



Office of Superintendent of Public Instruction

e-Certification

Request for Vendor Information

General Questions and Functional Requirement

June 24, 2011

General Questions

The following questions have been developed by our project team and express the range of information we are seeking. We encourage you to tell us about functionality your system may have in addition to the areas identified below.

These are questions about your product. Most questions are about the core system requirements in the use cases. Other questions about your product will give us a more complete understanding of the product's functionality.

Questions 1 through 30 require a detailed response.

Architecture

1. What is the technical architecture of your system?
2. What technologies were used to develop your system?
3. Does your system include any 3rd party tools? If it does, what are they? Are the 3rd party tools licensed for redistribution and extension?
4. Does the application provide an open well-documented Application Programming Interface (API)?
5. What is the architecture of the "client" software your system requires?

Operations

6. What are the recommended Server hardware/software requirements for your system?
7. What are the recommended Client hardware/software requirements for your system?

Implementation

8. How do you approach the initial system installation? Do you rely on remote installations?
9. How do you approach on-going system maintenance requirements, including technical support, upgrades, patches, version control, and training on new or changed functionality?

Performance

10. How does your system scale? What if we wanted to double the number of users or the number of records contained in the database? Are there any maximum record volumes we need to be concerned with?
11. How many concurrent users does the ecommerce part of your system support? What is the peak load and what dependencies are required to support that peak load?

Administration

12. How do you support the need for user and administrative training?
13. What documentation comes with your system?

Hosting

14. Describe hosting options available for this system and the advantages/disadvantages of each.
15. Does your system allow access from a standard PC or Mac web browser through the Internet? Describe requirements for the client environment including supported browsers, required browser add-on, and any client third party software requirements.

Reporting

16. What is your system's reporting architecture?
17. Does your system provide standard reports?
18. Does your system provide the ability to create custom reports?
19. Does your system have the ability to interface with the Choice Solutions EdFusion product for reporting, query and analysis, and data integration products?
20. Please provide a complete list and examples of available reports.

Security

21. Describe your system's provide security features?.
22. Does your system provide the ability to administer, modify, and customize security features?
23. Does your system provide the ability to include and enforce user permissions and restrict access to data at the agency, individual, agreement type, and data type levels?
24. Describe your user validation process.
25. Does your system provide the ability to integrate with single sign-on authentication and/or other standard authentication methods?
26. Does your system meet the security standards of the Washington State Information Services Board published at this link: <http://isb.wa.gov/policies/security.aspx>?
27. Does your system provide the ability to maintain (read-only) transactional dated history (audit trail) for all key changes to data that includes a time/date stamp, the type of change that was made, and the person responsible for the making the change?
28. Does your system provide data protection features?
- a. Is data protected from wrongful access when at rest?
 - b. Is data protected from wrongful access when it is in motion?
 - c. Is data protected from wrongful access when transferred between applications?
29. Does your system provide any features that would detect unauthorized access to or disclosure of system-managed data? If yes, please describe.
30. Does your system provide control over "who" can get "what" reports based on the user security system?

Questions 31 through 73 require a yes or no response, except for questions 43, 45, 46, 67a, 71, 72, and 73 which require an additional detailed response.	Yes/No
Database	
31. Does your system provide sufficient technical documentation to allow developers to interface with your database?	
32. Will you release the database schema for use by our developers?	
33. If it is a remotely hosted system, will you release nightly backups to OSPI?	
Operating Environment	
34. Does your system run in a Microsoft environment and use an application deployment model that can be efficiently managed across agency environments (dev, test, prod),	
35. Are product updates available to support upgrades to the underlying server and desktop environment (e.g., the OS)?	
Availability	
36. Does your system have the ability for extended use hours, 99.0% of the time assuming 24x7 public availability and 4am to 8pm for business processing capabilities?	
37. Does your system have the ability to be available for normal on-line transaction processing during batch processing?	
Performance	
38. Does your system have the ability to meet the following performance requirements?	
a. Screen displays within three seconds for external users: the time elapsed after a command is entered until results begin to appear must not exceed three seconds for 99% of all transaction or search/retrieval requests.	
b. Next Screen Page Time: The time elapsed from the request of a new screen until the new screen and data appear must not exceed three seconds for 99% of the time	
c. Screen Edit Time: The time elapsed after the last field is filled on the screen and the enter command executed until all field entries are edited and the screen refreshed with the errors highlighted must not exceed five seconds for 99% of the time.	
d. System must satisfy response time requirements for at least 600 concurrent external users. And 50 concurrent internal users. Screen displays within two seconds for internal users.	
e. Backend processing system should have the ability to meet all performance criteria during all normal Washington State working hours of 8:00 A.M to 5:00 P.M. Pacific Time.	
39. Does your system allow a system administrator to monitor response time, system use and capacity, concurrent users, and system errors?	
Data Collection, Management, Structure, and Validation	
40. Does your system provide the ability to archive disposed data and retain data for a minimum of six years and longer for certain agreements?	
41. Does your system provide the ability to automatically expire/retire records based on a record retention schedule and/or other business rules? These may vary depending upon the type of agreement.	
42. Does your system provide the ability to perform flexible workflow management?	

