

ARTSYS: A Review of Maryland's Articulation System

Reporting Requirement of the College and Career Readiness and College Completion Act of 2013

October 2014

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INTRODUCTION

As part of the College and Career Readiness and College Completion Act of 2013, the Maryland Higher Education Commission's (MHEC) Segmental Advisory Council is required to submit a report to the Governor; Senate Budget and Taxation Committee; Senate Education, Health, and Environmental Affairs Committee; House Appropriations Committee; and House Committee on Ways and Means regarding Maryland's academic course articulation data system, ARTSYS, and academic course transferability between institutions of higher education in the state. Further, the Act states that the following topics are to be examined:

- A review of the online articulation data system currently in use, known as ARTSYS, and whether improvements to the transparency and user-friendly functionality of ARTSYS can be accomplished in a timely manner;
- A review of whether there is an alternative articulation data system available and, if so, what would be the cost and schedule of implementation of the alternative system;
- An analysis of any gaps and deficiencies in the articulation of academic course equivalencies amongst segments of higher education;
- Recommendations to establish a course articulation system that is transparent and user-friendly for students and administrators at institutions of higher education; and
- Recommendations on how to maximize degree credit transferability in a cost- and time-efficient manner.

The initial stages of this review process were coordinated by MHEC and University System of Maryland (USM) staff, in collaboration with the Student Transfer Advisory Committee (STAC) and additional review team members appointed by the Maryland Association of Community Colleges (MACC). As of October 2014, this work is still in progress. This review will continue as the State moves forward on the development of statewide transfer agreements in line with the provisions of the *College and Career Readiness and College Completion Act of 2013*, including an analysis of gaps and deficiencies in current articulation practices, and plans for maximizing degree credit transferability in two-year to two-year, four-year to four-year, two-year to four-year, and four-year to two-year transfer pathways across the State.

This report begins with an overview of the broader context of transfer and articulation in Maryland and the history and functionality of the ARTSYS system. It continues with a summary of ARTSYS review activities that were initiated in May 2013 and carried out through the remainder of year, and the resulting system updates that were launched in 2014. The report then

presents a summary of several alternative articulation systems that are currently in use in other states. The report concludes with a summary of key findings and a series of recommendations from the analysis.

TRANSFER AND ARTICULATION IN MARYLAND

Student transfer has continued to serve as an important pathway for college access and completion in the State of Maryland's postsecondary education system. In FY13, a total of 8,970 associate's degrees were awarded in transfer programs at Maryland community colleges, including arts and sciences, engineering and information technology, general studies, teacher education, and business administration. This FY13 number represented an increase of 4.2% over FY12 transfer program degree figures, and 12.0% over FY11.¹ (Note: The total number of associate's degrees awarded by Maryland community colleges in FY13 was 14,257, which includes associate's degrees granted in career-oriented areas in addition to transfer programs.) Each year, over 10,000 Maryland community college students transfer to a Maryland four-year institution.

Transfer was prominently featured in both Maryland Ready: 2013 State Plan for Postsecondary Education and in the College and Career Readiness and College Completion Act of 2013. In Maryland Ready, policies and initiatives related to transfer and articulation were mentioned a total of 39 times in goals related to Quality and Effectiveness (Goal 1); Access, Affordability, and Completion (Goal 2); and Innovation (Goal 4), including the following action recommendation with associated benchmarks: "The Commission and Maryland colleges and universities will work to strengthen the quality of the student academic experience and to enhance the ease of credit transfer among public institutions in the State." In the College and Career Readiness and College Completion Act of 2013, specific provisions related to student transfer included the development and implementation of statewide transfer and reverse transfer agreements; the development and implementation of incentives for students to obtain an associate's degree prior to transfer (including dedicated institutional financial aid); and a review of the state's academic course articulation data system.

