve Capaldo, Shea Dunifon, Barbara Lockee, Ken Miller, Robert Walters.

Call to Order

Dr. Knocke called the meeting to order at 12:10 p.m.

Approval of Agenda

The agenda was unanimously approved as distributed. Joe Merola stated that later in the meeting he would report on an issue about journal and paper archival that was presented to the Faculty Senate last week.

Approval of Minutes

On a motion made by Robert Harvey, and seconded by Joe Merola, the minutes for the September 15, 2010 meeting were approved.

Old Business

IP Issues Related to Student Project Teams

Dr. Knocke provided feedback (attached) from his meetings with faculty in Industrial Systems Engineering, Mechanical Engineering, and Industrial Design concerning IP issues that relate to student project teams. As a result of the meetings, Dr. Knocke came away with a clear sense that these types of programs are not set up to deal effectively with potential IP-related issues. It appears a guidance document is needed that would hit the key points regarding IP that need to be considered and addressed when design

team/student projects appear on the horizon, especially in situations where outside funding and parties are involved.

Carol Roberson briefed the committee on her discussion with FourDesign (a faculty-led, student-run digital and print design service center in the VT School of the Arts) regarding a student design project that could develop into an ongoing sponsored project involving multiple schools. FourDesign has been asked by a company named Balfour to design and produce promotional materials in connection with next year's ring promotions for Virginia Tech and for James Madison University. The potential is for major funding if Balfour likes their work and hires them to do this for multiple colleges over the United States. The designs will be copyrighted materials to which the students will have ownership rights. A variety of potential problem areas were noted in the arrangement by members of the IP Committee during discussion. Ultimately the committee agreed that whenever issues IP arise in these situations, we should resolve such situations through application of the university's stated IP policy. The feedback to FourDesign from the Committee is that this project should be processed through the Office of Sponsored Programs.

It was decided that an informational sheet or brochure should be made available to faculty and students involved in these student design type situations to clarify questions related to IP issues. Carol agreed to prepare a first draft of this document.

<u>Faculty/Student/Staff Educational Opportunities Related to VTIP, IP and Technology Commercialization</u>

An Outreach Activity Log (attached) was handed out to the committee outlining educational programs and presentations that have been conducted by VTIP licensing professionals in the past few months. Mark Coburn also reported on the "Making Connections" program. This program is VTIP's forum for communicating about IP issues and sharing expertise. These activities keep VTIP connected to inventors and entrepreneurs, and will build a network of resources to promote technology transfer and commercialization. Efforts will continue to find ways of reaching a great audience of faculty and students for these programmatic activities.

New Business

<u>Lecture Capture – IP Implications at VT</u>

Document outlining this resource was provided to the committee (attached). Lecture Capture is a company making licensing arrangements with universities and individual faculty members. Lectures are taped and students pay a fee associated with the course to be able to access the lectures. It was

suggested that someone from IDDL could come to the next IPC meeting to share information about this program.

Joe Merola reported that Phillip Young from the University Library made a
presentation to the Faculty Senate concerning the creation of an online
archive for faculty papers. The intention is that once something has been
published it is then deposited in the archive for open source access. The
committee will be kept informed as things develop with this project.

Next Meeting Date

November 17, 2010, 325 Burruss Hall, 12:00 p.m.

<u>Adjournment</u>

There being no further new business, the meeting adjourned at 1:10 p.m.

Respectfully Submitted,

Shelly Key Administrative Support to the IP Committee

Student Design Team Discussions

- Interaction with Brian Kleiner (ISE), which led to conclusion that very few of their projects have
 IP outcomes. They do have students sign a confidentiality agreement upfront to address this
 issue. In instance last spring decision was that the disclosure that came forward was well
 beyond the effort of the design team as part of the class project; instead, this individual took
 things much further, did not use University resources, and disclosure went on and was filed.
- 2. Interaction with Kevin Kuchersberger and Ken Ball. ME created CREATE@VT. Affiliates Program document, but hasn't officially used it yet. They don't have an organized approach to IP issues either; rather, deal with them as they may arise. More potential here for IP to arise since student teams working on prototypes of equipment. They also deal with confidentiality agreements for students. Expressed interest in having a guidance document for helping address these issues since such design project course activities are critical to their undergrad BSME program. One issue noted by Ken was disclosures coming forward by individuals from these teams wherein the individual and team had worked in a well-outfitted robotics laboratory. He wondered how to assess the issue of "using no more than \$10,000 in University resources" would be addressed in that circumstance. He also was concerned about situations where one individual came forward after the fact to claim IP disclosure when work had been done as a team how he would ultimately be able to sort out how who did what.
- 3. Met with several faculty in the Industrial Design program. They too have situations where students on design teams generate prototype outputs (e.g., washing machine design that had variable height capability project not funded by an external sponsor, but faculty member noted it was still a "pain" to get all students involved with the project to complete and sign disclosure paperwork. They too would like direct guidance on these issues as they would like to create an "industrial affiliates" program as well and seek external funding more from industrial folks to support these projects.

