

MARYLAND LONGITUDINAL DATA SYSTEM (MLDS)
550 West Baltimore Street
Baltimore, MD 21201

GOVERNING BOARD MEETING

March 10, 2017

MINUTES

The meeting of the Maryland Longitudinal Data System (MLDS) Governing Board was held on March 10, 2017, in the Maryland State Department of Education (MSDE) Board Room of the Nancy S. Grasmick Building. Dr. Fielder, Chair of the Governing Board, called the meeting to order at 9:00 a.m. and noted that a quorum was present.

The following Governing Board members were in attendance:

Dr. James Fielder, Secretary of Higher Education and Chair of the Governing Board
Mr. Michael Harrison, Director of the Office of Policy Development, Maryland Department of Labor, Licensing, and Regulation (Designee for Secretary Kelly Schulz)
Dr. Sylvia Lawson, Deputy State Superintendent for School Effectiveness & Chief Performance Officer, Maryland State Department of Education (Designee for Superintendent Karen Salmon)
Dr. Ben Passmore, Assistant Vice-Chancellor for Policy, Research, and Analysis, University System of Maryland (Designee for Chancellor Robert Caret)
Ms. Tina Bjarekull, President, Maryland Independent Colleges and Universities Association (Designee for President Tina Bjarekull)
Mr. Steven Rizzi, Vice President, PAR Government
Ms. A.J. Brooks, Privacy Analyst, United States Department of Health and Human Services
Mr. Christopher J. Biggs, Information Assurance Manager, Raytheon Company

The following MLDS Center staff members were in attendance:

Mr. Ross Goldstein, Executive Director, MLDS Center
Ms. Tejal Cherry, Director of System Management Branch, MLDS Center
Ms. Laia Tideman, Data Management Coordinator, MLDS Center
Dr. Angela Henneberger, Director of Research, MLDS Center
Ms. Ann Kellogg, Director of Reporting Services, MLDS Center
Ms. Dawn O’Croinin, Assistant Attorney General for the Governing Board and MLDS Center
Ms. James Dixon-Bobbitt, Executive Associate, MLDS Center

Approval of December 9, 2016 Meeting Minutes

Dr. Fielder asked for a motion to approve the minutes from the December 9, 2016 meeting. Mr. Rizzi made a motion to approve the minutes that was seconded by Mr. Biggs. The motion was unanimously approved.

Center Update

Mr. Goldstein began the Center update by introducing new staff members Ann Kellogg, who is the Director of Reporting Services and MHEC Liaison, Matt Koerner, who is a data analyst, and Sean Duvall, who is a business analyst.

System Management Update

Ms. Cherry, CIO for the MLDS Center, provided the Systems Management update. The Center has been working with the Department of Information Technology (DoIT) on moving operations to DoIT's data center (Tier Point). The move is part of the implementation of DoIT's enterprise management plan. The Center's virtual machines and servers will be moved next month. Ms. Bjarekull questioned why this was happening and will there be a follow-up audit to ensure that the same level of security is maintained. Ms. Cherry responded that the reason for the move was to be part of the enterprise system, which provides enhanced security, standardization of operations, and economies of scale. Ms. Cherry agreed that another security audit would eventually be necessary, but noted that the Center's data system and security remains the unchanged. This is because the Center's system is a virtual data center and the only change is the physical location.

Mr. Rizzi asked whether the Center's servers would be in a separate cage or open on the floor, noting his opinion that a cage is necessary and represents industry standards. Ms. Cherry responded that she requested a separate cage. Dr. Fielder stated that a written plan from DoIT that establishes standards would be helpful. Mr. Biggs agreed that a cage was a must have and also noted that from a security perspective a managed enterprise system would provide more assessments on the system than the Center's limited staff could do on its own. Ms. Cherry agreed, noting that the enterprise firewall solution is a good example of the increased monitoring and patching that can be done by the enterprise management team.

Next, Ms. Cherry stated that staff has been working on the security audit recommendations. An action plan has been established to address all of the recommendations. There were two major recommendations. The first recommendation is to conduct a security awareness training for all staff, which has been scheduled for later in March. The second recommendation is to conduct full time monitoring of the master data management system. Ms. Cherry is working with DoIT security staff in light of the enterprise system to understand how much additional monitoring will be needed.

