The ERTC is responsible for matters related to the development and implementation of educational and research technologies at the University that guide acquisition of information literacy by students and faculty. Current members include:

<table>
<thead>
<tr>
<th>college</th>
<th>name</th>
<th>term</th>
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<tbody>
<tr>
<td>Agriculture &amp; Life Science</td>
<td>Petrillo, Jane</td>
<td>2017-2020</td>
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<tr>
<td>Arts &amp; Science</td>
<td>Kaelber, Lutz</td>
<td>2017-2020</td>
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<tr>
<td>Arts &amp; Science</td>
<td>Law, Marc</td>
<td>2015-2018</td>
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<tr>
<td>Grossman School of Business</td>
<td>Do, Hung</td>
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<tr>
<td>Education &amp; Social Services</td>
<td>Toolin, Regina (Chair)</td>
<td>2017-2020</td>
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<tr>
<td>Engineering &amp; Mathematical Science</td>
<td>Read, Helen</td>
<td>2016-2019</td>
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<tr>
<td>Environment &amp; Natural Resources (Rubenstein School)</td>
<td>Voight, Brian</td>
<td>2016-2019</td>
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<td>Libraries</td>
<td>Ross, Lyman</td>
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<td>Larner College of Medicine</td>
<td>Lee, Tim</td>
<td>2016-2019</td>
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<tr>
<td>Larner College of Medicine</td>
<td>Jenny, Nancy</td>
<td>2017-2020</td>
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<tr>
<td>Nursing &amp; Health Science</td>
<td>Tourville, Tim</td>
<td>2015-2018</td>
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<td>Curricular Affairs Committee Representative</td>
<td>pending</td>
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<td>Financial &amp; Physical Planning Committee Representative</td>
<td>pending</td>
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<tr>
<td>Research, Scholarship, &amp; The Creative Arts Representative</td>
<td>pending</td>
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<tr>
<td>Student Affairs Committee Representative</td>
<td>pending</td>
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<tr>
<td>Graduate Student Senate Representative</td>
<td>Cleary, Sarah</td>
<td>2017-2018</td>
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The ERTC meets on a monthly basis to pursue educational and research technology initiatives at UVM. What follows is a summary of the initiatives that were addressed during the 2017-18 academic year.

1. **Chief Information Officer Search**
ERTC members had the opportunity to interview CIO candidates during the campus visits in March 2018. ERTC representatives reported that there were three strong applicants in the pool. In her role on the CIO search committee, Regina Toolin reported that the work of the hiring committee was complete and that the committee forwarded their recommendations to senior administration. On May 2nd, President Sullivan announced that Simeon Ananou was selected as the new UVM CIO.

2. **Access Students and integrated testing**
The SAC has had conversations with the Global Gateways administration. From these conversations Gayle Nunley and Brian Reed have agreed to form a faculty advisory committee to create more direct connections with the GGP. This will give the faculty a place to bring concerns they have and will help GGP students be more successful. Other concerns of the committee.
- Is there a way to be more sensitive on the way we label GGP students?
- How can students be better integrated into the UVM community?
- How to determine language barriers earlier
- Faculty training and support

3. **UVM Integrated Course Evaluations**
Thomas Chittenden presented the Faculty Senate with the resolution, UVM Integrated Course Evaluation. Co-chair Prue of the SAC and Chair Toolin of the ERCT also joined Thomas for the presentation. The resolution passed the Faculty Senate as follows:
WHEREAS the University of Vermont Faculty Senate passed a motion on online evaluations on April 9th, 2012 (FS2012-174) supporting the creation of an online course evaluation platform for UVM courses; and

WHEREAS the University of Vermont Student Government Association passed a resolution supporting the revitalization and standardization of academic course evaluations on November 18th, 2014 (SGA2014-04); and

WHEREAS the Student Affairs Committee of the Faculty Senate, the Educational Research & Technologies Committee of the Faculty Senate and the Student Government Association passed additional resolutions calling for an integrated course evaluation system to have the following operational and policy parameters:

- The anonymity of respondent submissions should be maintained in all presented results with specific attention to semantic security limiting multi-dimensional response parsing to only include sub-populations with a minimum number of five collected responses from that sub group;
- Such a platform would make available the course questionnaire to students to complete up until being able to view their final course grade, and that a prompt would ask students if they would like to opt out or in to completing the evaluation;
- If the student opts to complete the course evaluation, this would only occur before the final grade is viewable ensuring that students must complete the course evaluation before their grade is viewable through the online portal;
- Functional units or departments on campus would not be under any obligation to use this integrated platform for course evaluations, and that the determination to do so rests with the governance structures in place within each functional unit/department;
- This platform would place full autonomy and control of the questions, responses and managed access to the responses solely with the functional units or departments on campus currently responsible for managing course evaluations;
- Any implemented system would include data access and access attempt auditing to maintain verifiable integrity over the departmentally controlled responses to these course evaluations.

