**Appendix A – Data Models and Use Cases**

## Data Models

The following are data and user models based on current understanding of the work of the two centers.

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|  |  |
| --- | --- |
| State | The State level of the CDM includes the 50 U.S. States, plus U.S. Territories and the Bureau of Indian Affairs. Consequently there are a total of ~60 State entities. |
| Lead Agency for Part C | Special Education for infants and toddlers is typically served by various other State agencies, e.g., “Department of Development”; these are known as Lead Agencies for Part C. |
| State Education Agency | Typically, this is the State’s Department of Education. (All US States have a Department of Education.) States may also have Boards of Education.- Each State has its own way of administering funding. The method of administering funding may be a defining characteristic of the State, either at the State level or the State Education Agency level. - Each State has staff in both policy and technical roles |
| Other State Agency | Some states have a Board of Education (BOE) in addition to a DOE. Various other State agencies may be tracked. |
| Other Department | Various other State Departments may be tracked. |
| Finance Dept(School Funding) | School Funding is typically a sub-department of a State Department of Education and/or Division of SpED. There are frequently communication issues between a State’s finance department and program department. |
| Department of Special Education | Special Education for infants and toddlers is typically served by various other state agencies, e.g., “Department of Development”; these are known as Lead Agencies for Part C. |
| Program Department | A state Special Ed division works with all of the LEA’s in the state |

**User Data Models**



| **Entity** | **Description** |
| --- | --- |
| Center | CIFR or NCSI, the host organizations |
| Partner Organizations | WestEd has partnered with several other organizations to accomplish the work of each center.NCSI partners include SRI, CCSSO, MCPER, NASDSE, and AIR.CIFR partners include AIR, Westat, Utah State University, and the Improve Group |
| Staff Person | A staff member of CIFR or NCSI, including individuals also associated to another organization as staff and/or employees. For example, an NCSI staffer may be employed by an affiliated University, which is a Partner Organization. |
| State | The State level includes the 50 U.S. States, plus U.S. Territories and the Bureau of Indian Affairs. Consequently there are a total of ~60 State entities. |
| Other Ed Funded TA Center | The OSEP and Federal DOE fund various other centers, analogous to NCSI and CIFR. |

## Local Education Agency Data Model

The LEA area of the data model may be “stubbed out” for future development but not exposed to Users.



| **Entity** | **Description** |
| --- | --- |
| Department of Education | All US States have a Department of Education.- Each State DOE has its own way of administering funding. The method of administering funding may be a defining characteristic of the State, either at the State level or the DOE level. - Each State Department of Education has staff in both policy and technical roles |
| District | Districts operate at the local level within a State. For example, the state of Texas has over 1,000 School Districts. Districts can be large (many schools and students) or small (few schools and students). Districts can have sub-districts. The potential for parent-child relationships between districts and sub-districts is represented by a recursive crow’s foot. |
| School | Schools deliver education directly to students. There are potentially three categories of school: * Infant and Toddler
* Pre-K-age 21
* Higher education
 |

## Technical Assistance Plan Data Model



| **Entity** |  **Description** |
| --- | --- |
| TA Program Year | * It may be desirable to find another term for “Program” as the word may already have other meanings within the WestEd universe
* The State (and its corresponding Program) is designated as Universal, Targeted, or Intensive.
* The levels are cumulative:
* Intensive states are provided Intensive activities and can also take part in Universal and Targeted Activities
* Targeted states take part in Targeted and Universal Activities
* Universal states take part only in Universal Activities
* States are reevaluated annually and can change TA Levels from year to year
 |
| TA Plan | * Each State will have a separate TA plan each associated with either NCSI or CIFR.
* Each center will assign one or more levels of service to each State, (Universal, Targeted, Intensive)
* A TA Plan is an agreement with a state to do specific things and involves multiple stakeholders from state and center(s).
* Should have a template or wizard to build the plan from Components
* There will be at least 3 templates (U,T,I)
* See existing paper-based or xls templates
* Intensive and Targeted TA probably must be linked to one or more of the 7 outcomes *(via the Components? Or directly?)*
* Universal TA may not be linked to an outcome
* Universal TA states may possibly not even have plans
* Is equivalent to an Order, but may be a Custom Object
 |
| TA Plan Component | * Consists of Community of Practice Groups, Webinars, facilitated meetings, email list serv, etc.
* May leverage the Product Object; helps track costs associated to delivery
* TA Plan component is equivalent to a Product, but may be a Custom Object
 |
| State | Includes the 50 U.S. States, plus U.S. Territories and the Bureau of Indian Affairs. Consequently there are a total of ~60 State entities. |
| State Education Agency  | Represents a record of any object in the Customer Data Model  |
| Portal User | A client: typically, a staff member at a SEA or Part C Lead Agency |
| Technical Assistance Request  | A description of a customer’s feedback, problem or question, used to track and solve customers’ issues, typically by a status (such as “working” or “closed”) and ultimately a resolution. |
| Activity | A task, event, or email.* An Activity can be “Universal” but associated to an Intensive State
* All Activities for a particular State should be tracked under their TA Plan
 |
| Outcome | * Each Center has targeted objectives
* Each objective has 1 or more outcome
* This object (rather than a picklist) serves as a stub for more complex Outcomes with multiple records and types
 |
| SIMR | * SIMRs are visible only to NCSI staff, not to CIFR staff
* Each State must pick \*exactly one\* (?) SIMRs from the list of 17 potential SIMRs provided by OSEP. In part, they are:
* Reading
* Graduation rate
* Etc.
* There is not necessarily a direct connection between the TA activities and the SIMRs; that is, a particular type of TA activity could help a State with any SIMR (e.g., personal 1:1 help with reporting could relate to SIMR “graduation rates” or to SIMR “third grade reading” and there would be no difference in the TA)
* SIMRs will change from year to year for each State; they have to declare by April 1
 |

