



Implementation of the IMS Global Comprehensive Learner Record Standard: A Practical Guide for Campus Personnel

*AACRAO WORKGROUP ON THE IMPLEMENTATION OF THE IMS
GLOBAL CLR STANDARD*

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The American Association of Collegiate Registrars and Admissions Officers (AACRAO) is a non-profit, voluntary, professional association of more than 11,000 higher education professionals representing approximately 2,600 institutions in more than 40 countries. Its commitment to the professional development of its members includes best practice guidance on admissions strategies to meet institutional diversity objectives, delivery of academic programs in innovative ways to meet the needs of a changing student body, and exemplary approaches to student retention and completion.

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Introduction

What is a CLR?

A Comprehensive Learner Record (CLR) is an official document issued to a learner/student that is focused on what was learned in an educational program. In this context, the educational program is a technical or higher education degree program at the post-secondary level. In American higher education, the transcript is the official document used to convey what coursework was taken in a degree or certificate program. The CLR is not a replacement for this record but a different way to record and convey the outcomes of an educational program or activity. Its intent is to provide learners, employers, and others with information that is not reliant upon them having in-depth knowledge of postsecondary education, which is a major drawback of the transcript. The CLR also provides information on learning that may come from academic courses, co-curricular activities, employment or other evidence of learning or acquired competencies.

Emergence and Terminology

In 2015, there was a great deal of interest in exploring how technology could and should impact student records. Initial thoughts included some way to provide richer information about the courses on an academic transcript, such as hotlinks or pop-ups that could be used by the receiver, if desired, to see more than just a course title. Thus, an initial name of “extended transcript” emerged and, for a short time, was a working title. That quickly changed, as it created confusion about the intent of these records and some higher education professionals assumed the content of courses or academic programs was being altered (which it was not). A new title for the work, Comprehensive Student Record, was then applied. It was more accurate, as the notion that information on learning that occurred outside the classroom could be part of the record and that the organization of information should be prioritized around learning outcomes or competencies, rather than the chronological enrollment organization of the academic transcript.

In 2017, work on the record expanded to include many more types of institutions. As concepts of the record began to be more refined and consistent, it was also apparent that learning may go beyond the experience of students in an academic setting. When learning occurs in the workplace or in military settings, we don’t think of those as student experiences. Consequently, a more inclusive title for the record emerged, the Comprehensive Learner Record, acknowledging that most experiences would come from academic and co-curricular settings but that learning from workplace, military or civic experiences might be validated through Prior Learning Assessment (PLA) and become part of the record.

In 2018-2019, a White House taskforce on the American Worker took up discussions on digital records. This work was not directly connected to the CLR project but surfaced a new name for records, Comprehensive Learner/Worker/Military records. That generated some confusion about the name of the CLR and differences between these. The U.S. Chamber of Commerce Foundation, a collaborative partner in the CLR project, worked to mitigate the confusion and did resolve to shorten their references to LER, or the Learning and Employment Record. Today, confusion still exists about the two names and the differences between them. It may be helpful to consider LER to be an umbrella term, where the CLR is one type of digital learning record among others. At the time of this publication, there are employment badges and certificates, the military is working on several projects to digitize and modernize the Joint Services Transcript (JST) and create their own comprehensive services record, MilGears. However, the CLR is the only type of LER that is in production today. As other digital records become available, the LER umbrella concept may become clearer to the public.

The Need for a Standard

During the first phase of CLR development work (2015-2017), it was unclear how these records might form. The collaborative work of the initial 12 colleges and universities in that phase, performed in partnership with NASPA and supported by Lumina Foundation, yielded fruitful discussions around their purpose, audience, content and more. As the next phase of the work began in 2018, it became clear that more institutions with larger student bodies were also interested in developing and implementing these records. In order to create records that could be exchanged between institutions and with outside entities (agencies, employers, etc.), interoperability was required.

IMS Global was working with several colleges and universities that were part of the Competency-Based Education Network (C-BEN), an emerging and growing organization that focused on CBE instruction in courses and degree programs. The resulting [report](#) from IMS' research demonstrated the need for a digital "extended transcript". AACRAO was engaged with this group, as there was an overlap between C-BEN and CLR Phase I institutions. Further, AACRAO was working to assist C-BEN in its creation of a standard for CBE transcript content.

An initial standard was being developed for the CBE programs and courses by IMS Global. That organization sought feedback from several individuals and organizations, including AACRAO, on its scope and direction. That draft became more formalized at the same time the need for one was appearing. That serendipity allowed AACRAO to review the IMS Global CLR standard and provide feedback on it. An AACRAO workgroup assessed its ability to meet the needs of diverse institutional types, learners, modalities and experiences required by the emerging and developing CLR formats. Per that review, the CLR Standard from IMS Global is the only comprehensive data standard in place today that meets the objectives of an official institutional learning-focused and comprehensive learner record. Further details on the review can be found in AACRAO's [guidance](#).

Digital Standard versus Digital Credential

The standard is the mechanism by which issuers of CLRs can convey information to other parties or “consumers” of the contents (colleges, universities, employers, agencies). It is focused on the need to communicate to external consumers and not on the many ways that internal data could be used for reports, degree progress, etc. This is an important distinction. There are cases where institutions have used learning data to help them understand the learning of their own students. Those are vital for student success. They should not however be conflated with the external communications needs. Just as an academic transcript has certain properties that are important when we communicate it electronically to other parties outside the institution, we may also use course data to create views of student progress in grade reports, degree audit modules, etc., and the transcript standard wouldn’t be expected to also meet these internal needs.

The credential itself is a digital document that is rendered into a format that is useful and informative. There are many ways to accomplish this and the variety of CLRs already in production illustrate this. The standard does not force an institution to render its CLR in any particular manner. It is only the mechanism that allows the data contained within the CLR to be organized in a way that it can be interoperable across an ecosystem of record exchange. This is sometimes compared to the standard for electricity within a country. The standard ensures that the electricity flows along a grid in a way that it can be commonly used by the consumer of it. How you use the electricity is irrelevant to the standard itself. Electrical products are built to that standard, so that you can easily plug them in and use them without having to concern yourself with what voltage may be coming from the outlet or what the product needs. Over time, using the CLR standard, an ecosystem of learner data will be enabled, and users of the data will be able to rely upon the data in a consistent format. How they render it, articulate it, and interpret it will be up to them; the standard does not dictate this.

Elements and Important Considerations

One of the important considerations of the CLR is that the learning claims it represents should be validated by an authority. In the academic transcript, we understand that grades were issued by faculty. That is the validation of the learning that we accept as accurate and authentic. The CLR carries that same concept of trust, while expanding the scope of authority to those who supervise learning. Most often, this is a faculty member but there are instances where others, especially student affairs staff and administrators, have been entrusted with that responsibility. In all cases, it implies and should carry the assumption that rigor has been applied to the assessment of learning.

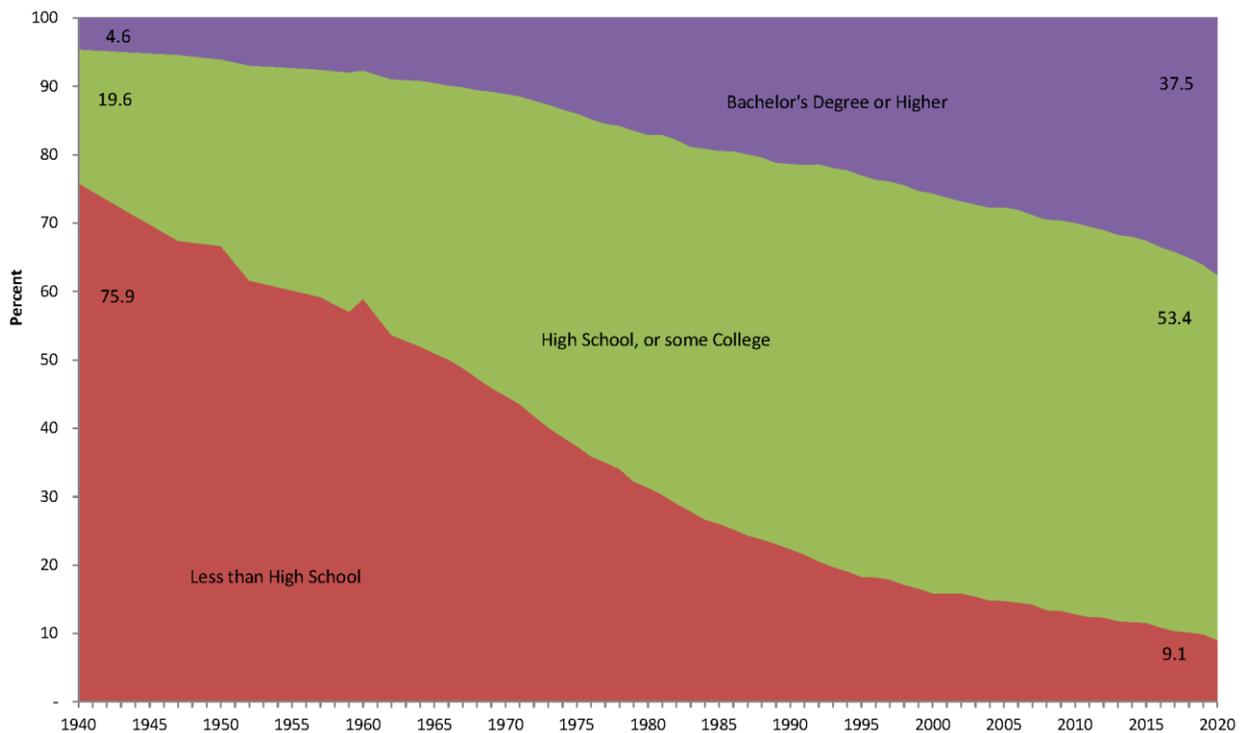
Another important element of the CLR is its modularity. As micro-credentials expand in use and concept, we recognize that the learner may want or need to disaggregate the education program for her benefit in leveraging its learning outcomes for employment, further education, scholarship opportunities or other needs. This is a shift in thinking from many current academic

record uses, as there has always been a desire and need for transparency in the academic transcript. That document has been focused on its use by the academy and that need continues today.

The needs of learners and employers are different from those of the academy. In our lifetimes, the percentage of Americans holding a baccalaureate degree has risen sharply, as shown in Figure 1 below. Figure 2 reveals that for many years, nearly 70% of high school graduates continue on to higher education. As college-going becomes a common event in our society and holding a degree no longer distinguishes people as rare, learners and employers demand to know how these experiences translate into knowledge and skills needed in the workforce.

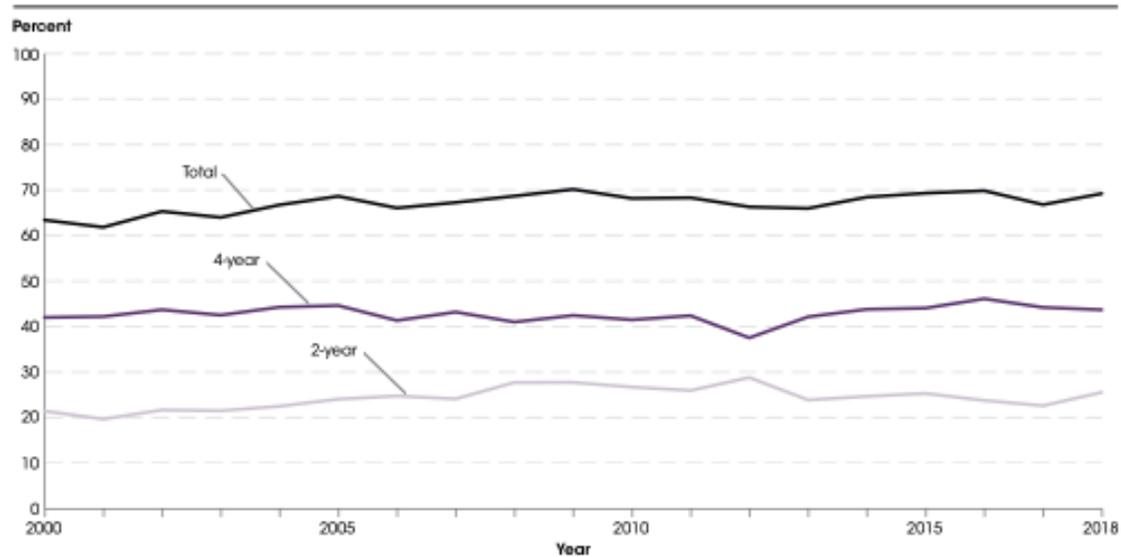
For these reasons, CLRs must be constructed with disaggregation as an assumed need of the learner. The reverse may also become true, where it will be important for educational institutions to receive and apply learning from other sources (transfer and advanced standing credit, military and work experiences) toward the degree outcome requirements in much the same way we display transfer credit on an academic transcript today. Knowing that the learner will require flexibility in the use of her learning data, the CLR seeks to allow modularity in the way its data is assembled and associated with other learning experiences in that educational program.

Figure 1. Percentage of Americans with A Baccalaureate Degree, 1940 - 2020



Sources: U.S. Census Bureau. 1947, 1952-2002 March Current Population Survey, 2003-2020 Annual Social and Economic Supplement to the Current Population Survey; 1940-1960 Census of Population. For more information on confidentiality protection, sampling error, nonsampling error, and definitions, see <<https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar20.pdf>>

Figure 2. Immediate college enrollment rate of high school completers, by level of institution: 2000 through 2018



NOTE: Immediate college enrollment rate is defined as the annual percentage of high school completers who are enrolled in 2- or 4-year institutions in the October immediately following high school completion. High school completers include those who graduated with a high school diploma as well as those who completed a GED or other high school equivalency credential. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 2000 through 2018. See Digest of Education Statistics 2019, [table 302.10](#).

A third critical element of the CLR is the learning framework. As the CLR elevates the roles of learning outcomes and competencies (for those who use them), the number of individual learning outcomes and their structure will be numerous and varied. This allows for individual learning experiences to reflect discrete information about the learning that is being validated in the record. However, this can also create a cacophony of disparate information for the users and receivers of CLR. Learning frameworks allow the educational institution to summarize learning, using established or institutionally developed categories into which the learning outcomes may be organized.

Early developers of the CLR often had institutionally established frameworks that provided the summary of learning needed to render a CLR in its visual form. These reflected the institution's agreement on categories; the CLR did not drive or dictate these. Examples include Stanford's Eight Ways of Knowing and Doing, Elon's Experiences, IUPUI's Profiles of Learning for Undergraduate Success, and the University of South Carolina's Beyond the Classroom Matters. Other institutions sought existing frameworks to help them organize learning in ways that aligned with their educational philosophies and programs. These include the AAC&U Value Rubrics, the Degree Qualifications Profile, NACE Career Readiness Competencies, and others.

Institutions often use framework tools within courses or programs but less often have mapped curriculum across degrees into frameworks that can summarize the learning outcomes across the educational experience. In these instances, it is often wise to begin with learning outcomes for the general education curriculum. This is the most common area of curriculum where broad learning outcomes have been established. Discipline-specific program outcomes can be added to these when they exist. While having robust discussions and forming workgroups to identify the right learning framework for an institution is always encouraged, these can also delay the implementation of a CLR. If new frameworks arise, they can be implemented at that time.

Some institutions begin their CLR work only with co-curricular learning experiences. The goal of a CLR is to span all learning experiences and the academic curriculum is at the heart of that. However, this can be the way to seed the project, and, in several instances, this has led to broader interest in CLRs from academic programs. This is largely because so many co-curricular programs are tied to academic programs (internships, research projects, global study, discipline-specific student organizations, etc.). In using this approach, it is important for Student Affairs professionals to ensure that assessment and validation of learning are present as soon as possible. Indirect assessment of learning via participation in a learning activity may be the first step. Is direct assessment of a reflective assignment possible in the following step? Collaboration with faculty can often help strengthen practices while building trust among faculty partners in the quality and rigor of learning validation and assessment that takes place outside their courses, labs and classrooms.

Regardless of where a college or university begins to collect, validate and assess learning, these elements and important considerations should form a roadmap to a more comprehensive and inclusive learning record. The institution will likely begin to see the interdependencies between learning experiences and connect them more intentionally, as a result. It is recommended that institutions speak with and review resources from institutions that have already developed and implemented their CLRs, as this will help them map their path forward and avoid creating records that cannot be easily expanded as the institution's learning frameworks and data capabilities grow and change over time.

Institutional Data and CLR Creation

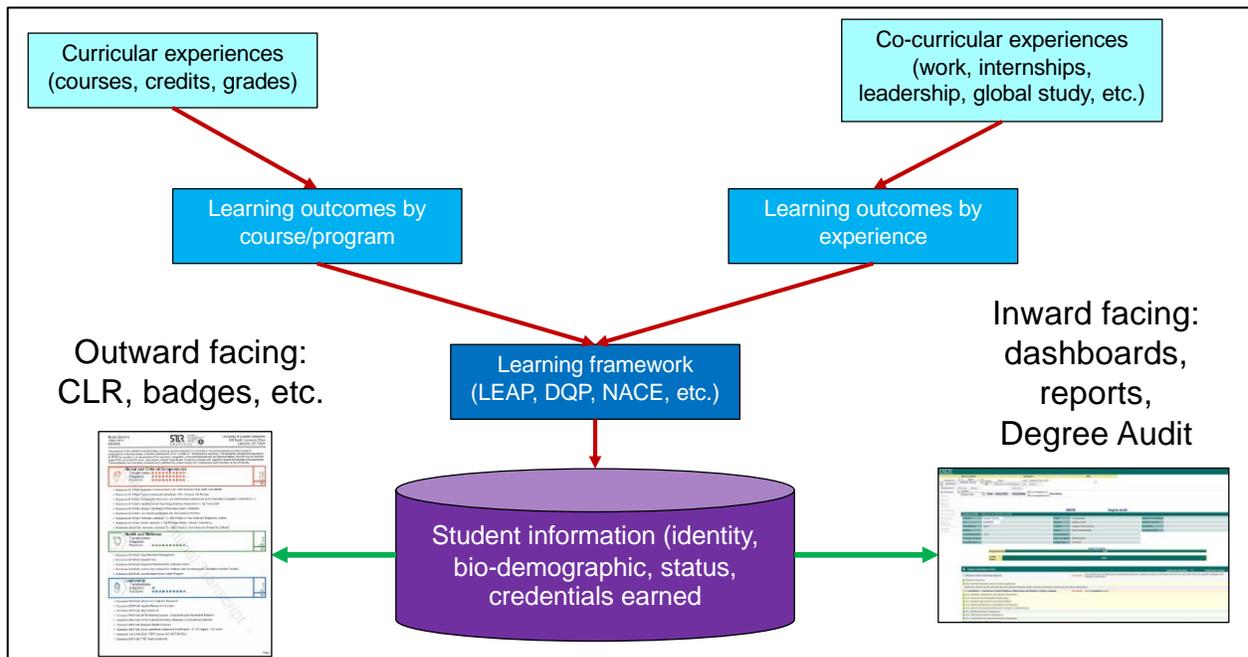
Building from the realization that learning happens in many different environments and through various experiences, capturing learning data becomes more complex. Technology-supported learning through learning management systems (LMS) is nearly ubiquitous in higher education. A growing number of co-curricular information systems are available and help student affairs administrators organize and track student activities, career development, and student organizations. Each of these systems hold pieces of the learning data environment.

