



Provincial Approach to Student Information (PASI)

2018 PASI READINESS OVERVIEW & CHECKLIST

DIGITAL STUDENT RECORD

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1.0 DIGITAL STUDENT RECORD OVERVIEW

The Digital Student Record Overview is intended to be used by administrators and decision makers within schools and school authorities to assist in determining an individualized plan for each organization to transition from physical to digital student record-keeping. This overview will also help highlight the many benefits, concepts, standards and best practices recommended by Alberta Education to successfully implement the Digital Student Record. Alberta Education's Provincial Approach to Student Information (PASI) developed the Digital Student Record functionality to better support students as they move between schools, both inside and outside the province.

This functionality has been reviewed by the College of Alberta School Superintendents (CASS) and the Association of School Business Officials of Alberta (ASBOA) and these organizations have set out their recommendations and expectations for adoption of the functionality. It has been determined that the Digital Student Record is the strongest way to support students, teachers and administrators in accessing complete, up to date, accurate information about a student in the most timely manner possible.

The PASI Digital Student Record management initiative will provide new functionality for users of the PASI solution to manage and view electronic documents contained within the Student Record. By providing this functionality (either through PASIprep or a PASI-web service for schools and authorities to integrate with), schools and authorities will be able to load documents to PASI to effectively support students as they move from school to school, teacher to teacher and grade to grade.

By incorporating these documents into PASI, a current teacher, or a teacher that is receiving a new student, will have immediate access to digital student information. The current process is manual, and consists of storing and shipping physical student records between schools. This often leads to significant delays before teachers can access vital student records and prepare individualized supports. By moving to digital student records, it is expected that this delay will be significantly reduced, or even eliminated.

The PASI capabilities to upload documents will be available for Spring 2018. The PASI Digital Student Record Readiness checklist is available in [Section 8.1](#), Appendix 8.1.1 to 8.1.7, to assist your organization in preparing to transition to a digital student record.

According to section 23(1) of the *School Act*:

23(1) A board shall establish and maintain pursuant to the regulations a student record for each student enrolled in its schools.

The *Student Record Regulation* states the following:

The student record of a student must contain all information affecting the decisions made about the education of the student that is collected or maintained by a board, regardless of the manner in which it is maintained or stored...

The PASI Digital Student Record initiative adds the ability for PASI to house the digital student record and to support the policies/process/procedures for authorities as per the *Student Record Regulation*:

- Access to the student record by an Accredited Alberta School
- Access to a copy of the student record by other authorized parties (e.g. out of province school)
- To collect and maintain the student record in a secure manner
- To support retention of the student record in a secure manner
- To support disposal and destruction of the student record
- To support a student who is transferring to a different school
- In alignment with GOA Digitization standards
- Following GOA Records Management standards
- In compliance with acts and regulations

The Student Record is the responsibility of the authorities and schools to manage. By introducing a Digital Student Record, authorities and schools can manage the student record using PASIprep or local Student Information System (SIS) systems integrating with PASI. PASI will provide access to view and manage the Student Record to those organizations where the student is enrolled.

1.1 THE 2020 CASS AND ASBOA VISION

CASS and ASBOA representatives on the PASI Steering Committee met to discuss a shared goal for completing the digitization of student records. Members agreed that the benefits from a Digital Student Record will primarily be realized when the majority of Alberta school authorities are able to exchange digital records in real-time. To this end, representatives from CASS and ASBOA agreed to work towards a September 2020 goal that envisions all student record transfers to be electronic.

This vision states that:

- Schools who receive a new student from another organization within Alberta must be able to receive a PASI supported electronic student record.
- At the time of a school to school student transfer, all associated student documents must be made available electronically to the new school through PASI.
- Paper records for students are not required to be fully digitized by September 2020. However, all organizations must be able to accommodate digitizing a student's record

when they transfer to a new school without delay or detriment to the student or the new school.

1.2 BENEFITS

There are many anticipated benefits in moving to a digital student record. These include:

- Quicker access for teachers to new/arriving student information.
- Ensure integrity and prevent loss of information from within the student record should the student leave the school/authority/province and later return to continue their education.
- Reduction in the need to complete assessments more than once should the assessment documentation not be provided immediately by the former school when a student enrolls.
- Facilitation of early notification to allow for personalized student supports, such as student learning plans, specialized programming, special needs accommodation, budgeting, etc.
- Minimized need for paper records to be stored at the school.
- Student information will be easier to access during natural disasters or crisis situations.
- Early detection of potential challenges with the student record and the ability to resolve them quickly to improve the integrity of the student record and adherence to the Student Record Regulation and FOIP.
- Streamlined communication with Alberta Education regarding student record audits – potentially speeding up the process while reducing resourcing needs.
- PASI manages the record retention schedule in alignment with the Student Record Regulation, enabling better use of school authority records management capacity.

1.3 LESSONS LEARNED

A number of Alberta school jurisdictions are already transitioning to digitized student records and have shared the following recommendations for other jurisdictions to consider during this process:

- Consider purchasing desktop scanners to reduce the workload at the school level
- Provide guidelines to school administrators regarding how to ensure the physical student record aligns with the Student Record Regulation (e.g. a summary sheet).
- Establish and keep an Operating Procedures Manual up to date for common practices.
- Consider scanning historical student records as a single document to minimize splitting these documents into individual documents which can require additional time and resources.

- Move towards digital-born documents will minimize the need to scan paper documents.
- Plan to offer initial training for users as well as refresher training over time.
- Take time to perform quality assurance checks when scanning documents – this will save time and resourcing later when they need to be accessed or transferred,

1.4 DIGITAL RECORD ATTRIBUTES

The objective is to create and manage records that are authentic, reliable, complete, unaltered and useable. The effective integration of digital records management policies and practices into the design of PASI will result in records, regardless of their original physical form, that are capable of reflecting the attributes described below.

1.4.1 Authentic

The PASI digital record can be proven to:

- be what it purports to be;
- be created or sent by the person purported to have created or sent it; and
- be created or sent at the time purported.

To ensure the authenticity of records, school authorities should implement and document policies and procedures that control the creation, receipt, transmission, maintenance and disposal of records.

PASI will implement policies and procedures that ensure creators are authorized and identified and that the digital records are protected against unauthorized addition, deletion, alteration, use and concealment.

1.4.2 Reliable

The content of a digital record can be trusted as a full and accurate representation of the transactions, activities or facts to which it attests. The digital record can be depended upon in the course of subsequent transactions or activities.

