



# Rostering for the Future: Ed-Fi and OneRoster Working Together

# Speakers



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# Agenda

- Update on the collaboration across 1EdTech and Ed-Fi Alliance communities
- Overview and demo of implementation of a OneRoster v1.2 service for Ed-Fi deployments
- What's next and how to get involved
- Q/A and discussion

# ***The collaboration***



# Focused Opportunity: Rostering Applications



- **1EdTech and the Ed-Fi Alliance** are working together to develop a coordinated rostering approach and scalable pathways for richer data integrations
- The collaboration aims to
  - Enhance data **driven decision-making**
  - **Maximize educator time** for teaching
  - Align with **data-driven policies** to unlock state and federal funding
  - **Reduce fragmentation** across disparate EdTech products at both state and local levels
- This is a **community-driven** initiative. Mutual community members are already building valuable integrations and there is support for a growing set of use cases enabled by rostering.



# Learning from Existing Implementations

| Criteria                     | Michigan Data Hub                              | ClassLink (Delaware)                                    | EdGraph   | Education Analytics   |
|------------------------------|--|---|---|---|
| <b>General Information</b>   |  |   |   |   |
| <b>OneRoster Version</b>     | 1.1  | 1.1, 1.2<br>(Clients choose; Connector outputs 1.1)     | 1.1   | 1.1   |
| <b>Implementation Type</b>   | REST API Provider<br>(+ Flex Exporter for CSV) | CSV Export & REST API                                   | CSV Export & REST API<br>(+ PUT support)                    | CSV Export only   |
| <b>1EdTech Certification</b> | ✓ REST Provider 1.1                            | ✓ REST Provider 1.1, 1.2                                | ✓ REST Provider 1.1<br>✓ CSV Export 1.1                     | ✗ No certification  |
| <b>Ed-Fi Version</b>         | v6.2 (DS 4.0)                                  | v6.2 (DS 4.0)   | v6.2 (DS 4.0)<br>v7.2 (DS 5.1)                              | v7.1 (DS 5.0)   |
| <b>Production Use</b>        | 376 active districts                           | ~40 districts   | 100's of districts indirectly<br>(vendor-owned districts)   | TBD   |
| <b>Vendor Adoption</b>       | CSV: 77 vendors<br>API: 106 vendors            | CSV: ~ 10% of vendors<br>API: ~ 90% of vendors          | <5 vendors each<br>(CSV & API)                              | TBD   |
| <b>Architecture</b>          |  |   |   |   |
| <b>Integration Pattern</b>   | Ed-Fi as central hub<br>(Direct from ODS)      | Parallel implementations<br>with middleware translation | Parallel implementations<br>with middleware translation     | Ed-Fi as central hub +<br>downstream data store<br>(ELT approach) |
| <b>Multi-tenancy</b>         | Separate Ed-Fi ODS per<br>tenant               | Tenant isolation at<br>downstream DB                    | Tenant isolation at<br>downstream DB (Single API<br>router) | Tenant isolation at<br>downstream DB                              |



# Mapping and Gap Analysis

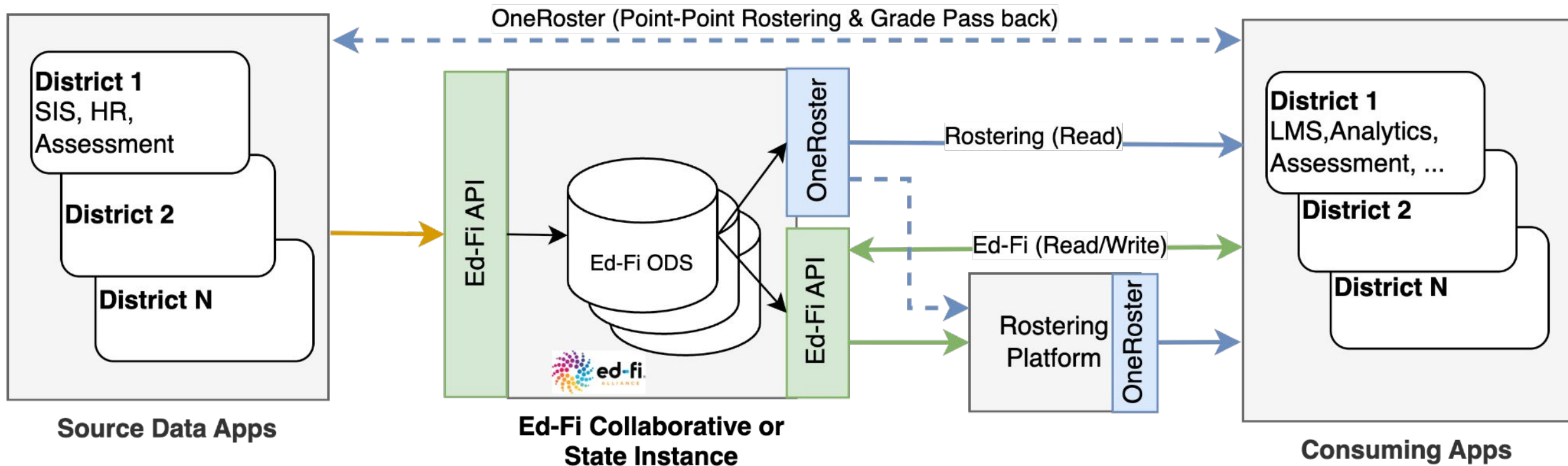
## Recommendations for Integration and Alignment