The CLR requires that these pieces of information be brought together in a way that securely joins them to student identity. Institutions may populate the LMS, co-curricular data system or

other learning technology from the SIS, the institution’s system of record, where identity has already been established. The data from learning experiences is then stored in those systems. The CLR requires that some of these data are harvested for use in the record, necessitating operations that may be simple or complex, depending on the system(s) being deployed.

Some systems provide plug-ins that make the return of some learner data to the SIS simpler. For example, an instructor may grade a course in the LMS and the course grade may be imported back into the SIS through a plug-in. Because SIS transactions are focused on terms, academic courses, grades and credits, they are not commonly built to accept and use learning data, such as learning outcomes, competencies, rubrics, artifacts, etc. Institutions must deploy or develop a system to collect and join learning data to student identity, so that the output to the CLR can be achieved. Figure 3 shows a simplified sketch of the information that needs to be collected and joined together.

Figure 3. Learning Data Sources Map - simplified example



Institutions have used various methods to join data from learning experiences with student identity. Some use the tables that support their SIS as a location for the data, importing it from various sources and joining it to the student identity already established in the SIS. This requires matching as the data is placed into the tables so that the data are aligned with the correct records. Using the same student ID as in the SIS across all information systems (LMS, co-curricular, etc.) is highly recommended. Note that these systems often allow users to create learner records within them, even when populated by the SIS initially. Safeguards and strong data governance processes must be in place to ensure that all records coming from these systems can be accurately joined to the records in the SIS.

Other institutions join data from various sources in a data warehouse. In doing so, there is typically a set routine for establishing the accuracy of identity before joining the data. Using the same unique record identifier across all systems is a strong/best practice and allows easier alignment. Regardless of the methods it is important to create or utilize error reports that identify any records or data that come into a system that cannot be joined to other records. These are common in admissions systems where student records often start; they are also found in financial aid. The matching routines used to link applications to inquiries or FAFSA/ISIR data to existing records often provide the structure required to align records when a unique record identifier is not in place.

Most institutions that will develop and implement CLR's will need to determine how they will stage the data for the record, even when they use external providers to render the records or translate their content into the J-SON format the standard uses. This may be as simple as a spreadsheet, a .csv file, or as complex as routines that provide automation to transmit the compiled data to a company or service provider that will render and transmit the CLR's on the institution's behalf.

Purpose

When referencing the definition of a CLR, each institution will include components on the digital record that best represents the institution's mission, goals, and student body. As the body of the CLR could reflect co-curricular, academic, competency work or a combination of these, it is important that data is represented in a standard format so that the components of the record are easily identifiable and transferrable regardless of the type of CLR created. The purpose of this publication is to introduce the elements that contribute to a CLR standard; the definitions, relationships, and representation of achievements and how to define and apply the standard to a CLR. Although CLR's can vary due to the needs and wants of the individual institutions, the standardization of the content and elements represented on the CLR will allow for easy recognition of the content and consumption of the data for all consumers of the record. Just like the grades, courses, terms, and other elements that make the traditional transcript recognizable, adopting a standard does the same for a CLR.

Through a variety of examples portrayed by a number of institutions who have adopted the IMS standard, this publication aims to familiarize readers with the different elements of the standard and how to apply the standard when developing a CLR. In addition, this guide strives to highlight from a business, non-technical point of view how to use and adopt this standard for institutions of all types and sizes, regardless of where the institution is in its CLR development process.

Intended Audience

As technology continues to influence the mode by which institutions educate students, and as technology continues to influence the functional roles that are needed at institutions of higher learning, it becomes even more important for employers and IT personnel to be able to communicate, and for employers to be able to “speak” the language of business requirements to IT. This is even more true when working in the world of digital credentials like the CLR. Although IT may have a role in developing or setting up your institution's CLR, the features represented on the record that influence the use of a standard and the connectivity of data fall to the educators at the institution who craft and create what the CLR will provide to their students.

This guide is meant for any unit who is engaged in the design and assessment of student learning experiences. This is different for each institution, but runs the gamut of enrollment services, registrar personnel, student services offices, and others that really understand the data (where it lives, how it's used, how it can be applied) that will be portrayed on the CLR.

Scope

IMS Global defines a CLR as “A document of structured data created by a Publisher containing one or more Assertions about one Learner.” The key words in this definition are *structured data*, which implies all who generate a CLR or consume a CLR are using that same formatting and defining content similarly to ensure that data can be machine readable and transferrable. This is the same process followed by the U.S. Treasury when developing currency, or states that use one standard size and set of information on a driver for the distribution of driver's licenses. This same approach is very much applicable to the traditional transcripts. The standard format is recognizable and those who receive or see a transcript recognize it as such. By using a “common language” as defined by a standard, the information a CLR holds about a learner can be easily generated, shared, and interpreted.

It should be noted that the IMS Global CLR standard is not meant to be a replacement for the Standardization of Postsecondary Education Electronic Data Exchange (SPEEDE), the Open Badges standard, etc. The SPEEDE standard for the exchange of academic transcripts contains more details specific to that record type than those in the IMS Global CLR standard. Rather the CLR standard will serve the digital exchange of academic credentials of many types with sufficient detail to communicate the credential type, issuing authority, salient details of the credential and associated meta-data or artifacts. The IMS Global CLR standard is seen as complementary to existing standard(s) to enable a broader exchange of all types of digital credentials.

In this guide, several different institutions who have adopted the IMS standards in the creation of their CLR will share their approach and share how the IMS standard guides the elements of their institutions CLR. Each institution crafted a CLR to best represent and meet the needs of

their student population, yet was able to apply the standard in a consistent manner based on the definitions and guidance supplied by the IMS Global CLR standard. The standard in these cases was applied by those at the institution who worked on the development of the CLR, not necessarily IT or functional personnel. In addition, there are often multiple ways for the standard to apply and still be meaningful to the publisher and to the consumer, and that is another key take-away of this guide. This publication will highlight by example, how the standard will make a CLR and other digital credentialing efforts consumable and will expand the reach, usability, adoptability, and interoperability of the CLR created by any institution.

The Format of Technical Terms in this Guide

This guide contains a number of technical terms and references. In some cases, those appear within coding examples and, when this occurs, the format has not been altered from what is required by the coding language. At other times, these terms and references appear in graphics that have been created for the publication; those retain the formats of their creators. In other places, however, the following scheme is used:

- ⇒ Attributes or Field names, including terms, such as **Achievement**, are in **boldface type**.
- ⇒ Associations, such as *IsChildOf*, which connect field names, are in *italics* and appear as printed in the Standard, without spaces between words.
- ⇒ Values or results, such as “true”, or “degree”, appear in quotation marks.

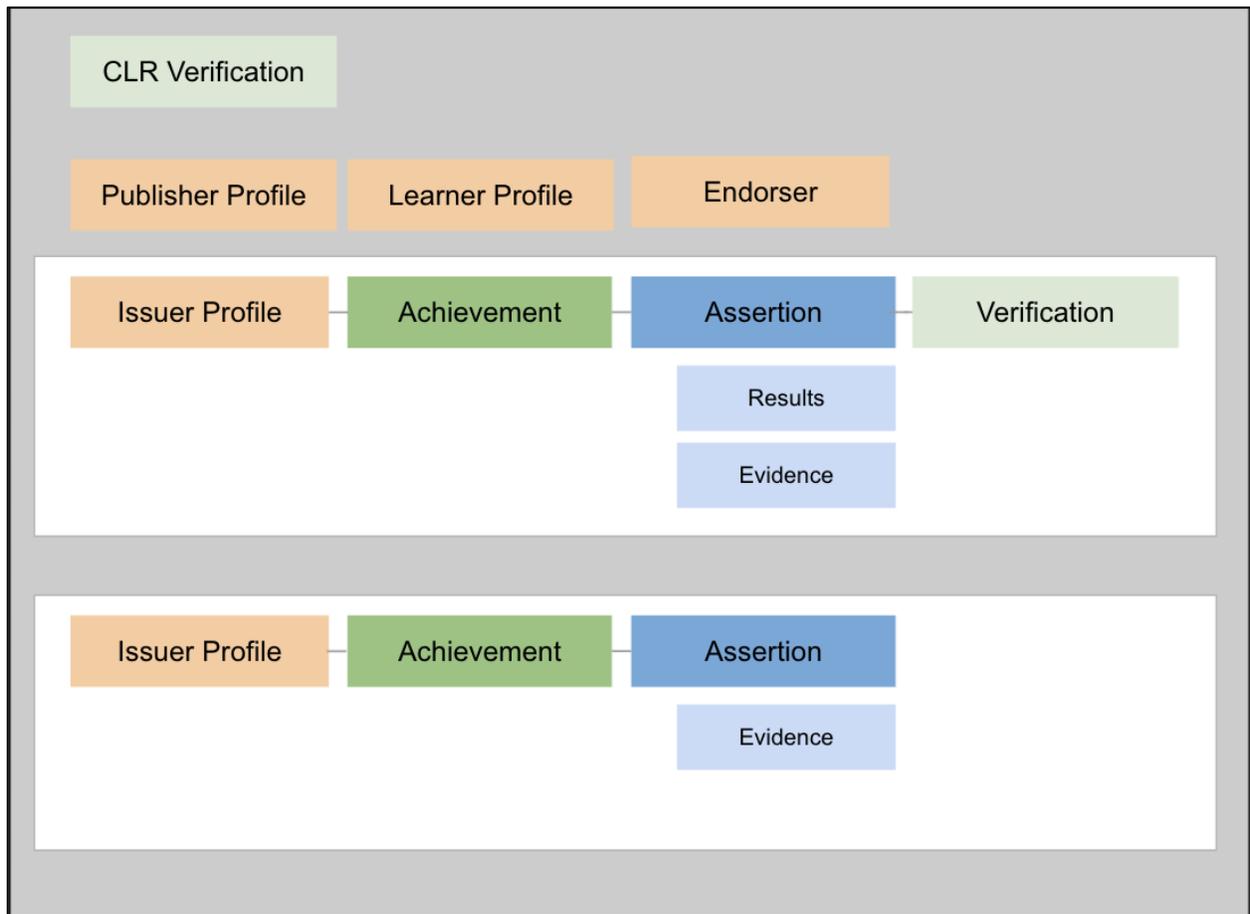
IMS Global CLR Standard Overview

The [CLR Standard](#) is a technical specification from IMS Global that defines how CLR data is to be structured and exchanged between systems. The standard includes both a data model and a service model (REST API). IMS offers certification to products that conform to the CLR Standard.

It is important to note that the standard focuses on the retrieval of CLR information and does not define how CLR information is to be stored within individual systems. However, an understanding of the data model may be helpful for designing storage strategies that maximize efficiency.

The data model contains a number of data objects or classes each containing a variety of attributes or properties. A CLR is a JSON document that contains a number of required and optional data objects conceptually related in the following illustration:

Figure 4. Comprehensive Learner Record (CLR) containing two achievements



The full data model is described completely in the [information model specification](#), however, the following data objects are defined here for foundational purposes:

CLR - A document of structured data created by a Publisher containing one or more Assertions about one Learner.

Achievement - An accomplishment such as an award, badge, competency, course, degree, or other recognition. An achievement is general in that it may be asserted about one or more Learners.

Association - A relationship (e.g., *isChildOf*, *precedes*, etc.) between multiple achievements.

Assertion - The attestation made by an Issuer about a Learner regarding an **Achievement**. **Achievements** (what is awarded) and **Assertions** (to whom was the achievement given? what were the learner's unique attributes?) go together when mapping a component portion of the CLR. The **Assertion** will often include associated results, evidence, or other metadata regarding a specific **Achievement**.

Issuer - The profile of an organization or entity that has made a particular **Assertion** about a Learner. The Issuer of an **Assertion** is the authoritative source for that specific **Assertion**.

Publisher - The profile of the organization providing the CLR and serving as the official record keeper for assertions in a CLR. In the majority of cases, the **Publisher** is also the Issuer of some or all of the assertions in a CLR.

Endorsement - A claim of support made by a third party. Endorsements can be made about any **Achievement, Assertion, Profile** (e.g., **Publisher, Issuer, Learner**), or the CLR itself.

Evidence - Artifact(s) that support the issued **Assertion** (e.g., text, video, website).

Learner - The profile of the person who is the subject of the CLR and assertions contained in a CLR.

Verification - Instructive information for third parties to verify assertions or the CLR itself.

Example

Here is an actual CLR in its native form called JSON (Javascript Object Notation), a well-known data exchange language. Non-technical implementers have no need to learn JSON but it is shown here for illustrative purposes as this is what is behind the scenes when your systems exchange CLR's.

This example is from a fictitious institution, Atlas University, and issued to a fictitious learner, Alice Smith. The CLR contains one achievement, completion of a two-credit course, Introduction to Project Management, leading to a Project Management Introductory Certificate. CLR's will normally contain many achievement assertions and their data and relationships.

SAMPLE CLR for Course Completion

```
{
  "@context": "https://purl.imsglobal.org/spec/clar/v1p0/context/clar_v1p0.jsonld",
  "id": "https://www.sample.edu/ims/clar/v1p0/clrs/1",
  "name": "Project Management Introductory Certificate",
```

```
// The Learner Profile
```

```
"learner": {
  "id": "https://www.sample.edu/students/1",

  "email": "AliceSmith@email.com",
```

Learner Profile

```
"name": "Alice Smith"
},
```

```
// The Publisher Profile
```

Publisher Profile

```
"publisher": {
  "id": "https://www.sample.edu",
  "email": "demo@sample.edu",
  "name": "Sample University"
},
"issuedOn": "2018-06-12T00:00:00",
```

```
// The Assertions
```

Assertion

```
"assertions": [
  {
    "id": "https://www.sample.edu/ims/clar/v1p0/assertions/1",
```

```
// The Achievement being asserted
```

Achievement

```
"achievement": {
  "id": "https://www.sample.edu/courses/PM100",
  "achievementType": "Course",
  "name": "Intro to Project Management",
  "description": "Introduction to Project Management is an ideal starting point for the
fundamentals of the discipline. This course offers a basic introduction to processes, procedures,
tools, and techniques of coordinating and managing projects in an organizational setting.",
  "humanCode": "PM100",
  "creditsAvailable": 2,
```

```
// The Achievement Issuer Profile
```

Issuer Profile

```
"issuer": {
  "id": "https://www.sample.edu",
  "email": "demo@sample.edu",
  "name": "Sample University"
},
```

```
// Associations between this Achievement and
// other Achievements
```

```
"associations": [  
  {  
    "associationType": "isParentOf",  
    "targetId": "https://www.sample.edu/assessments/PM100-1",  
    "title": "Unit 1 Discussion"  
  }  
]  
},
```

```
// The Recipient of this Achievement
```

```
"recipient": {  
  "type": "email",  
  "identity": "AliceSmith@email.com",  
  "hashed": false  
},  
"issuedOn": "2017-10-31T19:00:00",  
"creditsEarned": 2,
```

Learner Profile

```
// The Assertion Verification instructions
```

```
"verification": {  
  "type": "Hosted"  
}  
}  
],
```

Verification

```
// The CLR Verification instructions
```

```
"verification": {  
  "type": "Hosted"  
}  
}
```

END

Recommendations for Some Specific Tricky Mapping Concepts

Full or Partial Record (CLR Class)

Institutions typically send a full academic record when transmitting a transcript to a third party, including another institution. However, this is not always the case, as institutions are frequently asked to certify the status of the student independent of the full academic history (e.g., degree certification, full time certification, etc.). These methods require the institution (the registrar) to take action to fulfill the request and only then is the information considered official or valid. An emerging concept is student self-sovereignty, where the student has agency over what she discloses to third parties. It is predicated on the assumption that the recipient of the record will know if the record is a full/complete record or partial one by some information or designation on, or in the record itself. In a similar manner, the functionality of digital wallets, currently being developed/deployed, enable students to select and/or stack their credentials as is appropriate for the opportunity they are seeking. This is dependent upon the recipient understanding the nature of the record that the student transmits. If the record is not complete, the receiver must know this up front to evaluate it appropriately.

In a digital exchange environment, this information (full/partial) must be transmitted clearly to the recipient to ensure clear understanding and trust. The **partial** (6.1.7.9) attribute of the CLR class is intended for this purpose and should be included as part of all CLR transmissions. The value of “true” means the CLR does not include all of the achievements and assertions for the learner. If the value is “false” or omitted, the CLR is assumed to carry all the achievements and assertions of the Learner.

Expressions of, and ways to employ, the Achievement Class

Degrees, Courses, Competencies, etc.

An **Achievement** is used most commonly to represent an institutionally defined accomplishment that a student enrolled at the institution can earn if all its requirements are satisfied. A common example is a bachelor’s degree that can be awarded to any and all students who complete the requirements of the academic program. The **Achievement** is defined only once but can be awarded (see the discussion of **Achievement** and **Assertions** below) multiple times to as many students as needed. The attributes of the achievement enable it to be described, identify the issuer, its alignment to a standards framework (if germane), credits required or awarded, endorsement of the award (e.g., accrediting organization), licenses, etc.

However, in addition to an award like a degree, the **Achievement** class can be used to represent any credential or attestation the institution deems appropriate. These include a certificate, competency, course, learning engagement activity or any other credential or accomplishment the institution wishes to express on behalf of the student. **Achievement** examples are numerous in the use cases in this guide and include the IU Hoosier Experience Certificate expressed as an **Achievement** earned through student participation in proscribed campus events, each represented as a different, supporting activity **Achievement**.

The record must be able to be verified as accurate upon receipt. While the digital credential would carry a **Result** attribute, such as “awarded”, this is a fixed point in time reference. Issuers of digital credentials should provide information or a mechanism that these records can be validated at the source. While rare, a credential may be “revoked” after issuance and to ensure trust in the accuracy of the record’s information, receivers of the records should be prompted to validate the current status of the record. It may be possible that a third party provider, such as the Paradigm Certified Electronic Diploma, can provide this real-time reference as part of the records receipt.