Ideally, digital records should be created at the time to which they relate, or soon afterwards, by individuals who have direct knowledge of the facts of the document.

1.4.3 Complete and Unaltered

The integrity of a digital record refers to its being complete and unaltered. Digital records should be protected against unauthorized alteration. Digital records management policies and procedures should specify what additions or annotations may be made to a record after it is

created, under what circumstances additions or annotations may be authorized, and who is authorized to make them. Any authorized annotation, addition or deletion should be explicitly indicated and traceable.

1.4.4 Usable

A useable digital record is one that can be located, retrieved, presented and interpreted. It should be possible to demonstrate a direct connection to the business activity or transaction that produced it.

The audit history of digital records should carry the information needed to understand how they were created, by who and how they have been used. It should be possible to identify a record within the context of a student, a school and an authority.

An audit history of activities related to digital records must be maintained.

1.5 CONCEPTS

1.5.1 Access to the Digital Student Record

PASI supports the ability to provide access to student records to those staff who require access to the record to complete their work while restricting access to users who do not require access to the student record.

PASI also supports the ability to review audit records of all persons who access a student record.

1.5.2 Digitization

Digitization is the process of converting physical (hard copy) documentation to a digital (electronic) format. This process supports the transition from a physical student record to a digital student record as supported by PASI.

1.5.3 Retention

PASI supports the record retention requirements outlined in the *Student Record Regulation*. The PASI solution aligns with section 4 in the *Student Record Regulation* – “Retention of student record:”

4(1) a board shall keep a student record ... for 7 years after the student ceases to attend a school operated by the board...

(2) If a student transfers from a school in Alberta to a school outside Alberta, the board that operates the school from which the student transfers shall keep the student record for 7 years after the date the student could be expected to have completed grade 12...

1.5.4 Disposal

In alignment with the retention requirements outlined in the student record regulation, disposal of the digital student record will occur when the digital student record passes its retention period.

Disposal of the digital student record will occur by complete destruction of the record.

2.0 DIGITIZATION STANDARDS

The Government of Alberta IMT Digitization Standards describes the processes that should be implemented for all digitization projects when the goal of the digitization project is to create digital business records. Expectations include the following:

- Adherence to minimum requirements that must be met when digitizing physical documents.
- Following suggested procedures for handling physical documents that have been digitized and loaded to PASI.
- Clearly laid out responsibilities.
- Successful demonstration of authenticity and reliability of digitized documents.
- Ensuring documents are legally admissible in place of the Source Records.
- Compliance with Canadian General Standards Board (CGSB) 72.1193, Microfilm and Electronic Images as Documentary Evidence.

2.1 DIGITIZATION

The digitization program must be planned, authorized and documented before starting a digitization process. The digitization program must include a digitization procedures manual and may include the development of contract specifications if digitization will be outsourced (see the Request for Service instructions and Standing Offer List documentation).

The digitization procedures manual includes details relating to how digitization will proceed. The [Government of Alberta Digitization Process](#) standard supports this process.

2.2 DIGITIZATION - TECHNICAL

The [Government of Alberta Digitization Technical Requirements](#) standard describes the technical requirements that should be implemented for all digitization projects.

The hardware chosen for a Digitization project must be maintained according to a regular maintenance program that is documented and followed. Scanner equipment must meet the specifications required by the project.

All documents must be scanned at a minimum of 300 DPI, and must be output to PDF.

2.3 METADATA

One of the most important and often overlooked components of a digitization project is the attention paid to applying useful indexing or metadata to the image collection. If images are not

tagged appropriately, then end users may not be able to find a specific document easily and managing the collection becomes infinitely more challenging over time.

Metadata must be retained for at least as long as the records to which they relate. The digitization process includes four phases where metadata must be obtained and defined. These phases are:

- Image capture (scanning)
- Image re-capture (re-scanning)
- Quality Assurance
- Data Transfer

The re-capture stage is required if the images and associated metadata do not pass the Quality Control or Quality Assurance checks and must be re-captured.

Metadata has four main functions:

1. Identify Content - Provides unique characterization distinguishing content/images.
2. Manage Content - Allows systems to manage content/images.
3. Retrieve Content - Help user to find and retrieve content/images.
4. Track usage of content - Provides metrics.

There are two types of metadata information that are pertinent to these specifications: Biographical and Bibliographical. Biographical information deals with the lifecycle of the image file, and relates to the context of the image and file properties that must be captured, logged, and certified during the digitization process.

The values surrounding obligation to include these fields are as follows:

- Mandatory: The property must be provided.
- Mandatory if applicable: The property must be provided if appropriate for the business context.
- Recommended: The property should be provided if appropriate for the business context.
- Optional: The property may be provided to add Metadata of value based on business requirements.

Bibliographical information relates to the content and context of the record. This information must be captured and then associated with the image, preferably by automated means or by manual data entry during the digitization process.

2.3.1 Metadata Elements

The following are the metadata requirements for loading of documents into PASI:

- Alberta Student Number – a number used to uniquely identify each student.
- Document Type – identifies the type of document that is being added to the student (must align with a predefined list of acceptable document types within PASI).
- Title – the commonly known as name for the document from the user’s perspective.
- Relevance – a true or false value that indicates if the document is relevant within the complete student record and should be reviewed as part of the initial student record review.
- Document Language – indicates the language of the content of the document (English, French, other).
- Document Date - represents the date that the document was generated on or attributed to.
- Document Expiry Date – the date the document expires.
- Linked to School Year – reflects that school year that the document pertains to.
- Quality Assurance Already Performed – a true or false value that indicates if quality assurance has already been completed on the document.
- Original File Name – the original file name as it was loaded to PASI.
- Linked to Organization – a K to 12 organization that the document belongs to and is linked to in PASI.
- Text Searchable – a true or false value that indicates if text character recognition and searching is available for the document.
- Digitized – a true or false value this indicates if the electronic document was created from a hard copy document.
- Exempt from QA – a true or false value that indicates the document is considered exempt from quality assurance.

3.0 DIGITIZATION PROCESS

3.1 BEST PRACTICES

Digitization best practices provide a concise set of guidelines that should be implemented when digitizing records with the intention to use the digitized record as the business record and to dispose of the original (source) records. Business requirements may necessitate the implementation of standards that exceed the minimum requirements outlined in this document.

3.1.1 Objectives and Principles

Specific objectives include:

- Digitized records that are reliable, trustworthy, authentic and admissible in legal proceedings. The laws of evidence allow submission of digitized records when creation and management of these records meet specified standards and are documented.
- Designation of digitized records as the business record, thereby reducing the retention of paper or other physical copies of records.

