Executive Summary
We were tasked by Vice President Ellen Horsch to investigate the work-life balance issues among the faculty, staff, postdoctoral staff and graduate students at Michigan Technological University. We met at least once a month for several months to discuss our progress, and coauthored this report at the end of the summer. We compiled existing survey and interview data and conducted targeted surveys and focus group meetings. From this preliminary data set we formulated a list of key issues that were common concerns among all groups.

These issues are:
● Inadequate mentoring between supervisor and supervisee
● Inadequate IT resources to make opportunities for flexible work schedules and locations feasible
● Excessive expectations on faculty and staff to master new software
● Inconsistent flex time policies (in availability and enforcement)
● Inadequate child and elder care availability
● Weather policies that create additional burdens

We then read and reviewed over a dozen books, websites, and organizational systems to identify potential solutions for each of these issues. Jennifer Lind-Riehl also attended the annual meeting of the College and University Work-Life-Family Association (CUWFA) from May 7-9, 2014 in Baltimore, MD. The solutions we have identified range from minimal requirements of time and resources, to an entire restructuring of the workplace.

Recommendation: Form a permanent committee on work-life balance issues. This committee would be responsible for periodically collecting information to ensure that progress towards university-wide goals are being met, that policies are being implemented equitably, and that units and programs have adequate resources to maintain their work-life balance efforts. The committee would also maintain resources such as a website and reading library on work-life balance issues and solutions.

The following five points would be good initial tasks for this work-life balance committee:

1. Implement rigorous training programs for mentoring. These programs would give supervisors and advisors the information and skills needed to successfully manage a
variety of personality types and teams. The training would emphasize communication skills and setting clear roles and expectations.

2. **Reorient towards rewarding results instead of time.** Following the philosophy of a Results-Only Work Environment (Ressler and Thompson 2010, 2013), many of Tech’s employees could work on the same model as faculty do at present, where productivity is monitored and rewarded instead of time. This would give employees far more control to solve their work-life balance issues (such as child and elder care), instead of flex-time policies that still place the onus of monitoring on the supervisor as well as retain the focus on time rather than results.

3. **Task an IT person to monitor the “landscape” of software and hardware.** This person would stay closely attuned to the number and variety of software that faculty and staff are required to use, and which are routinely versus seldomly used. The goal of this position would be to streamline the software used by various community members based on the tasks they do, and review the impact of new software on the software landscape (both positive and negative).

4. **Encourage the University Senate to pass a more reasonable weather policy.** The dissatisfaction with the current weather policy was unanimous and obvious. We recommend that the University Senate take up this issue and write a policy that will better serve its constituents; we encourage the Senate to work on this policy with representatives from staff unions and the Graduate Student Government. If the university transitions to a ROWE system, a weather policy is no longer necessary (Ressler and Thompson 2013).

5. **Conduct an audit of tasks and roles for all employees.** There is a widespread feeling among faculty and staff that they are increasingly asked to cover more tasks, often with inadequate training and time to perform them. An audit will identify areas where employees are poorly matched with tasks or overburdened, so that the work can be better assigned (to a new hire, if necessary, such as a trailing partner of a current employee). This may be a good focus area for Lean and/or Kaizen activities.
Introduction

All institutions have work-life balance issues, whether they are driven by the demand schedule set by customers, the availability of resources, production cycles, changing expectations of domestic responsibilities, or institutional philosophies on the employer-employee relationship. Some of these issues are truly unavoidable, but advancements in technology continue to erode the traditional rationale for dealing with these issues and solving them, and improving access to effective IT solutions for faculty, staff, and students can go a long way to improving the quality of work-life balance. While IT resources are not free, often the increases in worker productivity and decline in voluntary turnover will more than offset the investment in the IT infrastructure that allows workers to create a better balance for themselves (Meisel 2014).

However, IT infrastructure can only go so far to resolve these work-balance issues. The landscape of the workplace has changed greatly over time not only with technological advances but also with cultural changes in family structure (Philipsen and Bostic 2010). The Michigan Tech community must deal with a wide diversity of life issues at different life stages, from dual-body problems (spouse pairs that both need employment in the same town), to the care of young children, sick dependents and relatives, and aged parents. It is not feasible for Michigan Tech to solve all of these problems for its employees. What Tech can do however, it change the culture of work that currently makes it difficult or impossible for employees to find work-life balance (Philipsen and Bostic 2010). If Tech reorients its focus on results and productivity, rather than on time, employees can make better decisions on how to allocate their time between work and life (Ressler and Thompson 2010). This also has the added benefit of allowing Tech to focus on what really matters; a job well done.

