

Outcomes and Investments
Subcommittee
December 12, 2013
10:30am - 12:30pm
OHSU, School of Nursing Building
3455 SW US Veterans Hospital Road,
Room 602
Portland, OR 97239-2941

Materials packet includes:

Meeting Agenda

Draft Scorecard

Data Systems Project – Problem definitions

Data Systems Project – Alternatives

Database schematic

Systems Project – FAQ

2014 Draft workplan



OREGON EDUCATION INVESTMENT BOARD Outcomes and Investments Subcommittee

Oregon Health & Science University
3455 SW US Veterans Hospital Road
Room 602
Portland, OR 97239-2941

Thursday, December 12, 2013
10:30am – 12:30pm

Members: Dick Withnell, Chair, Pam Curtis, Ron Saxton,
Hanna Vaandering, Duncan Wyse

AGENDA

JOHN KITZHABER
Governor of Oregon
OEIB Chair

JULIA BRIM-
EDWARDS

YVONNE CURTIS

MATTHEW DONEGAN

SAMUEL HENRY

NICHOLE JUNE
MAHER

MARK MULVIHILL

DAVID RIVES

RON SAXTON

MARY SPILDE
Chair-Designee

KAY TORAN

JOHANNA
VAANDERING

DICK WITHNELL

Chief Education Officer
NANCY GOLDEN

- 1.0 Subcommittee Welcome & Roll Call
- 2.0 Scorecard: Final Review & Recommendation to the Full OEIB
Whitney Grubbs, Chief of Staff
David Edwards, Director of Research & Policy
- 3.0 Overview of Longitudinal Database
Peter Tromba, P-20 Longitudinal Database Project Manager
- 4.0 Update on Achievement Compact Assessment Plan
David Edwards, Director of Research & Policy
- 5.0 Review & Discuss Draft 2014 Work Plan
Dick Withnell, Chair
- 6.0 Public Comment
- 7.0 Review of Tasks and Details on Next Meeting
Meeting adjourns

****Times are approximate***

All meetings of the Oregon Education Investment Board are open to the public and will conform to Oregon public meetings laws. The upcoming meeting schedule and materials from past meetings are posted [online](#). A request for an interpreter for the hearing impaired or for accommodations for people with disabilities should be made to Seth Allen at 503-378-8213 or by email at Seth.Allen@das.state.or.us. Requests for accommodation should be made at least 48 hours in advance.

OEIB Quarterly Scorecard

| Key Student Outcomes | 2012 Baseline | 2013 Results | 2015 Target | ____ [date] ____ - Quarterly Update | Status |
|---|------------------|-----------------|------------------|-------------------------------------|--------|
| Increase Children Ready for Kindergarten | | | 20% | | |
| <i>Strategy 1: Early Learning Hub System</i> | | | | | |
| <i>Strategy 2: Increase Connection Between Early Learning & CCOs</i> | | | | | |
| Increase 3rd Graders Demonstrating Reading Proficiency | | | 80% | | |
| <i>Strategy 1: Statewide Literacy Campaign</i> | | | | | |
| <i>Strategy 2: Early Reading Strategic Investment and K Partnership & Innovation Fund</i> | | | | | |
| Increase 8th Graders Demonstrating Proficiency in Math | | | 75% | | |
| <i>Strategy: STEM Hubs</i> | | | | | |
| Increase Students On Track With Credits By End of 9th Grade | | | 85% | | |
| <i>Strategy 1: Mentoring, Monitoring & Support Investment</i> | | | | | |
| <i>Strategy 2: Transition Youth Development Division</i> | | | | | |
| Increase Students Earning College Credit in High School | | | 65% | | |
| Increase 5-Year Cohort Graduation Rate | | | 76% | | |
| <i>Strategy: Accelerated Learning Opportunities and 11-14 Initiatives</i> | | | | | |
| Increase Certificates, Associates Degrees, and Transfers | | | | | |
| <i>Strategy: STEM and CTE Investments</i> | | | | | |
| Increase degrees (bachelors & higher) | | | | | |
| <i>Strategy: Oregon Opportunity Grant Redesign</i> | | | | | |
| Key Equity Outcomes | 2012 Baseline | 2013 Results | 2015 Target | ____ [date] ____ - Quarterly Update | Status |
| Increase 5th Grade ELLs Demonstrating Reading Proficiency | | | 37% | | |
| <i>Strategy 1: Implement State ELL Plan</i> | | | | | |
| Decrease Achievement Gaps on All Metrics | | | Reduce 5% | | |
| <i>Strategy 1: Implement Equity Lens</i> | | | | | |
| <i>Strategy 2: Closing the Achievement Gap Investments</i> | | | | | |
| Achievement Growth at Focus / Priority Schools | | | 75% | | |
| <i>Strategy: Support Improvement in Focus and Priority schools</i> | | | | | |