General Principles:

- There must be a thorough knowledge of underlying business processes associated with the record series
- Digitize at the highest resolution appropriate to the nature of the source material and the long term storage needs of the documents.
- Conform to the Digitization Standards.
- Electronic Content Management (ECM) tools offer greater functionality than is possible in the paper world.
- A meaningful indexing schema (metadata) for digital files or collections.
- Store digital files in an appropriate environment (PASI).

3.1.2 Phases and Considerations

In general, the following phases are applicable to every digitization project:

- business analysis
- digitization program
- preparation of original documents
- image capture and re-capture
- indexing and metadata
- quality assurance
- image storage

Issues to be considered throughout a digitization project include:

- records management requirements
- quality control
- auditing

To comply with procedures documented within the Digitization Procedures Manual, staff must be trained and able to follow the documented procedures.

3.1.3 Digitization Model

Establishing a digitization program will be one of the first steps required to progress towards a fully Digital Student Record. There are pros and cons both to outsourcing and to creating in-house capabilities for digitization projects. Even though a digitization project may be outsourced, organizations will still be required to support many aspects of the project including the long-term maintenance of the digitized business records and the appropriate management of the source records.

[Appendix 8.1.6](#) within the readiness checklist is available to provide you with additional considerations.

3.1.3.1 In-House vs Outsourced Digitization

Outsourcing digitization is viable if the organization has a large volume of records to digitize and/or intends to digitize collections of documents for a term of years. Additionally centralized management of documents may also lend itself to outsourcing of digitization. Digitization vendors can fully digitize documents, provide standardized metadata, meet requirements, and adopt policies and procedures for various functions.

Outsourcing	Advantages	Disadvantages
	<ul style="list-style-type: none"> • Cost containment (see RFS Instructions and SOL Guidelines) • Economies of scale: vendors can handle large volume • Broad range of options and services available, including digitization, metadata creation • On-site expertise • Pay for cost of digitizing the record only. Equipment and most staffing costs are included in the vendor pricing. 	<ul style="list-style-type: none"> • Organization is removed one-step from the digitization functions, services most often performed offsite. • Security, handling, and transportation required • Vendor may presume a level of understanding on part of organizational staff • Source documents must be transported to and handled by vendor staff

In-House digitization may be a preferred option if the amount of documentation being digitized is not cost prohibitive, if the organization has equipment to complete the digitization in alignment

with the standards and/or if the organizations current documentation is primary digital-born minimizing the need to digitize large amounts of physical documents.

In-House	<ul style="list-style-type: none"> • Development of digitization project experience and exposure to technology • More control over the entire digitization process, security and storage of both source records and digital records • Flexibility to alter project requirements and digitization parameters if needed 	<ul style="list-style-type: none"> • Requires initial and ongoing financial investment in equipment and staff • Longer time needed to implement digitization process and technical infrastructure • Limited production level • Staffing expertise not always available • Need to enforce standards and best practices
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3.2 BUSINESS PROCESSES

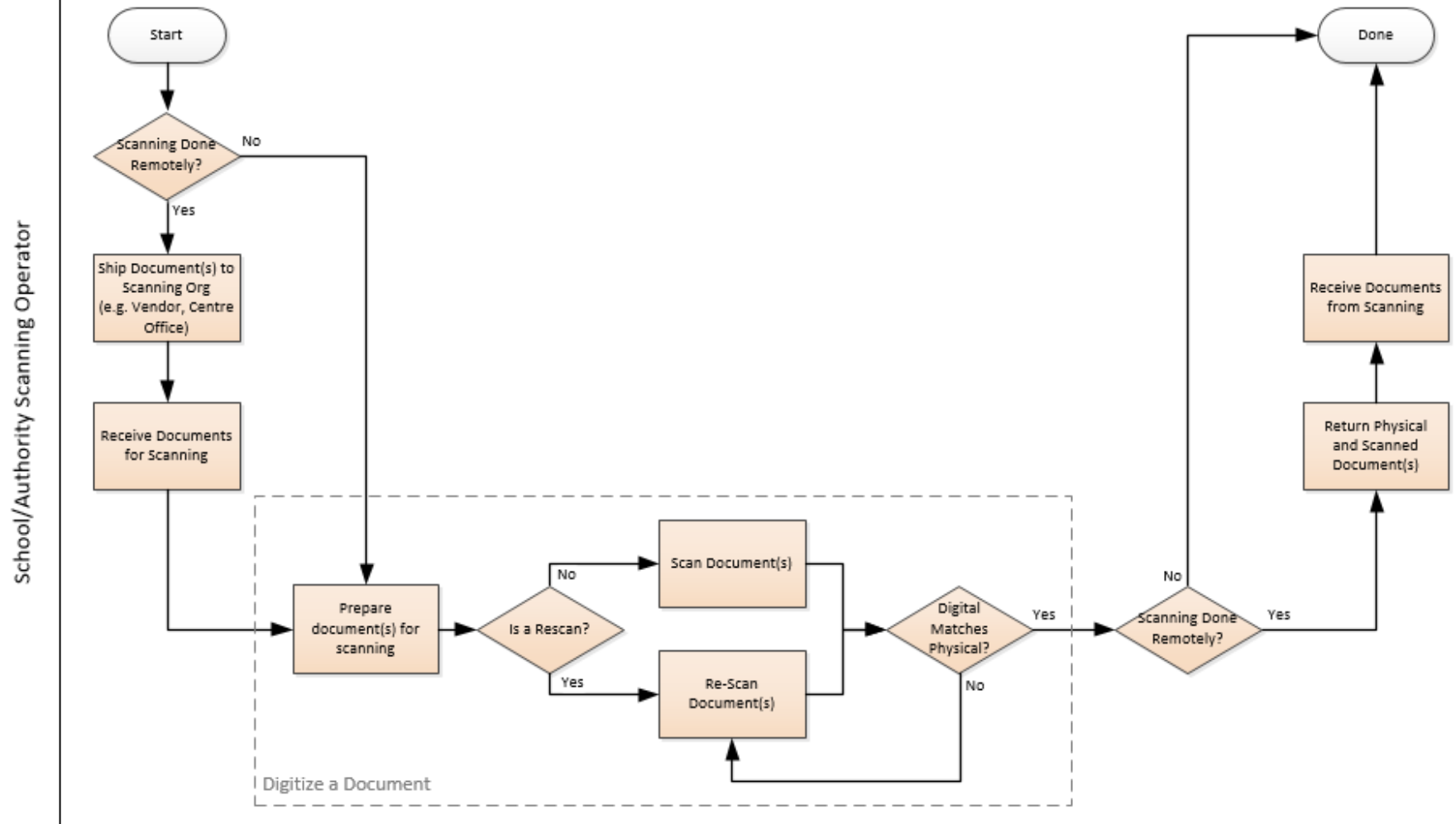
3.2.1 Business Analysis

Carefully thinking through the many components of a digitization project will go a long way towards ensuring a successful outcome. Consider factors such as how digitization fits into your organization's overall plan of moving towards a fully Digital Student Record. Identifying your organizations priorities will help define the digitization strategies best suited for your organization (see the Readiness Checklist). Decision maker and end user engagement and review of existing processes will facilitate a smoother and more successful transition to future state processes.