## Account Team Data Model (exclusive to NCSI)



| **Entity** | **Description** |
| --- | --- |
| State | Includes the 50 U.S. States, plus U.S. Territories and the Bureau of Indian Affairs. Consequently there are a total of ~60 State entities. |
| SIMR | * SIMRs are visible only to NCSI staff, not to CIFR staff
* Each State must pick \*exactly one\* (?) SIMRs from the list of 17 potential SIMRs provided by OSEP. In part, they are:
* Reading
* Graduation rate
* Etc.
* There is not necessarily a direct connection between the TA activities and the SIMRs; that is, a particular type of TA activity could help a State with any SIMR (e.g., personal 1:1 help with reporting could relate to SIMR “graduation rates” or to SIMR “third grade reading” and there would be no difference in the TA)

SIMRs will change from year to year for each State; they have to declare by April 1 |
| TA Facilitator, Part B | Formerly, a “State Liaison”: the TA Facilitator is the primary internal contact for the State on all TA issues. The “Part B” facilitator handles issues regarding children and young people of ages 3-22. |
| TA Facilitator, Part C | Formerly, a “State Liaison”: the TA Facilitator is the primary internal contact for the State on all TA issues. The “Part C” facilitator handles issues regarding infants and toddlers. |
| Account Team Role | Account Team Members will be designated as from one of four Workgroups:1. Data Use
2. Knowledge Utilization
3. Systems Change
4. Communication & Collaboration

The Account Team may have more than one member from a particular Workgroup, and may or may not include a member from each/every Workgroup. |
| Team Member | An Account Team is a team of Users that work together on an Account (i.e., a State). Account Team members will want to see the Accounts for which they are on the team in their “My Accounts” view or similar. |
| Skillset | Potential Account Team members may be selected and assigned to the Account based on the relevance of their skillset(s) to the needs of the Account. For example, if the State needs help with generating a certain type of report, someone with expertise in creating that particular type of report would be sought. The picklist values for skillsets to be determined. |

**User Stories Overview**

The use case work done to date identified the following epics and user stories. We currently have 11 detailed use cases, and are in the process of refining these use cases and defining in more detail user stories.

The bold items indicate a full use case was developed.

1 TA Tracking System

**1.01 Create a TA Plan for a State, at the appropriate level (Universal, Targeted, Intensive)**

**1.02 View all TA activity for a particular State**

1.03 Capture time and effort expended on a particular State

1.04 Create "Formative" Reports (how they can improve): report on data ad hoc

1.05 Create "Summative" Reports (measure impact, cumulative): answer questions about “to what extent does the center and its activities cause, or participate in causing, valued outcomes?” (State level capacity outcomes, local level capacity outcomes, and Kid outcomes)

**1.06 Proactive Outrearch to States**

2 Access to tools we develop

3 Resources/Access to Knowledge

3.01 Submit a question without revealing identity of asker to OSEP

**3.02A Address a particular issue for a State - internally initiated**

**3.02B Address a particular issue for a State - State initiated**

3.03 Resolve a question by supplying an existing KB article

3.04 Resolve a question by creating a new KB article

**3.05 Create a new KB article from combinations of components both existing and new**

3.06 Post a file and make it private, or visible only to selected individuals or groups, then publish it later to all users of the system