To support student transfer, Maryland's higher education segments have a number of partnership activities in place, including the USM-MACC Joint Leadership Council's Committee on Transfer and Access, which prepares reports on progress in enhancing transfer, sponsors an annual transfer professionals program to share data and best practices, and oversees faculty discipline meetings. The State also currently has three statewide articulation agreements: the Associate of Arts in Teaching, the Associate of Science in Engineering, and the statewide RN to BSN articulation in nursing with 90 credits advanced standing. There are also a number of bilateral articulation agreements in place, including individual program articulations between institutions, articulated programs offered in regional higher education centers, the Bachelor of Technical/Professional Studies, and 2+2+2 programs in fields such as biotechnology, education, engineering, homeland security, and information technology. In addition, a number of four-year institutions have dual admissions/enrollment programs for Maryland community college students, including the UMBC Transfer Student Alliance, UMCP Transfer Advantage Program, and UMUC Community College Alliance Program.

¹ Maryland Association of Community Colleges. (2014). 2014 Data book.

To support the articulation of transfer programs, courses, and credit, faculty from both two-year and four-year institutions in Maryland regularly convene in discipline-based groups. Active discipline-based groups include business, biology, communications, computer science, criminal justice, cybersecurity, information technology, mathematics, and psychology. Faculty and academic administrators also serve on oversight councils and continuous review committees for education (Associate of Arts in Teaching degree programs) and engineering (Associate of Science in Engineering degree programs). Likewise, in nursing, the Nursing Academic Progressions Committee, with representatives from the state's two-year and four-year nursing programs as well as hospitals and health systems, works to strengthen and increase the number of articulated pathways for Maryland students from the RN to the BSN, MSN, and beyond.

HISTORY AND FUNCTIONALITY OF THE ARTSYS SYSTEM

ARTSYS is a proprietary articulation system that was developed by USM staff, is owned by Sunrise Software Arts, Inc., and is managed and maintained by USM. ARTSYS was first launched as a PC-based common platform software system in 1988. By 1993, it had transitioned to a dynamic web-based system available 24/7. In 2007, *Maryland TransPort*, a student transfer information portal, was developed to accompany ARTSYS. All public two-year and four-year institutions and eight independent institutions in Maryland currently participate in ARTSYS, a total of 37 institutions.²

The historical system (prior to updates through this review process) was available online at http://artweb.usmd.edu with the following launch page:

College.

² Two-year public sending institutions include Allegany College of Maryland, Anne Arundel Community College, Baltimore City Community College, Community College of Baltimore County, Carroll Community College, Cecil College, Chesapeake College, College of Southern Maryland, Frederick Community College, Garrett College, Hagerstown Community College, Harford Community College, Howard Community College, Montgomery College, Prince George's Community College, and Wor-Wic Community College. Four-year public receiving institutions include Bowie State University, Coppin State University, Frostburg State University, Morgan State University, Salisbury University, St. Mary's College of Maryland, Towson University, University of Baltimore, University of Maryland, Baltimore, University of Maryland, College Park, University of Maryland Eastern Shore, and University of Maryland University College. Four-year independent receiving institutions include Capitol Technology University, Goucher College, Hood College, McDaniel College, Mount St. Mary's University and Seminary, Notre Dame of Maryland University, Stevenson University, and Washington



One of the most important features of ARTSYS is that it houses dynamic, real-time information. For example, when a community college uploads a syllabus for a new or modified course, an email message is automatically generated and sent to all participating four-year institutions, requesting that they evaluate the course. Reminder emails are sent to institutional contacts weekly, listing all courses in ARTSYS yet to be evaluated. Once the course is evaluated, the information becomes available immediately online.

ARTSYS is an open system that can be accessed by anyone with web access; Maryland students do not need special log-ins or credentials to utilize its features. (However, there are dedicated log-ins for participating institutional staff to use when uploading or reviewing course syllabi.) Morgan State University, St. Mary's College of Maryland, and Maryland independent four-year institutions pay annual fees to USM to participate in ARTSYS, which covers expenses associated with staffing, institutional training, servers, system maintenance, and programming.