THEREFORE BE IT RESOLVED that

- The University of Vermont Faculty Senate supports the implementation of a myUVM-integrated departmentally controlled course evaluation platform.; and
- The University of Vermont should charge a joint Administration/Faculty Senate committee to develop a Request For Information (RFI) to solicit vendor proposals on a course evaluation platform to meet the desired characteristics outlined above.

Provost Rosowsky does not currently support the proposal as written. He suggests a stronger commitment from more units across campus before he invests in the software. Encouragement of more CAS departments signing on would help in the adoption of the UVM Integrated Course Evaluation.
4. ERTC Operating Procedures - Drafted and Approved by the ERTC (Spring 2018)

7.1.5.6 Educational and Research Technologies Committee.

This committee shall have the responsibility of matters related to the development and implementation of educational and research technologies at the University that guide acquisition of information literacy by students and faculty. It shall review and recommend policies and procedures relating to the planning, introduction, and use of campus-wide technologies, including computers, communications, electronic data handling, and instructional media. The committee shall assume responsibility for informing the administration of educational and research priorities and needs related to information literacy and see that these are considered in all planning. It shall maintain close liaison with the Curricular Affairs Committee, the Financial and Physical Planning Committee, the Student Affairs Committee, and the Research, Scholarship, and Graduate Education Committee. In addition to the membership stipulated in Section 7.1.2.1a and 7.1.2.3, each of these committees shall appoint one of their elected members to serve as a voting member on the Educational and Research Technologies Committee. The committee shall maintain close liaison with appropriate administrative offices in its areas of responsibility and with the Educational Policy and Institutional Resources Committee of the Board of Trustees.

7.1.2.1 Elected Members.

a. Number. Except as described below, standing committees and standing subcommittees shall be composed of at least one member from each of the major academic units (the Colleges of Arts and Sciences, Agriculture and Life Sciences, Education and Social Services, Engineering and Mathematics, and Medicine; the College of Nursing and Health Sciences, Business Administration, and Natural Resources; and the Officers of Extension, and of the Libraries. A unit with more than 200 full-time eligible faculty members may elect one additional member to each standing committee and standing subcommittee.

b. Eligibility. Any eligible faculty member may stand for election by his/her college or school to serve on a standing committee except as otherwise stated in these Bylaws.

c. Term. Members of the standing committees shall be elected for three years or as otherwise stated in these Bylaws, starting on July 1. Terms shall be staggered so that approximately one-third of the standing committee members shall be elected each year.

d. Election. The election of standing committee members shall be the responsibility of the individual college and school faculties. Elections shall be held no later than April of each year and shall be conducted by secret ballot distributed to all eligible faculty members of the college/school. An opportunity must be provided for all eligible faculty members to volunteer to run for election to Senate standing committees. The Faculty Senate shall supervise the elections of Senate Standing Committees; concerns regarding election irregularities must be communicated to the Senate President by May 1.

e. Vacancies. If a standing committee member vacates his/her seat the vacancy shall be filled by a special election within the unit from which s/he was elected. The term of a member under these circumstances shall commence immediately and shall normally be for the unexpired term of the regularly elected member. If a standing committee member is granted leave for one year or less a replacement shall be elected by a special election within the unit from which s/he was elected to take the absent standing committee member’s seat for the period of the leave.
f. **Attendance.** A standing committee member absent from three committee meetings in a calendar year in the absence of mitigating circumstances will be considered to have vacated his/her seat.

g. **Members of the Senate.** A standing committee member may also serve as an Elected Senator. Standing committee members are members of the Senate without vote if not also an Elected Senator.

**Meetings (Dates, Times, Location)**

- The Educational & Research Technologies Committee meetings are generally held on the second Wednesday of each month from 8:30 - 10:00 a.m. in 427A Waterman.
- It is the responsibility of the ERTC Chair to notify all members of the specific dates, times, and locations of committee meetings.