4 Access to the Practice Communities

4.01 Ability to share information with other states that have similar financial practices

**4.02 Ability to share information with other states in my geographic area**

5 State Profile Database

5.01 Categorize, list, and report on States by many various criteria (e.g., how they handle charter schools)

6 Website / Universal Access

7 Ongoing Communication

7.01 Publish quarterly newsletters to lists or groups of constituents; newsletters will include excerpts from knowledge articles

8 Project Management

**8.01 Intensive TA: Perform standard project management with assigned tasks, due dates, timelines, milestones and outcomes-- see example TA Plan provided by Dave Phillips**

8.02 Work Plans: track activities, action steps, milestones or deliverables, person responsible, supporting people, timelines, resource implications (i.e., needed, need to find, already have). Therefore there are 4 plans each one with 3 different levels

8.03 Link TA Plans to Work Plans

9 External Evaluator

9.01 Formative: See implementation quality against key State's or District's plans

9.02 Summative: Evaluate success of overall TA efforts by level: Intensive or Targeted

9.03 Summative: Evaluate success of all TA efforts for a particular State

10 xKnowledge Development

11 Mass Communication

**11.01 One-time mass email: to: Contacts**

11.02 Notification: "this file has been posted": to Client Users

11.03 Publishing Content

**11.04 One-time: event to: Client Users**

12 Delegated Partner Administration

13 After-hours support

14 Email to Case or Web to Case

**14.01 Post a question and get immediate resolution by matching existing KB article to keywords, or to selected topic picklist values**

**14.02 Automatically route questions to the appropriate internal person by matching area of expertise to keywords or selected topic picklist values**

## User Story Examples

The following are a few examples of key use cases.

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID  | 01.01 | Requestor: | Greg Roberts |
| Use Case Name  | **Internal User creates TA Plan for a State** |
| Use Case Summary/Goal  | Internal user will have ability to create a Plan for providing Technical Assistance (TA) to a particular State for a calendar year, at one of three Levels (Intensive, Targeted, Universal). The Plan comprises various components; three standard templates are provided. |
| Actors  |  Internal User |
| Prerequisites  | * The Level of the State is known (Intensive, Targeted, Universal)
 |
| Course of Events/Success Scenario  | 1. User logs into internal System and lands on the Home Page
2. User selects, “Accounts” tab or equivalent (Clients, States, or other alternative terms may be used instead of Account)
3. The “My Accounts” list view appears
4. User selects a State from the list view and clicks on the State
5. The State’s Detail page appears
6. User scrolls down to the related list for TA Program Years and selects, “Create New”
7. User enters the year (e.g., 2015) and the desired Level of the Program, and clicks “Save”
8. User scrolls down to the related list of TA Plans on the TA Program Year page and clicks, “Create New”
9. A TA Plan Detail page appears, pre-populated with Components for the appropriate Level of Plan (Universal, Targeted, Intensive)
10. User selects additional TA Plan Components from a menu (e.g., community membership, facilitated webinars, in-person meetings, etc.)
11. User de-selects TA Plan Components as desired
12. User populates TA Plan header fields (see embedded file below for example fields)
13. User selects Outcomes from a picklist of 7 targeted outcomes
14. User clicks “Save”
15. User clicks on the link back to the State Detail page
16. The TA Plan and the TA Plan Components appear in two separate related lists on the State’s Detail page
 |
| Desired Outcome | * Quickly create consistent TA Plans so that States at the same level have similar Plans
* Easily see what types of Activity to which the State is entitled for the current year
 |
| Alternate Scenarios  | * The intermediate object “TA Plan Component” could be omitted, but this will make it more difficult to construct consistent Plans based on templates
* A wizard or similar could guide Users to build a Plan from relevant Components
 |
| Notes  | * Levels are cumulative; Intensive > Targeted > Universal. Therefore, an Activity can be Universal but associated to a Targeted or Intensive State, or Targeted but associated to an Intensive State. However, an Intensive Activity can’t be associated to a Universal State.
* All Activities for a particular state should be tracked under their Plan. (No Activities can occur outside the Plan.)
* We may wish to restrict what kinds of Activity can be associated to a TA Plan. For example, an Activity Type of “1:1 Seminar” may be associated only to TA Plans of Type = Intensive, whereas Activities of Type = “Attend webinar” may be associated to any TA Plan.
* States are reevaluated annually and can change TA Levels from year to year
* See the ERD in the section
 |