GENERAL COMMENT – appears that we need a guidance document that answers the "top ten" questions on these design team/student project situations. Key issues would be confidentiality issues, defining the \$10,000 University resource issue, how best to set these up with companies at the outset, etc.

CREATE@VT Affiliate Program

Capstone Realization of Engineering And TEchnology at Virginia Tech

Member Agreement

This agreement (hereinafter "Member Agreement") establishes an affiliate program that provides close cooperation and information/technology transfer between the entity identified below (hereinafter "Member") and Virginia Polytechnic Institute and State University, a non-profit educational institution (hereinafter "University" or "Virginia Tech") for participation in the Mechanical Engineering senior design program (CREATE@VT Program").

Member joins the CREATE@VT Program under the terms and conditions as indicated herein.

ARTICLE 1. MEMBERSHIP

Member:

Name

Address

Contact Person

Membership Dues:

\$15,000 annual fee.

Membership Period:

Calendar Year -August 15, 200___ through August 14, 200___

ARTICLE 2. BACKGROUND

The Accreditation Board for Engineering and Technology (ABET) requires mechanical engineering students to participate in a capstone senior design course. This course provides students an opportunity to participate in a product design and realization project that requires the synthesis of knowledge gained throughout their undergraduate curriculum.

Virginia Tech is establishing a structured program where companies will be given the opportunity to actively participate in the design process. By proposing student projects of interest to the company, helping select student projects, and providing a mechanism for an engineering liaison to interact with the student team, the CREATE@VT Program will benefit both students and industry. The Member can expand its capabilities through product development projects in areas typically not pursued due to limited resources and/or more time-critical business priorities that prevent such projects from occurring. Virginia Tech will strive to build upon the successful operation of this affiliate program and pursue grant funding for a design studio to be dedicated for senior projects.

Virginia Tech believes that the impact of an industry sponsored program is significant. The engineering liaison is engaged in the project and will treat the undergraduates as company associates, giving them invaluable real world experience through feedback and operations common within the corporate environment. The company also becomes familiar with the

capabilities of Virginia Tech faculty and their research programs. Senior design projects can lead to funding graduate students to extend the work initiated by the undergraduates. This gives companies an opportunity to consider entering into a research agreement with VT.

ARTICLE 3. PURPOSE

The purpose of the CREATE@VT Program is to establish close cooperation and information/technology transfer between groups interested in supporting mechanical engineering senior design projects at Virginia Tech. It is anticipated that this program will eventually extend to all such required senior design classes in the College of Engineering.

ARTICLE 4. STUDENT DESIGN PROJECTS

Senior engineering students will have the option of selecting the design project they are interested in from a list that includes both CREATE and non-CREATE projects. CREATE@VT projects are projects of interest to the Members which are proposed to the CREATE Coordinator. Upon discussion and acceptance by a selected Faculty Advisor subject matter expert, the Coordinator, Advisor and Member write the project description that includes the requested number of students and the preferred skill-set. Reports and presentations from all design groups will be made available to the Members; however, in the case that a company chooses to belong to a sub-group of non-competing companies, access to reports and presentations will be limited to the sub-group Members only.

In the event that a prototype device is constructed by a student design team, it will be made available for inspection by the Members (or sub-group Members, as applicable).