1. **Establish clear mapping conventions:** Develop a detailed field-by-field mapping guide between OneRoster and Ed-Fi to ensure consistent data exchange
2. **Align descriptors and enumerations:** Develop an approach to configure Ed-Fi descriptors to match OneRoster's terminology
3. **Implement robust identifier strategy**
4. **Address differences in authorization**
5. **Develop a strategy for reducing OneRoster custom extensions**
6. **Develop a OneRoster Profile for Ed-Fi:** Explore the creation of a joint profile to enhance interoperability, leveraging both standards' strengths.

# ***OneRoster Service for Ed-Fi - Initial implementation***



# Proposed Architecture: Services from Both Standards



# Overview of implementation

## Design Principles

- Stay within the ODS database
- Minimize excess structure creation
- Leverage Descriptor Mapping domain flexibility
- Adopt patterns that could translate from Postgres to MSSQL

## Execution

- Mapped OneRoster codes to Ed-Fi Core Descriptors
- Deployed Materialized Views in Postgres with scheduled refreshes
- Deploy companion API for integration with OneRoster consumer
  - Tested with OneRoster conformance testing suite

## Next Steps

- Porting to MSSQL and addressing lack of Materialized Views feature
- Accommodating OneRoster scopes via the Ed-Fi API



***Demo***



***What's next and how to get involved***



# Next Steps to Mature the Implementation

## Expansion

MSSQL and Data Standard 4.0

Unlocks broader pilot testing

## Hardening

Database-level and API integration tests.