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID  | 01.02 | Requestor: | Greg Roberts |
| Use Case Name  | **Internal User views all TA efforts for a particular State** |
| Use Case Summary/Goal  | Internal user will have ability to view all Activities related to TA for a particular State, including activities at any “level” (Intensive, Targeted, Universal) for any SEA in the State. |
| Actors  |  Internal User |
| Prerequisites  | * Related Activities have been created
 |
| Course of Events/Success Scenario  | 1. User logs into internal System and lands on the Home Page
2. User selects, “Accounts” tab or equivalent (Clients, States, or other alternative terms may be used instead of Account)
3. User selects “View:” (or equivalent) and picks a List View
4. User selects a State from the List View and clicks on the State
5. User scrolls down to the related lists of Activities: Open Activities, Activity History (or equivalent)
6. User selects “Go to list” on the desired related list
7. The entire list of associated Activities for the current TA Program Year (either open or completed) appears. The columns in the list include the Activity Type (Email, Task, etc.), Subject, Primary Contact Name, Case, intermediate related TA Plan Component, and the intermediate TA Program Year, Owner (Assigned To), Create Date, Due Date and (for Open Activities) Status.
8. User selects a particular Activity
9. User clicks on the Activity Subject (or equivalent)
10. The Activity Detail page appears showing the Primary Contact, date, status, etc. in the header, and other associated Contacts in a related list.
 |
| Desired Outcome | * See all TA Activities for a single State easily in one place
 |
| Alternate Scenarios  | * In this scenario, we have presented all Activities that are ultimately related to the Account in two related lists—completed and open. (In Salesforce, this can be accomplished through Visualforce customization to show only relevant sub-object records for the current year.) Alternatively, the Account Detail page could show multiple related lists of Activities, related to TA Program Year, TA Plan, and TA Component. However, this is not desirable.
* Assumes Users want to see only the Activities ultimately related to the current TA Program Year by default. Past years’ sub-object records could be viewed by bringing up the relevant TA Program Year under the Account.
 |
| Notes  | See the ERD in the section  |
| Use Case ID  | 03.02A | Requestor: | Rorie Fitzpatrick |
| Use Case Name  | **Address a particular issue for a State, identified by internal Staff** |
| Use Case Summary/Goal  | Internal user addresses an issue which requires various Activities and involve various other people to resolve by creating a TA Request. Another Internal User handles an assigned Task, and associates a Solution to the TA Request. The Client User views the TA Request and Solution and closes the TA Request. |
| Actors  |  Internal User 1, External (Portal) User, Internal User 2 |
| Prerequisites  | * None
 |
| Course of Events/Success Scenario  | 1. Internal User1 logs into the system
2. Internal User1 navigates to the Account
3. Internal User1 scrolls down to the related list of TA Requests
4. Internal User1 clicks “New TA Request”
5. Account info pre-populates on the TA Request
6. Internal User1 enters the Contact from a pre-selected list of Account Contacts
7. Internal User1 enters data in relevant TA Request fields TBD (Type, Reason, Status, Priority, Origin, Subject, Description, etc.)
8. Internal User1 clicks “Save”
9. The TA Request Detail page appears
10. Internal User1 scrolls down to the related list of Open Activities
11. Internal User1 clicks “New Task”
12. Internal User1 enters data in relevant Task fields TBD (Subject, Due Date, Priority, Status, Comments, etc.)
13. Internal User1 assigns the Task to another User by searching and selecting a User in “Assigned To”
14. Internal User1 attaches a file to the Task by clicking “Attach file”
15. Internal User1 clicks “Save”
16. Internal User2 logs into the system and lands on the Home page
17. Internal User2 scrolls down to the “My Tasks” list
18. The new Task appears in the list of Tasks
19. Internal User2 opens the Task by clicking on the subject (or similar)
20. Internal User2 edits the Task, creates attachments, updates the Status, etc.
21. Internal User2 navigates to the TA Request from the subordinate Task
22. Internal User2 searches on Solutions by keywords
23. Internal User2 selects a Solution and associates it to the TA Request
24. Client User logs into the system and lands on the Home page
25. Client User scrolls down to a list of their TA Requests and sees the new TA Request
26. Client User clicks on the TA Request and views the Solution
27. Client User updates the status of the TA Request (appropriate status TBD)
28. Internal User updates the TA Request status to “Closed”
 |
| Desired Outcome | * The TA Request is resolved to both the Internal and Client Users’ satisfaction
 |
| Alternate Scenarios  | * Either Internal User can associate a Solution to the TA Request
* The TA Request can be closed by an Client User as opposed to the Internal User
 |
| Notes  | * The host organization may wish to place restrictions on Client Users’ ability to view and edit TA Requests.
* We have re-named the Case object to “TA Request”
 |

