Online Advising Tool Implementation Recommendations
Submitted by Members of the Online Advising Tool Working Group

Version 1.2 - June 3, 2007

Version 1.0 – Released May 25, 2007
Version 1.1 – Updated June 3, 2007 with comments/updates from Working Group members
Version 1.2 – Merged Functional Specifications spreadsheet as Appendix C
The Online Advising Tool Working Group, charged by the Vice Provost for Information Services, met to explore and deliver information to guide the development of a comprehensive and sustainable online tool for advising at the University of Kansas (KU). To achieve this goal, the working group met for a series of weekly meetings and smaller working groups to address the deliverables outlined in our charge. Based on conversations, review of data collected during campus interviews in the fall of 2006, and reviews of product and approaches at other campuses, the following details were compiled in response to the charge.

**Identifies, describes, and ranks (prioritizes) the optimum set of functions and accessibility the tool should deliver.**

The functions needed for KU to support advising activities and the successful matriculation of students on all campuses includes both advising components as well as comprehensive degree audit. While degree audit was not explicit in the scope of this project, it was clear that much of the data and functions to support students and advisors would be degree audit related. A functional spreadsheet that outlines both advising tool development as well as degree audit functions is included with this report (Appendix C).

**Identifies and describes the information resources that the tool should access and/or collect.**

**Identifies the systems and databases currently in place that would interact with, or be replicated by, the tool.**

A number of existing campus sources were identified as necessary for contributing critical data to the online advising tool.

- SAKU including catalog data, course descriptions, schedule of classes, enrollment data, demographic information, etc.
- ARTS including SAKU extracts, course lists, and catalog requirements.
- CredTran (credit transfer data) which is built from SAKU

Other “new” information that is either not currently collected or stored in paper and/or decentralized/individual databases is also outlined as part of the functional specifications (Appendix C).

**Evaluates potential software products and/or non-commercially produced options for maximally enabling the optimum functions and accessibility.**

**Reviews and articulates the deployment strategies and functionalities of similar comprehensive advising tools at major institutions to identify implementation and delivery best practices.**

The Working Group reviewed a number of vendor, open source, and homegrown applications related to advising and degree audit. Below is an overview of the strengths (+) and weaknesses (-) as noted by members of the Working Group.
PeopleSoft Academic Advising 8.9*

- Integrates with existing student information system and processes
- Strong degree audit option with real time data
- Not intuitive or attractive user interface
- Questionable reporting options for departments/schools
- Implementation timeline will be lengthy to achieve degree audit

*Note: A separate report prepared by Student Information Systems re: PeopleSoft Academic Advising is available.

ARTS (Academic Requirements Tracking System)

- A KU developed application already containing much needed data
- A known and trusted platform at KU
- Not “real time” data but day old information
- Still feels very paper based with many abbreviations
- Dated infrastructure in need of upgrade/revision for future support

DARS (Degree Audit Reporting System)

- Very comprehensive degree audit system
- Has been integrated with PeopleSoft systems at other institutions
- Somewhat overwhelming as “first look” at a degree
- Ties the system to another vendor based application

Decision Academic

- Strong reporting features
- Billed by vendor as quick and easily integrated with existing systems
- .NET/Microsoft development environment
- Ties the system to another vendor based application
- Would also rely on a data extract from PeopleSoft – potentially day-old data

UT Austin Advisor’s Toolkit

- Very intuitive and attractive interface
- Provides messaging/tracking functionality
- Focused on needs of advisors and easy access to information
- Entirely homegrown code that cannot be shared

My Plan (University Relations proposed screens/interface)

- Visually appealing
- Information presented was simple and easy to use
- Developed with current and prospective student users in mind
- Perhaps lacking in faculty/advisor needs
- Completely homegrown system proposed independent of any “back-end” implementation considerations

Develops and articulates the most effective strategy (purchase, build, or hybrid approach) to implementing a new optimally functional enterprise-wide advising tool for the University of Kansas.

Since two primary areas need to be addressed to achieve an enterprise class advising environment for faculty, staff and students, the following pragmatic approach to hybrid development and implementation is recommended:

- **Advising** – Implement Phase A (see Appendix C) as a complete overhaul and redesign of ARTS to a more current, real-time, manageable, and extensible platform with adequate
resources and infrastructure to become the foundation for advising. This would include accomplishing real-time data, appointment scheduling, appointment logging, and messaging.