Academic or Competency Objectives

The **Achievement** can also be used to define an academic objective, degree program, competency pathway, or simply as means to provide a framework or context to the student’s academic or engagement activity. In the case of an academic transcript, the student degree objective is often expressed as an **Achievement** to provide context to the set of courses appearing on the record. Each term on the transcript may be associated with a different degree objective (a student may change their major from one term to another). Each of the degree objectives may be expressed as an **Achievement** providing the framework for each term and course taken while the student was pursuing it. Similarly, the University of Central Oklahoma’s STLR record defines Tenets of Transformational Learning where levels for each Tenet are achieved through a completion of courses, projects, activities or experiences germane to the Tenet. All activities awarded within a Tenet for which students earn lowest or middle level assessment are associated to the Tenet, but only upon assessment at the top level is the student asserted to have demonstrated transformational development (so noted on the CLR as an **Achievement** and in the form of an honor cord). If not yet earned, the **Achievement** can be used to provide the framework for the set of activities that support it.

Temporal or Summary Statistics Aggregation

An **Achievement** may also be used to provide a needed collection or organization point in a learner record. For example, certain learning activities may be categorized within the overall learning framework. The category (perhaps “Leadership”) is stated as an **Achievement** and the learning activities that demonstrate leadership are associated with it. In another example, most academic transcripts are rendered as chronological ledgers with courses organized by

terms and summary statistics (e.g., GPA) provided for each. In addition, a cumulative set of statistics is provided for all courses at the same level on the record summarizing the performance of the student. An **Achievement** can be used to represent each “Term” providing a temporal context for the courses under it and provide the means to express the associated term GPA values. Each of the term **Achievements** support either the degree program or the completed degree. Likewise, a “cumulative GPA” **Achievement** can be defined to express the undergraduate or graduate summary statistics.

Majors and Minors

If a student has earned a major and a minor from different schools (different issuers) within the institution, defining the majors and minors as **Achievements** provides a means of describing the **issuers** (e.g., schools) and additional earned **attributes** (e.g., “Major GPA”). In addition, a second major under the same degree may be expressed as a distinct **Achievement** enabling attributes unique to the second major and the issuing entities to be defined. See the IU Academic Record High Level Map. This construct also enables the learner to disclose these individual components (i.e., majors) of the record as separate credentials.

Concentration(s)

In addition to majors and minors, some institutions may record and attest to concentrations or cognates. In some cases, students may have earned multiple concentrations. If the concentration is not truly a separate credential and the issuer authority is the same as named in the **Achievement**, the recommended placement of these concentrations is in the **specialization** (6.1.1.18) attribute. If there are multiple concentrations, place the free form values between brackets and separate them by a colon. See the example below:

```
"specialization": { "Concentration": "Culinary Arts", "Concentration": "Baking and Pastry Arts" }
```

Academic Courses in an Achievement

In order to represent courses in a consistent manner, it is recommended that the “course title” be expressed in the **Achievement name** (6.1.1.10) and the coded “department-course combination” be expressed in the **Human Code** (6.1.1.9).

Achievement Types

Achievement types (represented in the CLR standard by the **achievementType** attribute) define the type of **Achievement**. For example, the “Achievement” **Achievement Type** represents a generic achievement and the “Competency” **Achievement Type** represents a competency. For a list of existing **Achievement Types**, see the Children attributes in Table 6.4.1: Description of the

ExtensibleAchievementType class at [this link](#). **Achievement Types** are also extensible which means that you can add custom **Achievement Types** as **extensions**.

Associations and Achievements

As just described, **Achievements** can represent a variety of accomplishments, frameworks or organization constructs for a CLR. **Achievements** may represent a degree with supporting courses, a competency with supporting activities, a certificate with supporting events. The relationships between these **Achievements** must be defined and communicated to the recipient. This is accomplished via **Associations**. Typically, the **Achievements** that support the completion/mastery **Achievement** are considered to be its children¹. In the Elon Experiences Transcript use case, each program area (e.g., “Research”) is expressed as an **Achievement** (providing framework, context, and summary) with each of the “Research” activity **Achievements** given an **Association** type of *isChildof*.

Parent or Child

Another way to express the supporting relationship between **Achievements** is to use the **Association Type** *isParentof*. In the Western Governors University (WGU) use case, the “Business Essentials” **Achievement** uses multiple **Associations** of type *isParentof* to tie together all of the courses used to earn a Business Essential micro-credential since the child courses may be associated with other levels of achievements and since the parent achievement will only be issued upon completion of all child elements. Use of the *isParentof/isChildof* **Association** is a personal choice since each will work in the standard to describe the relationship between the **Achievements**.

Other Relationships

In the University of Maryland Comprehensive Learner Record use case, completed projects (either from a course or an engagement activity) provide the basis for earning specific program learning outcomes (and may be expressed as a badge). “Courses”, “Projects”, “Learning Outcomes” and “Badges” are all denoted as **Achievements**. Projects are associated with courses using **Association Type** *isRelatedto* and with program learning outcomes using type *isChildof*. Note also (more below) that if an **Achievement** (“Learning Outcome”) is also expressed as a type “Badge”, the resulting relationship is also denoted as *isPeerof*.

¹ “Achievements” do not have to have an “Association” and may stand on their own. They may also have multiple “Associations”.

Achievement/Assertion

As mentioned in the IMS Global CLR Standard Overview section of this guide, an **Achievement** describes what is awarded but it does not, by itself, enable the institution to identify the recipient of the award nor the unique characteristics that are pertinent to the learner receiving the award (e.g., honors, competency level, license, award date, credits, etc.).

Achievement/Assertions are nearly always paired with one another; typically, one cannot be asserted without the other¹.

Learning Artifacts

The **Assertion** also enables the addition of metadata to the achievement itself. The student may have a specific learning artifact (e.g., paper, computer program, assessment, etc.) created/developed to earn the achievement. The **Assertion evidence** (6.1.5.8) attribute can be used to link the artifact to the **Achievement/Assertion**. A common use of the attribute is to include a link pointing to the artifact.

Achievements and Assertion Results

Learner outcomes, assessments, grades, honors, and other attributes are expressed in the standard by using the **Achievement ResultDescription** (6.1.1.17) attribute with a result **name** and placing the value of the result in the **Assertion Result value** (6.1.19.6). As an example, refer to IU Academic Record CLR use case and note that the **Achievement** “Degree” has multiple **Result** descriptions for “Awarded” and “Honors” while the **Assertion Result** reflects the value earned by the student (“Awarded” and “Distinction”, respectively).

Stand-alone Badges/Credentials versus Mixed Transcript/Badges (Or not)

CLRs may contain a variety of achievement types including but not limited to digital badges, certificates, courses and degrees². With a learner’s CLR, these achievements may be related to each other through the use of **Associations** (e.g., courses that lead to a certificate or skills that are part of a competency) so that stacked or incremental **Achievements** may be communicated in a CLR. However, **Achievements** are not required to be associated with other **Achievements**. For example, one learner’s CLR might contain seven **Assertions** -- three badges and four non-credit courses -- that are not associated with each other.

² For an excellent discussion of academic micro-credentials and a governing policy, please see <https://system.suny.edu/academic-affairs/microcredentials/>

[Achievements and Badges](#)

For many institutions, there is a need to provide an award in context (expressed as an **Achievement/Assertion**) but also a desire to award a badge that can be asserted independent of the record as a whole. In addition, for many wallets, a badge provides an excellent structure that enables the learner to select and stack the badge as an independent credential. To transmit both concepts digitally, express the award(s) as an **Achievement/Assertion** and associate it/them as a parent/parents or child/children (as appropriate). Define the **Achievement** “Badge” (one of the achievement types) and associate it with the appropriate **Achievement/Assertion** with the **Association Type** *isPeerof*. For examples, review the University of Maryland Global Campus (UMGC) CLR or WGU Micro-Credentials use cases.

[Transfer Work](#)

In order to identify work that was taken at another institution and accepted/articulated at the asserting institution, the following is recommended. Create an **Achievement/Assertion** for the course in a manner similar to institutionally offered courses. Use the **Assertion source** (6.1.5.18) attribute to indicate the institution that originally awarded credit for the course. Note that Indiana University (IU or IUB) places the transferred course under the academic term in which it was accepted. If this is not the practice at your institution, an **Achievement /Assertion** can be created to provide context for the transferred courses. Optionally, a **Profile** for the original institution could be created if more information is required. As an example, please review the IU Academic Record CLR.

[Authority and Profiles: How to Describe the Institution and its Authority to Award a Credential](#)

For all credentials, it is vitally important to understand who is issuing the credential, the authority of the issuer, how it is derived and the distinction between the publisher and the issuer. The IMS Global CLR Standard provides some options for communicating these relationships and providing the appropriate context and governance behind the issuer for each award.

Often, though not always, the **Publisher** of the CLR or transcript is the registrar, and the office serves as the primary point of contact for recipients of the credential. However, the registrar does not award a degree or certificate; it is the institution or campus that is empowered to award the degree, or an individual school is empowered to award a certificate, major or minor. In the case where a digital wallet might enable a self-sovereign learner to stack their credentials for disclosure to a third party, the learner themselves would be **Publisher** while the institution/campus would remain the **Issuer**. Lastly, there may be the need to transmit to the recipient additional information such as the state that allows the institution legal authority to award the credential, the accrediting body that reviewed the institution attesting to the

credential and perhaps a national or professional accreditor that reviewed the department or program that provided the learner’s specific program (engineering, business, nursing, occupational therapy, etc.).

In order to transmit this information via the IMS Global CLR standard, it is recommended to create a **Profile** of each of the organizations (**Issuer** (e.g., “Institution”/”College”/”University”), **Publisher** (e.g., “Registrar”) and any additional issuers (for example, a degree in which a major and minor are awarded from two different schools at the institution). Use the **Profile** attribute **ParentOrg** (6.1.23.15) to create any hierarchical relationships between them. For example, examine the IU Academic Record CLR and note the following:

Publisher:	Registrar
Issuer – Degree:	Indiana University Bloomington
Issuer – Major:	School of Public Health
Issuer – Minor:	College of Arts and Sciences
Accreditor:	Higher Learning Commission (HLC)

The **Publisher**, “Major” and “Minor” **Issuers** are organizations contained with the institution (i.e., parent) while the “Accreditor” is cited in the **Achievement endorsements** (6.1.1.8) with the URL of the reviewing organization. It is at the discretion of the transmitter whether a **Profile** for the “Accreditor” is necessary.

Recommendations for use of specific data objects and properties

Id

The **id** attribute is included to support JSON-LD processing and the CLR API. Generally speaking, achievement designers and authors do not need to supply a value for **id**. It will be assigned as needed by the application that implements the CLR provider role. If an educational organization is providing **Achievement** and **Assertion** data to a third party CLR provider, the educational organization should assign a unique internal identifier to each achievement, and each **Assertion** should reference that identifier so that the **Assertions** are linked to the correct **Achievements**.

For example,

Achievement	
UniquelIdentifier	“123”
Name	"Introduction to Project Management"
Assertion	
AchievementUniquelIdentifier	“123”

IssuedOn	"2021-03-09"
----------	--------------

The third party CLR provider can ingest this information and then assign an **id** as needed.

Use Cases and Examples

To help users of this guide interpret their learning data and align it to the IMS Global CLR Standard, an array of use cases has been included. These represent actual institutional credentials that have been mapped to the Standard. An effort was made to identify and include institutions with different student audiences, learning activities, degrees and innovative practices.

Each of the use cases provides a short narrative that contextualizes the CLR. These narratives provide background on the college or university, and its students/learners. In describing the CLR, each institution has provided information on what learning it was attempting to capture, record, assess, validate and transmit. Each institution also completed a template for their CLR, which is a detailed roster of information that allows the data to be mapped to the Standard. Due to the extensive data contained in each template, these are located in Appendix B of the Guide. This is followed by a visual map of the elements of the CLR to the component parts (Achievement, Assertion, Profile, etc.) in the Standard.

The first use case from Indiana University Bloomington provides a comprehensive view of the process. This allows readers of this guide the opportunity to see how a use case can be taken from the visual example of a credential (the rendered sample) and its related online validation, in this case through Paradigm's Certified Electronic Diploma product. The next examples take the reader through each of the steps required to place the data used to render this certificate into the IMS Global CLR Standard (mapping and template steps) into the actual data that would be transmitted (the JSON language example). The final example in this use case is the data being received by a third part in a digital wallet.

[Indiana University Bloomington – First Year Experience Hoosier Experience Achievement Award](#)

The Hoosier Experience Certificate is an award given to students who complete a designated co-curricular set of engagements and experiences. In 2018, The IU Bloomington campus sought to improve the experience of onboarding students to campus life, support their academic needs and provide incentives for students to seek out and utilize all the resources, activities, and opportunities that were available to them. The goal was to not only improve academic performance and increase persistence, but to provide opportunities for students to engage in a

wide variety of experiences that would enhance their campus life experience. The result was the creation of the Hoosier Experience program.

The program was designed to unify the first-year experiences across campus, facilitate collaborative programming, and enhance student engagement during the student's first year of enrollment. Areas of programming include Academics and Careers, Equity and Inclusion, Community and Engagement, and Arts and Humanities. In order to provide an incentive to participate in a wide variety of activities, a certificate was created and awarded to students who engage in 6 of the programmatic offerings across the defined categories of experiences. IUB began awarding the Hoosier Experience Achievement Awards (HEAA) in the spring of 2019 (eCertificates only) and provided a more robust and fully developed (with Scholar Record) certificate in 2020. For more information regarding the program and types of activities and engagements that are part of the program, please click on the office of First Year Experience Programs, [Hoosier Experience](#) page.

The eCertificate enables a digital and portable representation of the award that the student may choose to disclose, and also carries additional supporting information (e.g., description, requirements, assessments, rubrics, learning outcomes, etc.) to add richness and fidelity to the award for the recipient. The certificate enables those who authenticate the credential, the opportunity to download a machine readable (IMS Global CLR standard) version of the credential.

In the context of the IMS Global CLR standard, the eCertificate consists of two primary **Achievement/Assertions**: 1) representing the earned certificate and 2) representing the events/activities/assessments in which the student participated. The **Issuer** is the "Office of Enrollment Management", the **Endorser** is the "Office of the Provost", and the **Publisher** is the "Office of the Registrar".

Hoosier Experience Achievement Award – Rendered Sample



Certificate of Completion

This certificate presented to

Allison Fake Student

for the

First-Year Hoosier Experience Achievement Award

in recognition of your participation in the Hoosier Experience program
during your first year at Indiana University Bloomington.

November 2019

Dr. David B. Johnson
Vice Provost
Office of Enrollment Management
Indiana University Bloomington



Hoosier Experience Achievement Award – Validation Sample

ScholarRecord



INDIANA UNIVERSITY

Credential Details

CeDiD:	198M-36HP-AKTL
Name:	Allison Fake Student
Date:	4/24/2019
Credential:	First-Year Hoosier Experience Achievement Award

To validate the authenticity of this credential, visit the institution's website and enter the CeDiD above.



Educational Experience

Publisher

Indiana University
107 S. Indiana Avenue
Bloomington IN 47405
+18128554848
<https://www.indiana.edu>

Learner

Allison Fake Student

[Export Json](#)

Award

+FYE Hoosier Experience

Event

+ Involvement Fair

+ First Thursdays Festival

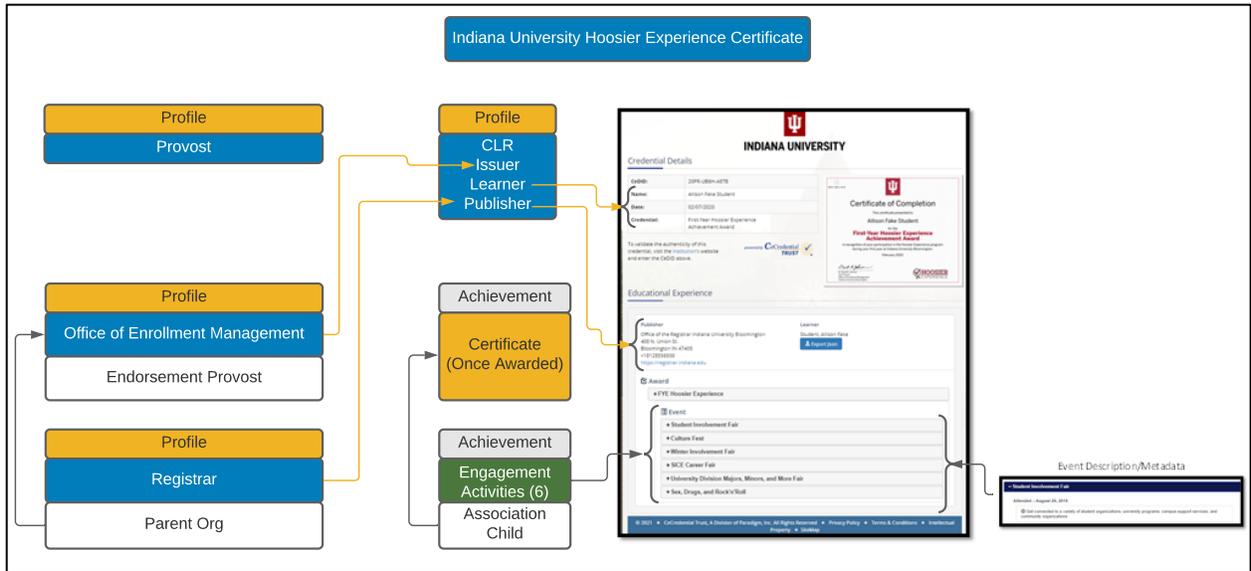
+ Student Political Learning and Electoral Engagement