| | | | | | |
|--|---|-------------------------|------------------------|--|---------------|
| Increase College Enrollment Rate for Underserved Students | | | | | |
| <i>Strategy: Implement Post-Secondary Aspirations Investments</i> | | | | | |
| Key Educator Outcomes | 2012 Baseline | 2013 Results | 2015 Target | _____ [date] _____ - Quarterly Update | Status |
| Increase non-white, Hispanic, or non-Native English Educators | | | | | |
| <i>Strategy: Create and implement statewide plan for recruitment and retention</i> | | | | | |
| Increase Educator Satisfaction with Professional Support | | | | | |
| <i>Strategy: Develop and Invest in Network for Quality Teaching & Learning</i> | | | | | |
| Key System Outcomes | 2015 Target | | | _____ [date] _____ - Quarterly Update | Status |
| Standards & Assessments Aligned Across P-20 | Complete | | | | |
| Functional P-20 Policy Data System | Complete | | | | |
| Achievement Compacts Track Key Outcomes & Drive Local Budgeting | Annual Analysis of Trajectory / Recommendations Complete | | | | |
| Policy Barriers to Student Success Removed and Mandates Reduced | Legislative Agenda Passed | | | | |
| Develop Strong Partnerships and Accountability Across P-20 | Effective Accountability System | | | | |
| Outcome-based State Budget | Developed & Passed | | | | |
| Key Initiatives are Analyzed for Impact and Return on Investment | ROI Model Built & Key Initiatives Analyzed | | | | |
| Stakeholders adequately informed with adequate opportunities to provide input | 85% Key Stakeholders Informed & Engaged | | | | |

| Status - Color Key | |
|--|--|
| On Track to Reach Target | |
| Target Attainable with Continued Efforts | |
| Attention Needed | |

OEIB Data System Project - Problem Definition

Oregon spends over \$12 billion annually for public education but does not have systems in place to allow policy makers to evaluate the effectiveness of those expenditures. In response, the law creating of the Oregon Education Investment Board (Senate Bill 909) stipulated a goal to provide a longitudinal database to track and evaluate these returns on investments. The state has not integrated educational longitudinal databases across the various sectors of education, i.e. early childhood, public K12 schools, community colleges, universities. Finally, the state has not connected employment outcomes to educational data to evaluate program effectiveness.

| Problem | Opportunity | Details |
|---|---|---|
| Lack of a policy level database that informs legislators, other policy makers, and research partners. | Better educational investments. Better policy research. | De-identified data that shows students' longitudinal path through the system. |
| Not meeting Federal COMPETES Act that stipulates targets for state longitudinal data systems. | Keep pace with other states. | |
| Not utilizing workforce data | Ability to assess high school and post-secondary preparation in terms of workplace success. | Data is already collected by the OED. Requires a secure linking of data. |

Effective program coordination is inhibited by technical and governance barriers to data sharing that exist across educational sectors. These barriers increase staff workload, lead to duplication of effort, promote uninformed decisions, create shadow-systems of informal information exchange, increase data errors, and generally retard student progress and opportunity.

| Problem | Opportunity | Details |
|---|--|-----------------------|
| Staff workload and duplication of effort | Standardized electronic exchanges will reduce the time staff spend searching for records and determining a student's best program and placement. | |
| Uninformed Decisions, primarily on issues that cross boundaries. | Better wrap-around services, ability to better support students with special needs. | |
| Shadow-Systems: unofficial information sharing done on an ad-hoc basis. | More equitable treatment for all students and less risk for staff. | |
| Governance barriers. | All of the technical issues are solvable given appropriate governance. | OEIB data governance. |