Other key features and functions of ARTSYS include the following:

- Course equivalencies (transferrable, not transferrable, applicability towards general education, equivalent courses, linked to a particular majors, linked to other courses for equivalency, course syllabi)
- Recommended transfer programs (pathway for every bachelor's degree program at all participating institutions, which guarantees transfer of credits if followed)
- Key word searches (word, course prefix, exact course, general education area)
- Transcript evaluation (course-by-course, by program)

• Evaluation summaries (provides summaries of transcript evaluations across programs and/or four-year institutions so that students are provided with "what if" scenarios)

ARTSYS REVIEW ACTIVITIES AND UPDATES

Beginning in May 2013, the USM Office of Articulation launched an ARTSYS review process, focusing on the system's design, navigation, and functions, including the following activities:

Date	Review Activity
May 2013	ARTSYS users focus group held with two-year and four-year transfer advisors during Annual Transfer Professionals Day
May 2013	USM Academic Affairs Advisory Council (AAAC): Discussions with provosts on importance of maintaining updated course evaluations in ARTSYS; lists sent including all outstanding courses requiring evaluation
May 2013	Annual request to institutions for review of all Recommended Transfer Program (RTP) information; sign-off and revisions due by August 1, 2013
June 2013- July 2013	ARTSYS training conducted at two-year and four-year institutions for beginners, refreshers, and managers
June 2013- August 2013	Online survey conducted with institutional users to evaluate ARTSYS processing functions and navigation (survey included links to online articulation systems in several other states to gain comparative feedback)
July 2013	Focus groups conducted with students at Community College of Baltimore County and Montgomery College to gain feedback on the student user experience with ARTSYS
August 2013	Survey and focus group feedback analyzed; changes planned
September 2013- October 2013	Initial work on ARTSYS processing functions and navigation redesign
October 2013	ARTSYS redesign survey launched featuring several alternate layouts for institutional users and students; over 100 survey responses received
October 2013- November 2013	New ARTSYS design and navigation features completed
October 2013- November 2013	Recommended Transfer Program (RTP) revisions completed (all RTPs reviewed within the last three years)
November 2013	Annual request to community colleges for approved course inventories (with due date in mid-December)

Date	Review Activity
November 2013	Department of Legislative Services briefing on ARTSYS redesign
November 2013- February 2014	New ARTSYS processing functions completed
March 2014	Redesigned ARTSYS live

The two user surveys referenced in the table above are included at the end of this report as Appendix A (ARTSYS function and navigation survey administered in June 2013) and Appendix B (ARTSYS design survey administered in October 2013). The second user survey featured several alternate ARTSYS launch page layouts for which respondents could vote.

In collecting feedback from ARTSYS users through surveys and focus groups, the most frequently cited issues were related to site navigation. There were comments about the system feeling "dated," "clunky," and "unintuitive," and being difficult to navigate in comparison to other types of academic systems and portals. In terms of processes and functions, staff, in particular, cited the time it takes to engage in the course review and approval process, and the fact that many institutions were lagging behind in their scheduled review and approval of courses in the system. A lack of currency in course and program data in ARTSYS can pose significant barriers to effective academic advising and efficient transcript evaluation. Students, in particular, questioned why the system did not articulate transfer equivalencies from one community college to another (two-year to two-year in addition to two-year to four-year), why individual course descriptions were not easier to navigate, and why there were no detailed tutorials for ARTSYS.

Responding to this feedback, USM staff made a number of enhancements and changes to ARTSYS in terms of design, navigation, and functions. These changes included a redesigned launch page with a sleeker layout and look; an enhanced keyword search (including the ability to search by course ID, general education classification, or course title); the addition of text and video-based tutorials as an overview of the site itself as well as on all "transfer tool" functions (including course equivalencies, transcript evaluations, Recommended Transfer Programs, major search, and keyword search); and more clearly delineated web site sections for students, parents, and institutional faculty and staff.

The redesigned version of ARTSYS went live in March 2014 and can be accessed at http://www.artsys.usmd.edu.



REVIEW OF ALTERNATE ARTICULATION SYSTEMS

There are several commercial vendors that provide articulation systems and solutions to higher education clients. Three specific systems that were reviewed by MHEC staff were CollegeTransfer.net (by AcademyOne), Transfer Navigator (by Decision Academic), and Transfer Evaluation System and Transferology (by College Source, Inc.). A summary of key features from these articulation systems is included in the chart below.