43. Does your system display error messages that are easy for users to understand and respond to?	
44. Does your system provide the ability to customize error messages?	
45. Does your system allow user defined fields to be included on screens, forms, and reports? If yes then how are the definitions maintained? Calculations, rollups, and summary views of user-defined fields?	
46. Does your system provide any mechanism for user-defined data validations that are formula-based, and/or which are based on other data elements either in the form or in the database? If yes then how are the validations maintained?	
47. Does your system account for role based data presentation? For example, suppression of SSN or suppression of address for those enrolled in an address confidentiality program?	
Administration	
48. Does your system provide user/system administration features?	
49. Does your system require any operational maintenance or housekeeping activities that OSPI must perform? If the answer to this question is "yes", please outline what those activities are, the level of skill required to perform them, and the frequency that they will need to be performed.	
Interfaces	
50. Does your system provide the ability to make data available to the agency or other systems using industry standard XML formats?	
51. We will need to interface your system to various OSPI internal and State external accounting systems. Please explain how system-to-system interfaces will be developed. Can OSPI development staff build these?	
Document Management	
52. Does your system include an integrated document management system?	
53. If your system includes an integrated document management system, does this system include the ability to associate electronic documents with a certification application or other database entities?	
54. If your system includes an integrated document management system, does this system include the ability to image paper documents into a format that can be managed by this system and associated with a client record or other database entities?	
55. Does your system have the capability for backfile conversion, the ability to scan and index historical documents, storing them in a digital format, and group them by historical transaction and by applicant?	
56. If your system includes an integrated document management system, does this system include the ability to maintain previous versions of documents?	
Implementation	
57. Does your system provide an incremental approach to the upgrade or replacement of the system?	
58. Does your system include support for implementation?	
Accessibility	
59. Does your system adhere to the Web Content Accessibility Guidelines (WCAG) 1.0 - Priority 1 checkpoints as published at this link: http://www.w3.org/TR/WCAG10/ ?	

Statewide Enterprise Architecture	
60. Does your system provide the ability to meet Washington State's Enterprise Architecture Program? The Integration Domain of the State's Technology Architecture is a key consideration.	
In-Bound Integration	
61. Does your system have the ability to provide access to the application through Application Programmable Interfaces (API) independent of the user interface?	
62. Is your system's application user interface separate from the rest of the application, especially the business rules and the API's?	
63. Does your system provide well-documented and unrestricted (both technically and by license) APIs?	
Out-Bound Integration	
64. Does your system provide the ability to isolate other applications, as much as possible, from changes in your system?	
65. Does your system provide an interface between the business logic and the enterprise financial functions?	
66. Does your system separate functional dependencies (e.g., business rules for messaging) from non-functional dependencies (e.g., types of messaging)?	
67. Does your system minimize the impact of system changes to its integration partners?	
68. Does your system provide isolation and loose coupling between systems?	
Open Standards Conformance	
69. Does your system provide the ability to use open (vendor-neutral) industry standards-based technologies?	
a. If not, does your system have a strong business case justifying a proprietary alternative?	
70. If a proprietary alternative is used, does your system ensure one or more "adapter strategies" is available to render the proprietary alternative "open" to other statewide applications?	
Other Capabilities and Features	
71. Does your system provide features that may be of value to our operation that we have not asked about and that you would like to demonstrate?	