ARTICLE 5. UNIVERSITY OBLIGATIONS

The University will use its best efforts to organize, direct, and administer the activities of the CREATE@VT Program in accordance with the terms of this Member Agreement. The University will, to the extent possible, take Members' suggestions into account in defining class projects and maximizing use of membership fees. The University intends to:

- After consultation with Members, assign Members to the general membership group or a subgroup of diverse companies that benefit from the shared outcomes of the projects but do not have competing business interests.
- Consult with Members to generate project proposals appropriate for senior class projects
- Select projects that are of interest to the Members.
- Notify senior engineering students about the CREATE projects and the requested skillsets for these projects. Students from Mechanical Engineering will represent the majority of the four- to eight-student teams, however students from other engineering departments will be requested if the project requires a multidisciplinary component.
- Provide, where possible, university equipment and facilities that support the students' successful completion of their project. This includes:
 - o Partnering with other College of Engineering resources aimed at transitioning students from the classroom to the global workplace, such as the VT Engineering Communications Center (VTECC), and the Interdisciplinary Design, Engineering and Analysis (IDEAS) Laboratory.

- o Providing access to teleconferencing and videoconferencing facilities for conducting design meetings between the students and the Members.
- Use membership fees to purchase needed supplies and special equipment for student projects.
- Coordinate liaison meetings between student teams and the Members.
- Provide overall supervision to the team on the senior design project.

ARTICLE 6. MEMBER OBLIGATIONS

The Members in the CREATE@VT program greatly benefit from the original and unrestricted thinking found in the university environment. At the same time, the program is strongly supported by the structure and format found in industry through meetings and progress reports with the participating companies. To ensure that VT students are engaged in a practice-oriented experience, each project team will be matched to the respective Member within the affiliates group that generated the project proposal or is most closely aligned with the project definition. The Member(s) will provide technical focus and an outside evaluation of the students' work, and agree to provide the following:

- Contact information for an engineering liaison who will interface with the students and faculty advisor on a weekly or bi-weekly basis through regularly scheduled meetings. These meetings can be attended in person, by teleconference, or videoconference.
- Technical data pertinent to the successful completion of the project.
- Background information necessary to educate the project team on the origin of the project.

ARTICLE 7. MEMBER BENEFITS

All Members shall be entitled to the following benefits that accrue during their membership period:

- 7.1 <u>Company Project</u>. Each Member will be able to propose a senior design project(s) to be included in the CREATE@VT Program.
- 7.2 <u>Member Participation.</u> Each Member will be given the opportunity to interact directly with the student team(s) on at least one project. Faculty and graduate teaching assistants will be available for discussions and consultation concerning the senior project.
- 7.3 <u>Project Reviews</u>. Members will be given the opportunity to visit Virginia Tech to participate in project reviews and presentations.
- 7.4 <u>Intellectual Property</u>. It is not anticipated that any inventions, commercial computer software, or other intellectual property (IP) will be developed or created from a CREATE@VT senior design project. In the event that IP is developed, ownership will follow Title 35 of the USC, §261, "Ownership, assignment."

ARTICLE 8. COSTS AND PAYMENT

The Member agrees to pay the annual fee as indicated in Article 2. Payments shall be made to Virginia Tech Foundation and mailed to 902 Prices Fork Road, Suite 4500, Blacksburg, VA 24061, Blacksburg, VA, 24061-0111.

All membership fees will be maintained in a separate account and shall be expended for wages, supplies, equipment, travel, and other expenses in connection with the CREATE@VT Program. The title to any equipment purchased for senior projects with member fees shall vest in the University.

The University will keep complete and systematic written financial records related to the CREATE@VT Program. All such records will be available for inspection and copies of all or any part of such records shall be furnished to the Member upon request.

ARTICLE 9. TERM AND TERMINATION

The term of this Member Agreement is for the calendar year as designated in Article 1, and will automatically renew for successive one academic year periods unless terminated by written notice from either Member or University.

This Member Agreement may be terminated by the mutual consent of the parties or 30 days after written notice from either party. Except in the case of default by the University, early withdrawal will not entitle Member for refund on a pro-rata basis.

ARTICLE 10. CONFIDENTIAL INFORMATION

No confidential information shall be provided for use in a senior project except with the prior written agreement of the parties and under mutually agreeable terms of confidentiality. Any release of confidential information to students will require a signed confidentiality agreement between the Member and each student.

Confidentiality agreements should be written with consideration given to the requirement that students must present to an audience consisting of faculty and industrial representatives, as part of their evaluation. Affiliate Members may work with the faculty advisor and students to determine what information is acceptable for presentation.

ARTICLE 11. WARRANTY AND LIABILITY

University represents that it has adequate liability self-insurance, such protection being applicable to officers, employees, and agents while acting within the scope of their employment. University has no liability insurance policy as such that can extend protection to any other person.