Students do not have sufficient and meaningful access to their own achievement data. Students are important agents in a successful educational and employment outcome; yet, they have limited access to incomplete data and no tools to understand and use the data. An equity issue exists in this area because groups of students have less access and understanding of their achievement data.

| Problem | Opportunity | Details |
|--|---|---|
| Students do not have sufficient and meaningful access. | Provide access to relevant achievement data. | Can include grades, transcripts, and other evidence of proficiency. |
| Lack of equitable access to relevant data. | Universal access that is easily accessible and culturally relevant. | |
| Achievement data is not meaningful to students. | Provide tools that link desired outcomes to educational requirements. | |

DRAFT

OEIB Longitudinal Database Alternatives – Version 3.0

Alternatives

Alternative 1 is a complete replacement of all the elements required to meet all of the requirements. At the institution and district level, this includes new student information systems, human resources systems, and financial systems. A single state data warehouse would pull data from the institutions or districts. This central data warehouse would allow for longitudinal and other comparisons by providing portals and tools for students and families, staff members, board members, policy makers, and the community to access this data in a secure environment.

Alternative 2 is similar to #1, but it omits any changes at the institutional levels, except for uniform student information systems in K-12 public schools.

Alternative 3 is similar to #1, but it omits any changes at the institutional levels.

Alternative 4 maintains the existing data systems in institutions and agencies. In order to create the meet the requirements for a longitudinal policy database and the personal student record, agencies would be required to report longitudinal data from their systems on a periodic basis. Longitudinal data from each sector would be matched to create PK-20W records through a secure process at the OEIB. These data would then be de-identified. This alternative also includes the creation of an entirely new and separate personal educational record that is informed by agency data warehouses, but wholly owned and accessed by students and families.

Alternative 5 is similar to #4, but it omits the creation of a separate personal educational record. In order to meet this requirement, agencies and institutions will need to maintain and be able to transfer the record data as students move through the system. They will also need to address the need for student and family access.

| | | Status | Alt 1 | Alt 2 | Alt 3 | Alt 4 | Alt 5 |
|----------------------------|--------------|---------------------------|-------|-------|--------|--------|--------|
| Elements | | | | | | | |
| Student Information System | | | | | | | |
| | PK | No | Yes | No | No (1) | No (1) | No (1) |
| | K-12 | In existence, not uniform | Yes | Yes | No | No | No |
| | CC | In existence, not uniform | Yes | No | No | No | No |
| | Universities | In existence, not uniform | Yes | No | No | No | No |
| | | | | | | | |

OEIB Longitudinal Database Alternatives - Version 3.0

| | | | | | | | |
|--|--------------|---------------------------|-----|-----|--------|--------|--------|
| HR/Business System | | | | | | | |
| | PK | No | Yes | No | No (1) | No (1) | No (1) |
| | K-12 | In existence, not uniform | Yes | No | No | No | No |
| | CC | In existence, not uniform | Yes | No | No | No | No |
| | Universities | In existence, not uniform | Yes | No | No | No | No |
| | | | | | | | |
| Data Warehouse | | | | | | | |
| | PK-12 | In process | Yes | Yes | Yes | No (2) | No (2) |
| | CC | In process | Yes | Yes | Yes | No (3) | No (3) |
| | Universities | In existence | Yes | Yes | Yes | No (4) | No (4) |
| | | | | | | | |
| Longitudinal Databases | | | | | | | |
| | PK-12 | In process | Yes | Yes | Yes | No (5) | No (5) |
| | 13 - W | No | Yes | Yes | Yes | No (6) | No (6) |
| | | | | | | | |
| Interagency Matching | | | | | | | |
| | PK - W | Testing | Yes | Yes | Yes | Yes | Yes |
| | | | | | | | |
| Policy/Research Business Intelligence System | | No | Yes | Yes | Yes | Yes | Yes |
| | | | | | | | |
| Personal Educational Record | | No | Yes | Yes | Yes | Yes | No (7) |

Definitions:

Student Information System: Organize data for students and staff regarding demographic information, classes and courses, attendance, grading, contact information. Can include portals for student, and family electronic access.

Human Resources System: Organize personnel and employment data, especially with respect to educator licensing and highly qualified status. Can include portals for staff.