5. **Leap Frog, Expanded Section Descriptions (ESD), and EAB Updates**

The Registrar reported that Leap Frog costs between $40-$45K for the annual subscription compared to UVM’s current system, DegreeWorks at $12K. Visual Schedule builder is another option, as it is an online scheduling tool. The Registrar reported that she and colleagues would attend a vendor fair to research other options. The plan is to make a decision by the end of the academic year. Expanded Section Descriptions are desired features in a new platform. If this is not feasible, ESDs can be included in the Banner 9 upgrade.

The timeline for the new advisement tool, EAB, is scheduled for June for students and August for advisors with a big roll out in the fall. A campus-wide roll out meeting is scheduled for later in the semester and includes these features:

- All 1st year students will have access to the software on their phones.
- Deans office will have access to track student progress
- Training and technical assistance will be available for faculty.
- Tutorial videos will be accessible to students and faculty.
- Interactive 4 year plans with the student, will have links to important information.
- More capability for students to see faculty schedules and book appointments
- Working on a texting option
- Can self-identify and can get information based on those selections.

6. **Synchronous Learning Platform**

The Chief Information Officer requested that the Center for Teaching and Learning (CTL) coordinate a committee with the charge to recommend an enterprise-level synchronous learning platform for UVM. Specifically, the committee’s charge is to:

- Identify the system requirements based on university’s goals and the needs of faculty and administrators. - Status: Complete
- Define a Request for Proposal (RFP) criteria - Status: Defined Request for Information; hosted 3 vendor information sessions in May 2017 (Cisco, Skype for Business, Zoom)
- Work with Procurement Services to initiate the RFP process - Status: Postponed to become more closely aligned with ETS’ “Unified Communication Systems” selection process
- Based on the RFP responses, evaluate leading synchronous platforms, using the defined criteria - Status: Not initiated; pending results of Unified Communication pilots
• Recommend a synchronous platform that best meets UVM needs, based on the evaluative process - *Status: Not initiated; pending results of Unified Communication pilots*

7. Unified Communications Updates
The Unified Communications team is finalizing their requirements document. Our synchronous learning platform feature list will be integrated into that requirements document.

- This requirements document will be used to evaluate 2 products: Skype for Business (SfB) and Cisco.
- Both SfB and Cisco are currently being tested in several use-case environments. Faculty testers need to be recruited for expanding testing of both solutions this spring. ETS and the CTL are working together can provide training for faculty testers. We estimate the time commitment for faculty testers will be ~10 hours per application.
- Cisco testing will begin in March. Faculty testers need to be recruited, ideally the same faculty testing SfB.
- CTL staff have been testing Zoom Rooms. Based on the committee’s feedback and our research, we feel that Zoom is likely the best candidate for a synchronous learning platform, if SfB or Cisco do not meet the necessary teaching criteria. We have discussed Zoom with UVM College of Medicine, UVM Extension, Davis Center/Conference and Facilities, University of New Hampshire, and University of Kentucky (all Zoom users).

8. Blackboard (Bb) Accessibility Pilot
Bb Accessibility will help the University become more compliant with the ADA. There is a three-minute informational video on Ally that can be found at: [https://www.youtube.com/watch?v=FmUTP!4sujo](https://www.youtube.com/watch?v=FmUTP!4sujo).

UVM has negotiated a one year no cost pilot. Approximately 20 faculty were recruited to participate in the pilot for the purpose of giving constructive feedback on Ally. Video files are under consideration but a date has not yet been confirmed.

9. Document Camera Survey
A university-wide document camera survey revealed that a number of faculty and staff utilize document cameras on a regular basis. The university will continue the use of document cameras on campus. They have purchased 25 new units and will start replacing them across campus. All GP classrooms will have a document camera. Andrew Horvat would provide training if faculty if requested. The new generation of document cameras include new features that may be valuable to faculty.

10. Event Management System (EMS)
EMS has a detailed description of all classrooms on campus including photos of room layout. Awareness and accessibility of the EMS Portal is not common knowledge to many faculty. The ERTC Committee discussed methods for easier accessibility to the EMS Portal. Perhaps the EMS link can be included in more visible places on the UVM website.
11. Transition from HyperResearch to NVivo Qualitative Research Software
J. Dickinson and Julia Russell reviewed site-wide licensing of qualitative software at UVM and discussed the possibility of switching the site license from HyperResearch to NVivo. Anecdotal evidence suggests that widespread use of NVivo would ease cross-institutional collaborations and is recognizable to funding proposal reviewers. A survey of UVM’s qualitative listserv indicated strongest support of NVivo. A motion was made to support the transition from Hyper Research to NVivo at the University of Vermont and was unanimously approved by the ERTC committee.