- 11.2 Member agrees to be responsible and assume responsibility for its own wrongful or negligent acts or omissions, if any, pertaining to its participation hereunder, or those of its own officers, agents, or employees to the full extent required by law.
- 11.3 Member hereby agrees to defend, indemnify and hold University harmless against all claims, demands, losses, damages, causes of action, and other liabilities of every kind (whether based in contract, tort, or other legal theory) by all parties for personal injury, death, or property damage or loss which arises out of or results from any use of the CREATE@VT Program results by Member, its affiliates, or any third party to which Member may extend the right to use the CREATE@VT Program results.
- 11.4 Neither the University nor any Member shall be liable to any other Member, or any of its affiliates, or any contractor or third party, for any damages to equipment or other property, or for injury to any person as a result of any use by the Member or their affiliates of the data and information obtained from the CREATE@VT Program. In no event shall any party be liable to any other party for any consequential, indirect, incidental or special damages, including loss of profit or business interruption arising out of the use or inability to use the data and information obtained from the CREATE@VT Program, or from any other claim arising from this Member Agreement.
- 11.5 EXCEPT AS OTHERWISE EXPRESSLY STATED HEREIN, UNIVERSITY DISCLAIMS ANY AND ALL OTHER WARRANTIES; EXPRESS AND IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

ARTICLE 12. MISCELLANEOUS

- 12.1 No Member shall use the name of another Member in any advertising relating to the subject matter of this Member Agreement without that other Member's prior written consent.
- 12.2 The validity and interpretation of this Member Agreement will be governed by the laws of the Commonwealth of Virginia, without regard to the conflicts of laws provisions thereof.
- 12.3 This Member Agreement may be assigned by either party to any of its Affiliates, but may not otherwise be assigned without the party's prior written consent which will not be unreasonably withheld.
- 12.4 The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Member Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition or any other term or condition by the other party
- Each clause of this Member Agreement is a distinct and severable clause, and if any clause is deemed illegal, void or unenforceable, the validity, legality or enforceability of any other clause or portion of this Member Agreement will not be affected thereby. This Member Agreement states the entire understanding between University and Member and supersedes, cancels and merges all prior representations, understandings, covenants, or agreements, whether oral or written with respect to CREATE@VT Program. No change,

alteration, or modification to this Member Agreement will be effective unless it is in writing and signed by the authorized representatives of both University and Member.

In consideration of the foregoing terms and conditions, the parties through duly authorized representatives have executed this Member Agreement.

MEMBER:	VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
Ву:	Ву:
Typed Name: Title:	Typed Name: Title: Dean/Department Head
Date:	Date:

OUTREACH ACTIVITY LOG - SEPT/OCT/NOV 2010

Includes education programs and presentations conducted by VT licensing professionals, meetings with individual and small groups of faculty and administrators regarding technology transfer issues and topics of interest and on- and off-campus meetings with companies, all having an educational and/or outreach component. Meetings with faculty inventors and companies that are focused on discussions regarding IP protection, technology marketing or licensing of specific invention disclosures are not included.

DATE		ACTIVITY
9/7	MM	Advise emeritus faculty regarding processes for developing inventions in collaboration with current VT faculty; how to set up confidentiality agreement with OSP; complete CDA form for OSP and inventor; explain patenting and licensing in relation to sponsoring research at VT
9/10	MM	Meeting with Ken Stratton, Caterpillar, to discuss licensing processes and expectations at VT in advance of exploring significant funded research programs
9/13	MC GH	Meeting with Biomethodes to discuss licensee commercialization progress
9/14	MM	Presentation to MBA Entrepreneurial Leadership class (Jim Lang) – explain role of tech transfer in business strategy and present opportunities for development of business strategies around VT inventions
9/14	MM	Presentation to Dr. Misra and Mr. Reaves at VCOM regarding basics of tech transfer, protection, licensing and exploitation of VCOM inventions (both with and without VT collaborators)
9/15	SL	Discussion with Brook Rosenstein, InovialP, to determine if VTIP would wish to use them for filing national stage patent applications
9/15	JG MC	Meeting with SAIC Executive team regarding technology areas of mutual interest to SAIC and Virginia Tech
9/15	MM	IPC committee discussion regarding how best to improve awareness of IP and tech transfer policy and processes for faculty members
9/16	MM	Discussion with Doug Juanarena, Gentek Ventures, regarding expectations for next generation technology areas likely to be most valuable in commercialization activities
9/16	MM	Meeting with Steve Capaldo, University General Counsel's Office and S. Midkiff, EE Dept Head regarding IP issues relating to part-time graduate students and how they can comply with university policy
9/16	All	Meeting with Triton Ventures to discuss licensing processes at VTIP and potential opportunity for collaboration on portions of VT portfolio
9/16	JG	Interview with Technology Transfer Tactics magazine, "Best Practices in Commercializing Research Center Technology"
9/17	МС	ALCOVe (Virginia university licensing association) Fall meeting
9/23	MM	Discussion with S. Capaldo (university legal) regarding compliance with and applicability of IP policies to the sale of musical arrangements by the Marching Virginians
9/23	MM	Meeting with B. Walters, T_{i} Bell, T. Long and others regarding IP issues related to visiting scholars at VT.
9/23	MC	Reviewer for American Security Challenge Annual Meeting in Arlington, VA
9/24	MM JG	Meeting with Luna's new in-house IP attorney to discuss VT/VTIP licensing processes in general and establish a closer working relationship in future