Articulation Product	Functionality	Client Examples	Staff Notes
CollegeTransfer.net Vendor: AcademyOne URL: http://www.collegetransfer.net	Institutional database searchable by key terms Students can build own transfer transcripts Database of transfer agreements Transfer course equivalencies Prior learning equivalencies (AP, CLEP, DSST, IB, etc.) Data analytics for member institutions	Delaware Department of Education Pennsylvania Department of Education South Carolina Department of Education Texas Higher Education Coordinating Board Utah System of Higher Education	 No account needed for students to initiate general searches; account needed for planning tools, saving searches, etc. Nationwide network of member institutions (can be implemented as a closed system for individual systems or states) Each participating institution has an individual profile Four levels of institutional membership/participation, ranging from having a profile listed to a full contract covering all technical services Site is intuitive, professional, and clean in appearance

Articulation Product	Functionality	Client Examples	Staff Notes
Transfer Navigator Vendor: Decision Academic URL: http://www.decisionacademic.com/ products/transfer-navigator	Students: "What if" analysis Evaluate transfer credits in course planning and degree audit Browse course equivalencies	College Foundation of North Carolina	 Need ID/password to log-on Can be structured for system-wide or state-wide systems Can link with other Navigator products (curriculum, catalog, degree), or be purchased and deployed as a standalone articulation system
	 Institutions: Define and track transfer relationships and equivalencies Configure transfer rules to support variable relationships SIS integration capabilities Post data entry validation 		
Transfer Evaluation System Transferology Vendor: College Source, Inc. URL: http://www.collegsource.com/solutions.tes https://www.transferology.com	Transfer Evaluation System: Locate course descriptions; track the evaluation process; store, manage, group, and publicize resulting equivalencies. Algorithms generate likely equivalencies between institutions. Evaluation Tracker tool creates workflow process for routing equivalency decisions to faculty.	Illinois Board of Higher Education Minnesota State Colleges and Universities (MNSCU) System	 Need an account to use Nationwide network of member institutions (can be implemented as a closed system for individual systems or states) User actions and process results are stored for later review to provide internal data on the institution's responsiveness to transfer credit Transferology just launched in spring 2014
	Transferology: Students enter coursework, exams, and/or military experiences, then discover schools in the network with matching courses, and how those courses will count. Schools ranked by course percentages accepted in transfer for each student.		

In addition to the commercial articulation products and vendors listed above, MHEC staff reviewed Web-based articulation systems that are currently in use in three other states: California, Pennsylvania, and Virginia. These systems were chosen since they are somewhat similar in terms of the scope of Maryland's ARTSYS system, serving multiple institutions, both two-year and four-year.

State Articulation System	Staff Notes		
California: Articulation System Stimulating Interinstitutional Student Transfer (ASSIST) URL: http://www.assist.org	 Functions/Features: Course equivalencies searches were challenging (does not separate out sending and receiving institutions) Articulation agreements were unclear and many seemed to be out-of-date Misleading "help" topics (discussed what ASSIST was intended for versus assistance with functions) Useful embedded links for further searches System appeared to be somewhat "dated" in appearance 		
	 System Administration: Originally started as homegrown system in 1985 with a small number of California colleges and universities participating; system now includes all public postsecondary institutions in the state (community colleges, CSU institutions, and UC institutions). Funded by California state legislature. ASSIST Board of Directors made up of representatives from each of the public postsecondary educational segments. ASSIST Coordination Site (ACS) is central office for ASSIST; responsible for coordinating all ASSIST-related activities and services, such as software development, technical support, database coordination, training, and administrative coordination to support the implementation of ASSIST at colleges and universities. 		
Pennsylvania: PA TRAC URL: https://www.pacollegetransfer.com	 Functions/Features: Search provides database of sending/receiving course equivalencies, but the information is not all in one place (must click on sending institution course and then receiving institution course to get information) Includes institutional profiles for all participating schools Includes information about the state's 30-Credit Transfer Framework and Statewide Program-to-Program Articulations Transfer Events feature – helps transfer students get more information and connect with potential institutions Specific resources are included for veterans (VA-approved education and job training programs, information about credit for prior learning) Home page is professional, simple, and easy to understand; site is very easy to navigate 		
	 System Administration: Statewide transfer and articulation system was established in accordance with a 2006 Pennsylvania law aimed at benefiting college students transferring between public colleges and universities in the state. Includes Pennsylvania community colleges, state system colleges (but not Penn State system), and a select number of independent institutions. Administered by the Office of Postsecondary and Higher Education in the Pennsylvania Department of Education. System is powered by CollegeTransfer.net. 		