Business/Financial System: Budgeting and accounting system that charts spending according to state requirements. Can include portals for staff.

Data Warehouse: Comprehensive storage of student, human resources, and business/financial data that allows for complex analysis. Can include portals for staff, student, and family electronic access.

Longitudinal Database: An extract from a data warehouse that includes the linking of data of individuals over time.

Notes:

- (1) – Some PK systems may be created as part of the ELC data project, especially with respect to the Early Learning Hubs. Funds may be required to scale this effort up.
- (2) – QUESTION: Is the long term goal to continue with regional data warehouses? Will that information reside only on local systems, or will ODE mine/collect what is there beyond KIDS?
- (3) – If this is not part of the project, the HECC will need to bring up this database; funds may need to be allocated to support this.
- (4) – Currently, all the Oregon Public Universities report data to OUS. HECC plans to take on this responsibility for all institutions; it is not clear what OSU, UO, and PSU are planning to do. Funds may need to be allocated to support the HECC.
- (5) – Funds may need to be allocated to support the ODE.
- (6) – May or may not be necessary. What is substantially different for this longitudinal database, versus a K-12 version, is that students will typically cross from education to work and back in a huge variety of ways. If this type of analysis is important for the HECC, they may opt to fund it independently.
- (7) – If this is not part of the project scope, the no-cost solution to this problem is to have processes and procedures in place for institutions that extend the rules and format of the existing student cumulative record.

OEIB Longitudinal Database Project
Frequently Asked Questions

Q: What problems does the OEIB database solve?

A: (1) the state has no method to effectively track longitudinal educational outcomes resulting from over \$12 billion of public spending; (2) the commissions, agencies, and institutions governed by the OEIB have incompatible data systems; (3) students and families do not have sufficient and meaningful access to their personal longitudinal record of achievement.

Q: What will a longitudinal database allows us to do?

A: (1) it will allow policy makers to track statewide educational outcomes for students as they move through the system into the world of work; (2) it will create a more seamless system between institutions and agencies, resulting in greater efficiencies for staff, less hassle for students and parents, and more expedited services for students who need extra help; (3) students and families will have equitable access to their achievement data that is portable and personal for them; they will also have tools to connect future goals to current decision-making.

Q: Who will be the end users of the longitudinal database?

A: The “policy database” will be de-identified so that it can be used by legislators and other policy makers. It is not intended for agency or institution staff to access student data—they already have internal systems to do that. The “personal student database” will be available for students and families only and will persist for their educational career and beyond.

Q: How are we determining what the needs are for this database project?

A: As part of the development of the business case, project staff are interviewing key stakeholder groups. These groups include existing data steering committees (ALDER and ELC); boards and commissions (OEIB and QEC); key agency staff at ODE, OED, CCWD, OUS, ELD, and HECC; professional organizations (COSA and OEA), district superintendents and IT directors; business partners (OBC and Chambers of Commerce). We are also interested in your feedback. Please call or email Peter Tromba at peter.tromba@state.or.us or (541) 954-2507.

Q: How are we investigating alternative solutions for this database project?

A: Based on the needs assessments, design specifications will be developed which will allow us to propose alternate solutions. These alternates will be compared with respect to their relative costs, implementation considerations, and functionality.

Q: How does this project relate to the Oregon Department of Education’s ALDER project?

A: ALDER as currently designed cannot solve all of the problems indicated above. Alternatives will likely include replacing ALDER or using ALDER as a key source for the OEIB longitudinal data system.

Q: What is the scope of this longitudinal data system?

A: Early Learning (which includes data from early learning providers, the Department of Human Services, and the Oregon Health Authority), K-12 public schools, Public Universities, Community Colleges, Licensed Professional and Technical Schools, and Workforce Data.

Q: Will this system replace what teachers, administrators, and other staff use in their schools, colleges, and universities?

A: No. Collectively, state institutions have invested heavily into systems for their staff based on the needs in their local context and systems are substantially in place to report data to the state. It is likely that the development of the OEIB longitudinal database will ultimately change some of the reporting requirements of the local systems.

Q: Will this increase workload on school staffs?

A: No. In fact, the state agencies involved in this project are interested in decreasing workload and increasing efficiency in two ways: simplifying reporting procedures and providing standardized reports back to schools.