So now we must ask what Michigan Tech can do to take the lead in solving these issues. In general providing a positive working environment is key (Maravelas 2005). Although we generally assume that, by the time a faculty member or staff member has risen to the position to be a supervisor, they have accumulated the necessary expertise to manage their supervisees well, quite often this is not the case. Poor communication and unreasonable expectations can add additional stress and time conflicts to an already busy life. Better mentoring programs for faculty, staff and graduate students can reduce the strain of the “learning as you go” model that can drive turnover and generate ill feelings towards Tech and its community.

Problems Identified

Summarizing across all information sources, we identified six major issues that were common to almost all of the groups we surveyed. Within the groups, we also learned of problems that are
specific to smaller subsets of employees; for many of these issues, the group surveyed had feasible solutions to these problems that could or should be implemented.

**Major issues**

1. **Mentoring**

   Across the board, people we talked to expressed some dissatisfaction with their working relationship with their direct supervisor, whether it was faculty members having difficulty navigating the expectations of them from their unit head, graduate students uncertain about what they are expected to accomplish (and when), and staff struggling with completing their tasks under a lack of guidance. Primarily this is a breakdown in communication between supervisor and supervisee, but communicating across these divides can be difficult. While few would disagree with the importance of good mentoring and clear lines of communication, it is obvious that many are struggling to put these into practice.

   For example, through the NSF ADVANCE grant, Tech instituted a mentoring program for junior faculty to improve tenure and retention rates. However, the intensity with which the program is implemented is inconsistent across units, and junior faculty are not instructed on how they should identify a mentor (or even whether they are the ones who should do so). Furthermore, mentors are not provided any guidance or training on how to mentor junior faculty; it is assumed that since they themselves achieved tenure, they know how it is to be done and how this can be communicated to their mentee.

   Likewise, since faculty members successfully navigated the path from undergraduate student, to graduate student, to degree completion, there is an implicit assumption that they know how to mentor their own graduate students, and that the path they took and the strategies they used to navigate that path will be appropriate or feasible for their graduate students. Those faculty who suffered but persevered under a lousy major advisor may know how not to advise grad students, but still lack insight into what they might do instead.

   The lack of guidance, clear expectations and responsibilities, and communication between supervisors and supervisees results in a great deal of time wasted and induced stress. Improving mentoring across the community would go a great way to easing one of the major generators of work-life balance difficulties and likely improve employee relationships as well as productivity.

2. **Information Technology**
Advancements in computer speed, memory storage, and the internet have allowed workers to complete their tasks anywhere, any time. This flexibility can give employees a great deal of control over how they allocate their time between work and life, ensuring that they can meet their obligations in both realms without intense conflict. However, many of those we talked to identified weaknesses in Tech’s IT infrastructure that made it difficult to use IT systems (and flex-time schedules) to their full effect. Remote access, wireless reliability, and other technical issues can cause a great deal of downtime when workers were planning to complete tasks, which then must be completed when the infrastructure is working at which point they may have other responsibilities that also need to be addressed.

These advancements also come at a cost. Faculty in particular noted an expectation among students that emails would be answered immediately, leading to the widespread belief that feedback should be generated 24/7. Likewise, staff mentioned that the stress of being “always reachable” meant that they too experienced significant strain and an inability to step away from their work to focus on their families, health and social lives. Our community needs to have a conversation about what this 24/7 connectivity does to us and our work-life balance struggle, and how we might fight the urge to permit this evolution in our communication.

Furthermore, many faculty and staff noted that new software programs create a constant burden (in terms of time and energy) to learn; often software is introduced with little warning and little choice for adoption or alternatives. New software sometimes has a steep learning curve, and is only sometimes accompanied by training sessions (which of course require more time). Faculty are increasingly asked to do tasks for which they don’t have time and are poorly trained (accounting, admin), and a lot of their time is spent trying to learn procedures (accounting, SPO) and software (gmail, Canvas, Image Now, Banner, Banweb, etc.) that are constantly changing in addition to their main tasks (research, teaching, mentoring).