+ Mexico Remixed Presents: Valeria Luiselli

+ Cyclocross

+ IUnity Summit

Step 1: High-Level Mapping of Record to CLR Standard Elements



Step 2: Mapping of Learner Record Data to CLR Standard Elements

CLR Campus Planning/Mapping Template			
Indiana University First Year Experience Hoosier Experience Achievement Award			
Background	Response		
Achievement, Assertion and Association General Questions			
Who is the issuing authority of the credential (State Accreditation (degree), Institution, Campus, School, Department, etc.)?	The IUB Office of Enrollment Management through the auspice of the Indiana University Bloomington Provost. The Publisher is the office of the Registrar.		
Do your achievements (competencies, courses, awards, etc.) have a hierarchical relationship? For example, do competencies roll up to a course or courses roll up to a degree?	A student must complete 6 engagements across 4 categories to be eligible for the FYE Hoosier Experience Award. Thus the 6 (or more) qualifying engagements support the award of the Hoosier Experience Award.		
Do any of your achievements "stand alone" i.e. not roll up to a higher order award or achievement?	No, the Hoosier Experience Certificate may stand alone; The engagements activities are not awards/credentials in and of themselves.		
Are there "potential" conceptual levels, chronological segments (such as a term-based header), aggregation points, that need to be represented within the record?	There are only two entities (Achievements) of interest in the Hoosier Experience Award. The Hoosier Experience Certificate and the supporting Engagement activities.		
Does an aspirational award or credential need to be represented in order to structure the events or curriculum supporting it? Examples include, but are not limited to, degree objectives, learning outcomes, certificates, etc.	No. The credential is only awarded once the student is eligible.		
In addition to your responses to above, are there other factors constituting to our mapping of records to Achievements and how these achievements relate to one another?	None		
Please describe your mapping to the IMS CLR Achievement Class.	There are two achievements in the Hoosier Experience Credential: 1) the FYE Hoosier Experience Certificate and 2) the Engagement activities that enable the student to earn the award.		
Please describe how your achievements are related to one another and how you represented the relationship via the Association Class.	The student engagement activities are "children" of the Hoosier Experience Certificate.		
Please describe if you added any additional information to the Assertion class beyond matching learner and achievement? For example, honors notations, learning artifacts, etc.	Currently, no. However, adding reflections and/or other learning artifacts to some of the engagement activities has been discussed and may be considered in the future.		
CLR Record / Package			
Type	Response	Source of Data	CLR Class Description
Issued/ON	CLR	Default	6.1.7 "Clr" class
Extension (e.g., internal tracking request number, etc.) - Seldom used but if used please explain	Date	Generated at time of Issue	6.1.7.5 "IssuedOn"
Learner Data			
Family name	Family Name	Last Name (SIS)	6.1.18.8 "name"
Given name	Given name	Preferred name (SIS)	6.1.18.8 "name"
Additional name (e.g. middle name)			6.1.18.8 "name"
student ID (Institutional)	1234567890	Student Identification Number (SIS)	6.1.18.13 "studentid"
student birthdate (Optional)			TBD
Student address (Optional) - street, locality, region, country, postalcode			6.1.18.3 "address"
student phone (Optional)			6.1.18.14 "telephone"
student email	examplestudent@iu.edu	Student email address (SIS)	6.1.18.5 "email"
student image (Optional)			6.1.18.7 "image"
CLR Publisher Data			
CLR Publisher (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	The Issuer is the Office of Enrollment Management (OEM). OEM was authorized by the Office of the Provost to award the Certificate.		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organizational information	The Issuer of the credential is the Office of Enrollment Management. The publisher is the Office of the Registrar. The validator of attendance/assessment is the Office of First Year Experience.		
CLR Publisher			
Publisher of CLR (institution, campus, etc.)	Office of the Registrar, Indiana University - Bloomington	Generated at time of Issue	6.1.18.8 "name"
Issuer address, telephone, email	Student Central (Voice), Registrar address, no email	Generated at time of Issue	6.1.18.3 "address"
Parent Organization	Office of Enrollment Management		6.1.23.15 "parentOrg"
Issuer image/logo			6.1.18.7 "image"
Issuer URL	https://registrar.indiana.edu/	Generated at time of Issue	6.1.18.15 "url"
CLR/Certificate Issuer Profile			
Issuer of the Certificate	Office of Enrollment Management	Generated at time of Issue	6.1.18.8 "name"
Issuer address, telephone, email, web URL	408 N Union St, Bl. IN 47405	Generated at time of Issue	6.1.18.3 "address"
Parent Organization			6.1.23.15 "parentOrg"
Endorsement	Office of the Provost		6.1.15.7 "name"
Issuer image/logo	URL here		6.1.18.7 "image"
Issuer URL	Office of Enrollment Management, Indiana University Bloomington	Generated at time of Issue	6.1.18.15 "url"
CLR/Endorser Profile			
Endorser of OEM	Office of the Provost	Generated at time of Issue	6.1.18.8 "name"
Issuer address, telephone, email, web URL	Bryan Hall 100, 107 S. Indiana Avenue, Bloomington, IN 47405	Generated at time of Issue	6.1.18.3 "address"
Parent Organization			6.1.23.15 "parentOrg"
Endorsement			6.1.15.7 "name"
Issuer image/logo	URL here		6.1.18.7 "image"
Issuer URL	https://provost.indiana.edu/about/contact/index.html	Generated at time of Issue	6.1.18.15 "url"

Achievement, Assertion and Association Data			
Achievement 1 (General questions)			
What is the criteria for earning this achievement?	6 (or more) qualifying engagements support the award of the Hoosier Experience Award.		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No		
Is this achievement aligned to a skill or standard available in a framework? Describe.	No		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement? achievement or prerequisite? Describe.	Yes, but not included or exchanged currently. The fulfiller already has the image/logo.		
	No		
	Response	Source of Data	CLR Class Description
Achievement 1 (CLR Mapping)			
Achievement (Name)	First Year Experience Hoosier Experience Award	on tables	6.1.1.10 "name"
Achievement Description	First Year Experience Hoosier Experience Award - Official Description	IUFYEHEA Description (Registrar staging tables)	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Award	Generated at time of Issue	6.1.1.2 "type"
Issuer of Achievement (address, Human Code (Optional))	Office of Enrollment Management, address, url	Generated at time of Issue	6.1.1.13 "issuer" 6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)			6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain			6.1.1.20 "extensions"
Achievement 1 Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	The Office of Enrollment Services		
Is a start and end date associated with this achievement?	No, only an earned/issue date.		
Is a license number issued with this assertion?	No		
What are the learner's specific results ?	Awarded		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	No		
Does a third party endorse this assertion?	No		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes		
	Response	Source of Data	CLR Class Description
Assertions (CLR Mapping)			
Recipient ID (learner)	Learner	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	First Year Experience Hoosier Experience Award	Experience Category = 'CERT', Achievement = FYE, Description (SIS Bolt-on tables)	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (If Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Issue Date	Generated at time of Issue	6.1.5.9 "issuedOn"
Credits			6.1.5.4 "creditsEarned"
Source (Internship, etc.)			6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked ?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Result Value	Awarded	Generated at time of Issue	6.1.20.7 "requiredValue"
Result Description	Awarded	Generated at time of Issue	6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	None		6.1.6.1 "associationType"
Target ID			6.1.6.2 "targetId"
Repeat Achievement, Assertion and Association Data (row 46) as many times as need to reflect your CLR Record.			
Achievements 2 - 7 (General questions) - Student Engagements x6			
What is the criteria for earning this achievement?	Validated student attendance and/or assessment		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No		
Is this achievement aligned to a skill or standard available in a framework? Describe.	No		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	No		
	Response	Source of Data	CLR Class Description
Achievement 2 (CLR Mapping)			
Achievement (Name)	Engagement Name	Achievement = 'FYE', Achievement Skills = 'xxxx', Description (SIS Bolt-on tables)	6.1.1.10 "name"
Achievement Description	Event 1 Description	Achievement = 'FYE', Achievement Skills = 'xxxx', Title (SIS Bolt-on tables) and Registrar Staging Table	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Co-Curricular	Generated at time of Issue	6.1.1.2 "type"

Issuer of Achievement (address, etc.)	Office of First Year Experience , address, Voice, url	Generated at time of Issue	6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)			6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain			6.1.1.20 "extensions"
Achievement 2 Assertion <i>(Awarding achievement to a specific learner)</i>			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Office of First Year Experience		
Is a start and end date associated with this achievement?	No, only an attended date		
Is a license number issued with this assertion?	No		
What are the learner's specific results ?	Attended		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	No		
Does a third party endorse this assertion?	No		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	No		
	Response	Source of Data	CLR Class Description
Assertions (CLR Mapping)			
Recipient ID (learner)	Learner	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Engagement Name	Achievement = 'FYE'; Achievement Skills = 'xxxx', Description (SIS Bolt-on tables)	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (if Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Event Date	Achievement = 'FYE'; Achievement Skills = 'xxxx', Description (SIS Bolt-on tables)	6.1.5.9 "issuedOn"
Credits			6.1.5.4 "creditsEarned"
Source (Internship, etc.)			6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked ?	No	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Result Value	Attended	on tables)	6.1.20.7 "requiredValue"
Result Description	Attended	on tables)	6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	isChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	First Year Experience Hoosier Experience Award	Generated at time of Issue	6.1.6.2 "targetId"

Step 3: Conversion of Data to JSON Language

```
{
  "@context": "https://purl.imsglobal.org/spec/clar/v1p0/context/clar_v1p0.jsonld",
  "id": "urn:uuid:436bee8e-d0ff-4ff0-a5a6-0963dc7220bf",
  "achievements": [],
  "assertions": [
    {
      "id": "urn:uuid:d5b25cd1-0f43-4a73-b1c0-6e2e5b901bf7",
      "achievement": {
        "id": "urn:uuid:d705c8d7-8c2f-46b2-8cef-ef93e49673f6",
        "achievementType": "Co-Curricular",
        "alignments": [],
        "associations": [
          {
            "associationType": "isChildOf",
            "targetId": "urn:uuid:41dfdec5-a483-404e-991e-8ad6ab31cd26",
            "title": "First Year Experience Hoosier Experience Achievement Award"
          }
        ]
      },
      "endorsements": [],
      "identifiers": [],
      "name": "Engagement Name",
      "issuer": {
        "id": "urn:uuid:ed7a6c75-9672-4547-b3bc-dda46dc3292d",
        "endorsements": [],
        "identifiers": [],
        "name": "Office of First Year Experience",
        "parentOrg": {
          "id": "urn:uuid:3b2a3567-7006-4196-b96f-0b9f5486577a",
          "address": {
            "addressLocality": "Bloomington",
            "addressRegion": "IN",
            "postalCode": "47405",
            "streetAddress": "408 N Union St"
          },
          "endorsements": [],
          "identifiers": [],
          "name": "Office of Enrollment Management",
          "url": "https://oem.indiana.edu/"
        },
        "url": "https://fye.indiana.edu",
        "ParentOrgProfileKey": 90
      },
      "resultDescriptions": [
        {
          "id": "urn:uuid:4fa9fb82-8e7b-4238-a794-b8a2f2a28ca9",
          "alignments": [],
          "allowedValues": [],
          "name": "Attended",
          "resultType": "Result",
          "rubricCriterionLevels": []
        }
      ]
    }
  ]
}
```

Example of Hoosier Experience Achievement Award Received by a Third-Party Digital Wallet

A Comprehensive Learner Record (CLR) is a record of your curricular and non-curricular learning achievements. Each CLR comes from a single publisher (such as your school) and contains one or more of your achievements.

CLR

Id urn:uuid:436bee8e-d0ff-4ff0-a5a6-0963dc72... Verify No verification
Issued 06/28/2021 00:00:00
Name Hoosier Experience

Learner

Id urn:uuid:7ea35df4-38a5-4b73-a457-c0b6a...
Name Example Student
Email examplestudent@iu.edu
Student ID 0123456789

Publisher

Id urn:uuid:8b28dd2b-75d5-4817-b844-84b...
Name Office of the Registrar, Indiana University-Bloomington
URL <https://registrar.indiana.edu>
Phone 812-855-6500
ParentOrg **Id** urn:uuid:f101e17a-ce99-4735-...
Name Office of the Provost, Indiana University-Bloomington
URL <https://provost.indiana.edu>

Assertions

First Year Experience Hoosier Experience Achievement Award

Id urn:uuid:43f4f8f3-ce61-4c3f-ba02-b014746e... **Type** ⓘ Certificate
Issued 06/28/2021 00:00:00
Recipient examplestudent@iu.edu
Verify No verification

Issuer

Id urn:uuid:3b2a3567-7006-4196-b96f-0b9f54... Verify No verification
Name Office of Enrollment Management
URL <https://oem.indiana.edu/>
Address 408 N Union St
 Bloomington, IN 47405

Results

Name	Status
Status	Completed

Endorsements

Issued On 07/26/2021 00:00:00 urn:uuid:f101e17a-ce99-4735-9455-7c12623e24e4
Claim Issued under the authority of the Office of

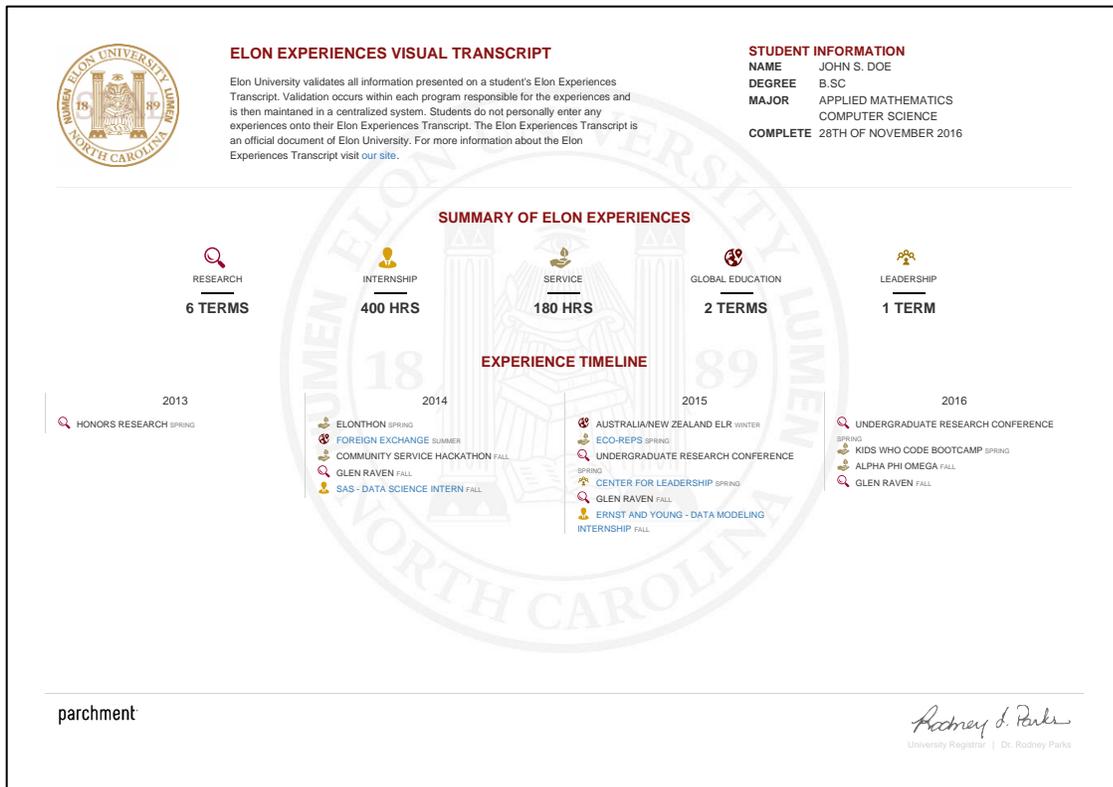
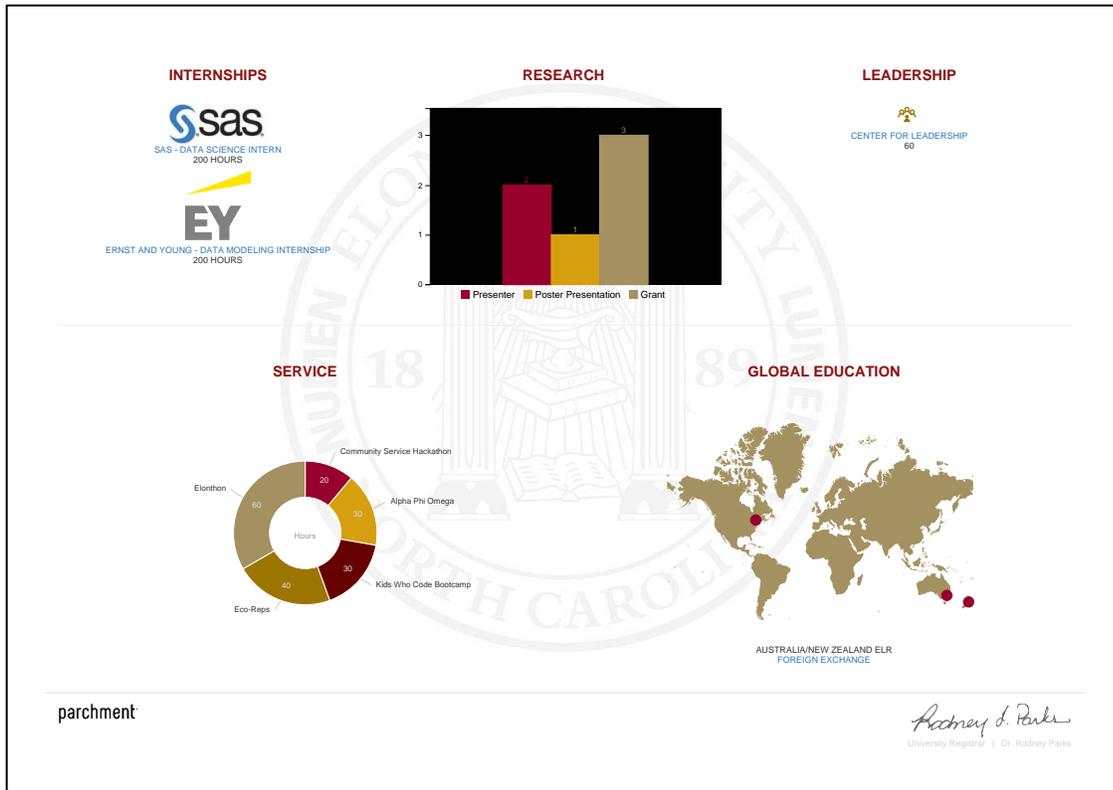
[Elon University – Visual Experiential Transcript \(Visual EXP\)](#)

Elon University is a mid-sized private university with approximately 6,000 undergraduate and 800 graduate students. The signature Elon Experiences Programs extend learning beyond the classroom through study abroad, internships, service, leadership, and undergraduate research. Elon believes so strongly in the power of the Elon Experiences that it documents the work on transcripts and requires that all students complete experiential learning as part of the degree program. Elon students graduate with a wealth of real-world experiences that support their transition to life after college and ensure they stand out when applying for a first job or graduate school.