The process model below outlines a high-level process that can support either an outsourced digitization model or an in-house digitization model. The process model is intended to provide a general guide to future state processes to be used as part of digitization of the student record.

[Appendix 8.1.5](#) within the readiness checklist is available to provide you with additional considerations.

Digitize Physical Document



3.2.2 Outsourced Digitization

Should an outsourced digitization approach be chosen, a Request for Service (RFS) and State of Work (SOW) will need to be developed to support the relationship between the organization and the scanning vendor. Alberta Education has included Request For Service (RFS) and Statement Of Work (SOW) templates and instructions within the Readiness Package to assist in establishing a trade agreement with a pre-qualified vendor. An independent procurement process can also be used to secure a trade agreement with a digitization vendor.

Organizations who intend to leverage the standing offer and Request for Service process should request that their scanning vendor provide an electronic waybill to support loading of documents into PASI. The Electronic Waybill file technical specification outlines the requirements for the waybill and can be located here: [Alberta Education Electronic Waybill XML Specification.pdf](#)

3.2.3 In-House Digitization

Even with the establishment of an outsourced digitization trade agreement it is likely that organizations will be in a position to also perform in-house scanning of documents as part of regular business (for example: Birth Certificate or Registration Form). This will also be the case if organizations chose not to enter into an outsourced trade agreement.

3.2.3.1 Document Preparation Processes

The procedures performed to prepare original documents for digitization must be documented by the organization. This includes but is not limited to:

- Who performed the document preparation.
- Details about file preparation (e.g. what level of document preparation was required, what aspects were executed).
- Special considerations (e.g. special document formats or sizes).
- Whether the original document or a photocopy was used for digitization (in cases where the physical condition of the original is not acceptable for the scanning).

3.2.3.2 Image Capture or Re-Capture (Scanning/Re-Scanning) Process

Image capture processes must be documented by the organization and should include alignment with standards for digitization (see section 2.1). Also, all required metadata must be captured and record as part of the digitization process (see section 2.2 and 2.3).

4.0 QUALITY ASSURANCE

Quality Assurance is the process of verifying images or determining whether digitization quality and associated metadata for a document meets expectations. Quality Assurance must be conducted by personnel not directly involved in the digitization or Indexing of documents and must be proven via audit logs which include details such as: Quality Assurance operator, date, and whether the image passed or failed the test.

A subset size of 5% of the total volume digitized is the required minimum Quality Assurance level, though the project's risk assessment may indicate a need for a higher quality assurance ratio. Acceptable margins of error and what constitutes an error must also be documented.

4.1 BEST PRACTICES

Quality Assurances must be considered and implemented throughout the digitization phases. The specific checks and any project specific standards or tolerance thresholds within the Quality Control processes should be documented. Implementing Quality Assurance after the Image Capture (Scanning) phase is intended to reduce the risk of insufficient image quality, Quality Assurance activities may include:

- A count of the prepared documents must be compared and matched with the number of documents digitized
- The number of pages of a digitized multi-page document compared and reconciled with the number of pages in the original document
- If multiple documents are digitized in a single batch, capability to separate individual digitized documents must be assured
- Confirming the completeness and accuracy of detail by ensuring the source document content has been captured in its entirety in the digitized version (overall readability, clarity of punctuation marks or smallest type size for text, etc.)
- Checking for the presence of scanner generated speckle (i.e. speckle not on original document)
- Colour fidelity
- Page alignment
- Minimum dots per inch (dpi) specification achieved (refer to the Digitization Technical Requirements Standard A000013)
- Removal of blank pages
- Is the output format appropriate (PASI standard is PDF)

Any enhancements of the image (e.g. de-speckling, de-skewing) must be used with caution as they may be deemed as altering the original document by the courts.

The quality assurance ratio is the number of digitized records and the associated indexing checked against the physical count of original documents. A designate from organization is responsible for ensuring that all aspects of the digitization process meet specified program area

requirements. The designate is responsible for documenting the implemented procedures, including the process to amend inaccurate Indexing or imaged with unsatisfactory quality (i.e., images or indexing that have failed the Quality Assurance review).

Considerations for quality assurance management include:

- Setting a benchmark for errors (perform benchmark testing). This can be done by performing Quality Assurance at a ratio of 1:1 for a subset of the record collection. Many business areas choose to do this by conducting 100% Quality Assurance on the first boxes or sets of records that are scanned in a digitization project. The benchmark incorporates checks for both image and metadata and confirms the error criteria.
- Examine benchmark results. If the benchmark testing results are less than 99.9% in your subset (one error within a set of 1,000 images), then re-examine the process implemented for the Document Preparation phase and incorporate more stringent digitization process requirements.

4.2 BUSINESS PROCESSES

The process model below outlines a high-level process that can support either quality assurance of digitized or digital-born documents. The process model is intended to provide a general guide to be used as part of an overall quality assurance program.

Depending on the importance of the documents, this could mean a separate person within the scanning department (someone who did not do the scanning or indexing).

A designate from the organization is responsible for ensuring that all aspects of the digitization process meet specified requirements. The designate is responsible for documenting the implemented procedures, including the process to amend inaccurate Indexing or imaged with unsatisfactory quality (i.e. images or indexing that have failed the Quality Assurance process).