Cost	
The cost information being requested below will be used to help us make a “Build” or “Buy” decision. If we decide to “Buy” a system, you will have an opportunity to refine these figures based on our Request for Proposals.	
72. Given the information you have about our requirements, are you able to provide an estimated range for a 5-year total cost of ownership of your system? If so, complete the following detailed <u>per major component</u> : ecommerce site, e-Transcripts, Professional Development module, Imaging and backend processing.	
a. Initial cost?	
b. Initial installation and support cost?	
c. Initial training cost?	
d. On-going Maintenance cost?	
e. Other anticipated cost?	
73. Are there any typical cost items your current customers face which are required to make your system effective that are not in your 10-year cost estimate?	

Functional Requirements

- (1) **Meets requirement “out of the box”** means this feature is ready to use immediately after installation.
- (2) **Meets requirement with configuration** means this feature is ready to use after customer or environment-specific data are entered in system "lookup" tables. No source code or database modifications are required. This may require additional modules to be implemented in order to satisfy a feature. Configurations are implemented through an administrative module via your system.
- (3) **Meets requirement with customization** means this feature is ready to use after source code and/or database extension. Integrators may need to maintain unique, customer-specific source code files for extension and/or recompilation when future product upgrades or patches are necessary.
- (4) **Does not meet requirement means** this feature is not available.

		(1)	(2)	(3)	(4)
Ref #	Requirement	Meets requirement “out-of-the-box”	Meets requirement with configuration	Meets requirement with customization	Does not meet requirement
Ecommerce site					
1	System access				
1.1	Ability for educator login via K12.wa.				
1.2	Ability for district, ESD, OSPI, University Login via Education Data System (EDS) https://eds.ospi.k12.wa.us				
1.3	Ability to use ssl and secure accounts for online payment using state standard found at http://techmall.dis.wa.gov/services/IGN_epay_guide.aspx . Note that OSPI will use a modified version of these requirements as we reside on the K-20 network and not the Inter-Governmental Network (IGN)				

Ref #	Requirement	(1) Meets requirement "out-of-the-box"	(2) Meets requirement with configuration	(3) Meets requirement with customization	(4) Does not meet requirement
2	Display educator profile (viewable by all roles)				
2.1	Ability to see all available OSPI data on an educator. Today this includes salary and years of experience (S275), test scores (PRAXIS, WEST-B, WEST-E), fingerprint results, certification data, special certificates (National board, proteach)				
2.2	Ability to view courses educator is qualified to teach				
2.3	Ability to view the courses previously taught by an educator. These class lists exist in another database within OSPI and are subject to ongoing correction. That lookup should include key reference points including State course code and HQT Content area code				
2.4	Ability to view Certification Endorsements and provide guidance with expiration date and status				
3	Upload data from different data sources (excel, flat file uploads)				
3.1	Ability to add data files to e-Cert from various data sources; today those data files include Test Scores, Salary Data, National Board, and more				
3.2	Ability to collect more detail in uploaded files (today we only retain some of the data in the uploaded files)				

		(1)	(2)	(3)	(4)
Ref #	Requirement	Meets requirement "out-of-the-box"	Meets requirement with configuration	Meets requirement with customization	Does not meet requirement
4	Automate loading and matching of data from different sources (automated)				
4.1	Ability to automatically load recurring data such as WSP fingerprint results				
4.2	Ability to automatically match and append records with an educator profile				

5	Create relationships between data elements				
5.1	Ability to permanently link data between data sources to a Person ID; link should not be lost if duplicated or corrected data is uploaded at a later date				
6	Apply for certificates and endorsements, new and renewal				
6.1	Ability to present a list of certificates that are up for renewal and ask (very simply and clearly) if applicant would like to renew				
6.2	Ability to determine which certificate or endorsement to apply for (Wizard)				
6.3	Ability to see very simply and clearly everything that is required for that action including information on fingerprinting				
6.4	Ability to complete an application electronically with all data saved into SQL database				
6.5	Ability to research supporting documents required by action type				
6.6	Ability to start an application, save and return later to complete it				
6.7	Ability for universities to initiate an application potentially via a batch upload feature				

E-Certification
 Request for Vendor Information
 Questionnaire & Demonstration Guidelines