Finally, Ms. Cherry noted that staff has created an online form for the public to use to request information or aggregate data from the Center. In addition, staff have created a subscription email service. The Center website will invite users to subscribe by submitting their email address. The Center will then provide direct email notifications of new content on the website and other important communications.

Mr. Rizzi asked whether the Center will provide a tracking number to requesters to allow them to know the status of their requests. Ms. O'Croinin responded that the Public Information Act requires specific notifications from the agency to the requester. Ms. Cherry noted that internally there is a tracking number so staff can keep track of requests and ensure they are being properly addressed. Mr. Harrison proposed providing the Board periodic summaries on the number of requests, who is making the requests, and any trends in the type of information sought.

Reporting Service

Ann Kellogg, Director of Reporting Services, shared a draft of a dashboard that will be released on the Center's website next week. The dashboard is based on data requests from several constituent groups. The dashboard provides the number of graduates from Maryland public institutions who are employed as novice teachers. The second dashboard shows the time to employment trends for graduates entering the teaching profession as novice teachers. These dashboards represents a new direction for the Center to create dashboards that address policy questions or regulatory requirements. In addition, new elements have been added, including a "why this is important" section to provide context and a section soliciting input from the public on ideas for further development on the topic.

Dr. Passmore noted that this dashboard demonstrates the services that the Center provides. Without the Center, a university would have to call school districts to develop this type of reporting. In response to Ms. Bjarekull, Ms. Kellogg explained that the report only addresses public institutions because the data from private institutions was incomplete (no out-of-state student data was provided, which would have presented an incomplete picture of private school graduates and their employment as novice teachers).

Mr. Rizzi raised the issue of dynamic information versus static information. While both are useful, dynamic information would allow users to drill down and customize the information to meet their needs and would be up-to-date. What the Center is providing is useful, but is not a dashboard - it is more of a mini report. Staff agreed with the assessment and noted some of the challenges with dynamic data, including small cell sizes and the need to consistently check data reporting standards.

Finally, Ms. Kellogg noted that the Center is taking an incremental approach to dashboards. The first step, represented here, is to establish the baseline population (graduates who go into teaching). Once the baseline is established, there are a lot of opportunities for reporting on additional topics on the established population.

Research

Angela Henneberger, Director of Research and Research Assistant Professor at University of Maryland, Baltimore, began by noting that four reports will be coming out covering five research questions. The data is at a point where researchers can begin to use advanced statistical methodologies to understand programs and policies. The four reports include:

1. High School to Workforce Report that shows the workforce outcomes for Maryland students who earn a high school diploma (via high school graduation or GED) or do not complete high school.
2. Brain Drain Report which analyzes whether students who graduate from out-of-state colleges move back to Maryland after earning their degree.
3. College to Workforce Report analyzes college graduates as they move into the workforce and compares outcomes by wages and industry.
4. Financial Aid report analyzes the impact of receiving financial on college outcomes.

Next, Dr. Henneberger provided an overview of the report by Heath Witzgen, Research Fellow at the University of Maryland College Park and the MLDS Center on *Need-based Grant Aid in Higher Education - The Effects of the Howard P. Rawlings Educational Assistance Grant on Financial Aid, Academic Persistence, and Working While in School (DRAFT)*.

The Howard P. Rawlings Education Assistance (EA) Grant is the largest need-based grant aid program for higher education in Maryland. The policy questions being looked at include how a student's financial aid package changes with receipt of the grant, do students earn less while in college, are students who receive the grant more likely to persist to later years, and if these effects are present, are they different across different student groups?

The amount of the EA grant award is based on the student's remaining need after considering the cost of attendance minus the the Expected Family Contribution (EFC) and any other grants or scholarships. The state sets an EFC cutoff, above which students are not eligible for the grant. This cutoff produces a natural experiment for examining the effects of the grant.

Ms. Bjarekull noted that the EFC cutoff changes over time, it is relatively minor, and it is not clear to students or institutions what it will be at any given time. Accordingly, Ms. Bjarekull asserted that the cutoff is not a factor that drives student decision making. Dr. Henneberger responded that the research

takes advantage of the fact that students don't know the EFC cutoff so that variation in the process creates a random assignment. Students on either side of the cutoff have similar attributes which, combined with the research method, supports a causal inference analysis. Ms. Bjarekull reiterated her concerns about the analysis and encouraged Dr. Henneberger to meet with financial aid officers to gain an understanding of the factors that impact the subject of student aid and loans.