- **Degree Audit** - Implement the PeopleSoft Advising product to integrate the course lists, requirements, enrollment and awarding of degrees into the enhanced ARTS advising system.

'It is essential to note that these are not simply two separate projects, but should be approached as a collaborative ENTERPRISE system to insure needed integration, usability and success of the system. Other notable issues:

- Ongoing maintenance and development of this system must be addressed beyond implementation phases. As an ENTERPRISE system it will require ongoing and dedicated collaboration and alignment of staff and resources from Information Technology, Student Information Systems, and school/department staff.
- The successful implementation of the system may require process shifts or modifications in schools, departments and administrative units. As a central resource, articulating school/department needs as well as a willingness to adopt some best practices enterprise/university-wide will be essential.
- Staff development skills will need to be enhanced/augmented as part of the technical implementation strategy (i.e. Java and web/XML skills). In addition, upgrading to a more current PeopleTools release (8.48) for deployment would be essential in pursuing integration of the data/system.
- The Identity Management infrastructure at KU will need to be enhanced/modified to accommodate prospective student access as well as better group functionality for overall support of the system. Single sign-on between SAKU and the Advising System will also be essential and require additional effort. Multi-campus authentication issues, primarily the separate identity management infrastructure used on the Lawrence campus and KUMC, must also be addressed.
- A comprehensive communication plan should also be developed to inform departments, advisors and other interested parties about what’s being done, why it’s being done, and keep them (on a more limited basis than the core team) informed of progress. This could help manage expectations about how the system will work, but also begin to set the expectation that this will be the system they will be using for advising and degree audit.

In order to move forward with planning and implementation in an agile fashion, the following technical implementation team is recommended. Again, this will require alignment of staff and resources into an ENTERPRISE project development team who represent the best interests and needs of the project rather than their respective areas of reporting.

**Core Technical Implementation Team**
- Information Technology software project manager (Mike Wright)
- Student Information Systems experts (Mark Pickerel and Sheri Philips)
- Information Technology development staff (George Hosler, Aaron Brown, plus 3-5 others to be determined based on technical needs and skills)
- Interface Design expert (Corey Stone, University Relations)
- Information Technology management (Julie Loats, Linda Brooks, Roy Lytle)
- Information Technology Data expert (TBA)
- KUMC technical representative (TBA)
- QA/Testing representative (Bruce Oliver)

Other technical resources, such as Technical Services and Data Services, will be engaged throughout the project and specified in the project plan.
**Functional Input**

Other functional stakeholders, users, and testers will be engaged throughout the project and built into the project plan as critical milestones. It is hoped that members of the Working Group will be available to provide input and feedback as the system is prototyped and developed.