9/24	MM	Meeting with undergraduate inventor whose technology is key to a funded
		research project to advise about his rights with respect to the university and the
		funding agency
9/27	JG	Presentation to VT Faculty Development Institute – "IP for Certified Research
		Administrator Training"
9/27	SL	Discussion with Bob Morris, Innovaro Technology Marketplace, to consider if VTIP
		would like to work with them to increase the marketing of our technologies
9/27	MM	Meeting with PhD student referred by faculty member to explain/educate
		regarding compliance with invention disclosure process and future rights to IP
9/27-28	All	Biannual Blank Rome IP Law visit with faculty inventors and VTIP licensing staff
9/28	SL	Making Connections - "Patent Law 101," with special guest Michael Greenbaum of
		Blank Rome, LLP
9/30	MM	Meeting with Acrylife to explain the limitations of their license and VTIP policies
	MC	regarding the option for acquiring rights to future improvements under a
		sublicense agreement with GAF
9/30	MM	Meeting with Dennis Hong to discuss how IP policy works for consulting
		agreements and how he can supply hardware to outside commercial entities for
		evaluation without it being considered a product sale from within university
9/30	MM	Meeting with MedTech Ventures to describe licensing processes at VTIP and
		evaluate how they can assist us in marketing medical related technologies using
		their contacts in the marketplace
9/30	MM	Advise EE faculty regarding proper procedure to transfer proprietary information
		(software) under a confidentiality agreement
10/1	MM	Meeting with EE/CWT faculty to discuss options for supplying hardware (PC boards)
		to commercial companies for evaluation without it being considered a product sale
		from within the university
10/1	All	Meeting with Mike Geggenheimer, Battelle Memorial Institute, to discuss tech
		transfer benchmarks at VTIP relative to BMI processes. BMI desires to improve
		their processes and considers VTIP a model of success in this area.
10/4-6	All	Biannual NRV IP Law visit with faculty inventors and VTIP licensing staff
10/4	JG	Meeting with Peter Sforza, Center for Geospatial Information Technology, to
		discuss general areas of interest related to the SAIC visit
10/4	MC	Southwest Virginia Life Sciences Forum at Inn at Virginia Tech
	GH	
	SL	
10/7	JG	Presentation to VT Entrepreneur Club – "Commercializing VT Inventions"
10/9	MC	Meeting with MiserWare to discuss licensee commercialization progress
	JG	
10/11	JG	Presentation to VT Faculty Development Institute – "IP 101 and Technology
		Licensing"
10/11	All	Meeting with Tredegar Films to discuss technology licensing and research areas of
		interest to Tredegar and Virginia Tech
10/11	GH	Presentation to GRAD 5984 Professional Development Communication Skills -
		"Authorship/Intellectual Property and Licensing"
10/11	GH	Meeting with Techulon to discuss licensee commercialization progress
10/12	MM	Monthly CARS/CAGS meeting to inform attendees about educational opportunities
		available from VTIP relating to processes and IP policies at VT