Considerations for the quality assurance program include determining what constitutes an error:

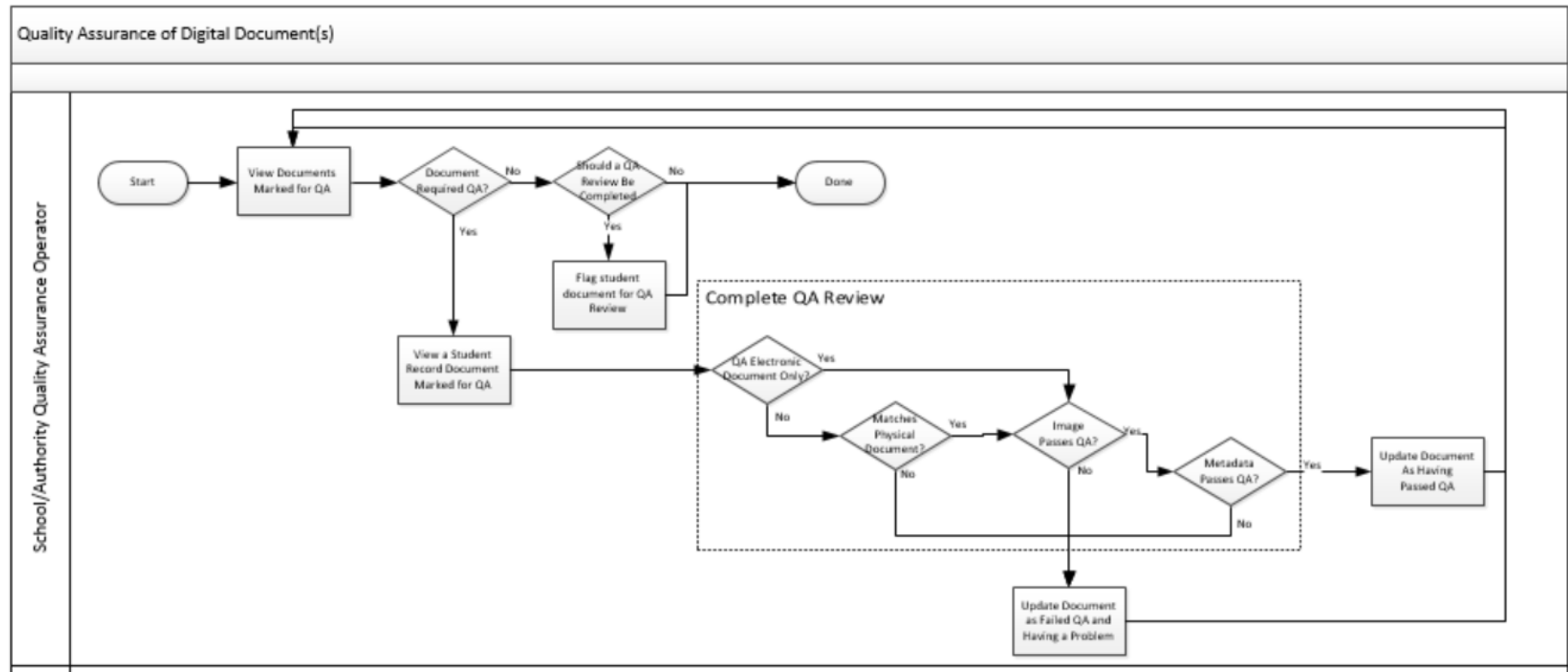
- acceptable deviation of quality from the original document
- treatment of poor quality original documents
- metadata accuracy
- image accuracy when compared to the original
- minimum dpi requirements

Logging or auditing of the quality assurance process is captured within PASI when quality assurance is completed within PASIprep and will ensure the following information is collected:

- quality assurance operator
- quality assurance date
- quality assurance status
- failed QA comments

[Appendix 8.1.5](#) within the readiness checklist is available to provide you with additional considerations.

Provincial Approach to Student Information (PASI)



4.3 PASI QUALITY ASSURANCE PROGRAM

PASI has developed a Quality Assurance program to support the integrity and reliability of student documents. When a new Student Document is being added, PASI will either require or not require Quality Assurance on the Student Document based on a variety of factors:

- Whether the Student Document is exempt from QA.
- If the quality Assurance has already been performed on the Student Document.
- The total number of Student Document records that have been uploaded to PASI in the last 90 days (by Organization and Document Type)

If a document has been added to PASI and is indicated to be exempt from QA, the document will not be selected for Quality Assurance. This can only occur when there is no manual intervention in the creation, indexing (metadata) or loading of the document into PASI. If a user is required to load the document or provide any of the metadata elements then the document cannot be exempt from QA.

A document that is added to PASI where Quality Assurance has already been performed will also not be selected for additional quality assurance within PASI. PASI will create a record that Quality Assurance was completed and passed and will attribute the Quality Assurance review to the user who added the document. In this instance, it is the responsibility of the organization completing Quality Assurance outside of PASIprep to ensure that records are kept to support compliance with all Quality Assurance requirements.

Should a document be added to PASI that is not exempt from QA and has not already had Quality Assurance performed, it may be selected by PASI for Quality Assurance review. Each document type within PASI has been set with a minimum Quality Assurance level (no lower than 5%). When a document is added PASI will review the number of documents of that type, submitted by that organization, in the last 90 days. If the minimum Quality Assurance percentage has not been met then PASI will select the document to go through the Quality Assurance process. If the minimum Quality Assurance percentage has already been met, PASI will not select a document to go through the Quality Assurance process.

5.0 LOADING OF ELECTRONIC DOCUMENTS TO PASI

Loading digital documents to PASI can be accomplished in a number of ways. Direct synchronization between and SIS and PASI can be developed to allow documents from the organization to be submitted to PASI. Additionally, PASIprep can also be used to load documents through a process of loading an individual document or through a bulk submission process.

5.1 LOADING AND MANAGING ELECTRONIC DOCUMENTS

Carefully considering which method of loading documents into PASI is best for your organization will assist in determining the best document management method for your organization. Consider factors such as your existing SIS system, any existing document management systems your organization may use, as well as how PASIprep might serve your organizations needs to manage documents. Identifying the intended users and business processes for your organization will help determine the best approach for your organization. Decision maker and end user engagement and review of existing processes will facilitate a smoother and more successful transition to future state processes.