3. Flex-Time and Family Leave Policies

Flex-time is one of the most commonly offered solutions to work-life balance issues in workplaces. With the help of technology, workers using flex-time systems can set some or all of their work hours and complete much of their work in a remote location. This flexibility is believed to provide the employee enough control and reduce work-life balance issues, however the system is still predicated on keeping track of hours. Faculty positions are a good example of an alternative system, one based on productivity instead of time. Professors receive tenure, promotions, and raises not based on the number of hours that they work, but by their products; journal articles published, grants funded, courses taught, graduate students successfully degreed, etc. They have the flexibility to work many hours in the weeks before critical deadlines (e.g.,
grant application deadlines), and can drop down to fewer hours in the weeks after to recuperate. Although their time is a bit more constrained by taking and/or TAing classes, graduate students also operate under this system.

However, even within these groups working on a results/productivity model, there is often a cultural expectation that they will be there during “regular work hours”. This also goes back to unclear expectations and communication. For example, even though graduate students may operate under a results only work environment, may have stated that their advisors expect them to be in the lab or office during regular business hours, implying a focus on time and not results. Some faculty have also expressed subtle pressure to be “seen” in the office during regular business hours at least during their 9 month appointment time. These cultural pressures to behave according to time-oriented cultural expectations while working in a results-oriented position can generate work-life balance issues as these groups try to meet the expectations of both systems (Ressler and Thompson 2013). Our community should explicitly address these “face time” expectations and determine whether they help or harm us (that is, do they qualify as “sludge”, as Ressler and Thompson (2010) define it).

Faculty and staff found that family policies also suffer from a lack of consistency and transparency. Tech has recently instituted a maternity leave policy, and this is an important first step, however the policy does not include paternity leave (further emphasizing the stereotype that women are primary caregivers). Additionally this new policy has been difficult for faculty to navigate with their department chairs. There is a perception that these leaves may also be detrimental to promotion and tenure. For non-tenure track faculty, postdocs, visiting researchers, and others, the family leave is even more difficult to navigate.

In the Potential Solutions section we will describe the shortcomings of the traditional system of hour-tracking (rather than productivity or results tracking). However, staff members in particular has voiced concerns about the way the flex-time policies are implemented at Tech. In particular, many perceived inequities in the policy; that it is not available to everyone, and it is inconsistently enforced. Leaving staff to negotiate flex-time policies with their supervisors on a case-by-case basis has created an uneven and opaque system and this impacts the cohesiveness and good will within and between departments (Maravelas 2005). Implementing a results-only system for only some units or people are likely to lead to the same complaints and therefore not fix the problem. However, if the university sets up to change the current work culture to reflect its understanding of the complex responsibilities faced by its employees, it may very well see productivity go up and retention rates fall as at other more progressive universities (Philipsen and Bostic 2010).

4. Care for children, sick relations, and elderly parents
Family members used to be the traditional source of care for very young, very old, and sick relatives. However, families are not structured as they used to be with one parent at home (Philipsen and Bostic 2010). Additionally, families are living much further apart than in the past, and this is particularly true for Michigan Tech; many faculty, staff and graduate students are not from the area and do not have substantial family support in the immediate vicinity. This places a very large burden on employees to find this care in the community. However, many parents emphasized a substantial lack of access and availability, citing long waiting lists for infant care, a lack of child care in the gaps between the Michigan Tech and local school systems schedules (e.g., winter and spring break, teacher in-service days, the last two weeks in August before Tech starts). Snow days also create an issue for many parents, as Tech is inevitably still open. Often the weather is too treacherous to drive kids to others’ houses or to pick up and drop off babysitters. Additionally, for those employees who do not have flex-time available, they often use up most or all of their sick and personal days to cover child care or elder care gaps. Time spent traveling to sick or elderly relatives’ houses also comes at a cost to sick and personal day accounts.