State Articulation System	Staff Notes
Virginia: Virginia	Functions/Features:
Education Wizard	 Appearance is modern/hi-tech; contains several guided modules and "how to" videos
URL: https://www.vawizard.org	• Home page features useful general tools in addition to transfer information (college cost calculator, career assessment, etc.)
	• Includes step-by-step tools to help students plan for transfer (need to create user account to use this function)
	No individual course equivalencies tool
	• Students can search for transfer articulation agreements between community colleges and four-year institutions (public and independent, as well as select out-of-
	state institutions, particularly for-profit); can also search for guaranteed admissions programs and transfer grant information
	Includes career planning information including interest assessments, resume builder, interview assistance, and workplace learning/apprenticeship opportunities
	System Administration:
	System geared toward Virginia community college students
	Powered by JobsEQ (Chmura Economics and Analytics)
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PRICING OF ALTERNATE ARTICULATION SYSTEMS

Price quotes were obtained for three of the commercially available articulation systems mentioned above: CollegeTransfer.net (by AcademyOne), Transfer Navigator (by Decision Academic), and Transferology (by College Source, Inc.). The prices below are for the products only, and do not reflect central staffing/coordination costs or additional costs for participating institutions (e.g., IT requirements).

Collegetransfer.net (AcademyOne)	Transfer Navigator (Decision Academic)	Transferology (College Source, Inc.)
Perpetual License, One-Time: \$400,000 (software maintenance optional and fee would be dependent on modifications; limited technical and helpdesk support)	Initial Licensing: \$300,000 Initial Implementation: \$800,000-\$900,000 Annual Maintenance and Support: \$60,000 (20% of initial licensing fee)	Annual Subscription Fee: \$369,151 Discounted Rates: If purchased as part of a statewide agreement: \$163,798 If purchased before 1/1/2015:
SaaS-Hosted Solution, Annual: \$72,000 (includes license fee, software maintenance, technical and helpdesk support, and hosting) Quotes above do not include initial implementation services, which would be charged at negotiated hourly rates.	Third Party Hosting (Optional): \$30,000-\$50,000 Summary: • \$1.1-\$1.2 million to get the system up and running • \$60,000-\$110,000 in annual costs	\$114,659 College Catalog subscription also required (\$0.375 per FTE). Quotes based on current ARTSYS members (37 institutions, 321,173 students)

STUDENT TRANSFER ADVISORY COMMITTEE (STAC) ISSUSES AND FINDINGS

In reviewing user feedback collected on ARTSYS, the functions of the redesigned ARTSYS system, and the features of alternate articulation systems currently on the market, the following issues emerged during Student Transfer Advisory Committee (STAC) discussions:

- The lack of timely institutional course evaluations and updates was cited as a current problem with ARTSYS from the perspective of faculty and staff users. Even though it is a dynamic system operating in "real time," the currency of the data does rely on human input and review. The fact that ARTSYS is housed at USM and users are in four other segments (community colleges, select independent four-year institutions, Morgan State University, and St. Mary's College of Maryland) creates further challenges. As a result, there are no real incentives or accountability measures in place to ensure that institutional participants perform scheduled updates and course reviews, so that the students they are either sending or receiving are not unfairly disadvantaged in the transfer process. Perhaps a group should be developed with oversight for the coordination of timely updates to the articulation system, such as an Advisory Council or Steering Committee through the Intersegmental Chief Academic Officers or the Student Transfer Advisory Committee, with representation from all higher education segments. This group could also help inform future policy decisions related to the State's articulation system, as needed.
- In terms of transfer and articulation across Maryland's higher education institutions in general, there are much greater challenges associated with the transfer of major courses versus general education courses. This challenge may become even more prevalent as the State moves forward in developing statewide transfer agreements through which a minimum of 60 credits will be transferrable from any Maryland public community college to any Maryland public four-year institution toward attainment of a bachelor's degree. This will necessitate the transfer of credits as packaged programs, versus historical reliance on course-by-course articulation between institutions. As these policies and agreements are developed in Maryland over the next several years, program-level evaluation functionalities will have to be expanded within the State's articulation system, whether it is ARTSYS or another system.
- What is the State's vision for a state-of-the-art articulation system, and what current and anticipated future needs will this system serve? With the recent expansion of ARTSYS functionality to include reverse transfer (ARTSYS-RT), are there unmet needs that will take priority in the future (e.g., two-year to two-year articulation, four-year to four-year articulation, dual enrollment course articulation)? How does expanded institutional capacity to send and receive electronic transcripts factor into transfer and articulation processes? Does the move to commonly used commercial course and student information management systems (e.g., PeopleSoft, Banner) by many institutions provide opportunities for increased automation to existing articulation processes? As the State continues to work toward more standard statewide agreements around transfer, these questions will likely continue to evolve. Such developments could have major budgetary implications for the State's articulation system, with increased needs for staffing, training, user support, programming, server space, and system maintenance. Given that ARTSYS is currently supported by USM through institutional fee revenue versus a State budget line item, these questions will require careful consideration in the context of available resources.