Ensures data transformation accuracy

## OAuth Provider

Ed-Fi integrated OAuth provider

Seamless login experience

## Multi-Tenancy

Support multiple Ed-Fi database instances via OneRoster API

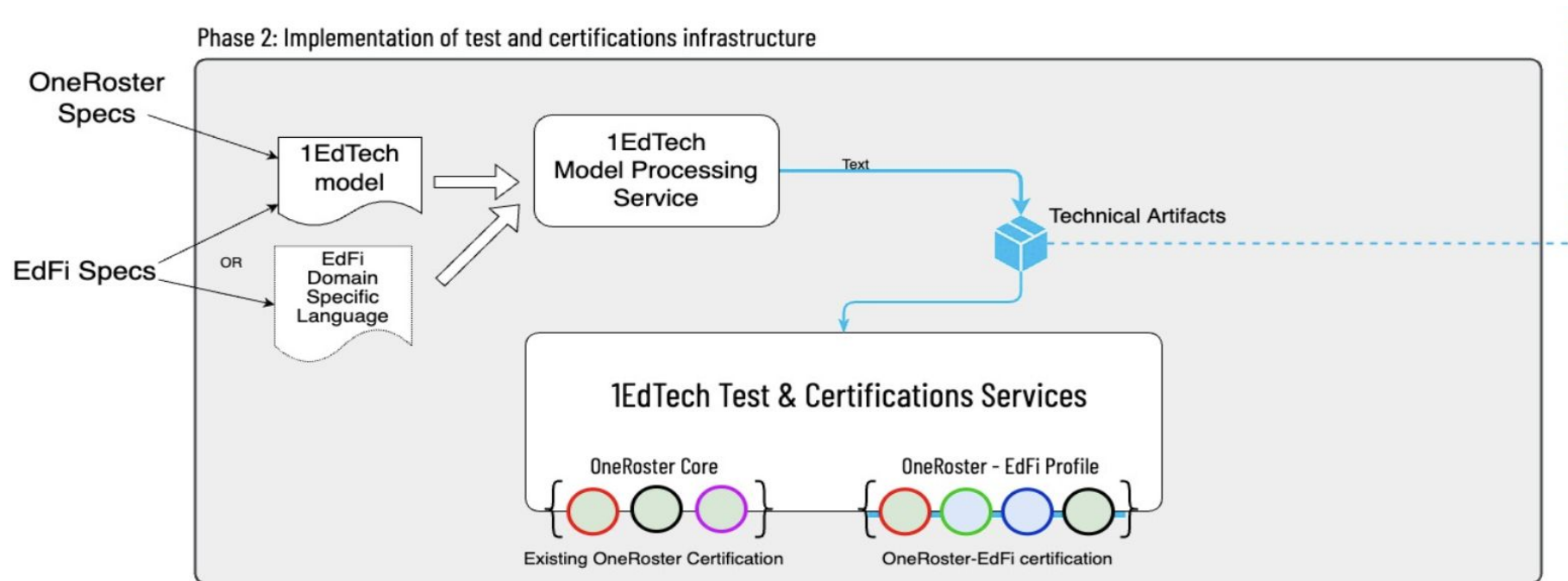
Enables datahub and regional deployment

## Auth Alignment

Integrate with Enrollment and Employment based Ed-Fi Authorization

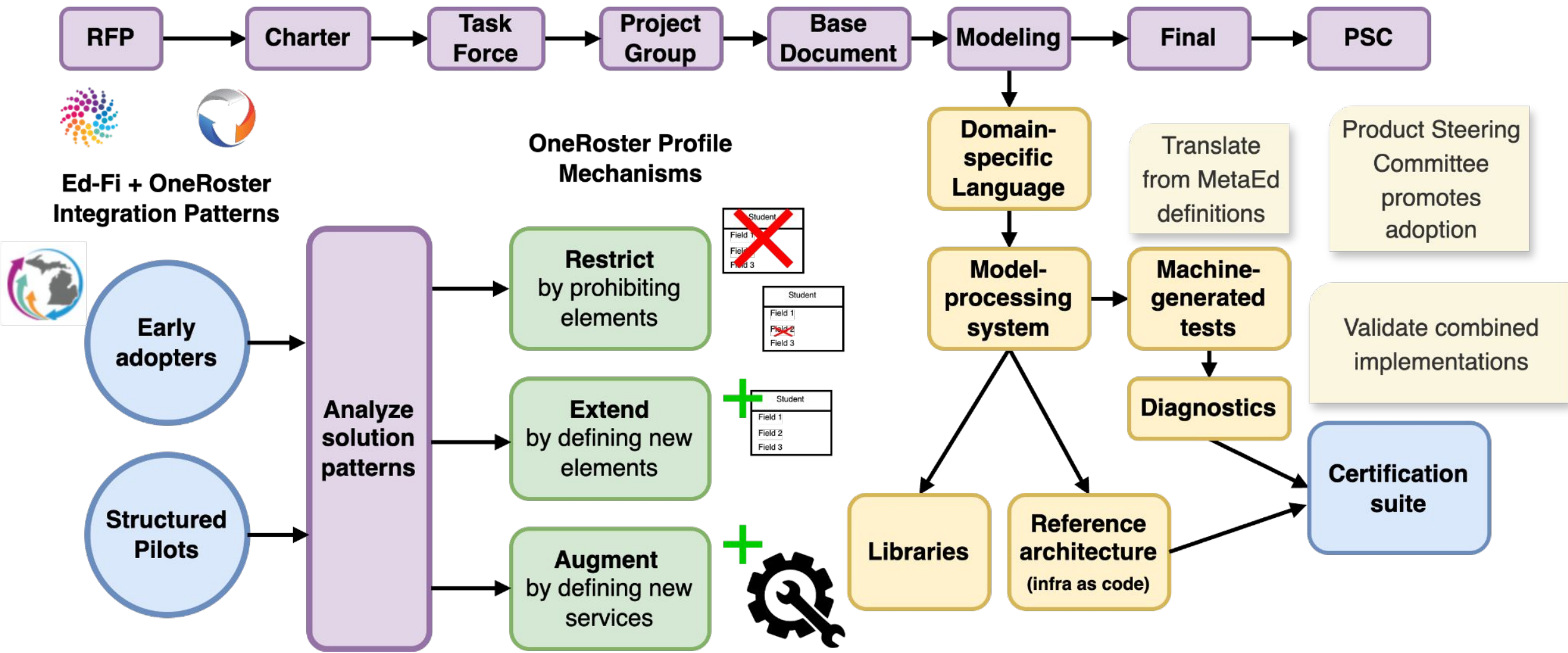
# Developing a OneRoster Profile for Ed-Fi

Phase 2 proposes a future-state where the 1EdTech infrastructure that maintains and supports the 1EdTech ecosystem for certification and diagnostics, can be applied to support the OneRoster-EdFi joint profile.