Mr. Rizzi raised the issue of how research is reviewed and vetted prior to release - such as a quality assurance process. Dr. Henneberger stated that research is reviewed by herself, Dr. Shaw, and Mr. Goldstein. Dr. Passmore added that Dr. Henneberger was hired specifically because of her expertise to conduct these types of analyses, and the partnership with respected research institutions was created for the same reason - to ensure highly trained experts would apply their knowledge and judgement on proper methodologies to analyzing this data. Dr. Passmore noted that the types of issues raised by Ms. Bjarekull are important to review and understand, but the methodologies used are solid.

Dr. Henneberger presented one of the conclusions of the analysis, which found that an additional \$1 of EA grant results in \$.40 less in loan aid received. Dr. Passmore noted that this provides evidence that the EA grant program is effective in reducing the total loan amount for an individual student. In response to a question from Mr. Harrison, Dr. Henneberger responded that the analysis is longitudinal because it studies how wages are impacted by the grant program both during and after college. Further, the analysis takes into consideration high school academic achievement factors.

Recommendations from Governor's P-20 Leadership Council

Mr. Goldstein began by noting that the P20 Council Annual Report contains recommendations for and discussion about the MLDS Center. The provided list refers to them as recommendations, however they are not all recommendations of the P20 Council. Nonetheless, all of these items are valuable for the discussion on this topic. Mr. Goldstein noted that last year staff proposed some additional research agenda questions. At the time the decision was made to hold off on modifying the agenda until the Board had an opportunity to hear from P20 Council. Accordingly, input from the Board on this list and the topics raised will help identify future research questions. Finally, Mr. Goldstein noted that one recommendation of the P20 Council MLDS Workgroup was omitted. That recommendation was that the P20 Council support the MLDS Governing Board recommendations in the Annual Report.

Mr. Rizzi stated that there is a lot of interest across the other P20 workgroups about what the MLDS does and what are its capabilities. Similarly, the MLDS is not aware of what the other groups need or want. The number one takeaway is to bridge this gap - inform the workgroups about the MLDS and make sure the workgroups are informing the MLDS about their needs. The Communication Plan that is being developed is a great opportunity to do that outreach and the workgroup can help by engaging the P20 membership as well as talking to constituent groups such as LEAs and PTAs.

In response to a question from Dr. Fielder, Mr. Goldstein stated that the recommendations from the College and Career Readiness Implementation (CCRI) Workgroup presented specific research questions (i.e. an analysis of PARCC implementation in connection to entrance into and success in postsecondary education). These are topics that the Center can research and provide meaningful information back to the workgroup. However, these topics cannot be examined until there are enough years of PARCC implementation outcomes to analyze. In response to a question from Dr. Passmore, Mr. Goldstein

responded that new research questions would not need to be created and that the research proposed by the CCRI workgroup falls under existing questions.

Dr. Fielder stated that the next step is for the MLDS Center staff to review and report back to the P20 Council on the recommendations and provide an estimate of how much time they will take to analyze and whether the Center has the necessary data for the analysis.

Dr. Fielder noted that a lot of the research capabilities will be impacted by the five year limit on linking student and workforce data and asked Mr. Goldstein for an update on the status of the legislation that would extend the permissible amount of time that data can be linked from five to 20 years. Mr. Goldstein stated that the bill (HB 680, *Maryland Longitudinal Data System - Student and Workforce Data Linkage - Extension of Time Limit*) was up for final passage in the House. During the House floor debate on second reader, there were questions about whether the Center can sell data. While selling data is strictly prohibited, an amendment was added that clarifies that the Center cannot sell data. The Senate companion bill (SB 1165) is still waiting for a committee hearing.

Strategic Communications Plan

Lia Tiderman began the presentation of the *Strategic Communication Plan* by noting that it is being created using some of the communication plans developed during the initial design of the Center. The plan being presented is a draft and staff are hoping to get the Board's input on several aspects of the plan.

The plan describes the desired outcomes of the communications strategy as developing an audience who will use the System, engage the MLDS for analyses, provide input to the MLDS, and champion the MLDS across the state. Dr. Fielder noted that one desired outcome is use of the MLDS to lead to better decision making and policies. Mr. Rizzi responded that stating that we are developing an audience assumes we already know what the audience wants or needs. Instead, we are a service organization and we first need to work to understand the needs of our audience. In other words, the communications strategy should be focused on establishing dialogue instead of promotion. Mr. Biggs agreed noting that if our audience doesn't know what we can do, they can't assess how the tool is useful for them.