5. Weather Policy

Michigan Tech’s current weather policy was consistently one of the top issues brought up by all groups. This is partly due to the severe winter we experienced last year, but also due to the hardship that many faculty, staff, and students faced. Those who do not live in Houghton must travel along unsafe roads. The current Tech policy is to remain open as long as US-41 is open, however most commutes do not start on US-41. Graduate students without cars must either walk, carpool or try to use public transportation, and some international graduate students may have little to no experience with winter dangers such as frostbite. In the past few years, many or most of the weather cancellations at Tech have occurred when Tech is already open for business in the morning, and the cancellation has delivered with little to no prior warning; in the case of last winter, the warning by email was 3 minutes. This creates havoc for everyone: many classes and labs are in session at the top of the hour when these last-minute closures occur (e.g., 70-minute classes); parents must rush to pick up their children at Little Huskies (which closes when Tech does); students without cars must find transportation home and students who commute will have already made the dangerous trek to the school before learning that it was closing. Everyone we talked to strongly demanded much earlier cancellation decisions, with the philosophy that it was far better to cancel earlier than necessary than too late.

The weather policy is not synced with that of the local school districts, and so this creates the potential for snow days (often not announced until that morning) for young children who will
then require care, but leaves faculty and staff precious little time to find that care. Although the local school systems take a more precautionary approach to weather than Tech would (which is reasonable, given the ages of the students), most Tech employees we talked to felt that Tech’s policy was unwise and created substantial (and unnecessary) work-life burdens and safety issues for the community.

6. Inadequate staffing and personnel

Particularly among faculty and staff, a common refrain was that work overflowed into personal time due to the sheer amount of work that needed to be completed. Furthermore, faculty cited the addition of tasks and duties that used to be the responsibility of support staff, and often faculty must now do these tasks with inadequate training to do them properly (leading faculty to spend more energy and time on tasks they must repeat). Duties that have been shifted to faculty, that faculty rarely do, are often the most problematic, as faculty must spend time to refamiliarize themselves with the forms or processes and check for changes or updates. These tasks take time away from faculty to do the things they feel that they were hired to do: develop and deliver courses, mentor and advise students, write grant proposals and papers, and present their work at conferences. Staff also cited inadequate training as a source of stress. These are indications of insufficient personnel; while downsizing personnel is often seen as a cost-saving measure, the increased burden on remaining personnel often leads to poor performance, health issues, and burnout, which in the long run also represents a cost to the organization in reduced productivity and higher turnover rates (Maravelas 2005).

Minor issues, issues specific to subsets

Female faculty

As mentioned, one of our data collection efforts involved a lunch focus group with the Women In Science and Engineering (WISE) faculty group. In addition to the major six issues identified above, this group also identified other issues that we detail here, either because they may only affect this subset of the Michigan Tech community, or because we view them as less complicated and more easily solved problems. Indeed, this group provided potential solutions for many of the issues they raised, and we include them here, under the broad headings of facilities, opportunities, and tasks.

Facilities
Exercise facilities
Faculty have few spaces or opportunities on campus for exercise that is appropriate to their age and fitness level. We recommend that SDC staff continue to develop courses geared towards the older faculty and staff population; slow yoga and aqua-fit are a good start but insufficient.

There are also no family locker rooms; children of the opposite sex are strongly discouraged from using locker rooms with their parent after they are older than 6 (e.g., 7 year old sons with their mother). Some children are not comfortable using these facilities on their own, and cannot join parents in activities that are traditionally family-oriented in some cultures (e.g., sauna). There is a paucity of opportunities for young children for free sports play outside of classes and sports camps (children older than 12 may use the fitness center and pool). These areas would be especially helpful for parents of young children when schools are not in session. We recommend adding family facilities to better accommodate the community.

If it is not feasible to build in programming and facilities for older patrons and families, we recommend investigating the potential for providing financial support for those members to use other facilities in their communities.

Networking and hosting
There is no good place on campus to take visiting researchers, faculty job candidates, or to have a working lunch with colleagues. The MUB is completely inappropriate for these events. Reinstating a faculty club, or providing some space for these meetings, is sorely needed.

Lack of changing tables in restrooms
Diaper changing facilities are important for parents, both employed by Tech and visiting. Tables such as the ubiquitous “Koala Kare” tables that can be found in airports and restaurants are obvious solutions. These can be placed in all bathrooms (not just women’s!) to assist parents with young children.