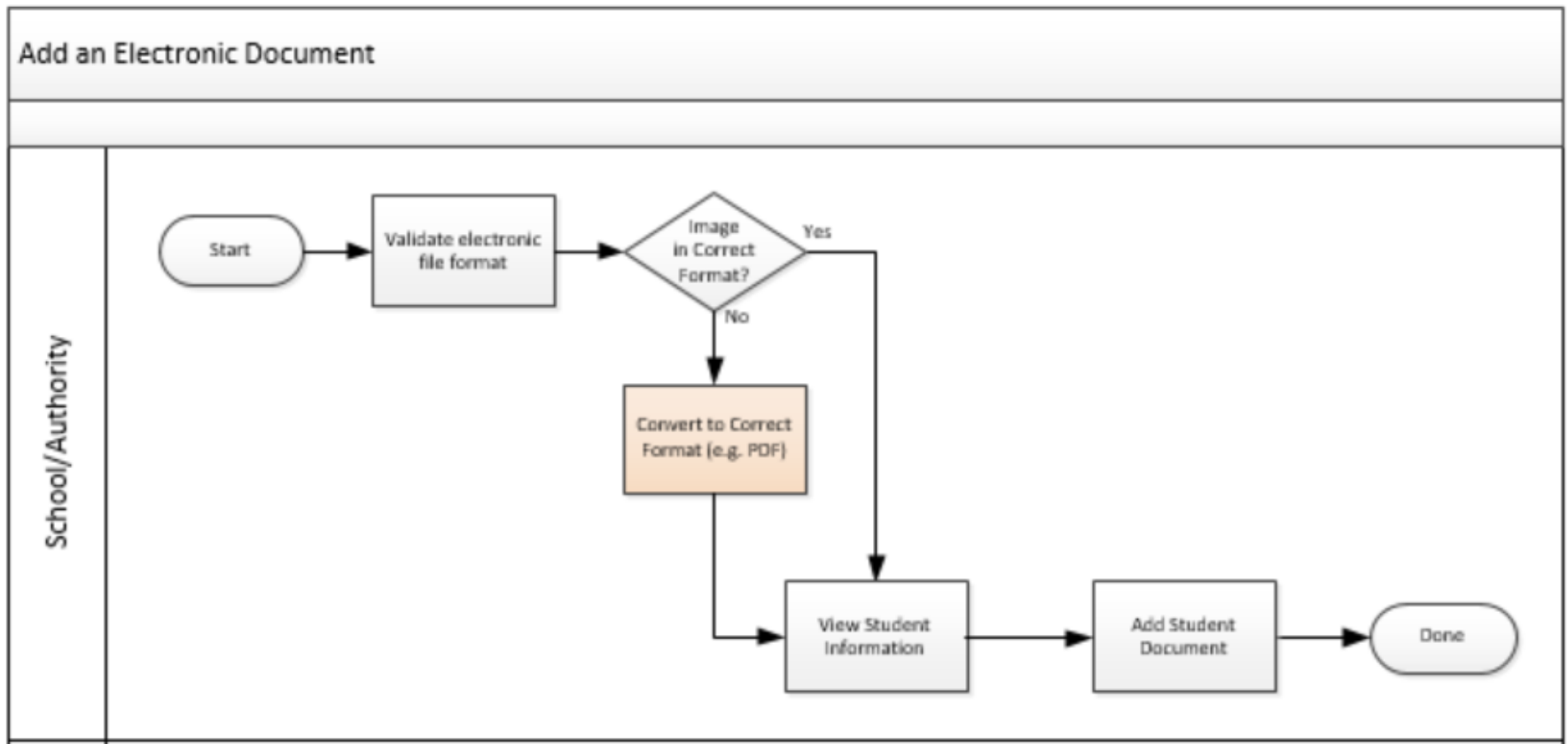
[Appendix 8.1.7](#) within the readiness checklist is available to provide you with additional considerations.

5.1.1 Historical Records

When loading historical records, the documents must be reviewed to ensure compliance with the *Student Record Regulation* and the outlined retention period. Documents that do not fall under the *Student Record Regulation* or have passed their retention period do not qualify to be loaded into PASI and must be removed prior to loading the historical document.

5.1.2 Business Processes

The process model below outlines a high-level process that can support either a synchronized or PASIprep based document management model. The process model is intended to provide a general guide to future state processes to be used as part of management of the digital student record.



6.0 PASI RETENTION AND DISPOSAL OF STUDENT DOCUMENT

Retention and disposal policies, procedures and system functionality exist within PASI to support the digital student record and student documents. All policies developed for retention and disposal of student documents within PASI are in alignment with the *Student Record Regulation* and Government of Alberta Document Management policies.

Should an organization wish to retain document for a period longer than is prescribed in the *Student Record Regulation*, the organization is required to follow the outlined requirements within the *Student Record Regulation* to allow for this and must also implement their own policies, processes and procedures to manage student documents outside of PASI after the PASI retention period has passed.

[Appendix 8.1.4](#) within the readiness checklist is available to provide you with additional considerations.

6.1 RETENTION

Requirements to manage the lifecycle of the digitized records

- Digitization of records and creation of metadata represent a significant investment in terms of time and money. It is important to realize that the protection of these investments will require the active management of both the image files and the stored metadata through a prescribed retention policy.

Retention and Disposition Schedules/Plan

- Digitized business records retain the retention schedule they had in their original format.
- The retention period outlined in the *Student Record Regulation* applies to both paper and digital records.
- School and Authorities must have a process in place to dispose of digitized paper records. The recommended retention period is 30 days to allow the completion of quality assurance prior to disposing of digitized paper documents.

6.1.1 The Student Record Regulation

The *Student Record Regulation* outlines the retention period implemented by PASI and is outlined below:

- Section 4 (1)

“... a board shall keep a student record... for 7 years after the student ceases to attend a school operated by the board or until the student record has been forwarded to another school... “

- Section 4 (2)

“... If a student transfers from a school in Alberta to a school outside Alberta, the board that operates the school from which the student transfers shall keep the student record containing the information ...for 7 years after the date the student could be expected to have completed grade 12 if the student had not transferred from the school.”

6.2 DISPOSAL

Disposal of student documents within PASI has also been aligned with the requirements outlined within the *Student Record Regulation*:

- Section 5 (1)

“A board shall dispose of or destroy student records that are no longer required to be kept under section 4.”

- Section 5 (2)

“Student records shall be disposed of or destroyed in a manner that maintains the confidentiality of the information in the record.”

Disposal within PASI is a permanent, complete disposal and physical deletion/erasure of digital documents once they pass their retention period.

7.0 SHARING OF THE DIGITAL STUDENT RECORD

7.1 ALBERTA STUDENT LINK

The Alberta Student Link is a secure self-service website for third parties to request access to a student's records. This system is intended to be used to track requests, approvals, denials and transfers of a student's digital record. The main intended use of this system is to allow the transfer of a student's digital student record to a school outside of the province when a student transfers to a new school.