**Appendix A**

Reporting preferences for how the information is represented or reported online

1. Web-based. ARTS reporting is currently client dependent, which limits access to certain machines/locations. A web-based approach would allow advising needs to be met from more locations/machines.
2. No abbreviations. Redesign interfaces to leverage the web and not be just “paper online”.
3. Easy download capabilities. Intuitive/easy ways to transfer data into Office programs and conversion to Adobe files.
4. Automated scheduled reports. Reports that can be scheduled to run weekly, monthly, etc.
6. Reports by category.
   - Audit
   - Activity
   - Tool
   - Enrollment Management
   - Query everything in a user friendly way, users be able to choose what to query
   - Dashboard style
   - Email generation
7. Reports by user type.
   - Prospective Students
   - Parents
   - Faculty Advisors
   - Administrative Advisors
   - Undergraduate Students
   - Graduate Students
   - Enrollment Managers
   - Office of Institutional Research and Planning
   - Accreditation Officers
   - University Relations
   - Administrators
   - Staff
   - Career Services Staff
## Appendix B
Members of the Online Advising Tool Working Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Department/Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robin Bedenbaugh</td>
<td>University Relations</td>
</tr>
<tr>
<td>Aaron Brown</td>
<td>Information Services</td>
</tr>
<tr>
<td>Marla Herron</td>
<td>Office of the University Registrar</td>
</tr>
<tr>
<td>Becky Hofer</td>
<td>School of Social Welfare</td>
</tr>
<tr>
<td>Jody Johnson</td>
<td>University Advising Center</td>
</tr>
<tr>
<td>Joy Koesten</td>
<td>Graduate School</td>
</tr>
<tr>
<td>Julie Loats</td>
<td>Information Services</td>
</tr>
<tr>
<td>Kim McNeley</td>
<td>College of Liberal Arts and Sciences</td>
</tr>
<tr>
<td>Chris Meiers</td>
<td>KUMC Office of the Registrar</td>
</tr>
<tr>
<td>Jason O'Connor</td>
<td>School of Business</td>
</tr>
<tr>
<td>Sheri Phillips</td>
<td>Student Information Systems</td>
</tr>
<tr>
<td>Mark Pickerel</td>
<td>Student Information Systems</td>
</tr>
<tr>
<td>Mary Ryan</td>
<td>Edwards Campus</td>
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<tr>
<td>Ex Officio</td>
<td></td>
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<tr>
<td>Liliana Merubia</td>
<td>Office of the Provost</td>
</tr>
<tr>
<td>Bill Myers</td>
<td>Information Services</td>
</tr>
</tbody>
</table>
## Appendix C – Advising Tool Functions by Phase/Priority