Opportunities

Employment for partners
The lack of employment opportunities for “trailing spouses” is widely known in the community (Philipsen and Bostic 2010). Dedicating an FTE to dual-hire and spousal accommodations was an excellent decision, but more can be done. Many spouses are interested in part-time or flex-time work, and many of them have academic experience and could make significant contributions to Tech. Quite a few faculty we talked to felt that their academically-oriented spouses were “underutilized” at Tech, and they would like to see a better-developed career track for adjunct professors, lecturers, etc.
**IT responsiveness to graduate students**

Several faculty described anecdotal experiences with IT providing slower service to graduate students who reported computing problems; when their advisor provides a follow-up request the response time is faster. In many cases, graduate students are working on IT issues to save time for their professors, which is negated when the professor needs to follow up. These faculty would prefer to have grad student and professor IT-help messages given equal priority, if they are not at present.

Tasks

**Communication**

Many faculty feel that email is abused and leads to bleed of work into non-work times (expectations of availability 24/7). Along with expectations from students that faculty will have a 24/7 response time, faculty increasingly face a deteriorating student culture, particularly in terms of professionalism, manners, and work ethics. Few programs on campus train students how to write emails that communicate their needs while being polite and concise; the Engineering Fundamentals program is one exemplary example on campus. The inability of students and faculty to communicate leads to additional time spent on simple communications.

In addition, faculty and staff receive numerous emails throughout the day that are poorly targeted or too long. This also decreases productivity in faculty because they have to search for what information is truly important or relevant. As mentioned below, Tech Today is one of the few venues that was mentioned multiple times as an information source that “does it right”; information is presented in digest form once a day, in a short summarized style, with links provided where more information can be accessed.

Solutions for these problems (particularly email use) include:

- configure Gmail to behave better (search feature is poor, “foldering” could behave better)
- Digest emails we get now (Tech Today is a good example) set to once a week. Put a short summary at the front for long emails, then provide a link where more information can be obtained (again, similar to Tech Today). This would be particularly helpful for emails from the Provost’s Office, the Graduate School, the VP of Research Office, Accounting, and Sponsored Programs.
- Place important updates or announcements on centralized web sites instead of using email (grant calls, deadlines, and format changes on SPO website; updates on a “Faculty” website with FAQ and announcements (e.g., University Senate meetings))
• Reduce student expectations of having emails answered immediately; increase tolerance for “downtime” (particularly on nights and weekends, and over holidays). This should be done during orientation for first year students, new graduate students and faculty, etc. Provide examples of proper email etiquette in orientation sessions as well, especially key information that is needed (e.g., class name or lab section, specific question or issue, expectations of receiving a response, etc.). Faculty can help here by providing clear information in syllabii and other venues to explain their general “turnaround time” on emails (e.g., 24 hours), graded assignments (e.g., 2 weeks), and other communications. Students can be encouraged to abide by those statements and not send multiple emails or requests within that time frame.

Service
Female faculty felt that their time spent on service tasks is excessive and inequitably distributed (mostly to women or junior faculty). They would like to see a more equitable distribution of tasks and service commitments across faculty levels and genders, both respect to amount and subject area (for example, diversity and work/life are not only issues for women!). This is a very common observation that is made in many academic institutions, and solutions to this problem may be found at other universities (Philipsen and Bostic 2010).

Accounting
We encountered widespread frustration and confusion among faculty regarding accounting-related tasks. Most faculty have no accounting training and find the monthly reports generated by the Accounting office to be difficult to understand (even after attending training workshops). Often finding the correct person to answer a question takes several calls; most of the frustration involves forms, accounting codes, and justifications.

Possible solutions include:
• reduce or simplify the justifications needed,
• tweak the Access Online (or new software) to allow us more space for justifications/descriptions, with spaces asking specifically for the information needed (e.g., travel destination, traveler’s names, dates, etc.)
• don’t send multiple documents about the same indexes each month; most of us only understand the document that lists the index balance (remaining funds)
• Set better firewalls on indexes to reduce mistaken charges by unauthorized individuals (e.g., when index numbers are not typed in correctly). Faculty often manage several to many accounts, and are inundated with account statements and don’t have time to check through all of them each month…. Errors in charging can go for months before being discovered, take a lot of time to set right.
reduce the amount of accounting the faculty is asked perform and allow those who are hired for this purpose to fulfill these tasks.