Grossman School of Business:
Business school graduates are expected to be proficient in the use of information technology. To support this goal, all students enrolled in the Grossman School of Business at the University of Vermont are required to own a portable computer. At a minimum, the computer must be able to run these programs:
- Microsoft Window 10 Enterprise
Apple portable computers are supported but they must have:
- A minimum of 80GB free space
Minimum Required Hardware Specs (PC or Mac):
- Intel Core i3 processor
- 8 GB of Ram
- 128GB Solid State Drive (SSD)
  Recommended Hardware Specs:
- Intel Core i5 Processor
- 16GB of RAM
- 256GB Solid State Hard Drive (SSD)
GSB provides high quality technology support for its students. There is a team of staff that can assist with questions regarding software / hardware or use of Kalkin computer labs.

Larner College of Medicine:
Information Systems (COMIS)
The Larner College of Medicine has built an information system which connects computers, provides shared software and data, and provides access to the Internet and Internet2. This system provides students, faculty and staff with a sophisticated level of connectivity and services. The system is housed on the UVM networking backbone within the uvm.edu domain, which means that web and e-mail addresses on the system will contain "uvm.edu." The system is designed to provide access to The University of Vermont Medical Center system as well.
Key Features of the System - http://www.med.uvm.edu/techservices/comisoverview
- Integration with the UVM network plus connectivity to the information systems of FAHC;
- Reliable design that ensures system availability;
- Easy access on and off campus;
- A "baseline" desktop unit featuring an integrated suite of Microsoft tools and related programs;
- Accessibility through computers other than the baseline unit;
- An electronic "home" for every user;
- A support system that provides ongoing assistance.

As medical education, research, and clinical care has moved towards greater use of information systems, it is more vital than ever that effective, efficient, and secure tools are in place and reflect current and future capacity. This system is designed to address this need.

**Computer Hardware**

**Recommended Hardware**
The Larner College of Medicine recommends Dell and Microsoft business machines for our computer standards. Dell Latitude for a laptop, and Microsoft Surface Pro 4 laptop/tablets and Dell Optiplex for a desktop.

**The current models are:**
- Desktop: The Optiplex 7050 Desktop is the model that we recommend. This is the standard business unit that can be configured with our baseline. **Optiplex 7050** model is a standard business machine that has an Intel processor, DVD, 8 GB or ram, and a 4 year warranty. The Latitude E5480 and E7280 laptops are the business models that we recommend and support.

**College of Education and Social Services:**
Students in Teacher Education Programs in the College of Education and Social Services have recently reached a turning point with respect to computer usage. State regulation requires that every student in every teacher education program produce a professional portfolio that demonstrates the depth of their knowing and the breadth of their doing with respect to knowledge and skills across six specific categories of professional expertise.

During the Fall of 2006, teacher education programs began to utilize a web-based system of building professional portfolios. Faculty determined that students pursuing a professional teaching career should have their own laptop computer from the beginning of their professional preparation. Most classes now include technology requirements and each teacher education program requires the gradual acquisition and critical reflection upon the data and documents of a student's professional education. This includes lesson plans, webquests, scanned examples of student work, and self-designed innovative assessments of teaching and learning. The system we recommend will enable students to work across platforms with a variety of innovative text and visual software creating for them an embedded and seamless education in technology literacy.

The computing needs of teaching professionals in the College of Education and Social services include more efficient academic learning mediums like word processing and presentation software, as well as more innovative software that enhances concept mapping and critical thinking, video production, web management, and digital photo processing and production, and data analysis.
13. TIF Funds
The Student Technology Fee of $77 and is one part of the University Comprehensive Fee. This fee is paid by undergraduate, graduate and continuing education students (by percentage). This fund nets approximately $185,000 a year. Approximately 50% of these funds are used for classroom media and general classroom upgrades. In the past, the funds have been used for wireless upgrades, Blackboard helpdesk and expanded virtual machines. These funds are used to directly benefit large populations of UVM students. The ERTC has recommended that a survey be administered to students to determine what improvements students would like on campus.