Additionally, during the transition period when organizations are moving towards a fully digital student record, the Alberta Student Link can be used to initiate the transfer of paper records between organizations within Alberta. The system can also support tracking of requests for student record information as part of a hybrid (transition) solution where part of a student's record is digital and part of the record remains in a physical format. During this transition, organizations can use the system to trigger the transfer of physical documents to a school within Alberta.

[Appendix 8.1.3](#) within the readiness checklist is available to provide you with additional considerations.

8.0 APPENDIX

8.1 PASI DIGITAL STUDENT RECORD READINESS CHECKLIST

The purpose of this checklist is to assist administrators and decision makers in schools and school authorities to prepare for these changes. Each school and school authority should:

1. Review the checklist in detail.
2. Determine business process changes needed to support PASI Digital Student Record Management.
3. Consider roles and responsibilities for document management.
4. Determine a document digitization model.
5. Decide on an ongoing document management strategy.

This checklist is meant to be an internal planning tool only and does not need to be returned to Alberta Education.

If you are a **PASIPrep user** and have questions regarding any of the items listed, please contact your **Data Coordinator**.

If you are a **Data Coordinator** and have questions regarding any of the items listed, please contact the PASI and Student Records Branch through studentrecords@gov.ab.ca. Please ensure “**Digital Student Record PASI Readiness Checklist**” is in the subject line of your e-mail.

8.1.1 Readiness Package

The items within this section list the resources available for schools and authorities to help prepare for the implementation of a digital student record.

#	Checklist Items	Response	Notes
1	The Digital Student Record Overview has been reviewed by the appropriate staff. Questions and clarifications have been resolved with the assistance of PASI, if necessary. Location: Alberta Education Extranet > PASI Community Site > Digital Student Record	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	
2	All items in the PASI Digital Student Record – Readiness Checklist (below) have been reviewed and completed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	

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#	Checklist Items	Response	Notes
3	<p>Appropriate staff from my school or school authority have been made aware that the Digital Student Record Management Training Videos and Reference Guides are available on the PASI Community Site.</p> <p>Location: Alberta Education Extranet > PASI Community Site > Training Resources > Digital Student Record</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	

8.1.2 Roles and Responsibilities

The items listed in this section describe the various security roles available to be assigned to users within your organization.

#	Checklist Items	Response	Notes
4	Our organization has reviewed the roles and responsibilities for access to student documents regardless of format.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	
5	We have determined which users within our organization will have PASIprep view-only access to student documents.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	
6	We have determined which users within our organization will have PASIprep contribute access to student documents. These users will be able to view and add student documents. These users will only have the ability to edit student documents they added to PASI.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	
7	We have determined which users within our organization will have PASIprep manage access to student documents. These users will be able to manage student documents. These users will also have the ability to resolve problems, manage quality assurance and approve third-party access requests for the student record.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	
8	We have determined which users within our organization will have PASIprep manage access to student documents as well as PASIprep bulk student document operations.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	

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9	We have reviewed current PASIprep access for all staff to ensure permissions remain appropriate for their current roles and have communicated the changes to all impacted staff.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	
10	We have ensured users within our organization are aware of and understand the PASI Usage Agreement for appropriate access to student personal information.	<input type="checkbox"/> Yes <input type="checkbox"/> No	

8.1.3 Request and Transfer of Student Documents

The Alberta Student Link is a secure self-service website for third parties to request access to a student's records. Alberta Student Link and PASIprep track the request, approval or denial and transfer of a student's digital record.

#	Checklist Items	Response	Notes
11	We are aware of the Alberta Student Link website and understand that we are responsible for managing requests received through the system.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	We understand the PASIprep functionality to transfer the digital student record outside of the PASI environment.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	Our organization has policies and procedures in place to verify and authorize requestors.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	We understand that having the digital student record up to date and accurate in PASI is recommended before the approval of the transfer request.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	We understand verification and communication with the requestor are completed outside of PASI.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16	We understand that we can use PASIprep to track requests during the transition from physical to digital student record.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17	We understand our organization can only approve transfer requests for students that had an enrolment with our organization in the last year they attended school.	<input type="checkbox"/> Yes <input type="checkbox"/> No	

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18	We understand that CASS and ASBOA outlined that physical records will no longer be shared after September 2020.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
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8.1.4 Retention and Disposal

Retention and disposal policies, procedures and system functionality exist within PASI to support the digital student record and student documents. All policies developed for retention and disposal of student documents within PASI are in alignment with the *Student Record Regulation* and Government of Alberta Document Management policies.

#	Checklist Items	Response	Notes
19	We understand that PASIprep will manage the disposal of student record documents in PASIprep based on a document type's retention schedule in alignment with the <i>Student Record Regulation</i> .	<input type="checkbox"/> Yes <input type="checkbox"/> No	
20	We understand that policies and procedures will need to be in place to govern the disposal of paper student documents.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
21	We understand that policies and procedures will need to be in place to govern the disposal of electronic documents within our document management system.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
22	Our organization intends to retain electronic documents longer than the PASI retention period. We understand that policies and procedures are required to support retention greater than outlined in the student record regulation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	

8.1.5 Digital Student Record Business Processes

The items listed in this section highlight the various business processes that are required to support the digital student record.

#	Checklist Items	Response	Notes
23	The business processes to digitize student documents have been assessed, updated and communicated to all impacted staff in our organization.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	
24	The business processes to add and manage student documents to PASI have been established and communicated to all impacted staff in our organization.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	
25	The business processes for student document quality assurance have been established and communicated to all impacted staff in our organization.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	
26	Transfer of student records between organizations remains the responsibility of the school or authority. The business processes to request and transfer student documents have been assessed, updated for to reflect digitization and communicated to all impacted staff in our organization.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> In Progress	

8.1.6 Digitization Methodology

Establishing a digitization program will be one of the first steps required to progress towards a fully Digital Student Record. There are pros and cons to outsourced digitization or to creating in-house digitization capabilities. Even though digitization may be outsourced, organizations will still be required to support many aspects of the process including the long-term maintenance of the digitized student records and the appropriate management of the source records.