Other issues discussed included:
- Demanding expectations of department (norms and pressures), particularly surrounding tenure expectations (the general sense was that these have been steadily getting more onerous) (Philipsen and Bostic 2010)
- Poor communication across campus (admin to/from faculty, faculty to faculty, faculty> to/from students) was a common complaint. This results in time wasted, increased stress, and damaged professional relationships.
- High faculty turnover (especially junior faculty) was also a concern, resulting in lost friends, colleagues, and support networks.
- Hard to balance teaching, research, and service (expectations for all three too high)
- Pressure to leave town on sabbatical makes taking sabbatical difficult for faculty with small children
- Inefficiency in Sponsored Programs Office (time chasing signatures for forms, time correcting mistakes to budgets, time correcting grants that come back as non-compliant)

**Graduate students**

Another subset of the community for which we have more detailed information comes from a survey done during a professional development workshop organized by a graduate student group in 2010 as well as an interview with a graduate student conducted by Audrey Mayer. This individual not only identified issues that may be specific to his/her group, but also identified potential solutions. The three main issues that were recurrent topics in both the 2010 survey and the interview were: lack of or inconsistent guidance and communication, belittlement of outside work responsibilities, and a lack of or inconsistent levels of support (financial, professional and emotional).

**Guidance and communication**
A general trend in surveys of and discussions with graduate students has been that the level of mentoring and communication between them and their advisors varies greatly. Students cited poor management and lack of communication concerning goal setting and time management by some advisors that contributed to their uncertainty of what was expected of them and by what time. For example, the question of how to prioritize coursework and research and/or teaching responsibilities was recurrent. Inadequate guidance led to increased feelings of stress and failure, which eat away at productivity by creating a negative working environment (Maravelas 2005).
Finally, some students often felt that they did not even know if they were doing well because of lack of feedback on their performance from their advisors. These failures can impact advisors as well who depend on their graduate students to further their own research endeavors and to obtain continued support in the form of grant money. In turn, this has a negative impact on research productivity at the university as a whole. Overall, the most commonly suggested solution was to provide mentoring and management training for faculty advisors.

Furthermore communication between graduate students was also cited as being lacking. Specifically, graduate students expressed a desire to have mentoring exist between more senior graduate students and incoming ones. In addition, students expressed the need for more feedback between students as well as between advisors and student.

\textit{Student or Employee?}

Many students also expressed confusion on whether their advisor is supposed to be their mentor or their boss. This can lead to students feeling that they have no ability to negotiate performance expectations and must just do what they are told. Not having a clear expectation of whether you are a student or an employee also raises questions about student holidays, sick and vacation time, and required work hours. These questions are often addressed in very vague ways by the graduate school or advisors, but do not resolve the uncertainty among the students. Students also expressed concern over differential treatment on these issues and several asked whether it is truly fair to the students if, for example, one advisor allows their students to take the Thanksgiving holiday break and another does not or one student is never allowed to take vacation time and another is. Clear and specific expectations from both the school and advisors and explicit communication of these expectations to students is needed.

Many students expressed worries about burning out during the first two years as some students are expected to conduct research, teach, and take courses. Students also feel that they are “locked in” to their advisor early on and that there is little to no mobility for students to move across advisors, projects, or subjects without arousing ill will. This can have a negative impact on student productivity if they continue to work on a project they are not interested in or for an advisor that they do not get along with. This is partly owing to the structure of external support (in the form of research assistantships) to graduate students currently that associate funds with a particular faculty member. Some schools do provide a year for graduate students to rotate among labs before committing to an advisor (e.g., Biology department at Vanderbilt University).

\textit{General work-life balance}

Graduate students comments on questions about work-life balance ranged from resigned acceptance to extreme frustration at the overall common view that graduate students are expected to devote all of their time to their research and teaching responsibilities, and little or no time to
their lives. In particular, most students voiced concerns about balancing family life with work and felt that they had to choose between the two. Students with families feel particularly alienated by the graduate school atmosphere for this reason and expressed a strong desire to see family life treated as importantly as work life. This is an issue that extends far beyond Michigan Tech, and is driven by the current structure of academic advancement (both graduate student to professional, and untenured to tenured professor) (Philipsen and Bostic 2010). The best interests of graduate students are often at odds with those of their faculty advisors, both here at Tech and at many U.S. higher education institutions (Philipsen and Bostic 2010).