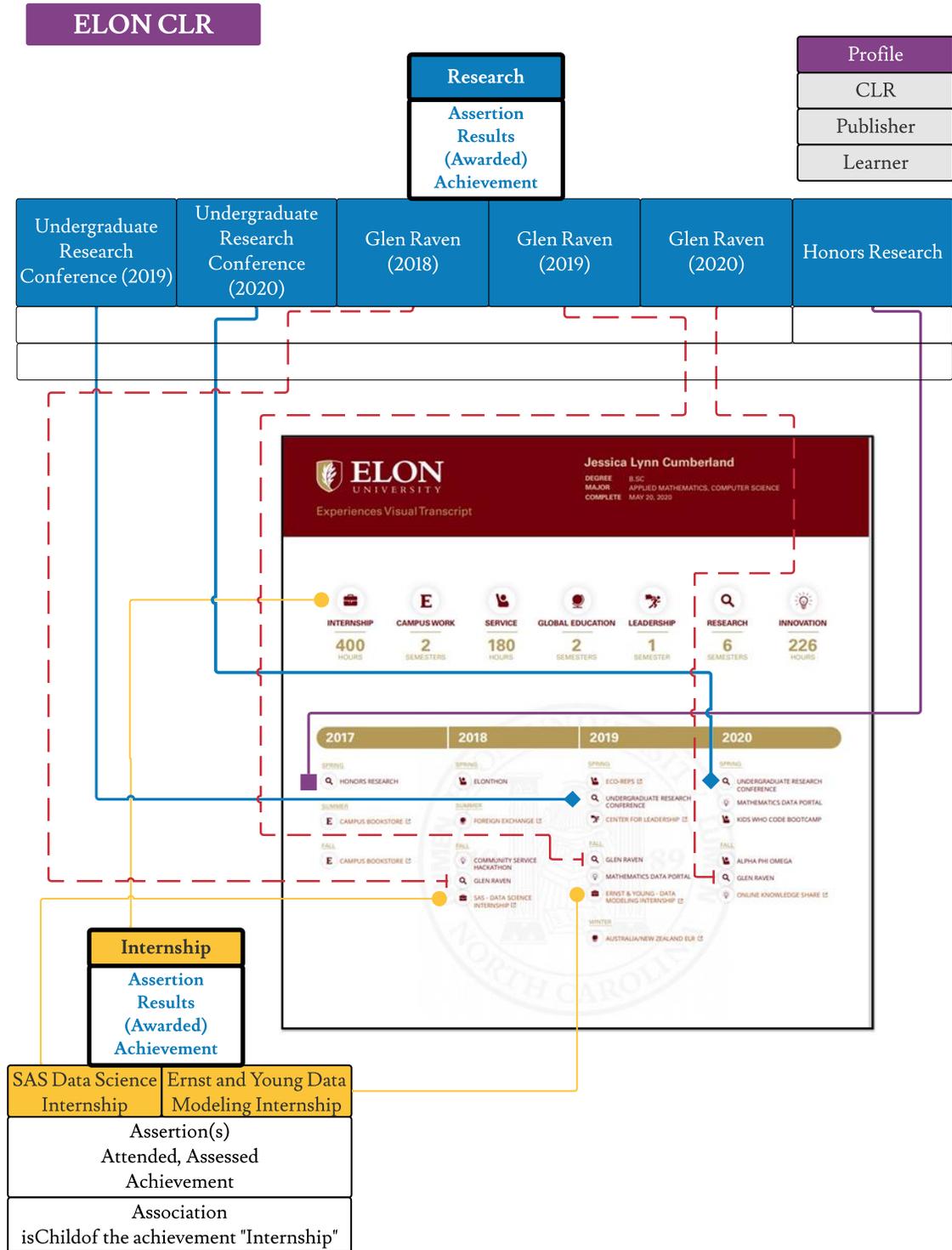
Elon University's Visual Experiential Transcript (Visual EXP) is a significant departure from traditional co-curricular transcripts. Since 1994, the university has been capturing and validating student's co-curricular experiences, and this digital-only document builds upon this foundation by expanding the co-curricular dimensions of Elon students in an accessible and aesthetically pleasing format. Each of the five Elon Experiences (Service, Undergraduate Research, Leadership, Internship, and Global Engagement) is presented as an infographic, and together they are presented chronologically along a four-year timeline. As students engage in experiential opportunities on and off campus, information about those experiences is collected for the student and verified by university faculty and staff.

As a completely digital and interactive document, the Visual EXP encourages interaction with the student's record. Unlimited information such as a specific job description, portfolio items, research papers, and other creative media can be linked to one instance of an experience, with no limits on the number of experiences that a student can complete during their time at Elon. Originally designed for undergraduate students, Elon is currently working towards a model for their graduate students, as well.

Elon Visual EXP – Rendered Sample (front and back)



Step 1: High-Level Mapping of Record to CLR Standard Elements



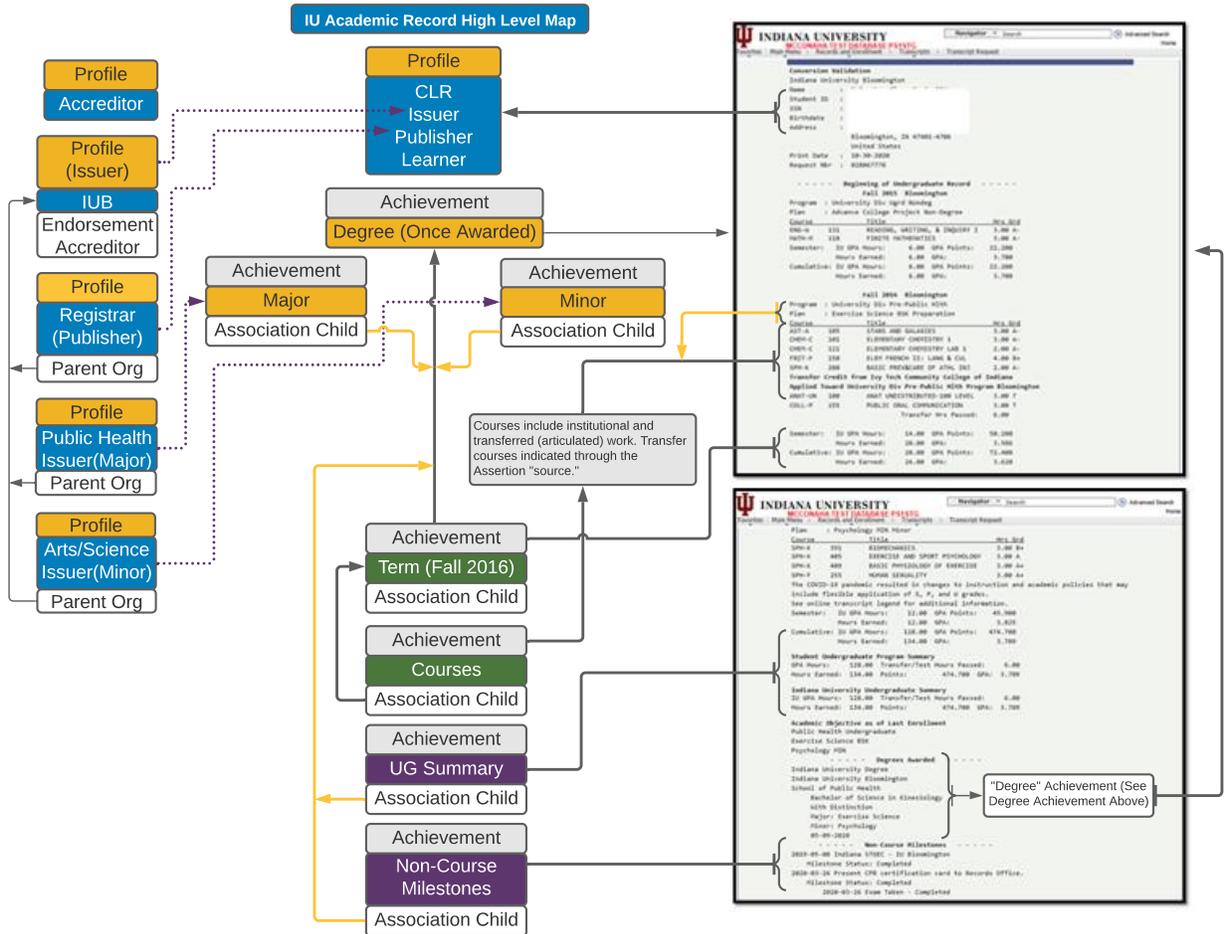
Step 2: Mapping of Learner Record Data to CLR Standard Elements

Draft- CLR Campus Planning/Mapping Template - V1- Draft			
Elon University - Visual Experiential Transcript			
Background		Response	
Author		Rodney Parks	
Institution Name		Elon University	
Institution Description		Elon is a mid-sized private, residential university with approximately 6,300 undergraduate and 800 graduate students.	
Learner Description		Learner is a undergraduate student who has participated in at least one of the 5 Elon Experiences. Note- plans are in the works for this to apply to graduate	
Description of Record		Elon University's Visual Experiential Transcript (Visual EXP) is a significant document from traditional co-curricular transcripts. Building upon the institution's	
Issuer of Credential		Elon University - Office of the Registrar	
Primary and Secondary Data Repository(ies)		The information displayed on the Visual EXP is stored within Elon's SIS (Elucan College) and present in a transcript like format. This data is then	
Agreement with Learning Outcome or Competency Standard		N/A	
Credential Rendering		The Visual EXP is a digital certificate that is rendered as a PDF using information that is housed in the SIS (Elucan College) and delivered through the	
Achievement, Assertion and Association General Questions			
What is the issuing authority of the credential? (State Accreditation (degree), Institution, Campus, School, Department, etc.)?		Elon University - Global Education Center, Kernodle Center for Civic Life, Center for Leadership, Student Professional Development Center, Office of the	
Do your achievements (competencies, courses, awards, etc.) have a hierarchical relationship? For example, do competencies roll up to a course or courses roll up to a degree?		Yes. There are 5 Elon experiences under which all achievements can be grouped into and rolled up under a single header. So while individual instances of	
Do any of your achievements "stand alone" (i.e. not roll up to a higher order award or achievement)?		No. experiences can be rolled into one of the 5 achievement categories.	
Are there "formal" conceptual, technical, or knowledge elements (such as a non-credit header, aggregation points, that need to be represented within the record)?		Yes, a non-credit header or even just year designation would be ideal.	
Does an aspirational award or credential need to be represented in order to structure the events or curriculum supporting it? Examples include, but are not limited to, degree objectives, learning outcomes, certificates, etc.		Not at this time, potentially learning outcomes in the future.	
In addition to your responses to above, are there other factors contributing to your mapping of records to Achievements and how these achievements relate to one another?		No. experiences are independent of each other.	
Please describe your mapping to the 5 (5) CLR Achievement Class.		The 5 Elon Experiences are the 5 different achievements that can be earned. (Service, Global Engagement, Internship, Research, Leadership)	
Please describe how your achievements are related to one another and how you represented the relationship via the Association Class.		The related learning experiences are the children of the achievements, but are independent of other experiences.	
Please describe if you added any additional information to the Assertion class beyond matching learner and achievement? For example, honors notations, learning artifacts, etc.		This includes job descriptions of positions, learning artifacts, company logos, geographical maps, and hopefully in the future potential learning outcomes of	
CLR Record - Package			
		Response	Source of Data
		CLR	Detail
		Issue/ID	Generated at the time of Issue
Extension (e.g., internal tracking request number, etc.) - See/Item used but if used please explain			
Learner Data			
Family name		Family Name	Last Name (SIS)
Given name		Given Name	Preferred Name (SIS)
Additional name (e.g., middle name)			
student ID (institutional)		1234567	Student Identification Number (SIS)
student birthdate (Optional)			DOB
student address (Optional) - includes street, locality, region, country, post/country code			Address (SIS)
student phone (Optional)			Phone (SIS)
student email		student@elcu.edu	student email address (SIS)
student image (Optional)			Student Photo
CLR Publisher Data			
CLR Publisher (General Questions)			
Is there an organization that this issuer belongs to? (e.g., university system)		Elon University	
In addition to the credential also the publisher? For example, a school may be the issuer of the credential but the Registrar is the publisher. If not, please provide additional organization information		The Publisher of the credential is the Office of the Registrar. The issuer/validator is one of the following - Global Education Center, Kernodle Center for Civic	
CLR Publisher			
Issuer of CLR (Institution, campus, etc.)		Office of the Registrar - Elon University	
Issuer address, telephone, email, web URL		100 Campus Drive, Elon, NC 27244 336-278-6077	
Issuer image/logo		Generated at the time of Issue	
Issuer URL		www.elcu.edu/registrar	
Achievement, Assertion and Association Data			
Achievement (Number) - (General Questions)			
What is the criteria for earning this achievement?		Participation in a study abroad study away course or program	
Does this achievement have a possible range of results or a specific type of result (e.g., assessment score within a range)?		No	
Is this achievement aligned to a self or standard portfolio or a framework? Describe.		No	
Is this achievement endorsed by a third party? Describe.		No	
Is an image associated with this achievement?		No	
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.		No	
Achievement (Number) - CLR Mapping			
Achievement (Name)		Global Engagement	
Achievement Description		Global engagement comprises study abroad, Study USA, and	
Achievement Type (See Standard)		SIS	
Issuer of Achievement (Issuer ID Internally defined)		Elon University - Issuella Cannon Global Education Center	
Human Code (Optional)			
Credits if applicable		Yes	
Alignments (e.g., CASE)			
Level if applicable			
Extensions (e.g., School/Department Name, etc.) - Please explain			
Assertion (Number) Assertion			
Assertion (General Questions)			
What entity is the source of this assertion (e.g., org or person that assessed the achievement)?		Elon University - Issuella Cannon Global Education Center/ Office of the Registrar	
Is a start and end date associated with this achievement?		Yes	
Is a numeric number issued with this assertion?		No	
What entity is the source of this assertion (e.g., org or person that assessed the achievement)?		Attended	
What evidence is submitted for the learner?		None	
Did the learner have a specific role or title with this achievement (e.g., President, Intern, Captain, etc.)?		No	
Does a third party endorse this assertion?		No	
Does this assertion expire at certain date or after a specific time period?		No	
Can this assertion be revoked?		No	
Assertions (CLR Mapping)			
Recipient ID (Learner)		1234567	
Achievement ID (Achievement named)		Global Engagement	
Evidence (e.g., URL, Learning Artifacts, etc.)			

License (if Applicable)					
Rule (if appropriate - e.g., President, civic advocate, etc.)				6.5.10 "LicenseNumber"	
Date issued (Required)	Date			6.5.16 "Rule"	
Source (Partnership, etc.)	Credits			6.5.8 "Assessment"	
Start Date (if needed)				6.5.4 "Validity/Expiration"	
End Date (if needed)				6.5.18 "Source"	
Can this assertion be revoked?	No			6.5.19 "Start/End"	
Extensions (as needed)	School attended, courses visited			6.5.5 "SpecialDate"	
				6.5.15 "Workload"	
				6.5.9 "Assessment"	
				6.5.27 "Source/Origin"	
				6.5.28 "Assessment"	
				6.5.29 "Assessment"	
				6.5.30 "Assessment"	
				6.5.31 "Assessment"	
				6.5.32 "Assessment"	
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				6.5.39 "Assessment"	
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				6.7.71 "Assessment"	
				6.7.72 "Assessment"	
				6.7.73 "Assessment"	
				6.7.74 "Assessment"	
				6.7.75 "Assessment"	
				6.7.76 "Assessment"	
				6.7.77 "Assessment"	

Evidence (e.g., URL, Learning Artifacts, etc.)	presentation, paper, outcomes		6.1.5.7 "evidence"
License # (Applicable)			6.1.5.10 "licenseNumber"
Role (if applicable e.g., President, club advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Date		6.1.5.8 "issuedOn"
Credits	Credit		6.1.5.4 "creditsEarned"
Source (Relationship, etc.)			6.1.5.18 "source"
Start Date (if needed)	Start Date		6.1.5.10 "startDate"
End Date (if needed)	End Date		6.1.5.11 "endDate"
Can this assertion be revoked?	No		6.1.5.15 "revocable"
Extensions (as needed)	Research Title, Faculty Mentor, Publications		6.1.5.3 "achievement"
Results Section			
Results Type	Result		6.1.20.8 "resultType"
Result Value	Grade		6.1.20.7 "resultValue"
Result Description			6.1.20.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed) - (Please explain)			
Achievement Type	sch303of		6.1.6.1 "achievementType"
Target ID	Research		6.1.6.4 "targetId"
Achievement Assertion and Association Data			
Achievement (Number) - (General Questions)			
What is the criteria for earning this achievement?		Students hold a leadership role in an internal or external organization.	
Does this achievement have a possible range of results in a specific type of result (e.g., assessment score within a range)?		no	
In this achievement aligned to a skill or standard available in a framework? Describe.		no	
Is this achievement endorsed by a third party? Describe.		no	
Is an image associated with this achievement?		Potentially	
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.		no	
Achievement (Number) - (CLR Mapping)			
Achievement (Name)	Leadership	Source of Data	CLR Class Description
Achievement Description	Student holds a leadership role in an organization	SB	6.1.1.10 "name"
Achievement Type (See 2nd tab)	Co-Curricular	SB	6.1.5.7 "type"
Issuer of Achievement Issuer ID (Internally defined)	Ekun University - Center for Leadership		6.1.1.3 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.5.4 "creditsEarned"
Alignments (e.g., CASE)			6.1.2.2 "alignments"
Level (if applicable)			6.1.1.4 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain	Organization name		6.1.20.1 "extension"
Assertions (Number) Assertion			
Assertion (General Questions)			
What entity is the source of this assertion (e.g., org or person that assessed the achievement)?		Ekun University - Center for Leadership	
Is a start and end date associated with this achievement?		yes	
Is a license number issued with this assertion?		no	
What entity is the source of this assertion (e.g., org or person that assessed the achievement)?			
What are the learner's specific results?		Role	
What evidence is submitted by the learner?		Workbook	
Did the learner have a specific role or title with this achievement (e.g., President, Intern, Captain, etc.)		Yes	
Does a third party endorse this assertion?		no	
Does this assertion expire at a certain date or after a specific time period?		no	
Can this assertion be revoked?		no	
Assertions (CLR Mapping)			
Recipient ID (learner)	Leadership	1234567	6.1.5.12 "recipient"
Achievement ID (achievement earned)	Leadership		6.1.6.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	Workbook		6.1.5.7 "evidence"
License # (Applicable)			6.1.5.10 "licenseNumber"
Role (if applicable e.g., President, club advocate, etc.)	Role		6.1.5.16 "role"
Date issued (IssuedOn)	Date		6.1.5.8 "issuedOn"
Credits			6.1.5.4 "creditsEarned"
Source (Relationship, etc.)			6.1.5.18 "source"
Start Date (if needed)	Start Date		6.1.5.10 "startDate"
End Date (if needed)	End Date		6.1.5.11 "endDate"
Can this assertion be revoked?	No		6.1.5.15 "revocable"
Extensions (as needed)	Organization, time in role, specific duties		6.1.5.3 "achievement"
Results Section			
Results Type	Role		6.1.20.8 "resultType"
Result Value	Role Title		6.1.20.7 "resultValue"
Result Description			6.1.20.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed) - (Please explain)			
Achievement Type	sch303of		6.1.6.1 "achievementType"
Target ID	Leadership		6.1.6.4 "targetId"