		(1)	(2)	(3)	(4)
Ref #	Requirement	Meets requirement "out-of-the-box"	Meets requirement with configuration	Meets requirement with customization	Does not meet requirement
7	Collect Educator Data				
7.1	Ability to broker email addresses (bounce backs, preferred email address and alternate email address)				
7.2	Ability to collect educator contact data (home, business, mailing addresses; preferred email and alternate email; primary phone, alternate phone; note privacy concerns)				
7.3	Ability to collect educator former names (to link records)				
8	Accept imaged supporting documents				
8.1	Ability to upload supporting documents not needed in original form through the e-Cert site (by applicant via e-Cert ecommerce site, or via ESD, District, or University on behalf of the applicant via e-Cert site EDS view)				
8.2	Ability to enter key fields referenced in uploaded document including course title, provider/ educator, date completed, number of hours, type of hours, and a document category (dropdown list)				
8.3	Ability to image and upload supporting documents on behalf of an applicant by OSPI, ESD or district staff.				
8.4	Ability to track key fields on imaged documents using data recognition technologies.				

E-CertificationRequest for Vendor Information
Questionnaire & Demonstration Guidelines

Ref #	Requirement	(1) Meets requirement "out-of-the- box"	(2) Meets requirement with configuration	(3) Meets requirement with customization	(4) Does not meet requirement
9	Track educator prep				
9.1	Ability to upload transcripts				
9.2	Ability to log all educator preparation when not uploaded via an electronic transcript.				
10	Track Professional Development				
10.1	Ability for an Instructor to log PD credits for students (gradebook)				
10.2	Ability to log all professional development when not uploaded via an electronic transcript.				
10.3	Ability to indicate if Professional Development is credited toward a specific path (salary, new endorsement, renewal)				
11	Process payments				
11.1	Ability to use ssl and secure accounts for online payment using state standard found at http://techmall.dis.wa.gov/services/IGN_epay_guide.aspx . Note that OSPI will use a modified version of these requirements as we reside on the K-20 network and not the Inter-Governmental Network (IGN)				
11.2	Ability to accept credit cards and echecks via OSPI interface to State Treasurer using state merchant account				
11.3	Ability for OSPI to accept certification fees				

		(1)	(2)	(3)	(4)
Ref #	Requirement	Meets requirement "out-of-the-box"	Meets requirement with configuration	Meets requirement with customization	Does not meet requirement
12	Certificate Delivery				
12.1	Ability to deliver pdf of certification documents (no print and mail)				
12.2	Ability to request a printed copy (for a fee)				

Customer Support					
13	Online Customer Support				
13.1	Ability to see application processing status				
13.2	Ability to lookup information on Fingerprinting				
13.3	Ability to look up OSPI, ESD, District contact information.				
13.4	Ability to question any piece of data through a button that says "I have a question on this item"				
13.5	Ability to declare closest ESD				
13.6	Ability to view personal and demographic data currently received via S275				
13.7	Ability to view and receive email samples of supporting documentation examples				
13.8	Ability to display professional development dashboard				

Ref #	Requirement	(1) Meets requirement "out-of-the-box"	(2) Meets requirement with configuration	(3) Meets requirement with customization	(4) Does not meet requirement
14	Online Messaging				
14.1	Ability to present group announcements				
14.2	Ability to present personal messages				
14.3	Ability to generate certification renewal reminders				
14.4	Ability to send email either 1)indicating you have a group announcement or personal message waiting.				
14.5	Ability to track all messages and replies in a transaction file				

Electronic Files					
15	Electronic files				
15.1	Ability to image supporting documents for applications				
15.2	Ability to create a historical file when microfiche is pulled for research (mark microfiche as "never pull again")				
15.3	Ability to create an electronic customer filing cabinet that contains folders for all actions				
15.4	Ability to categorize all uploaded documents for retrieval by category				

Ref #	Requirement	(1) Meets requirement "out-of-the-box"	(2) Meets requirement with configuration	(3) Meets requirement with customization	(4) Does not meet requirement
Certificate Processing					
16	Process Certification and Endorsement applications				
16.1	Ability to submit district certification application approval Note: specific types of certifications require district approval				
16.2	Ability to review and approve application and supporting documentation electronically				
16.3	Ability to segment processing by role with review and approve functionality				
16.4	Ability to email applicant with questions/corrections and track conversation				
16.5	Ability to change electronic processing queue based on seasonal priorities				
16.6	Ability to check against the "bad teacher" list				
16.7	Some documents must be visually validated for authenticity before an application can be processed. Only key staff in OSPI and ESD's may validate those documents. Staff need the ability to mark that a document has been visually validated in the processing workflow.				
16.8	Ability to automatically or as part of electronic process, apply credits for certificate achievement (proteach = 150 clock hours)				
16.9	Ability to queue and automat certificate renewal if professional development hours are reached.				
16.10	Ability to link a process step with one or more imaged documents.				