It was also commonly mentioned that graduate student orientation has a very negative tone and cements the mindset that “that’s the way it just is” for graduate students. This in combination with little to no discussion about work-life balance generally occurring between advisors and their students leaves many students feeling that any activity outside of work must be secondary to their work responsibilities. The negative tone set by the graduate school also makes it less likely that students will voice their concerns or problems to their advisors or anyone else in the administration. This can have an impact on student turnover and graduation rates (Maravelas 2005).

**Recommended Solutions for Six Major issues**

Our recommendations described below represent structural, programmatic, or technical changes that range from simple to highly complex, and require relatively few resources to highly resource intensive.

1. **Form a permanent committee on work-life balance issues (structural change)**

   There must be a permanent, high-level committee that is dedicated to advancing work-life balance on campus. The committee should develop targets, collect data to assess progress towards these targets, routinely survey the landscape of work-life balance advances (such as attending conferences) to identify new solutions, and coordinate work-life balance-related efforts across campus (especially the development of mentoring programs). One of the policy-implementation tasks of this committee should include random checks of units that policies are enforced transparently, fairly, and equally, particularly flex-time and family leave policies, and service commitment distributions across faculty. The committee should also routinely conduct widespread surveys and interviews to identify issues and solicit solutions from entire Tech community.

   This permanent committee needs to be supported by dedicated funding and support staff. It should be representative of the community, including members from faculty (tenure-track and non-tenure-track), staff, postdoctoral and other researchers, graduate students, and
representatives from IT (preferably someone in the IT governance group), Human Resources, one representative from each of the Vice Presidents’ Offices, the Center for Diversity and Inclusion, and Institutional Diversity. The term of service on this committee for faculty, staff, researchers and students could be 2-3 years with a primary representative plus an alternative (similar to the University Senate) to allow for proper continuity. The committee would need dedicated administrative support to collect survey data and monitor policy implementation, among other tasks.

The following five points are a mix of structural and technical solutions, and would be good initial tasks for this work-life balance committee:

2. Implement rigorous training programs for mentoring (programmatic change)
Our study is not the only one that has highlighted the dire need for mentoring programs on campus; the NSF ADVANCE program also pushed academic units to develop mentoring programs for junior faculty. However, the mentoring programs for junior faculty have proven to be problematic, as they are highly variable across units and provide no training for mentors. In some units, department heads assign mentors to incoming junior faculty and do not track whether these faculty ever meet. Both mentors and mentees need support and guidance to build effective mentoring relationships, and this support is entirely lacking on campus at present. These support programs would give supervisors and advisors the information and skills needed to successfully manage a variety of personality types and teams. The training would emphasize communication skills and setting clear roles and expectations.

As noted, virtually all personnel on campus could benefit from a mentoring program: faculty, staff, and students. There are many kinds of mentoring systems that could be cultured, such as peer-to-peer systems that allow people in similar stages to learn from each other. The junior faculty in the Department of Social Sciences meet once a month to discuss various issues, and occasionally they will ask a recently-tenured professor to meet with them to discuss tenure, promotion and grant proposal topics. Peer-to-peer groups should be especially helpful for mentors.

3. Reorient towards rewarding results instead of time (structural change)
Faculty currently work on what Ressler and Thompson (2010, 2013) call a “Results-Only Work Environment”; their promotion, merit raises, tenure and awards are all based on their productivity, not the amount of time they spend working. Publications, successful grant awards, matriculated graduate student advisees, high teaching evaluations, and other accomplishments are the results by which faculty are assessed. Following the philosophy of a Results-Only Work Environment, many of Tech’s other employees could work on this same model. This would give employees far more control to solve their work-life balance issues (such as child and elder care),
instead of flex-time policies that still place the onus of monitoring on the supervisor as well as retain the focus on time rather than results.