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID  | 03.02B | Requestor: | Rorie Fitzpatrick |
| Use Case Name  | **Address a particular issue for a State, identified by the State** |
| Use Case Summary/Goal  | Client User (a State) requests help with an issue which requires various Activities and involve various internal staff to resolve, by creating a TA Request. The Client User views the TA Request and Solution and closes the TA Request. |
| Actors  |  Internal User, External (Portal) User |
| Prerequisites  | * None
 |
| Course of Events/Success Scenario  | 1. Client User logs into the system and lands on the Home page
2. Client User scrolls down to a list of their TA Requests and clicks, “Create New”
3. The TA Request Detail page appears
4. Client User’s Account info pre-populates on the TA Request
5. Client User enters data in relevant TA Request fields TBD (Type, Reason, Status, Priority, Origin, Subject, Description, etc.)
6. Client User clicks, “Save”
7. <The system auto-assigns the TA Request to the appropriate Internal User based on the values selected by the Client User in Step #6>
8. Internal User logs into the system and lands on the Home page
9. Internal User scrolls down to the list of “My TA Requests”
10. Internal User opens the new TA Request by clicking on Subject, or similar
11. The TA Request Detail page appears
12. Internal User can view the Account associated to the TA Request in the TA Request header, and the name of the person who initiated the TA Request in the “Created By” field in the TA Request header
13. Internal User scrolls down to the related list of Open Activities
14. Internal User clicks “New Task”
15. Internal User enters data in relevant Task fields TBD (Subject, Due Date, Priority, Status, Comments, etc.)
16. Internal User edits the Task, creates attachments, updates the Status, etc.
17. Internal User navigates back to the TA Request from the subordinate Task
18. Internal User searches on Solutions by keywords
19. Internal User selects a Solution and associates it to the TA Request and clicks “Save”
20. Client User logs into the system and lands on the Home page
21. Client User scrolls down to a list of their TA Requests and sees the TA Request
22. Client User clicks on the TA Request and views the Solution
23. Client User updates the status of the TA Request (appropriate status TBD)
24. Internal User updates the TA Request status to “Closed”
 |
| Desired Outcome | * The TA Request is resolved to both the Internal and Client Users’ satisfaction
 |
| Alternate Scenarios  | * Either Internal User can associate a Solution to the TA Request
* The TA Request can be closed by an Client User as opposed to the Internal User
* 14.01 & 14.02 Web to Case
 |
| Notes  | * Details of automatic assignment of the TA Request to the appropriate Internal User is not covered in this Use Case; assignment rules TBD
* The host organization may wish to place restrictions on Client Users’ ability to view and edit TA Requests.
* We have re-named the Case object to “TA Request”
 |

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID  | 07.02 | Requestor | Cecelia Dodge |
| Use Case Name  | Proactive Out Reach |
| Use Case Summary/Goal  | Technical Assistance providers will proactively reach out to the primary clients associated with the states and territories that they serve.  |
| Actors  | Internal User1Internal User2 - Supervisor |
| Prerequisites  | * Ability to create new client records
* Ability to link client records to states
* Ability to create and access state plans for the states the user serves
* Ability to invite clients to participate in communities of practice
 |
| Course of Events/Success Scenario  | 1. Internal User2: associates Internal User1 with states they are serving
2. [Internal User1: views list of existing client Contacts associated with their states based on filter criteria]
3. [Internal User1: If the client does not have a record will create a new client record
4. [Internal User1: Determine appropriate client outreach communication vehicle: email, phone call, text message, social media]
5. [Internal User1: Create appropriate event record
6. [Internal User1: Add notes regarding clients needs, appropriate next steps to provide services, follow up date, and a calendar based regular contact interval period.
7. Prioritize next outreach activity by sequencing by a filter or searching client records
8. Continue to follow up in future outreach sessions until client is provided with the service noted.
9. Tickler function reminds TA provider that client is due for a follow up call or other activity
 |
| Desired Outcome | * Establish Client Needs
* Successful closure on first engagement request
* Develop connectedness with client
* Maintain consistency and control of delivery
 |
| Alternate Scenarios  | * Notes
* Outbound call campaign
* Profile Update
* Next Step Recommendations
* Tickler or Reminder
 |
| Notes  | * Campaign Members consist of Leads and/or Contacts—not External Users.
* Campaign Members can be uploaded in a list, or selected from existing Contacts or reports on existing Contacts
* Campaign execution typically occurs outside of Salesforce in one of the following manners:
	1. Online, using an email execution partner to send mass marketing emails
	2. Offline, for example, by hosting a conference, running advertisements, or sending direct (snail) mail
 |