Next Ms. Tiderman described the plan to convene a Communications Advisory Board. The Board would provide guidance, assist in the development of communication materials, and provide consultation to the staff of the Center. This advisory board is consistent with our current models for the Data Governance Advisory Board and the Research and Policy Advisory Board. This board would consist of the communications officials at the partner agencies and at the School of Social Work and the University System. Dr. Passmore noted that there are a lot of different groups around the state to engage with and asked whether they should be included in the advisory board. Ms. Tiderman responded that MSDE has a lot of experience in engaging students, parents, LEAs, and school staff and hopefully they can assist in how best to engage some of those groups. Mr. Rizzi noted that the advisory board is made up of all state government entities and asked whether there would be value to including representatives from the private sector. Dr. Fielder proposed including representation from the P20 Council, which has a broad membership. Mr. Rizzi and Mr. Harrison both agreed with this proposal and noted that the P20 Council representative could be one of the non-government members of that board.

The communications plan also identifies groups of audiences. Ms. Tiderman asked the Board to provide their input on which of the audiences the Center should focus on first. This will help staff ensure that content is tailored to those groups. Mr. Rizzi responded that the list of audiences should include

employers, who are an important component of the workforce pipeline. Ms. Bjarekull stated that the whole purpose of the MLDS is to evaluate public policy for the primary state policy makers (Governor and General Assembly). This can include economic vitality of the state, but the focus of the work needs to be for policy makers. This will also help justify the investments being made by state government in the Center. Dr. Fielder pointed out that the Governor's Workforce Development Council would be a good audience and would include private industry employers. Ms. Brooks agreed with Ms. Bjarekull's assessment that the focus needs to be on the policy makers, noting that while it would be ideal for parents to use the MLDS, it is not realistic. Dr. Passmore also agreed with focusing on policy makers, but noted that the communications plan needs to be developed, perhaps with the expertise of the Communications Advisory Board, in a way that focuses on policy makers and their needs while reaching out to the broader public. Mr. Goldstein agreed and noted that dual enrollment is a good example of a topic that is of interest to policy makers and could be informative to the public. Ms. Bjarekull cautioned that the Center's role is to evaluate data to inform policy. When informing the public, the Center should be careful not to drive policy - that should be left to the agencies.

Dr. Fielder asked whether the website captures information about the audience. Ms. Cherry responded that the website does capture some general information - where they are from and what they are looking at - but no specific information. Mr. Goldstein noted that the subscription services and the request for feedback on dashboards will help the Center better understand the audience.

Finally, Ms. Tideman presented the revised Mission and Vision statement and asked for input. Ms. Bjarekull remarked that it was very good - her one observation was that the term "singular" in the Vision gives the impression that the Center wants to be the *only* source for information on student to workforce outcomes. It would be better to state that the MLDS is the "preeminent" or "optimal" source.

MLDS Center Incident Management Plan Overview

Mr. Goldstein started by discussing the purpose of the Incident Management Plan, which is to have an organized set of steps and procedures to follow in the event of a security incident. The plan also ensures that the Center's response to an incident fulfills legal requirements and thoroughly addresses technical needs.

Section 1 of the Plan outlines the State legal requirements which are provided in State Government Article, Title 10, Subtitle 13 - Protection of Information by Government Agencies. The subtitle defines a data breach as the "unauthorized acquisition of computerized data that compromises the security, confidentiality, or integrity of the personal information maintained by the unit." Personal information is defined as the name in combination with an identification number such as a Social Security number, driver's license number, or State Assigned Student Identification number (SASID). The law requires prompt investigation and notification of those affected by the breach. The method of notification must be written or by telephone, unless the cost exceeds \$100,000 or the number of affected individuals is 175,000, in which case email or conspicuous posting is sufficient. Notification is not required if personal information was secured by encryption and there is no evidence that the encryption key has been compromised or disclosed.

The rest of the plan (section 2) is the implementation of the requirements of state law. The components include the following:

1. Roles and responsibilities of the MLDS Center staff as well as staff at MSDE and DoIt in its capacity as host of the data center.
2. A first 24 hour checklist which is a list of "what to look for" such as different types of attacks that should be considered.