8.1.6.1 Outsourced Digitization

Based on your responses in this section - Outsourced Digitization, if the majority of your responses are yes, this suggests that outsourcing the digitization of your student documents might be the preferred model for your organization. The Request for Service supporting documentation is available on the PASI Community Site. Location: [Alberta Education Extranet](#) > PASI Community Site > Digital Student Record

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#	Checklist Items	Response	Notes
27	Within the digitization process, budget is a primary concern for our organization.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
28	The student documents in our organization are primarily paper.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
29	In an outsourced digitization model, equipment and/or most staffing costs are absorbed by the digitization vendor. <ul style="list-style-type: none"> • Yes, this is our preference. • No, we prefer to manage the equipment and staffing costs. 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
30	In an outsourced digitization model, the digitization vendor has the expertise to digitize student documents. <ul style="list-style-type: none"> • Yes, this is our preference. • No, we have the expertise to digitize student documents. 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
31	Our organization is comfortable developing secure handling and transportation processes required to work with digitization vendors.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
32	We prefer to rely on the expertise of a digitization vendor for the creation of waybill files to be used in the loading of student documents.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
33	We are comfortable in establishing a trade agreement with a pre-qualified digitization vendor.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Total		Yes =	
		No =	

8.1.6.2 In-house Digitization

Based on your responses in this section - In-House Digitization, if the majority of your responses are yes, this suggests that in-house digitization of your student documents might be the preferred model for your organization.

Provincial Approach to Student Information (PASI)

#	Checklist Items	Response	Notes
34	The student documents in our organization are primarily digital.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
35	Our organization sees value in investing time and resources to digitize existing student documents ourselves.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
36	Control of the digitization process and security of our student documents is a high priority for our organization.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
37	We are confident in our ability to enforce digitization standards and best practices.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
38	Professional development of our staff related to digitization is of value to our organization.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
39	We have the technical expertise to create waybill files to be used in the loading of student documents.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Total		Yes =	
		No =	

8.1.7 Document Management Model

Carefully considering which method of loading documents into PASI is best for your organization will assist in determining the best document management method for your organization. When considering your organization's approach to loading documents into PASI, we recommend reviewing factors such as your existing SIS system, any existing document management systems your organization may use, as well as how PASIprep might serve your organization's needs to manage documents. Additionally, consideration of an implementation methodology may also influence your preferred model.

Functionality available within PASIprep includes viewing, adding, editing and deleting of student documents, Quality Assurance and problem management. In addition, bulk operations are available for adding and deleting student documents. Additional functionality or workflows may be available through an SIS or document management system. It is worth considering integration between systems that generate digital-born documents and PASI to minimize manual intervention.

Provincial Approach to Student Information (PASI)

#	Checklist Items	Response	Notes
40	Currently, our school or authority manages student data by the use of a student information system (SIS) that is integrated with PASI. We prefer to manage digital student documents, within our SIS.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
41	We have advised our student information system vendor that we wish to integrate digital student record functionality into our SIS. Additionally, we are aware of the requirements for conformance testing prior to implementation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
42	Currently, our school or authority manages (or is interested in managing) digital student documents with a Document Management System.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
43	We have engaged a vendor to acquire a Document Management System. Additionally, we are aware of the requirements for conformance testing prior to implementation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
44	We prefer to manage digital student documents, within PASIprep.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
45	<p>We have considered implementation/migration models to implement digital student record functionality. For example:</p> <ul style="list-style-type: none"> • By Document Type • By Document Source (digital-born vs. digitized) • By Grade (first grade or last grade) 	<input type="checkbox"/> Yes <input type="checkbox"/> No	

8.2 PASI TERMINOLOGY

The following terminology has been included to ensure a common understanding in relation to the digital student record:

8.2.1 Alberta Student Link

A secure self-service website for used to request access to a student's record. This system is accessible with an Education Account through the Alberta Education website.

8.2.2 Bibliographic Information (a form of metadata)

Information regarding the content and context of a document. It is created by the organization (possibly obtained from the Source Record) and aids in the retrieval of an image.

8.2.3 Biographic Information (a form of metadata)

Information regarding image capture (scanning/digitizing) that may include the date/time captured, operator identification, capture device identification/location and details of modification, if any.

8.2.4 Compression

A technique used to reduce the number of bits in an electronic image file.

8.2.5 De-Speckle

The process of removing specks or marks from images, especially those created in the digitization process.

8.2.6 De-Skew

The process of realigning tilted images. Skew is an output that can occur in scanned images because of the camera or document being misaligned, imperfections in the scanning surface, or because the paper was not completely flat when scanned.

8.2.7 Digital-Born

An electronic document that was originally created in an electronic format and was not converted to an electronic document through digitization.

8.2.8 Digitization

The use of a scanner or similar equipment to convert documents to digitally coded electronic images suitable for electronic storage.

8.2.9 Metadata

Elements that provide context and meaning to assist with use and interpretation of a document.

8.2.10 Quality Assurance (QA)

Refers to the process of reviewing images (the content) and associated data (metadata) to ensure accuracy and completeness. Quality Assurance should be conducted by personnel not directly involved in the digitization of documents.

8.2.11 Quality Assurance Percentage

The percentage of the total volume of records in the collection that require quality assurance. For PASI this is determined by document type, for each organization (school or authority) who loads documents into PASI. Each organization has the same minimum percentage set for each document type.

8.2.12 Quality Assurance Ratio

The number of errors acceptable per subset of records (e.g. 1 error in a 1000). Generally, if the probability of litigation is high, or great accuracy is required for other purposes, then a more stringent acceptable quality assurance ratio must be implemented.

8.2.13 Quality Control (QC)

The review of the processes being used, to ensure that they are meeting the project's requirements. It is defined as procedures, plans or actions used to ensure processes conform to established requirements, comply with standards and maintain confidence in integrity and accuracy.

8.2.14 Relevant

Indicates that the document is to be reviewed as part of an initial assessment of the student or is the most current version of a record of that type.

A document could be marked as not relevant if a new version of the document exists. Document mark as not relevant are not deleted, this field is meant to be a way to highlight documents to be reviewed first.

8.2.15 Responsible for the Student Document

The organization considered responsible for an individual document.

8.2.16 Source Record

The record itself or any facsimile intended by the author of the record to have the same effect.

8.2.17 Student Record (Digital Student Record)

The digital version of a student's cumulative file that will be stored in PASI.

8.2.18 Student Record Custodian

The school (or schools) responsible for managing the collection of student documents that make up a student's record. This school (or schools) are able to approve access to a student's record based on a request received from the Alberta Student Link.

8.2.19 Text Searchable

A flag indicating if the document has associated text that can be searched.

8.2.20 Waybill

A waybill is an electronic xml file that is not meant to be manually created. A waybill contains a document entry with metadata for each of the student documents contained in a batch zip file.