RECOMMENDATION

Given that the State of Maryland has had an articulation system in place since 1988, and that considerable investments have been made in this system over time, the Student Transfer Advisory Committee (STAC) recommends that the State continue to work with ARTSYS and to continue to expand its functionality to fully support the requirements of the *College and Career Readiness and College Completion Act of 2013*, which include statewide transfer and reverse transfer agreements by July 1, 2016. In order to do so, we not only need to continue to expand the system's functions, but we also need to develop standards of practice around the maintenance of the system, which will require that institutional users be held more accountable for the accuracy and currency of their data and information.

USM currently absorbs IT, staffing, and other operating costs related to ARTSYS, which are also partially supported by user revenues from independent colleges and universities. The recommendation above assumes that this current arrangement will remain in place in the future. In meeting more immediate needs cited by Maryland community colleges, including the expansion of ARTSYS functions to support two-year to two-year articulation, as well as to fully implement reverse transfer articulation, the following additional state resources would be necessary on an annual basis:

ARTSYS Coordinator (1.0 FTE)	\$ 65,000
Programming Costs	\$ 20,000
Hosting/Server Costs	\$ 10,000
Training Costs	\$ 10,000
Annual Total	\$105,000

NEXT STEPS

This initial review and report covered three of five major points in the charge in the *College and Career Readiness and College Completion Act of 2013*, including a review of ARTSYS, an analysis of alternative articulation systems, and upgrades to the current system to make it more transparent and user-friendly. As work on other transfer-related provisions in the Act progresses through 2016, attention will shift to the remaining two points in the charge: an analysis of specific gaps and deficiencies in the articulation of academic course equivalencies in Maryland, and an expansion of policies and practices to maximize degree credit transferability in a cost-and time-efficient manner.

APPENDIX A:

ARTSYS Function and Navigation Survey Questions

Administered June 2013

GENERAL USE OF ARTSYS

Q1: After reviewing articulation sites I have provided, what were your general impressions? Did any stand out?

Q2: Of the sites you reviewed, were there any features provided that you would like to see added to ARTSYS?

Q3: Please provide an overview of how you use ARTSYS.

Q4: How long have you used ARTSYS?

HOME PAGE EVAULATION

Q5: The ARTSYS Home Page contains seven buttons, each relating to a particular function. Please score each function by how often you use it.

Q6: In addition, the ARTSYS Home Page includes nine links: five links to outside websites, four links to other functions. Please score each function by how often you use it.

Q7: Given the opportunity, what about the ARTSYS Home Page would you change? This can be a cosmetic change, an additional function, or a change to any function currently on the Home Page.

COURSE EQUIVALENCIES

Q8: Please provide your impressions of the Course Evaluation process. How difficult to you find it to use?

Q9: Continuing with this topic, are there options you would add? Are there options you would remove?

Q10: Would you be more inclined to use Course Lookup if you could select courses from a drop-down menu showing course ID and course title?

Q11: While using Course Lookup, do you change the "Transfer From" selection very often?

Q12: The terms "Transfer To" and "Transfer From" on the heading actually indicate the Sender Institution and Receiver Institution or the community colleges and four-year institutions. Could these current headings cause a user/student some confusion? If you could change the heading, what would your choice be to define these items?

Q13: Please add any additional comments.