<table>
<thead>
<tr>
<th>Function</th>
<th>Detail</th>
<th>ID</th>
<th>Primary Function(s)</th>
<th>Access online for</th>
<th>Current Data Source</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase A - High Priority Items for Advising Tool Implementation</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Student Information</td>
<td>Includes student ID, School/Level, Initial KU Term, Email address, Major/Minor/Program Plan, Interest, Date of Audit, Student Photo, Assigned Advisor</td>
<td>1A</td>
<td>Advising, Degree Audit</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Academic Work Summary</td>
<td>Placement test scores (ACT, SAT, IB, CLEP, GRE, GMAT, TOEFL, etc.), course history/grades, previous degrees, enrolled campus, initial term of enrollment, last term enrolled, term probation indicator, KU GPA, Transfer GPA, etc.</td>
<td>2A</td>
<td>Advising, Degree Audit</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Advising Appointment Scheduler</td>
<td>Advisor availability, Automatic confirmation of appointment and email reminder to student with time/location</td>
<td>3A</td>
<td>Advising</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Appointment Documentation/Notes</td>
<td>Provides advisor with interface to enter primary reason for contact, policy/procedures discussed, referrals, evaluation of student progress</td>
<td>4A</td>
<td>Advising</td>
<td>X</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Summary of Advising Contacts</td>
<td>Records (logs) date, time, who used the system as well as a record of appointments whether they have documentation/notes or not</td>
<td>5A</td>
<td>Advising</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Advising/Academic Messaging System</td>
<td>Allows an advisor to securely communicate with individual students or groups of students by entering &quot;note&quot; in the system which sends and email/link for student to review and respond by logging into the advising system</td>
<td>6A</td>
<td>Advising</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>System Administrative Module</td>
<td>Provide administrative access to assign student-advisor pairs (whether by individual or by group) and control access rights to view/modify certain parts of the system. Consider delegation of rights and responsibilities involved in performing the administrative maintenance of the system.</td>
<td>7A</td>
<td>Administrative</td>
<td>X</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Academic Status (Probation)</td>
<td>Need to be able to communicate to student their current status and what actions student needs to take as result (honor roll, how to get off probation, etc.)</td>
<td>8A</td>
<td>Advising</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Improved Interactive Online Timetable</td>
<td>Easy, intuitive access to course availability (wish=2 years out), course descriptions, textbook requirements</td>
<td>9A</td>
<td>Advising, Graduate in Four</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Remove Advising Hold</td>
<td>Allows an advisor to designate when advising is complete and feeds back to SAKU automatically to allow them to enroll</td>
<td>10A</td>
<td>Advising, Enrollment</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Warning Support</td>
<td>Using Messaging System allows faculty to submit information based on student performance/needs</td>
<td>11A</td>
<td>Advising, Graduate in Four</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Evaluation of Advising Experience</td>
<td>Utilize messaging system to prompt student to evaluate advising appointment/experience which is recorded as part of their advising record</td>
<td>12A</td>
<td>Advising</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Reporting Functions</td>
<td>See Appendix A for details on reporting</td>
<td>13A</td>
<td>Advising</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Phase B - Items for Degree Audit System Implementation
| General Education Requirements | English, Math, etc. - Primarily Degree Audit related and should be implemented in SAKU "Advising Module" but generate an integrated view (perhaps not "PS self-serve") which would be accessible with Phase A Advising data/screens | 1B | Degree Audit | X | X | X | Modifiable based on changes to degree requirements and historical changes. Must consider how this data is managed and approved - who is authorized to make changes and how are faculty/staff notified. Primarily cultural/procedural changes that will need to take place for the technology to work. |
| Academic Plan Builder | Comparison between academic options - 2 year plan to major or school and 2 year plan to completion options | 2B | Advising, Degree Audit, Graduate in Four | X | X | X | Limited comparison exists now with forcing degree in ARTS. Should also allow for hypothetical degree audits to facilitate degree change decisions and not yet official transfer credits and course substitutions. |
| Minimum / Maximum Requirements | 124 Hours Minimum  
45 Jr/Sr Hours Minimum  
2.0 Cum. KU GPA Minimum  
2.0 Jr/Sr Major GPA Minimum  
64 Junior College Hours Transfer Maximum  
Approved courses for multiple enrollments  
Physical Education Hour Maximum  
Music Organization Maximum  
Residency Hours Minimum  
Distinct/Highest Distinction Honor Roll  
Distinct Hours between Majors and Minors  
Continuous Enrollment (Grad School)  
Committee Selected/Approved (Grad School)  
eligibility for repeat policy  
eligibility for academic forgiveness  
credit/no-credit |
|---------------------------------|--------------------------------------------------|
| Major/School Requirements       | Admissions  
Core Requirements  
Electives  
Internship/Practicum  
Scholarship Application  
Licensing Exam (Test Date, Status)  
Certification and Licensure  
Comprehensive Exams  
Honors  
Graduate School - Research Skills and/or computer proficiency met  
Residence for doctorate completed  
Examination date (Master's/Specialists)  
Examination date (Comprehensive orals - doctorate)  
Examination date (Defense - doctorate) |
<p>| 3B Degree Audit | X | X | X | SAKU, Catalog, ARTS |
| 4B Degree Audit | X | X | X | SAKU, Catalog, ARTS, Do-All Form, Graduate School tracking system |</p>
<table>
<thead>
<tr>
<th>Transfer Course Equivalency</th>
<th>Merge into one system/process - Admissions, Credit/Transfer Evaluation, Grey Petition Process (paper) then coded in ARTS</th>
<th>5B</th>
<th>Degree Audit</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>SAKU, CredTran</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Certificate</td>
<td>Tracking if student has completed Research Experience Program, Service Learning, Global Awareness Program, University Honors, etc.</td>
<td>6B</td>
<td>Degree Audit, Advising</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>SAKU, ARTS, Provost Office, DEMIS?</td>
</tr>
<tr>
<td>Degree Requirements Petition/Permission Status</td>
<td>Major or Gen. Ed. Substitutions, Minor Substitutions, Approved Electives, Degree Certification, NCAA Certification, Grad School Petition for Leave</td>
<td>7B</td>
<td>Degree Audit</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Paper process now then coded in ARTS and EFT, Do-All Form</td>
</tr>
<tr>
<td>Milestone Tracking</td>
<td>Change of School/Admission/Dismissal, Readmission, Declaration of Major, Incomplete Grades, Application for Degree</td>
<td>8B</td>
<td>Graduate in Four</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>ARTS</td>
</tr>
</tbody>
</table>

**Other Desirable Functions**

<table>
<thead>
<tr>
<th>Student Self Report</th>
<th>ACT AIM Information, Perspective on College, High School Extracurricular, Barriers to Grad in Four</th>
<th>1C</th>
<th>Advising, Graduate in Four</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Planning/Referral</td>
<td>Confirmation of Enrollment in Career Center System</td>
<td>2C</td>
<td>Advising, Graduate in Four</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>