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MC	Meeting with Josep B, Biotherapeutics, to discuss licensee commercialization
SL	progress
GH	Meeting with KeyGene to discuss technology licensing and research areas of
	interest to KeyGene and Virginia Tech
MC	Meeting with Dawn Crigger, CRC, to discuss establishing technology related special
SL	interest groups at the CRC
MC	Meeting with Stan Hefta, VBI, to discuss licensing strategies for VBI related
	inventions
JG	Presentation to VT Faculty Development Institute – "Licensing Your Invention to
	Start a Company"
	Meeting of NETL-RUA University Tech Transfer Directors in Pittsburgh, PA
MC	Meeting with Tom Goralski, Intrexon, to explore technology areas of mutual
	interest
 	Presentation to ISE 5164 – "Transfer and Application of Emerging Technology"
MC	IPC Meeting
All	Regular meeting with OSP to discuss interface with VTIP, issues relating to IP
	clauses in sponsored agreements, general support from VTIP in research contract
	negotiations
All	Making Connections - "Top 10 Questions about Tech Transfer," with VTIP panel members
MC	Meeting with VT-NCR faculty regarding IP issues in Falls Church, VA
 	MidAtlantic Bio Annual Meeting in Bethesda, MD
1	Widatianite bio Annual Meeting in bethesda, Mb
1	
	Meeting with General Dynamics to discuss technology licensing and research areas
''''	of interest to General Dynamics and Virginia Tech
MC	Presentation to ME 4015 Senior Design (Doug Nelson) — "IP 101 and Technology
	Licensing"
JG	Presentation to ISE 5164 – "Technology Transfer at VT"
	Presentation to COS IP Law and Society Class (Michele Mayberry) – "Capturing the
	Value of Technology Transfer"
	SL GH MC SL MC JG MC All All MC GH SL All MC

Lecture Capture

Battle for a Market

October 12, 2010

As higher ed technology leaders convene today in Anaheim for the annual meeting of Educause, the battle for the lecture capture market is growing more intense -- and the definition of the market may be changing as well.

At Educause a year ago, there was <u>still debate</u> regarding how to win over faculty members skeptical of lecture capture -- a service in which class lectures are recorded and preserved in a digital library, frequently with additional materials such as relevant slides, quizzes or summaries. This year, the pre-meeting buzz has been less about debating whether lecture capture will take off than over which companies and which approaches are mostly likely to succeed. Some lecture capture companies are aligning themselves with big publishers -- while others say they are content not to.

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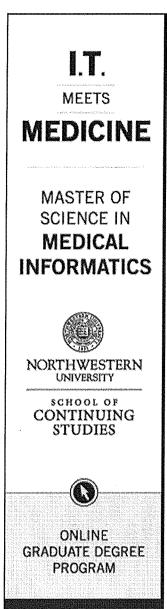
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One publisher-lecture capture partnership -- Macmillan and Panopto -- will today announce a plan to start pushing a business model in which individual faculty members would be sold on lecture capture and pass on the costs to students in the form of a low-cost licensing fee (\$10 per student per course). The professors would assign a lecture capture purchase much the same way a textbook is assigned. While some in the industry see this as a way to expand lecture capture quickly beyond institutions that will pay for institution-wide licenses, others question whether this could anger students, and in turn frustrate professors who want to use the technology.

The Macmillan/Panopto push (which is a collaboration, not a merger or purchase) comes a week after McGraw-Hill Education purchased Tegrity, a lecture capture company. Further, existing lecture capture companies such as TechSmith and Echo360 report continued growth, with the former starting some pilots with sale of its high-end lecture capture service to individual professors, not institutions. But the TechSmith pilot for Camtasia Relay isn't based on students

paying the fees, but on faculty members being reimbursed for doing so at institutions not willing to go all-out on a campus contract. <u>Matterhorn</u>, an open source alternative, has also emerged.

A New Technology Feature

Inside Higher Ed unveils Vlog U., a video discussion involving its technology bloggers. Today's topic: a preview of this week's Educause meeting. Click here.

The companies involved in lecture capture did tens of millions of dollars of business with higher education in the last year, and are expecting significant growth for the next five years, as more faculty members and more institutions embrace the concept. (See *Inside Higher Ed's* Technology and Learning and Digital Tweed blogs for analysis on why the approach is likely to take off.) As a result, many experts predict that more publishers will embrace some form of lecture capture, either by purchasing existing companies, building their own system, or creating alliances.