Q: What are the laws govern the privacy of the data included in the proposed OEIB longitudinal database system?

A: (1) Educational records security is governed by FERPA; (2) Medical records security is governed by HIPPA; (3) DHS data and Workforce data (that uses SSN's) is governed by the Federal Privacy Act.

Q: Will the longitudinal database contain personally identifiable information?

A: No. To create a longitudinal record between institutions, agencies, and the workforce, an intermediary step will be performed in a very secure and inaccessible environment. Once the records are linked, the results will be de-identified.

Q: Is there any risk associated with the intermediary step that links student records?

A: Yes. It is conceptually impossible to create the longitudinal database without exposing that data to some degree. However, that risk can be managed through effective design, extremely limited access, and monitoring.

OEIB Outcomes & Investments Subcommittee 2014 Work Plan
Draft v1 11.29.13

| Mtgs | Committee Logistics & OEIB Research/Policy Agenda | 40-40-20 Analysis & Progress Tracking | ROI Tool Development | Strategic Investment Tracking | Strategic Investment Recs 2015-17 |
|----------------|--|---|---|---|--|
| 1-14-14 | <ul style="list-style-type: none"> • Approve work plan | <ul style="list-style-type: none"> • Review 2014 research plan • Recommend OEIB scorecard to full committee | <ul style="list-style-type: none"> • Update on resource allocation model | <ul style="list-style-type: none"> • Review logic models for strategic investments | |
| 2-11-14 | <ul style="list-style-type: none"> • Relevant legislative updates | <ul style="list-style-type: none"> • Recommend 2014 research plan to full committee | <ul style="list-style-type: none"> • Review base model | <ul style="list-style-type: none"> • Update on strategic investments (status) • Report on early literacy investment & review of research plan | |
| 3-11-14 | <ul style="list-style-type: none"> • Relevant legislative updates | <ul style="list-style-type: none"> • OEIB scorecard • Research updates | | <ul style="list-style-type: none"> • Report on STEM investments & review associated research plans | <ul style="list-style-type: none"> • Review timeline for making strategic investment recs |
| 4-8-14 | | <ul style="list-style-type: none"> • Research updates | | | <ul style="list-style-type: none"> • Discuss strategy for developing strategic investments recs |
| 5-13-14 | <ul style="list-style-type: none"> • Potential joint meeting w/Best Practices & Student Transitions re: strategic investments | <ul style="list-style-type: none"> • Research updates | <ul style="list-style-type: none"> • Review draft ROI simulator | <ul style="list-style-type: none"> • Report on STEM Council recs | <ul style="list-style-type: none"> • First round of strategic investment recs |
| 6-10-14 | <ul style="list-style-type: none"> • Review/revise work plan | <ul style="list-style-type: none"> • Research updates | <ul style="list-style-type: none"> • Review refined ROI simulator | | <ul style="list-style-type: none"> • Second round of strategic investments |
| 7-8-14 | | <ul style="list-style-type: none"> • OEIB scorecard • Research updates | <ul style="list-style-type: none"> • Present final ROI simulator to full committee | | <ul style="list-style-type: none"> • Final round of strategic investments |

| Mtgs | Committee Logistics & OEIB Research/Policy Agenda | 40-40-20 Analysis & Progress Tracking | ROI Tool Development | Strategic Investment Tracking | Strategic Investment Recs 2015-17 |
|-----------------|--|--|-----------------------------|--|---|
| 8-12-14 | | <ul style="list-style-type: none"> • Research updates | | | <ul style="list-style-type: none"> • Recommend strategic investments to full committee |
| 9-9-14 | | <ul style="list-style-type: none"> • OEIB scorecard • Research updates | | | |
| 10-14-14 | | <ul style="list-style-type: none"> • Research updates | | <ul style="list-style-type: none"> • Review of baseline data on key strategic investments | |
| 11-18-14 | <ul style="list-style-type: none"> • Potential joint meeting w/Best Practices & Student Transitions re: strategic investments | <ul style="list-style-type: none"> • Research updates | | | <ul style="list-style-type: none"> • Report on strategic investments |
| 12-9-14 | | <ul style="list-style-type: none"> • Research updates | | | |