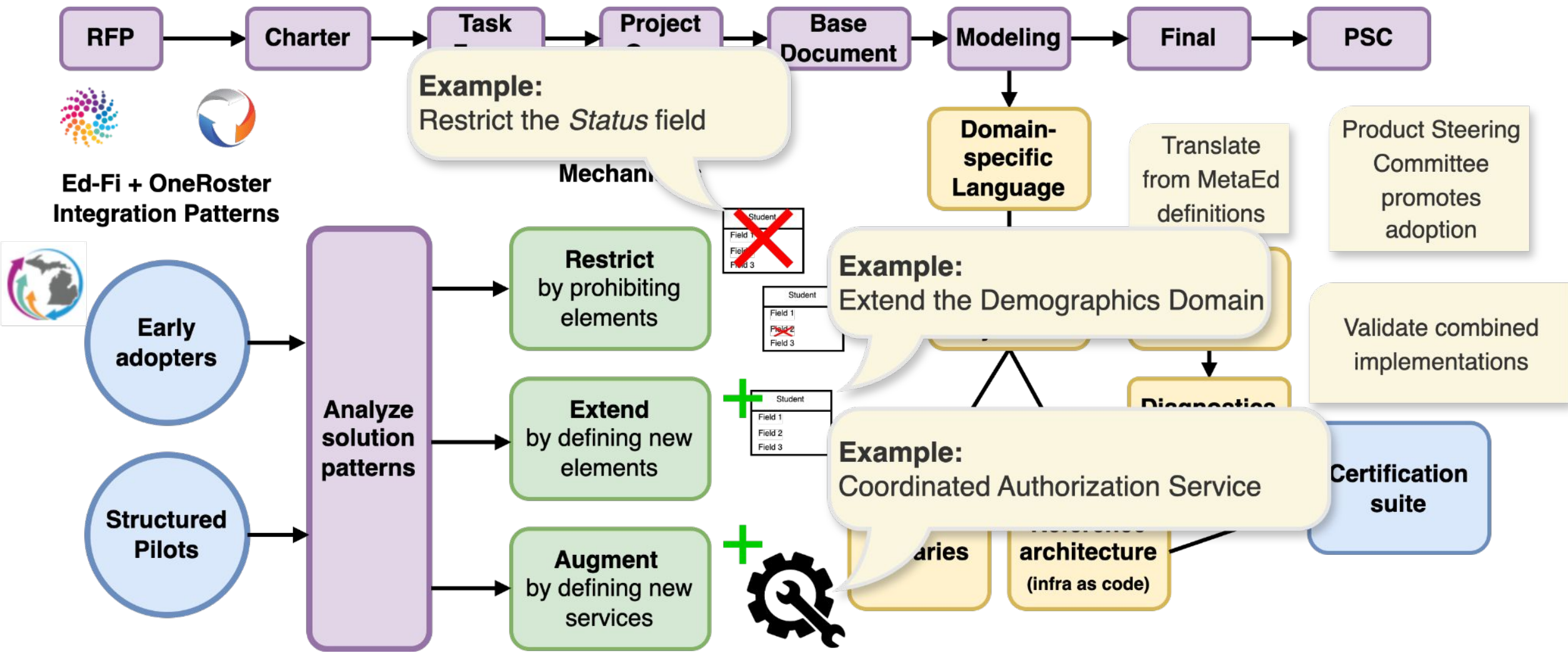


- Circle indicates services within each Spec
- Inner color indicates the source spec. (Green - OneRoster, Blue - EdFi)
- Outer color is an indicator of a similar service domain
- (i.e. Rostering could be 'Red' outer ring and is currently available in both specs whereas other domains are unique to each spec)

# Profile development governance



# Profile development governance



# Impact and Call to Action

Ed-Fi Alliance and 1EdTech standards are working together to simplify and enhance rostering

We are creating replicable, standards-aligned models for US K12

Next steps:

- SEAs: SY 26-27 commitments to adopt the Ed-Fi OneRoster API
- MSPs and Data Providers: align to integration
- Steering Committee: governance and adoption



# Get Involved - Upcoming Events

## Ed-Fi Alliance Summit

- October 6–8, 2025
- The Westin Riverwalk | San Antonio, Texas

## 1EdTech Member Assembly

- November 18-20, 2025
- North Charleston, South Carolina

Learn More: [1EdTech | Ed-Fi Collaboration](#)

Contact [RostringProject@1edtech.org](mailto:RostringProject@1edtech.org) to get involved.



***Questions?***