Step 1: High-Level Mapping of Record to CLR Standard Elements



Step 2: Mapping of Learner Record Data to CLR Standard Elements

Draft- CLR Campus Planning/Mapping Template - V1- Draft			
Indiana University Academic Transcript			
Background	Response		
Author	Mark McConahay		
Institution Name	Indiana University - Bloomington		
Institution Description	4 year +, Public, Large, Residential, Research 1, Enrollment ~42,000, Part of a State System.		
Learner Description (full/part time, traditional, dual credit, etc.)	Learner is a 4 year residential full time/part time undergraduate, graduate or professional student. Note - For the purpose of this example, the student is an undergraduate who has received a degree with a minor.		
Description of Record (co-curricular record, engagement record, transcript, etc.)	The Student Academic Record - Transcript.		
Issuer of Credential (Institution, Campus, School, Other unit on campus, etc.)	Indiana University - Bloomington		
Primary and Secondary Data Repository(ies) (e.g., SIS, Bolt-on tables to SIS, LMS, Local Developed, Vended, etc.)	Oracle: PeopleSoft Campus Solutions 9.2 - Student Administration		
Alignment with Learning Outcome or Competency Standard (e.g., CASE, LEAP, etc.)	None		
Credential Rendering (e.g., Digital Badge, Digital Certificate, PDF, etc.)	Transcript: Printed and electronic PDF		
Achievement, Assertion and Association General Questions			
Who is the issuing authority of the credential (State Accreditation (degree), Institution, Campus, School, Department, etc.)?	Indiana University - Bloomington (IUB) is accredited by the Higher Learning Commission. In the IUB Profile, the Higher Education Commission is represented as an Endorsement. For Majors and Minors awarded by academic schools and departments, they are expressed as Profiles and have IUB as a parent org.		
Do your achievements (competencies, courses, awards, etc.) have a hierarchical relationship? For example, do competencies roll up to a course or courses roll up to a degree?	Yes: Achievements are used in this mapping to represent contextual and aggregation aspects of the student record. Thus, the Term, Major, Minor, and Summary statistics (GPA summaries) are all represented as achievements. The resulting relationship is: Course is a child of Term; Term, Major, Minor, Statistics are children of the Degree/Academic Objective.		
Do any of your achievements "stand alone" i.e. not roll up to a higher order award or achievement? If your achievements can be both (that is stand alone AND support a higher level award), please explain.	In general, the hierarchy above governs achievements. However, there are instances (e.g., notations, degrees, certificates, etc.) that could be asserted independently and may not be a child of the Degree.		
Are there "potential" conceptual levels, chronological segments (such as a term-based header), aggregation points, that need to be represented within the record?	Yes: Term based header to group courses and aggregate/assert term based summary statistics.		
Does an aspirational award or credential need to be represented in order to structure the events or curriculum supporting it? Examples include, but are not limited to, degree objectives (student major), higher level learning outcomes e.g., critical thinking, certificates, etc.	Yes: Generally, courses on the transcript are provided context under the academic degree objective of the student.		
In addition to your responses to above, are there other factors constituting to our mapping of records to Achievements and how these achievements relate to one another?			
Please describe your mapping to the IMS CLR Achievement Class.	The mapping is guided by the hierarchy: Course -> Term -> Degree or Academic Objective (Major) Term, Course; Summary Statistics and Non-Term Milestone -> Degree or Academic Objective		
Please describe how your achievements are related to one another and how you represented the relationship via the Association Class.	Course is a child of Term, Term is a child of Degree/Objective, Summary Statistics(GPA) is child of Degree/Objective, Minor and the Non-Course Milestone can be a child of the Degree/Objective or stand alone as separate credentials.		
Please describe if you added any additional information to the Assertion class beyond matching learner and achievement? For example, honors notations, learning artifacts, etc.			
CLR Record / Package			
Type	CLR	Source of Data	Default
IssuedON	Print Date	Source of Data	Generated at time of Issue
Extension (e.g., internal tracking request number, etc.) - Seldom used but if	Internal Request Number	Source of Data	SIS Generated at time of Issue
Learner Profile			
Family name	Student Preferred Name	SIS	6.1.18.8 "name"
Given name	Student Preferred Name	SIS	6.1.18.8 "name"
Additional name (e.g. middle name)			6.1.18.8 "name"
student ID (Institutional)	Internal Student ID Number	SIS	6.1.18.13 "studentId"
student birthdate (Optional)	DD/MM of Birthday	SIS	TBD
student address (Optional) - includes street, locality, region, country, postalcode	Student Home Address	SIS	6.1.18.3 "address"
student phone (Optional)	Student home/Cell Phone	SIS	6.1.18.14 "telephone"
student email	NA		6.1.18.5 "email"
student image (Optional)	NA		6.1.18.7 "image"
CLR Publisher Data			
CLR Publisher (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	The Registrar is a unit on the Indiana University Bloomington Campus		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organization information	No: The Institution issues the transcript. The publisher is IUB Registrar		
CLR Publisher Profile			
Publisher of CLR (Institution, campus, etc.)	Office of the Registrar	Source of Data	Generated at time of Issue
Issuer address, telephone, email, web URL	408 N Union, Phone: USSS, transcripts@iu.edu, transcripts.iu.edu	Source of Data	Generated at time of Issue
Issuer image/logo			6.1.18.7 "image"
Parent Organization	Indiana University Bloomington		6.1.23.15 "parentOrg"
Issuer URL	iu.edu	Source of Data	Generated at time of Issue
CLR Issuer (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	Indiana University (Bloomington) is part of a System - but is individually accredited). It is endorsed by the Higher Learning Commission		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organization information	No: The Institution issues the transcript. The publisher is IUB Registrar		
CLR/Degree Issuer Profile			
Issuer of the Transcript/Degree	Indiana University Bloomington	Source of Data	Generated at time of Issue
Issuer address, telephone, email, web URL	107 S Indiana Ave, Bloomington, IN 47405	Source of Data	Generated at time of Issue
Parent Organization			6.1.23.15 "parentOrg"
Endorsement	Higher Education Commission		6.1.15.7 "name"

Issuer image/logo	URL here		6.1.18.7 "image"
Issuer URL	Indiana University: Transcript Explanations - All Campus	Generated at time of Issue	6.1.18.15 "url"
Major Issuer (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	School of Public Health is the Issuer of the Major. The School is a unit of Indiana University Bloomington		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organization information	No: The Institution issues the transcript. The publisher is IUB Registrar		
Major Issuer			
Issuer of the Major	School of Public Health	Generated at time of Issue	6.1.18.8 "name"
Issuer address, telephone, email, web URL	Bloomington, IN 47405	Generated at time of Issue	6.1.18.3 "address"
Parent Organization	Indiana University Bloomington		6.1.23.15 "parentOrg"
Issuer image/logo	URL here		6.1.18.7 "image"
Issuer URL	https://publichealth.indiana.edu/	Generated at time of Issue	6.1.18.15 "url"
Major Issuer (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	College of Arts and sciences is the Issuer of the Minor. The School is a unit of Indiana University Bloomington		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organization information	No: The Institution issues the transcript. The publisher is IUB Registrar		
Major Issuer			
Issuer of the Major	School of Public Health	Generated at time of Issue	6.1.18.8 "name"
Issuer address, telephone, email, web URL	Bloomington, IN 47405	Generated at time of Issue	6.1.18.3 "address"
Parent Organization	Indiana University Bloomington		6.1.23.15 "parentOrg"
Issuer image/logo	URL here		6.1.18.7 "image"
Issuer URL	https://publichealth.indiana.edu/	Generated at time of Issue	6.1.18.15 "url"
Achievement, Assertion and Association Data			
Achievement (Degree) A48-188 (General questions)			
What is the criteria for earning this achievement?	Degree Requirements as defined by Institution and School: e.g., 120 credit hours, GPA>2.0, etc.		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No. Generally it is achieved or not awarded. There may be "honors" associated with the award.		
Is this achievement aligned to a skill or standard available in a framework?	None		
Is this achievement endorsed by a third party? Describe.	Yes: The Higher Learning Commission and the Indiana Commission of Higher Education		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement?	No		
	Response	Source of Data	CLR Class Description
Achievement (Degree)			
Achievement (Name)	Degree		6.1.1.10 "name"
Achievement Description	Bachelor of Science in Kinesiology	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Degree	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (Internally defined))	Indiana University Bloomington	SIS	6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Result Description	Awarded	SIS	6.1.19.8 "resultDescription"
Result Description	Honors	SIS	6.1.19.5 "resultDescription"
Field of Study	Exercise Science	SIS	6.1.1.11 "fieldOfStudy"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)	Undergraduate	SIS	6.1.1.14 "level"
Achievement (Degree) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Indiana University Bloomington		
Is a start and end date associated with this achievement?	No: Awarded Date		
Is a license number issued with this assertion?	No		
What are the learner's specific results?	Degree Earned, with Distinction, Minor		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, etc.)?	None		
Does a third party endorse this assertion?	Higher Learning Commission Bloomington Campus Accreditation: Indiana University		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked?	Yes (extreme cases or mistake)		
	Response	Source of Data	CLR Class Description
Assertions - Degree			
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Degree		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (If Applicable)	None		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (IssuedOn)	Date Awarded	SIS	6.1.5.9 "issuedOn"

Endorsements	Accreditation url		
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.19 "source"
Start Date (if needed)	None		6.1.5.19 "startDate"
End Date (if Needed)	None		6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value	Awarded	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Awarded	Distinction	Generated at time of Issue per the SIS	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Achievement (Term)			
What is the criteria for earning this achievement?	Enroll in a semester or Term of Instruction		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	Yes - the term tracks the number of credits and summary statistics earned by the student during the time period defined.		
Is this achievement aligned to a skill or standard available in a framework? Describe.	None		
Is this achievement endorsed by a third party? Describe.	Indiana University - Bloomington, But since this is the issuer, no need for endorsement.		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Yes. The achievement describes an advancement step in the achievement of the Degree.		
	Response	Source of Data	CLR Class Description
Achievement (Term) (CLR Mapping)			
Achievement (Name)	Term		6.1.1.10 "name"
Achievement Description	Fall 2016 Bloomington	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Other	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (internally defined))	Indiana University Bloomington	SIS	6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Result Description	Program	SIS	6.1.19.5 "resultDescription"
Result Description	Plan	SIS	6.1.19.5 "resultDescription"
Result Description	Semester IU GPA Hours	SIS	6.1.19.5 "resultDescription"
Result Description	Semester IU GPA Pts	SIS	6.1.19.5 "resultDescription"
Result Description	Semester Hours Earned	SIS	6.1.19.5 "resultDescription"
Result Description	Cumulative GPA Hours	SIS	6.1.19.5 "resultDescription"
Result Description	Cumulative GPA Pts	SIS	6.1.19.5 "resultDescription"
Result Description	Cumulative Hours Earned	SIS	6.1.19.5 "resultDescription"
Result Description	Semester GPA	SIS	6.1.19.5 "resultDescription"
Result Description	Cumulative GPA	SIS	6.1.19.5 "resultDescription"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)		SIS	6.1.1.14 "level"
Extensions (as needed)			
Achievement (Term) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Indiana University Bloomington		
Is a start and end date associated with this achievement?	Term Dates		
Is a license number issued with this assertion?	No		
What are the learner's specific results ?	Term Summary Statistics		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	None		
Does a third party endorse this assertion?	No		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes (extreme cases or mistake)		
	Response	Source of Data	CLR Class Description
Assertions - Term			
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Term		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (if Applicable)	None		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (IssuedOn)	Print Date	SIS	6.1.5.9 "issuedOn"
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.19 "source"
Start Date (if needed)	Term Start Date	SIS	6.1.5.19 "startDate"
End Date (if Needed)	Term End Date	SIS	6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value-Program	University Div Pre-Public Health	SIS	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Plan	Exercise Science BSK Preparation	Generated at time of Issue per the SIS	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Semester IU GPA Hours	14	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			

Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Semester IU GPA Pts	50.2	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Semester Hours Earned	14	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Semester GPA	3.586	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Cumulative GPA Hours	20	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Cumulative GPA Pts	72.4	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Cumulative Hours Earned	26	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Cumulative GPA	3.82	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (Term)			
Achievement Type	IsChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Degree	Generated at time of Issue	6.1.6.2 "targetId"
Achievement (Course AST-A 105)			
What is the criteria for earning this achievement?	Enroll and earn a grade in a course.		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	Yes - Credit hours (may be a range) and a specific set of Assessment values (grades).		
Is this achievement aligned to a skill or standard available in a framework? Describe.	None		
Is this achievement endorsed by a third party? Describe.	Indiana University Bloomington		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Yes. The achievement describes a component of a Term.		
Achievement (Course AST-A 105)			
	Response	Source of Data	CLR Class Description
Achievement (Name)	Stars and Galaxies	SIS	6.1.1.10 "name"
Achievement Description	Topics include constellations, gravity, radiation, the Sun, structure and evolution of stars, neutron stars and black holes, the Milky Way galaxy, normal galaxies, active galaxies, quasars, cosmology, and the search for extraterrestrial life.	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Course	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (internally defined))	Indiana University Bloomington	SIS	6.1.1.13 "issuer"
Human Code (Optional)	AST-A 105	SIS	6.1.1.9 "humanCode"
Credits (if applicable)	3	SIS	6.1.1.6 "creditsAvailable"
Result Description	Grade	SIS	6.1.1.9.5 "resultDescription"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)	Undergraduate	SIS	6.1.1.14 "level"
Extensions (as needed)			
Achievement (Course AST-A 105) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Indiana University Bloomington, Instructor		
Is a start and end date associated with this achievement?	Term Dates		
Is a license number issued with this assertion?	No		
What are the learner's specific results ?	Grade		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)?	None		
Does a third party endorse this assertion?			
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes (extreme cases or mistake)		
Assertions - Course AST-A 105			
	Response	Source of Data	CLR Class Description
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	AST-A 105		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (If Applicable)	None		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (IssuedOn)	Print Date	SIS	6.1.5.4 "issuedOn"
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.18 "source"
Start Date (if needed)	Term/Session Start Date	SIS	6.1.5.19 "startDate"
End Date (if Needed)	Term/Session End Date	SIS	6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	LetterGrade	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Grade	A-	SIS	6.1.20.7 "requiredValue"

Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (Course AST-A 105)			
Achievement Type	IsChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Term	Generated at time of Issue	6.1.6.2 "targetID"
Achievement (Course Chem-C 101)			
What is the criteria for earning this achievement?	Enroll and earn a grade in a course.		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	Yes - Credit hours (may be a range) and a specific set of Assessment values (grades).		
Is this achievement aligned to a skill or standard available in a framework? Describe.	None		
Is this achievement endorsed by a third party? Describe.	Indiana University Bloomington		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Yes. The achievement describes a component of a Term.		
	Response	Source of Data	CLR Class Description
Achievement (Course CHEM-C 101)			
Achievement (Name)	Elementary Chemistry 1	SIS	6.1.1.10 "name"
Achievement Description	Essential principles of chemistry, atomic and molecular structure, bonding, properties and reactions of elements and compounds, stoichiometry, solutions, and acids and bases, For students who are not planning careers in the sciences and for those with no previous course work in chemistry.	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Course	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (Internally defined))	Indiana University Bloomington	SIS	6.1.1.13 "issuer"
Human Code (Optional)	CHEM-C 101	SIS	6.1.1.9 "humanCode"
Credits (if applicable)	3	SIS	6.1.1.6 "creditsAvailable"
Result Description	Grade	SIS	6.1.19.5 "resultDescription"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)	Undergraduate	SIS	6.1.1.14 "level"
Extensions (as needed)			
Achievement (Course CHEM-C 101) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Indiana University Bloomington, Instructor		
Is a start and end date associated with this achievement?	Term Dates		
Is a license number issued with this assertion?	No		
What are the learner's specific results ?	Grade		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	None		
Does a third party endorse this assertion?			
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes (extreme cases or mistake)		
	Response	Source of Data	CLR Class Description
Assertions - CHEM-C 101			
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	CHEM-C 101		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (If Applicable)	None		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (if issuedOn)	Print Date	SIS	6.1.5.9 "issuedOn"
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.18 "source"
Start Date (if needed)	Term/Session Start Date	SIS	6.1.5.19 "startDate"
End Date (if Needed)	Term/Session End Date	SIS	6.1.5.5 "endDate"
Can this assertion be revoked ?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	LetterGrade	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Grade	A-	SIS	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (AST-A 105)			
Achievement Type	IsChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Term	Generated at time of Issue	6.1.6.2 "targetID"
Achievement (Course Chem-C 121)			
What is the criteria for earning this achievement?	Enroll and earn a grade in a course.		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	Yes - Credit hours (may be a range) and a specific set of Assessment values (grades).		
Is this achievement aligned to a skill or standard available in a framework? Describe.	None		
Is this achievement endorsed by a third party? Describe.	Indiana University Bloomington		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Yes. The achievement describes a component of a Term.		
	Response	Source of Data	CLR Class Description
Achievement (Course CHEM-C 121)			
Achievement (Name)	Elementary Chemistry Lab 1	SIS	6.1.1.10 "name"
Achievement Description	Introduction to the techniques and reasoning of experimental chemistry. Emphasis is given to study of physical and chemical properties of inorganic compounds.	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Course	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (Internally defined))	Indiana University Bloomington	SIS	6.1.1.13 "issuer"
Human Code (Optional)	CHEM-C 121	SIS	6.1.1.9 "humanCode"
Credits (if applicable)	3	SIS	6.1.1.6 "creditsAvailable"
Result Description	Grade	SIS	6.1.19.5 "resultDescription"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)	Undergraduate	SIS	6.1.1.14 "level"
Extensions (as needed)			
Achievement (Course CHEM-C 121) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Indiana University Bloomington, Instructor		
Is a start and end date associated with this achievement?	Term Dates		
Is a license number issued with this assertion?	No		
What are the learner's specific results ?	Grade		

What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)?	None		
Does a third party endorse this assertion?			
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked?	Yes (extreme cases or mistake)		
Response		Source of Data	CLR Class Description
Assertions - CHEM-C 121			
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	CHEM-C 121		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (If Applicable)	None		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (IssuedOn)	Print Date	SIS	6.1.5.9 "issuedOn"
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.18 "source"
Start Date (if needed)	Term/Session Start Date	SIS	6.1.5.19 "startDate"
End Date (if Needed)	Term/Session End Date	SIS	6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	LetterGrade	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Grade	A-	SIS	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (AST-A 105)			
Achievement Type	IsChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Term	Generated at time of Issue	6.1.6.2 "targetId"

Other Courses Here

Achievement (UGRD GPA Summary)