		(1)	(2)	(3)	(4)
Ref #	Requirement	Meets requirement "out-of-the-box"	Meets requirement with configuration	Meets requirement with customization	Does not meet requirement
17	Document validation				
17.1	Validate supporting documents (when required in original) (OSPI, ESD District, University)				
18	Process HQT data				
18.1	Ability to upload HQT information				
18.2	Ability to validate and correct HQT information				
19	Administer special certificates (National Board)				
19.1	Ability to administer special certificate				
20	Waivers				
20.1	Ability to electronically apply for and process out of endorsement waivers				
21	Record administration				
21.1	Create relationships between files				
21.2	Merge records				

Ref #	Requirement	(1) Meets requirement "out-of-the-box"	(2) Meets requirement with configuration	(3) Meets requirement with customization	(4) Does not meet requirement
22	File sharing				
22.1	Ability to refer to another department for further inquiry or processing steps (i.e. resolve background check)				
22.2	Ability for that other department to "refer back" to the certification department once they have completed their work				

Reports and data presentation					
23	Reports				
23.1	Ability to pull operational reports (processing by time by step) Customer service statistics Completed actions by type Backlog Report				
23.2	Ability to run Statistical canned reports Certification expiration reports (by school, district, ESD, state) Courses taught out of endorsement (flag if waiver) and number of students taught in that status Salary Reports Continuing Education				
23.3	Ability to run an ad hoc report (by endorsement, by HQT, etc.)				
23.4	Ability to export all reports into pdf, excel, and txt formats				

24	Link to Data Warehouse				
24.1	Ability to create hyperlinks to specific reports in the K-12 Reporting Portal				
24.2	Ability to log into related systems via single sign on				

Non-Functional Requirements

		(1)	(2)	(3)	(4)
Ref #	Requirement	Meets requirement "out-of-the-box"	Meets requirement with configuration	Meets requirement with customization	Does not meet requirement
Get Help on System Use					
GEN.1	Ability to allow user to request help on any page where user may enter or request data.				
GEN.2	Ability to display clear and specific explanations of all items and instructions for all data entry items on the page.				
GEN.3	Ability to allow a system administrator to update help pages.				

Sign On to System					
GEN.4	Ability to allow user to access the system with a certain role.				
GEN.5	Ability to require a user to set a hardened password.				
GEN.6	Ability to require a user to change his/her password at a configurable interval.				
GEN.7	Ability to lock out a user after a configurable number of failed sign on attempts.				
GEN.8	Ability to log out a user after a configurable period of inactivity.				
GEN.9	Ability to log all user access to the system.				

		(1)	(2)	(3)	(4)
Ref #	Requirement	Meets requirement "out-of-the-box"	Meets requirement with configuration	Meets requirement with customization	Does not meet requirement
Control Access to System					
GEN.10	Ability to allow administration role to display all users authorized to access the system and their roles.				
GEN.11	Ability to allow administrator to define access roles to read or update data based on project and grant attributes				
GEN.12	Ability to allow user to enforce separation of financial duties for users.				
GEN.13	Ability to allow a system administrator role, which may not access business transactions or data.				
GEN.14	Ability to disallow shared user-ids by limiting concurrent users.				
GEN.15	Ability to keep user lists secure and separate from other data.				
GEN.16	Ability to log all access and changes to user lists.				
GEN.17	Ability to allow user to display user list access log based on user-id and date.				
GEN.18	Ability to allow user to display user system access log based on user-id and date.				

	(1)	(2)	(3)	(4)
Ref #	Meets requirement "out-of-the-box"	Meets requirement with configuration	Meets requirement with customization	Does not meet requirement
User Roles (identify if all roles can be accommodated)				
Internal (to the OSPI network)				
OSPI Certification Office				
External (to the OSPI network)				
Educator				
Applicant				
ESD Certification Office				
School District Certification Office				
School District Hiring Office				
University Certification Office				
PESB				
OPP				
Identify other roles that need to be considered				