That said, there are clearly issues with becoming overloaded with responsibilities that can be challenging for even Results-Only employees to manage. Faculty are faced with an increasing number and diversity of responsibilities because they do not have concrete statements regarding the expectations of tenure and boundaries of their positions; accounting tasks get reclassified as research tasks and are relabelled as the responsibility of project managers (a.k.a. professors). A transition to a Results-Only system must be done with care to ensure that it is used to help employees manage work-life balance tensions, and not to downsize the workforce and pile additional tasks onto already-overworked employees. In particular, the system requires clear statements on roles, tasks, and productivity targets, including clear and explicit tenure and promotion targets. Without them, other Tech employees will join faculty and graduate students who “enjoy the freedom to work themselves to death” (Philipsen and Bostic 2010). However, the university can use examples from other successful work-life programs that effectively change work culture such as automatic tenure clock stoppage or parental leave that have to be opted out of (Philipsen & Bostic 2010). This accomplishes two things, it reduces stigmatization of outside work responsibilities and provides clear expectations between employer and employee, both of which ultimately create a more positive work environment.

4. Task an IT person to monitor the “landscape” of software and hardware (programmatic/technical change)

Faculty in particular expressed dismay at the number of variety of software programs they must navigate, wondering if anyone on campus had a “big picture” vision of what all of the software was meant to do. We believe that Michigan Tech needs a person who will monitor all of the software that is required or regularly used on campus, how it is meant to be used and by whom, whether users have access to appropriate training to use the software productively, and how each new software program will (or won’t) interface with other software programs and hardware. The goal of this position would be to streamline the software used by various community members based on the tasks they do, and review the impact of new software on the software landscape (both positive and negative) and productivity.

For example, faculty were especially vociferous about Digital Measures, expressing concern that even five or six years after its roll-out to all units, Digital Measures still was not accessing other databases properly (e.g., Graduate School, SPO) and did not accurately portray faculty productivity. Now that Digital Measures is to be used for merit raises and promotion and tenure, the error and failure of this software is unacceptable, particularly the amount of time that professors must invest in the software to add information and navigate (and correct) its output. The general perception among the faculty is that part of the failure of Digital Measures is the
lack of adequate and consistent IT personnel assigned to its implementation; the IT person we describe here would have identified these problems and developed solutions for these issues long ago.

5. Encourage the University Senate to pass a more reasonable weather policy (technical change)
The dissatisfaction with the current weather policy was unanimous and obvious. The current policy creates unnecessary havoc for almost the entire Tech community and considerable safety issues. We recommend that the University Senate write and pass a policy that will better serve its constituents; we encourage the Senate to work on this policy with representatives from staff unions and the Graduate Student Government. Again, if Tech instead transitions to a Results-Only Work Environment, a weather policy becomes unnecessary, as faculty, staff and students will use IT options and other approaches to meet learning goals.

6. Conduct an audit of tasks and roles for all employees (programmatic change)
There is a widespread feeling among faculty and staff that they are increasingly asked to cover more tasks, often with inadequate training and time to perform them. Tasks audits can use offer letters, contracts, role statements, or other documents that were generated at the point of hire, and compare them with reports on annual productivity, time sheets, or other statements reflecting the tasks and time spent on these tasks. An audit will identify areas where employees are poorly matched with tasks or overburdened, or where considerable drift in responsibilities has occurred, so that the work can be more appropriately assigned (to a new hire, if necessary, such as a trailing partner of a current employee). This may be a good focus area for Lean and/or Kaizen activities, and can take place during annual reviews. The data collected in these efforts should be reviewed by the committee to look for patterns across units or employee categories (e.g., a general drift in accounting tasks from the Accounting office to faculty and staff).

Conclusion

We are energized by the ideas and solutions we came across in this preliminary analysis, and remain convinced that work-life balance issues can be addressed and overcome given the right tools and philosophies. We hope to see our recommendations put into practice, and we are committed to helping however we can in future endeavors.
References


Appendix A: Reviewed Books and Articles
We read and reviewed several books and articles. This appendix contains our reviews in full. In the future, these could be added to a website devoted to work-life balance resources for the Michigan Tech community.

Appendix B: Notes from the 2014 Annual CUWFA Conference
Jennifer Lind-Riehl attended the 2014 Annual College and University Work-Life-Family Association (CUWFA) in Baltimore, Maryland. These are the notes that she took while in attendance. They detail some of the important resources available and trends happening in other work life departments in colleges and universities across the country.

Appendix C: Summaries of surveys, focus groups, and interviews
This appendix contains detailed results of the focus group meetings conducted by Ann Kitalong-Will and Audrey Mayer. It also consolidates additional information from some surveys of faculty, staff and graduate students conducted by other groups on campus in the past.