TRANSCRIPT EVAUATIONS

Q14: Another option included with Course Equivalencies is Evaluate Transcript. On the Home Page this option is Transfer Evaluation. Take a moment to provide us with your observations of the Evaluate Transcript process. What do you like about it? How would you change it to make it better?

Q15: There are several items you may choose when you finish adding course codes to the Course Entry Screen. Which items are you more likely to use?

Q16: One of the options available with the Transcript Evaluation function is the Recommended Transfer Program Evaluation, represented by the "RTP Evaluation" button on the Course Entry screen. Please take a moment to provide us with your observations of the RTP Evaluation process. What are your likes and dislikes? How would you change it to make it better?

Q17: The Evaluate Transcript option takes the courses you've entered on the Course Entry Screen and displays their equivalencies against those from the Transfer To school you chose. You can select a course ID from the transcript list and bring up the Course Lookup screen. What are your impressions of this process? Would you add or change how this process functions?

MAJOR PROGRAM OF STUDY SEARCHES

Q18: Key Word search provides the user an option for looking up course codes by searching for a string within the Course Title. There are five search options. Please score each option.

Q19: Given the opportunity, would you change how you search for a particular course? Please elaborate.

Q20: The Major Program of Study search allows you to do a broad search of courses to seek out a particular topic which may exist in an area unrelated to the subject (i.e., photography may be an art course or a computer applications course). Tell us how you have used the Major Program of Study search.

Q21: What about this feature—Major Program of Study search—do you like? If you were to change this feature, how would you change it?

DATA INTEGRITY IN ARTSYS

Q22: How often are new courses added at your institution? What is the process for adding new courses?

Q23: How often do you receive requests to send data to USM? Are there scheduled periods when this data is to be sent?

Q24: Who is your primary contact at USM? When you send your data, do you receive an acknowledgement? By what method?

Q25: What types of data are you required to send, and in what form (i.e., text file, Excel spreadsheet, or other)?

Q26: Take a moment and let us know your thoughts about the process of data collection and reporting as it pertains to you and your institution. What would you add or change about the current process? Are there data to which you would like access, which you feel would be important in how you carry out your tasks?

ADDITIONAL COMMENTS

Q27: Let us know who you are.

Q28: How often do you use evaluation summaries?

Q29: Additional comments and suggestions.

Q30: If you would care to have us contact you about any specific questions or comments, please provide your name and additional contact information. Thank you for your time in completing this survey.

APPENDIX B

ARTSYS Online Redesign Survey: User Score Summaries

Administered October 2013

Design Submission 1:

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URL: http://131.118.2.3/mh/3/index.html
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Average Score: **3.97**# of Excellent (5): 27
of Good (4): 44
of Average (3): 17
of Adequate (2): 5
of Poor (1): 1

Click to view all comments about this submission.

Design Submission 2:

URL: http://www.acaff.usmh.usmd.edu/pk/index.html

Average Score: 2.23 # of Excellent (5): 5 # of Good (4): 15 # of Average (3): 17 # of Adequate (2): 13 # of Poor (1): 41

Click to view all comments about this submission.

Design Submission 3:

URL: http://www.acaff.usmh.usmd.edu/artweb/index.html

Average Score: **2.66**# of Excellent (5): 6
of Good (4): 17
of Average (3): 24
of Adequate (2): 26
of Poor (1): 17

Click to view all comments about this submission.

Design Submission 4:

URL: http://131.118.2.3/mh/2/index.html

Average Score: **3.92**# of Excellent (5): 26
of Good (4): 40
of Average (3): 19
of Adequate (2): 4
of Poor (1): 2

Click to view all comments about this submission.

Design Submission 5:

URL: http://www.acaff.usmh.usmd.edu/pk/2page/page2/index.html

Average Score: **2.46** # of Excellent (5): 3 # of Good (4): 16 # of Average (3): 28 # of Adequate (2): 15 # of Poor (1): 28

Click to view all comments about this submission.

Design Submission 6:

URL: http://131.118.2.3/mh/1/index.html

Average Score: 3.81 # of Excellent (5): 29 # of Good (4): 31 # of Average (3): 20 # of Adequate (2): 4 # of Poor (1): 6

Click to view all comments about this submission.