3. An analysis of each component part of the system, including the type of data it contains, the sensitivity of that data, any mitigating factors, such as whether the data is encrypted or de-identified.
4. A description of the forensic analysis to be conducted, including the requirement to deploy a computer forensic investigator.
5. A plan for communicating the facts of the breach to stakeholders and law enforcement. Within the first six hours of learning of the breach, the communication plan requires notification to the Chair of the Governing Board, the partner agencies, the Assistant Attorney General, and DoIT (by completing the *IT Incident Reporting Form* which is found in Appendix A). Within 24 hours of learning of the breach and if it is determined that a data breach occurred, the plan requires notice to be provided to the entire Governing Board and appropriate law enforcement agencies. The information provided must include:
 - a. Steps to stop breach;
 - b. Number of individuals affected;
 - c. Strategy for notification;
 - d. Cost of notification; and
 - e. Corrective Action plan.
6. Finally, the plan specifies the information that must be provided to individuals affected by the data breach, including:
 - a. Who is affected;
 - b. Description of information compromised;
 - c. Number and address for each credit reporting agencies;
 - d. Contact information for the FTC and OAG - and a statement that the individuals can obtain information from these sources about steps to avoid identity theft; and
 - e. A police report case number.

Mr. Goldstein noted that the staff plans to develop the text of the actual notices and conduct a test of the plan to ensure that it functions in practice as efficiently as it appears on paper.

Mr. Fielder asked whether the Center staff monitors attempts to breach the system. Ms. Cherry responded that the Center staff monitors access to all of the systems. There are audit logs that are consistently reviewed and DoIT provides alerts.

Mr. Harrison asked whether there were any requirements under federal law for labor data that would be distinct from the requirements for the education data and whether DLLR would have to report a breach to the U.S. Department of Labor. Ms. O’Croinin stated that federal regulations governing Unemployment Insurance (UI) data (20 CFR Part 603) do not have a specific data breach notification process. In terms of what is considered confidential, there is no distinction between what is confidential for purposes of UI data and education data. DLLR as the UI custodian would have to determine whether additional notification is required to USDOL. Mr. Goldstein noted that in the event of a breach, the interagency agreements specify that data loading must stop until the issues are resolved. In response to a question from Mr. Biggs, Ms. O’Croinin clarified that the statute authorizing the Center incorporates FERPA and federal UI regulations and therefore data confidentiality is consistent with federal confidentiality requirements.

Old Business

There was no old business.

New Business

Mr. Goldstein noted that there are three grants for the Governing Board to review. This was the first use of the Grant Notification Checklist that was established in the Governing Board's Bylaws. Overall, it was a good process and the feedback received will help staff provide more focused information in certain areas.

The first grant is the Computer Science For All grant. There was a presentation at the P20 Council meeting. The grant is from the National Science Foundation and is being applied for by the University System of Maryland and MSDE. The goal of the grant is to increase the number and capacity of teachers who can teach higher level computer courses. The MLDS would be used to study whether this program improves the pipeline of teachers so that more students study computer science in college and go to work in computer science fields.

The second grant is the Minority Youth Violence Prevention grant by the Department of Health and Human Services. The applicant is the School of Social Work. The goal of the grant is to identify approaches to reduce prevalence and impact of youth violence among racial and ethnic minority and disadvantaged at risk youth. The MLDS would be used to study whether program participants have improved outcomes as a result of the programs. The outcomes include whether the students are successfully entering college or the workforce.

The final "grant" is for the addition of a Postdoctoral Student to be provided by the School of Social Work. Mr. Goldstein clarified that while this is not a grant, it involved an application process and created a financial benefit to the Center and therefore the decision was made to present it as a grant for board review and approval.

Ms. Bjarekull made a motion to approve the Computer Science for All Grant. The motion was seconded by Dr. Passmore and unanimously approved.

Dr. Passmore made a motion to approve the Minority Youth Violence Prevention Grant. The motion was seconded by Mr. Harrison. The motion was unanimously approved, with the exception of Ms. Brooks who recused herself from voting on the motion.

Mr. Rizzi made a motion to approve the Postdoctoral Fellow Program. The motion was seconded by Dr. Passmore and unanimously approved.

Adjournment

Dr. Fielder reminded the members that the next meeting will be held on June 9th at 9 a.m. at the same location. A motion to adjourn the meeting was made by Mr. Rizzi and seconded by Mr. Harrison. The motion was unanimously approved and the meeting concluded at 10:45 a.m.

Respectfully submitted,
Ross Goldstein
Executive Director

Approved: *[pending]*