Pearson, for example, already has many technology services that go beyond publishing and has <u>encouraged partnerships</u> with lecture capture providers. Don Kilburn, president and CEO of Pearson Learning Solutions, said that he considers lecture capture "an interesting business" in which "the technology is quickly evolving." He said that, at Pearson, "we keep our eye on new technology" such as lecture capture.

For those publishers that have moved into formal deals with lecture capture companies, some cite the need to broaden the definition of the services they provide. Troy Williams, vice president and general manager of new ventures at Macmillan, said he viewed the ties to Panopto for lecture capture as part of a commitment to "exploding the walls of the classroom" to bring more interactivity and student engagement to the learning process. He noted that Macmillan has already moved into the clicker business, selling devices that professors may use to quiz or interact with students during class.

The traditional model of lecture capture (including for Panopto) has been to sell to institutions, while giving away free use to selected professors to get their campuses excited and build demand for a campuswide contract. While Panopto is not abandoning that approach, Williams said that with Macmillan it will now offer a new "Panopto Fusion" product that will be sold like textbooks or clickers. The professor will make the decision to buy and assign use to a class, so students will pay the costs.

Williams said that he believes the trends are such that over the next five years, many colleges and universities will indeed buy contracts for their entire campuses. But with budgets tight and some institutions putting off any "big ticket purchase," he said that Macmillan believes that the model used to sell textbooks can work for lecture capture. He noted that the price per student

(\$10 for a single course, with discounts if more than one course assigns the service) is relatively low, and said that tech support would still be provided.

Given student concerns about textbook prices, Williams said that "pricing was a big concern" and every effort was made to keep prices low -- with large (but not yet determined) discounts planned for an "all you can eat" model in which students could have access for a year for as many courses as they are taking where the professors assign lecture capture.

In some ways, McGraw-Hill has just moved in the exact opposite direction. While McGraw-Hill has had an individual purchase option, Tegrity (its new division) plans to continue to focus on institutional sales. Michael Berger, senior director of marketing at Tegrity, said he believes it is "very difficult to go instructor by instructor" from both a sales and an organizational perspective. Given that an institution can provide campuswide training about how to best use lecture capture, "it makes a lot more sense to do this on the institutional level."

He said he understands why a publisher might want to embrace the model that has worked for textbooks, but he said that there are enough differences between lecture capture and a textbook selection that he thinks the smarter choice for publishers is to deviate from their traditional business model.

TechSmith is trying yet another approach with its Camtasia Relay lecture capture service. Rich Boys, the product manager, said that it has been sold to institutions, but he said that the company is doing a pilot now selling to individual instructors. However, Boys said that he still envisions the purchase being made by the institution and not passed along to students like buying a textbook or clicker. While students are big fans of lecture capture, he said, "students are not going to be happy" if forced to buy access to lecture capture.

Boys said that he's not surprised that publishers are teaming up with lecture capture companies, but he said he's not sorry that TechSmith hasn't allied with a single publisher. Of publishers, he said that "I think digital media scares them."

Experts outside the publishing and lecture capture worlds generally agree that there will be more interaction between the two sectors, but are less certain that a business model similar to a traditional publishing approach will work.

Aimee Roberts, an analyst for Frost & Sullivan (a company that analyzes lecture capture among other technologies, but that is not affiliated with any of the players), said she thinks there is potential in the textbook-style model, where professors make the decision and assign the purchase. She noted that "professors love their free resources," so companies trying this approach may win converts who are interested in lecture capture, but don't have budgets or institutional backing for a campus contract.

She said that all the industry research shows that "students love lecture capture," and she predicted that if the price is kept down, they would pay, once they get to know how it works.

"I know students don't like buying their textbooks, and the last thing you want to do is to put out some more money for the technology, but if the students are able to experience these technologies in a trial version, I think they will see it as something that benefits them," she said.

But Kenneth C. Green, director of the Campus Computing Project (and an *Inside Higher Ed* blogger), is more skeptical. He said the business model being proposed by Macmillan and Panopto "raises the question of how much more we can push students to buy in-course resources, whether core or supplemental." He said he is not certain that there is much elasticity left in what students will buy.

A key challenge, Green said, is that the model of a campus purchase gives the student the sense that lecture capture is free, and that creates "an entitlement" that many students already have. Add in the various pilot projects where individual professors have free access to lecture capture, and there are many students who may like lecture capture, but don't think of it as something to pay for, Green said.

The new business model, he said, "may be viable," but this is "uncharted territory."

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- Scott Jaschik