What is the criteria for earning this achievement?	Enroll and earn a grade in a course for a term.		
Does this achievement have a possible range of results or a specific type of result (e.g., assessment score within a range)?	Yes - the GPA Summary statistics reflect the cumulative credits, hours, and GPA metrics earned by the student.		
Is this achievement aligned to a skill or standard available in a framework? Describe.	None		
Is this achievement endorsed by a third party? Describe.	Indiana University Bloomington		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Yes. The achievement describes assessment characteristics of the student in the academic Degree or objective the student was pursuing.		
Response		Source of Data	CLR Class Description
Achievement (UGRD GPA Summary)			
Achievement (Name)	UGRD GPA Summary	Generated at time of Issue	6.1.1.10 "name"
Achievement Description	Student Undergraduate Program Summary	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Other	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (Internally defined))	Indiana University Bloomington	SIS	6.1.1.3 "issuer"
Human Code (Optional)	Student Undergraduate Program Summary	SIS	6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Result Description	GPA Hours	SIS	6.1.19.5 "resultDescription"
Result Description	Transfer/Test Hours Passed	SIS	6.1.19.6 "resultDescription"
Result Description	Total Hours Earned	SIS	6.1.19.8 "resultDescription"
Result Description	GPA Points	SIS	6.1.19.5 "resultDescription"
Result Description	Cumulative GPA	SIS	6.1.19.5 "resultDescription"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)		SIS	6.1.1.14 "level"
Extensions (as needed)			
Achievement (UGRD GPA Summary) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Indiana University Bloomington		
Is a start and end date associated with this achievement?	Print Date		
Is a license number issued with this assertion?	No		
What are the learner's specific results?	Career Summary Statistics		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)?	None		
Does a third party endorse this assertion?	Indiana University Bloomington		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked?	Yes (extreme cases or mistake)		
Response		Source of Data	CLR Class Description
Assertions - (UGRD GPA Summary)			
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	UGRD GPA Summary		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (If Applicable)	None		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (IssuedOn)	Print Date	SIS	6.1.5.9 "issuedOn"
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.18 "source"
Start Date (if needed)	Print Date	SIS	6.1.5.19 "startDate"
End Date (if Needed)	Print Date	SIS	6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - GPA Hours	128	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Transfer/Test Hours Passed	6	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			

Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Total Hours Earned	134	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - GPA Points	474.7	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Cumulative GPA	3.709	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (UGRD GPA Summary)			
Achievement Type	IsChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Degree	Generated at time of Issue	6.1.6.2 "targetId"
Achievement (Minor)			
Achievement (Name)	Minor		6.1.1.10 "name"
Achievement Description	Psychology	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Other	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (Internally defined))	College of Arts and Science	SIS	6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Result Description	Awarded	SIS	6.1.19.5 "resultDescription"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)	Undergraduate	SIS	6.1.1.14 "level"
Achievement (Minor) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	The College of arts and Science - a unit of Indiana University Bloomington		
Is a start and end date associated with this achievement?	No: Awarded Date		
Is a license number issued with this assertion?	No		
What are the learner's specific results?	Degree Minor Earned		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	None		
Does a third party endorse this assertion?	Through IUB - Higher Learning Commission Bloomington Campus Accreditation: Indiana University		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked?	Yes (extreme cases or mistake)		
	Response	Source of Data	CLR Class Description
Assertions - (Minor)			
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Other Minor		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (if Applicable)	None		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (IssuedOn)	Date Awarded	SIS	6.1.5.9 "issuedOn"
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.18 "source"
Start Date (if needed)	None		6.1.5.19 "startDate"
End Date (if Needed)	None		6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value - Awarded	Awarded	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (Minor)			
Achievement Type	IsChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Degree	Generated at time of Issue	6.1.6.2 "targetId"
Achievement (Major)			
Achievement (Name)	Major		6.1.1.10 "name"
Achievement Description	Exercise Science	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Other	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (Internally defined))	School of Public Health	SIS	6.1.1.13 "issuer"
Result Description	Awarded	SIS	6.1.19.5 "resultDescription"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)	Undergraduate	SIS	6.1.1.14 "level"
Achievement (Major) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	School of Public Health which is a unit of Indiana University Bloomington		
Is a start and end date associated with this achievement?	No: Awarded Date		
Is a license number issued with this assertion?	No		
What are the learner's specific results?	Degree Major Earned		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	None		
Does a third party endorse this assertion?	IUB which is endorsed by the Higher Learning Commission		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked?	Yes (extreme cases or mistake)		
	Response	Source of Data	CLR Class Description
Assertions - (Major)			
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Other Minor		6.1.5.3 "achievement"

Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (If Applicable)	None		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (IssuedOn)	Date Awarded	SIS	6.1.5.9 "issuedOn"
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.18 "source"
Start Date (if needed)	None		6.1.5.19 "startDate"
End Date (if Needed)	None		6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value	Awarded	Generated at time of Issue	6.1.20.7 "requiredValue"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (Major)			
Achievement Type	IsChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Degree	Generated at time of Issue	6.1.6.2 "targetId"
Achievement (Non-Course Milestone)			
Achievement (Name)	Non Course Milestone Minor		6.1.1.10 "name"
Achievement Description	Statewide General Education Core	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Other	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (Internally defined))	Indiana University Bloomington	SIS	6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)	Undergraduate	SIS	6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain		SIS	6.1.1.20 "extensions"
Achievement (Non-Course Milestone) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Indiana University Bloomington		
Is a start and end date associated with this achievement?	No: Awarded Date		
Is a license number issued with this assertion?	No		
What are the learner's specific results?	Specific Courses Passed with a grade of C- or better		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	None		
Does a third party endorse this assertion?	Indiana University and Indiana Commission of Higher Education		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked?	Yes (extreme cases or mistake)		
	Response	Source of Data	CLR Class Description
Assertions - (Non-Course Milestone)			
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Other Non-Course Milestone	Generated at time of Issue	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (If Applicable)	None		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (IssuedOn)	Date Awarded	SIS	6.1.5.9 "issuedOn"
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.18 "source"
Start Date (if needed)	None		6.1.5.19 "startDate"
End Date (if Needed)	None		6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value	Awarded	Generated at time of Issue	6.1.20.7 "requiredValue"
Result Description	Completed	SIS	6.1.19.5 "resultDescription"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (Non-Course Milestone)			
Achievement Type	IsChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Degree	Generated at time of Issue	6.1.6.2 "targetId"
Achievement (Non-Course Milestone)			
Achievement (Name)	Non Course Milestone Minor		6.1.1.10 "name"
Achievement Description	CPR Certification	SIS	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Other	Generated at time of Issue	6.1.1.3 "achievementType"
Issuer of Achievement (Issuer ID (Internally defined))	Indiana University Bloomington	SIS	6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)	Undergraduate	SIS	6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain		SIS	6.1.1.20 "extensions"
Achievement (Non-Course Milestone) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Indiana University Bloomington		
Is a start and end date associated with this achievement?	No: Awarded Date		
Is a license number issued with this assertion?	No		
What are the learner's specific results?	Exam Taken 2020-03-26		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	None		
Does a third party endorse this assertion?	Indiana University and Indiana Commission of Higher Education		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked?	Yes (extreme cases or mistake)		
	Response	Source of Data	CLR Class Description
Assertions - (Non-Course Milestone)			
Recipient ID (learner)	ID	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Other Non-Course Milestone	Generated at time of Issue	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	None		6.1.5.7 "evidence"
License (If Applicable)	None		6.1.5.10 "licenseNumber"

Role (if appropriate - e.g., President, civic advocate, etc.)	None		6.1.5.16 "role"
Date issued (IssuedOn)	Date Awarded	SIS	6.1.5.9 "issuedOn"
Credits	None		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	None		6.1.5.18 "source"
Start Date (if needed)	None		6.1.5.19 "startDate"
End Date (if Needed)	None		6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Result	Generated at time of Issue	6.1.20.8 "resultType"
Result Value	Awarded	Generated at time of Issue	6.1.20.7 "requiredValue"
Result Description	Completed	SIS	6.1.19.5 "resultDescription"
Alignments	None		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (Non-Course Milestone)			
Achievement Type	IsChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Degree	Generated at time of Issue	6.1.6.2 "targetId"

Tennessee Board of Regents – Warranty Card

The Volunteer State Community College program warranty represents the College’s commitment to the quality of its technical education programs. It assures employers that graduates of A.A.S. degree programs and technical certificate programs have the knowledge and skill sets needed to successfully perform job functions. Valid for one year immediately following the student’s graduation/completion date, the program warranty covers retraining at no cost to either the graduate or the employer.

The College initially issued³ warranties on paper, and the student was given a warranty card with information to share with the employer. However, no learning outcomes were attached. This limited its effectiveness since the employer would need to know the expected learning outcomes or competencies covered in the program to determine which if any of these may not match the employee’s demonstrated skills on the job.

The intent of the digital warranty card CLR is to provide summative information to the employer that the student can present at the time of application for a job. The CLR will have the learning outcomes or competencies listed along with the digital credential earned by the student. The CLR would be delivered to the employer via a link to a secure webpage that could be included in a job application or resume. The CLR will be date-aware since the warranty is only valid for one-year post-graduation. During the warranty period, the employer would have the ability to file a “claim”. After the warranty period, the employer would simply see the credential and learning outcomes associated with it. Learning outcomes or competencies could be extracted dynamically from our SIS and displayed based on the appropriate outcomes or competencies for the graduate’s catalog year.

³ At the time of this report, digital warranty cards were not yet in production but their implementation was imminent.

Warranty Card – Rendered Sample

tbr | THE COLLEGE SYSTEM
of TENNESSEE

PROGRAM WARRANTY

for successfully completing a
TECHNICAL PROGRAM
at a Tennessee Community or Technical College

TBR | THE COLLEGE SYSTEM OF TENNESSEE STANDS BEHIND OUR GRADUATES AND THE QUALITY OF OUR TECHNICAL PROGRAMS



We guarantee that students who have earned an Associate of Applied Science (A.A.S.) Degree, Diploma or Technical Certificate of credit from our colleges have the competencies needed to perform critical work functions identified in the program of study. If a student is not able to perform one or more of the trained competencies, we will retrain the student at no cost to the student or the student's employer.

Visit tbr.edu/warranty for details.

Warranty is valid for one year from graduation/ completion.

Warranty Credential Validation

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc dui felis, dignissim at sapien nec, mollis elementum tellus. Fusce eu felis eget eros consectetur tincidunt. Nullam justo ex, feugiat vitae tempor vehicula, dapibus in quam. Integer tincidunt venenatis lectus in pharetra.

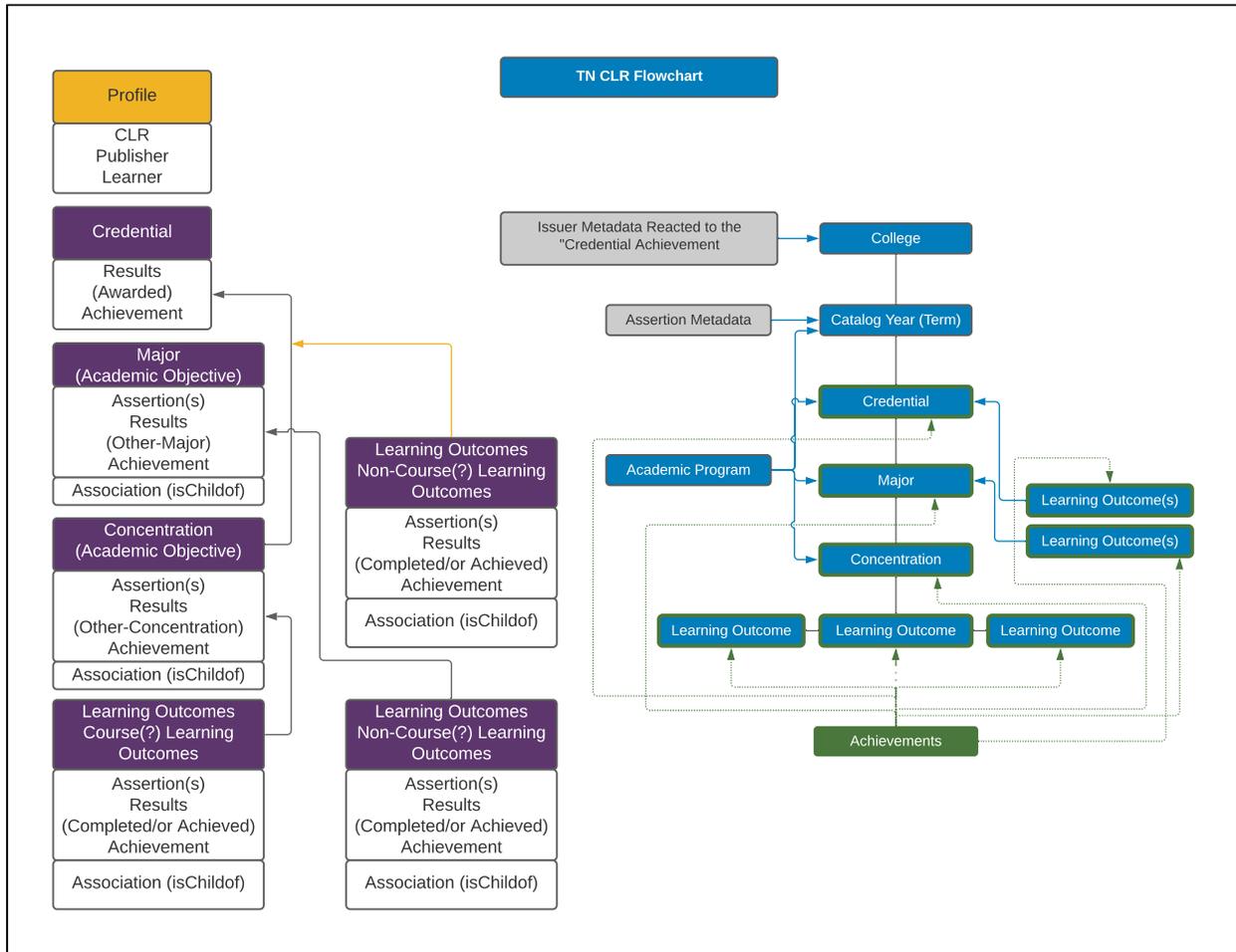
Please enter CeDiD (not case sensitive)

CeDiD Key: 0123456789
ABCDEFGHIJKLMNPQRSTUVWXYZ

powered by **CeCredential**
TRUST

For more information, please visit CeCredential Trust.

Step 1: High-Level Mapping of Record to CLR Standard Elements



Step 2: Mapping of Learner Record Data to CLR Standard Elements

Draft - CLR Campus Planning/Mapping Template - Draft			
Tennessee Board of Regents Warrantee Card			
Background	Response	Source of Data	CLR Class Description
Author	Tim Amyx		
Institution Name	Volunteer State Community College		
Institution Description	2-year Public		
Learner Description (full/part time, traditional, dual credit, etc.)	Students who have earned a Technical Certificate or Associate of Applied Science		
Description of Record (co-curricular record, engagement record, transcript, etc.)	Warranty Card		
Issuer of Record (Institution, Campus, School, Other unit on campus, etc.)	Registrar		
Data Repository (e.g., SIS, Bolt-on tables to SIS, LMS, Local Developed, Vended, etc.)	Banner bolt-on (local) table		
Alignment with Learning Outcome or Competency Standard (e.g., CASE, LEAP, etc.)	Program accreditation bodies and the Tennessee Board of Regents common curricula		
Credential Rendering (e.g., Digital Badge, Digital Certificate, PDF, etc.)	Digital warranty card		
Achievement, Assertion and Association General Questions			
Who is the issuing authority of the credential (State Accreditation (degree), Institution, Campus, School, Department, etc.)?	Volunteer State Community College (Accredited by The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC))		
Do your achievements (competencies, courses, awards, etc.) have a hierarchical relationship? For example, do competencies roll up to a course or courses roll up to a degree?	Learning outcomes, Concentrations, Credential are all represented as achievements. Learning outcomes can be children of concentrations, Majors and Credentials and of a degree (academic programs).		
Do any of your achievements "stand alone" i.e. not roll up to a higher order award or achievement? If your achievements can be both (that is stand alone AND support a higher level award), please explain.	A credential can be asserted independently and in support of a higher level credential. A concentration is a good example of this.		
Are there "potential" conceptual levels, chronological segments (such as a term-based header), aggregation points, that need to be represented within the record?	Not at this time.		
Does an aspirational award or credential need to be represented in order to structure the events or curriculum supporting it? Examples include, but are not limited to, degree objectives (student major), higher level learning outcomes e.g., critical thinking), certificates, etc.	Yes - Major represents a contextual achievement used to define the set of learning outcomes, courses, activities that are germane to it.		
In addition to your responses to above, are there other factors constituting to our mapping of records to Achievements and how these achievements relate to one another?			
Please describe your mapping to the IMS CLR Achievement Class.	Learning outcomes are children of Concentrations, Credentials, Major and Degree. Concentrations can be children of credentials, Major and degree. Credentials can be children of Major and of an academic program. Major is the child of academic program.		
Please describe how your achievements are related to one another and how you represented the relationship via the Association Class.			
Please describe if you added any additional information to the Assertion class beyond matching learner and achievement? For example, honors notations, learning artifacts, etc.			
CLR Record / Package			
Type	CLR	Default	6.1.7 "Clr" class
IssuedON	Date	generated at the time of issue	6.1.7.5 "issuedOn"
Extension (e.g., internal tracking request number, etc.) - Seldom used but if u	N/A	N/A	
Learner Data			
Family name	Banner Last Name	Banner	6.1.18.8 "name"
Given name	Banner First Name	Banner	6.1.18.8 "name"
Additional name (e.g., middle name)	Banner Middle Name	Banner	6.1.18.8 "name"
source did (unique ID for interoperability with other identity systems)	UUID		6.1.18.13 "studentId"
student ID	Banner ID	Banner	6.1.18.13 "studentId"
birthdate	Banner Birthdate	Banner	
address	n/a		6.1.18.3 "address"
phone	n/a		6.1.18.14 "telephone"
email	College-issued email address	Banner	6.1.18.5 "email"
image	n/a		6.1.18.7 "image"
CLR Publisher Data			
Issuer of CLR (Institution, campus, etc.)	Volunteer State Community College	Generated at time of issue	6.1.18.8 "name"

Issuer address, telephone, email, web URL	1480 Nashville Pike Gallatin, TN 37066 615-452-8600 records@volstate.edu www.volstate.edu	Generated at time of issue	6.1.18.3 "address"
Issuer image/logo	https://www.volstate.edu/sites/default/files/logos/VSCC_horz_blue_red.png		6.1.18.7 "image"
Is there an organization that this issuer belongs to? (e.g. university system)	Tennessee Board of Regents	Generated at time of issue	6.1.18.15 "url"
Achievement, Assertion and Association Data			
Achievement 1 (General questions)			
What is the criteria for earning this achievement?	Successful completion of credential requirements		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No		
Is this achievement aligned to a skill or standard available in a framework? Describe.	No		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Major		
Achievement 1 (CLR Mapping)	Response	Source of Data	CLR Class Description
Name	Credential	Banner	6.1.1.10 "name"
Description	Credential	Banner	6.1.1.7 "description"
Achievement Type	Credential		6.1.1.2 "type"
Issuer of Achievement	Volunteer State Community College		6.1.1.13 "issuer"
Publisher	Registrar		
Human Code			6.1.1.9 "humanCode"
Result Description	Status		6.1.1.16 "resultDescriptions"
System Identifier(s)	AAS, CRT1, or CRT2	Banner	
Credits	Varies	Banner	6.1.1.6 "creditsAvailable"
Achievement 1 Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Registrar		
Is a start and end date associated with this achievement?	Start Date		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes		
Credits earned	Varies		
What are the learner's specific results ?			
Is a license number issued with this assertion?	No		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	No		
Does a third party endorse this assertion?	No		
Assertions (CLR Mapping)	Response	Source of Data	CLR Class Description
Recipient ID (learner)	Student		6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Credential		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (If Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Graduation Date	Banner	6.1.5.9 "issuedOn"
Credits			6.1.5.4 "creditsEamed"
Source (Internship, etc.)			6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked?	Yes		6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Result Value	Awarded	Generated at time of Issue	6.1.20.7 "requiredValue"
Result Description	Awarded	Generated at time of Issue	6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Achievement 2 (General questions)			
What is the criteria for earning this achievement?	Successful completion of credential requirements		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No		
Is this achievement aligned to a skill or standard available in a framework? Describe.	No		
Is this achievement endorsed by a third party? Describe.	No		

Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Credential, Learning Outcome, and/or Concentration		
Achievement 2 (CLR Mapping)	Response	Source of Data	CLR Class Description
Name	Major	Banner	6.1.1.10 "name"
Description	Major	Banner	6.1.1.7 "description"
Achievement Type	Major		6.1.1.2 "type"
Issuer of Achievement	Registrar		6.1.1.13 "issuer"
Human Code			6.1.1.9 "humanCode"
Result Description	Status		6.1.1.16 "resultDescriptions"
System Identifier(s)	Major Code	Banner	
Credits	Varies	Banner	6.1.1.6 "creditsAvailable"
Achievement 2 Assertion (awarding achievement to a specific learner)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Registrar		
Is a start and end date associated with this achievement?	No		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes		
Credits earned	Varies		
What are the learner's specific results ?			
Is a license number issued with this assertion?	No		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)?	No		
Does a third party endorse this assertion?	No		
Assertion 2 (CLR Mapping)	Response	Source of Data	CLR Class Description
Recipient ID (learner)	Learner		6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Major		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (If Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Graduation Date	Banner	6.1.5.9 "issuedOn"
Credits	As defined		6.1.5.4 "creditsEarned"
Source (Internship, etc.)			6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked?	Yes		6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Result Value	Awarded	Generated at time of Issue	6.1.20.7 "requiredValue"
Result Description	Awarded	Generated at time of Issue	6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	isChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Credential (Degree)	Generated at time of Issue	6.1.6.2 "targetId"
Achievement 3 (General questions)			
What is the criteria for earning this achievement?	Successful completion of credential requirements		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No		
Is this achievement aligned to a skill or standard available in a framework? Describe.	No		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Major and/or Learning Outcome		
Achievement 3 (CLR Mapping)	Response	Source of Data	CLR Class Description
Name	Concentration	Banner	6.1.1.10 "name"
Description	Concentration	Banner	6.1.1.7 "description"
Achievement Type	Concentration		6.1.1.2 "type"
Issuer of Achievement	Registrar		6.1.1.13 "issuer"
Human Code			6.1.1.9 "humanCode"
Result Description	Status		6.1.1.16 "resultDescriptions"
System Identifier(s)	Concentration Code	Banner	
Credits	Varies	Banner	6.1.1.6 "creditsAvailable"
Achievement 3 Assertion (awarding achievement to a specific learner)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Registrar		
Is a start and end date associated with this achievement?	No		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes		
Credits earned	Varies		
What are the learner's specific results ?			

Is a license number issued with this assertion?	No		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	No		
Does a third party endorse this assertion?	No		
Assertion 3 (CLR Mapping)	Response	Source of Data	CLR Class Description
Recipient ID (learner)	Learner		6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Concentration		6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (If Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Graduation Date	Banner	6.1.5.9 "issuedOn"
Credits			6.1.5.4 "creditsEarned"
Source (Internship, etc.)			6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked?			6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Result Value	Awarded	Generated at time of Issue	6.1.207 "requiredValue"
Result Description	Awarded	Generated at time of Issue	6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	isChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Major	Generated at time of Issue	6.1.6.2 "targetId"
Achievement 4 (General questions)			
What is the criteria for earning this achievement?	Successful completion of credential requirements		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No		
Is this achievement aligned to a skill or standard available in a framework? Describe.	No		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement?	No		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Credential, Major and/or Concentration		
Achievement 4 (Learning Outcome)	Response	Source of Data	CLR Class Description
Name	Learning Outcome	Banner	6.1.1.10 "name"
Description	Learning Outcome	Banner	6.1.1.7 "description"
Achievement Type	Learning Outcome		6.1.1.2 "type"
Issuer of Achievement	Registrar		6.1.1.13 "issuer"
Human Code			6.1.1.9 "humanCode"
Result Description	Status		6.1.1.16 "resultDescriptions"
System Identifier(s)	Degree, Major, and/or Concentration	Banner	
Credits	n/a		6.1.1.6 "creditsAvailable"
Achievement 4 Assertion (awarding achievement to a specific learner)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Registrar		
Is a start and end date associated with this achievement?	No		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes		
Credits earned	Varies		
What are the learner's specific results ?			
Is a license number issued with this assertion?	No		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	No		
Does a third party endorse this assertion?	No		
Assertion 4 (CLR Mapping)	Response	Source of Data	CLR Class Description
Recipient ID (learner)			6.1.5.12 "recipient"
Achievement ID (Achievement earned)			6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (If Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Graduation Date	Banner	6.1.5.9 "issuedOn"
Credits			6.1.5.4 "creditsEarned"
Source (Internship, etc.)			6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked?			6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Result Value	Awarded	Generated at time of Issue	6.1.207 "requiredValue"
Result Description	Awarded	Generated at time of Issue	6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	isChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Major or Concentration or Credential	Generated at time of Issue	6.1.6.2 "targetId"

University of California San Diego – Enhanced Electronic Transcript and Co-Curricular Record

The University of California San Diego developed a suite of [Engaged Learning Tools \(ELTs\)](#) which provide a comprehensive set of tools that help students discover, capture, review and share their curricular, co-curricular and professional accomplishments. The overarching purpose of this suite of tools is to encourage engagement, help students reflect on and articulate competencies developed, and share a holistic picture of students' learning and accomplishments at UC San Diego and beyond.

Two of the ELTs include UC San Diego's expanded, integrated student record: the Enhanced Electronic Transcript and the Co-Curricular Record (CCR). The Enhanced Electronic Transcript embeds contextual curricular information into the academic transcripts. Through clicking hyperlinks embedded in the transcript, end users can read the course description, instructor name and contact, grade distribution for the course section. The Co-Curricular Record is a validated record of students' involvement in opportunities beyond the classroom and the competencies developed. Highlighted on the Record is the opportunity name, position held, short description of the opportunity, and up to three competencies developed from a pre-determined list of competencies which includes critical thinking/problem solving, research ability, leadership, and innovative/entrepreneurial thinking.

The two primary purposes of the Record are to 1) encourage engagement, and 2) act as an official record and reflective tool. By having the CCR printed with the transcript, UC San Diego is asserting student involvement beyond the classroom is valued and that it should be part of the students' recorded experience at the institution. This is an important message for students, their parents/families, employers, and staff and faculty at the institution. Students are encouraged to use their Record when applying for jobs, graduate/professional programs and for awards-either submitting the Record where appropriate or using the Record as a reflective tool to help identify and articulate competencies and skills developed.

UC San Diego is a traditional, full-time, four-year, public institution. All undergraduate, graduate, and professional students have the opportunity to create, discover, capture, review and share their learning experiences.

Co-Curricular Record (CCR) – Rendered Sample



Official Co-Curricular Record for UC San Diego. The record is organized into sections: COMMUNITY-BASED / GLOBAL LEARNING, PROFESSIONAL / CAREER DEVELOPMENT, and STUDENT ENGAGEMENT / CAMPUS LIFE.

Year	Position	Description	Competencies
2015 - 2016	Internship Program, Women's Center - Intern	Participated in a year-long internship experience facilitating programs and services focused on gender and social justice issues.	<ul style="list-style-type: none"> - Teamwork/Cross-Cultural Collaboration - Leadership - Civic Engagement/Social Responsibility
2016 - 2017	Program, Academic Integrity Office - Integrity Peer Educator	Participated in extensive training, advised students on matters of academic and professional integrity, facilitated workshops on ethical decision making, planned and led events and outreach to the campus community.	<ul style="list-style-type: none"> - Leadership - Professionalism / Integrity - Self-Reflection
2015 - 2016	Residence Life, Muir College - Residence Advisor	Participated in extensive training, lived in campus housing and served as residential leader, mediator and activities coordinator to foster strong community bonds.	<ul style="list-style-type: none"> - Critical Thinking / Problem Solving - Professionalism/Integrity - Career Development
2014 - 2015	Wellness Peer Education Programs, Counselling and Psychological Services - Peer Educator	Educated fellow students about mental health and wellness, reduced stigma and spread awareness of Counseling and Psychological Services on campus.	<ul style="list-style-type: none"> - Professionalism/Integrity - Self-Reflection - Civic Engagement/Social Responsibility
2013 - 2014	Women's Soccer, Intercollegiate Athletics - Athlete	Represented the university in local, regional and national NCAA competitions, and demonstrated a high degree of dedication, teamwork, and service to the community.	<ul style="list-style-type: none"> - Oral, Written, & Digital Communication - Teamwork/Collaboration

This is an official UC San Diego record and I certify that the activities have been validated.

Cindy Lyons
Cindy Lyons
Interim University Registrar
Enrollment Management

Step 1: High-Level Mapping of Record to CLR Standard Elements

Student Engagement / Campus Life	Research / Academic Life	Community Based/ Global Learning		CB/GL Activity 1 (Dates)		Research Activity 1 (Dates)	Residence Life Advisor	Women's Soccer (Athlete)
Association (is Childof)								
Assertion(s) Attended / Assessed Achievement								

CLR
Publisher
Learner

UC San Diego OFFICIAL CO-CURRICULAR RECORD

Student Name: Test Student Record Date and Time Printed: September 27, 2016 3:40

Student ID: Test Student

Dates	Activity - Position	Competencies
---COMMUNITY-BASED / GLOBAL LEARNING---		
2014 - 2015	Alternative Breaks, Center for Student Involvement - Co-coordinator Coordinated in an intensive prepackaged community service experience that explored concepts of leadership and community development.	- Understanding Global Context - Leadership - Civic Engagement & Social Responsibility
---PROFESSIONAL / CAREER DEVELOPMENT---		
2015 - 2016	Internship Program, Women's Center - Intern Participated in a year-long internship experience facilitating programs and services focused on gender and social justice issues.	- Teamwork/Cross-Cultural Collaboration - Leadership - Civic Engagement/Social Responsibility
---RESEARCH / ACADEMIC LIFE---		
2015 - 2016	Research, Department of Psychology - Research Intern Worked with a faculty member on a research project, which enriched their understanding of research processes and outcomes.	- Critical Thinking / Problem Solving - Research Ability - Digital Information Fluency
---STUDENT ENGAGEMENT / CAMPUS LIFE---		
2015 - 2016	Residence Life, Main College - Residence Advisor Participated in activities leading to campus housing and served as residence advisor, resident and activities coordinator to foster strong community bonds.	- Critical Thinking / Problem Solving - Professionalism/Integrity - Career Development
2014 - 2015	Witnesses Peer Education Programs, Counseling and Psychological Services - Peer Educator Educated fellow students about mental health and wellness, reduced stigma and spread awareness of Counseling and Psychological Services on campus.	- Professionalism/Integrity - Self-Reflection - Civic Engagement/Social Responsibility
2013 - 2014	Women's Soccer, Intercollegiate Athletics - Athlete Represented the university in local, regional and national NCAA competitions, and demonstrated a high degree of dedication, teamwork, and service to the community.	- Oral, Written, & Digital Communication - Teamwork/Collaboration

This is an official UC San Diego record and should not be modified. Any changes must be approved by the Registrar.

Assertion(s) Attended / Assessed Achievement		
Association (isChildof)		

Step 2: Mapping of Learner Record Data to CLR Standard Elements

UC San Diego- CLR Campus Planning/Mapping Template - Final			
UC San Diego, Co-Curricular Record			
Background		Response	
Author	Cindy Lyons		
Institution Name	UC San Diego		
Institution Description	4 year +, Public, Large, Residential, Research 1, Enrollment ~38,000, Part of University of California System.		
Learner Description (full/part time, traditional, dual credit, etc.)	Learner is a 4 year residential full time undergraduate, a full time graduate or a professional student.		
Description of Record (co-curricular record, engagement record, transcript, etc.)	The CLR is a suite of tools that help students to discover, capture, review and sharing their curricular, co-curricular, and professional accomplishments, The CLR is a much richer environment than what is provided in the example which is the Co-Curricular Record. The Co-Curricular Record highlights student involvement and achievements in opportunities beyond the classroom, Each opportunity including a brief description and the skills developed on an official record.		
Issuer of Credential (Institution, Campus, School, Other unit on campus, etc.)	UC San Diego, Office of the Registrar		
Primary and Secondary Data Repository(ies) (e.g., SIS, Bolt-on tables to SIS, LMS, Local Developed, Vended, etc.)	Orbis Communications, third party vendor solution		
Alignment with Learning Outcome or Competency Standard (e.g., CASE, LEAP, etc.)	Association of American Colleges & Universities Value Learning Outcomes, Council for the Advancement of Standards in Higher Education Learning & Development Outcomes, WASC Senior College and University Commission Core Competencies, National Association of Colleges and Employers Career Readiness Competencies		
Credential Rendering (e.g., Digital Badge, Digital Certificate, PDF, etc.)	PDF		
Achievement, Assertion and Association General Questions			
Who is the issuing authority of the credential (State Accreditation (degree), Institution, Campus, School, Department, etc.?)	UC San Diego, Office of the Registrar		
Do your achievements (competencies, courses, awards, etc.) have a hierarchical relationship? For example, do competencies roll up to a course or courses roll up to a degree?	Yes - competencies roll up to one or more of the following achievements: Research and Academic Life Student and Campus Engagement Community-Based and Global Learning Professional and Career Development		
Do any of your achievements "stand alone" i.e. not roll up to a higher order award or achievement? If your achievements can be both (that is stand alone AND support a higher level award), please explain.	Achievements can stand alone or roll up to multiple higher achievements. Our goal is to encourage as many engagements as possible during a student's career at UC San Diego. The majority of students have multiple achievements that roll up to one or more higher achievements (Research and Academic Life, Student and Campus Engagement, Community-Based and Global Learning, Professional and Career Development)		
Are there "potential" conceptual levels, chronological segments (such as a term-based header), aggregation points, that need to be represented within the record?	Yes, Highest Achievement (Research and Academic Life; Student and Campus Engagement; Community-Based and Global Learning; Professional and Career Development) > Academic Year > Activity/Position/Competency		
Does an aspirational award or credential need to be represented in order to structure the events or curriculum supporting it? Examples include, but are not limited to, degree objectives (student major), higher level learning outcomes e.g., critical thinking), certificates, etc.	No		
In addition to your responses to above, are there other factors constituting to our mapping of records to Achievements and how these achievements relate to one another?			
Please describe your mapping to the IMS CLR Achievement Class.	The mapping is guided by the following hierarchy: Highest Achievement (Research and Academic Life; Student and Campus Engagement; Community-Based and Global Learning; Professional and Career Development) > Academic Year > Activity/Position/Competency		
Please describe how your achievements are related to one another and how you represented the relationship via the Association Class.	Competencies grow from multiple engagements and can be associated with multiple higher level achievements.		
Please describe if you added any additional information to the Assertion class beyond matching learner and achievement? For example, honors notations, learning artifacts, etc.	Academic Year, Brief description of the opportunity/achievement, and up to 3 competencies that may have been developed.		
CLR Record / Package		Response	Source of Data
Type		CLR	Default
IssuedON		Date	Generated at time of Issue
Extension (e.g., internal tracking request number, etc.) - Seldom used but if used please explain			
Learner Data			
Family name	Family Name	Last Name (SIS)	6.1.18.8 "name"
Given name	Given name	Preferred name (SIS)	6.1.18.8 "name"
Additional name (e.g. middle name)			6.1.18.8 "name"
student ID (Institutional)	1234567890	Student Identification Number (SIS)	6.1.18.13 "studentId"
student birthdate (Optional)			TBD
student address (Optional) - includes street, locality, region, country, postalcode			6.1.18.3 "address"
student phone (Optional)			6.1.18.14 "telephone"
student email			6.1.18.5 "email"
student image (Optional)			6.1.18.7 "image"
CLR Publisher Data			
CLR Publisher (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	University of California		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organization information	The Issuer of the credential is the staff and/or faculty of the Academic and Student Affairs units of UC San Diego . The publisher is the Office of the Registrar. The validator of attendance/assessment is the staff and/or faculty of the Academic and Student affairs units.		
CLR Publisher			
Issuer of CLR (Institution, campus, etc.)	Office of the Registrar, UC San Diego	Generated at time of Issue	6.1.18.8 "name"
Issuer address, telephone, email, web URL	Registrar address, no email	Generated at time of Issue	6.1.18.3 "address"
Issuer image/logo			6.1.18.7 "image"
Issuer URL	https://registrar.ucsd.edu/	Generated at time of Issue	6.1.18.15 "url"
Achievement, Assertion and Association Data			
Achievement (number) (General questions)			
What is the criteria for earning this achievement?	In order to be approved for the CCR, the opportunity must have a clear connection to UC San Diego, develop the student's skills and competencies, provide 30-hours of active engagement through the academic year and not be linked to credit-bearing activities.		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No		
Is this achievement aligned to a skill or standard available in a framework? Describe.	AAC&U, CAS, WASC Senior College and University Commission Core Competencies, NACE		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement?	No		

Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	No		
Achievement (Number) (CLR Mapping)			
Achievement (Name)	Co-Curricular Record	CCR Database-Orbis Communications	6.1.1.10 "name"
Achievement Description	Co-Curricular Record highlights student involvement and achievements beyond the classroom. Each achievement including a brief description (position and activity) and the skills developed on an official record.	CCR Database-Orbis Communications	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Co-Curricular		6.1.1.2 "type"
Issuer of Achievement (Issuer ID (Internally defined))			6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)	AAC&U, CAS, WASC Senior College and University Commission Core Competencies, NACE		6.1.1.4 "alignments"
Level (if applicable)			6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain			6.1.1.20 "extensions"
Achievement (Number) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Staff and/or Faculty of the Academic and Student Affairs units of UC San Diego		
Is a start and end date associated with this achievement?	Academic Year		
Is a license number issued with this assertion?	No		
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Staff and/or Faculty of the Academic and Student Affairs units of UC San Diego		
What are the learner's specific results ?	Competencies and transferable skills accomplished		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	In some cases yes.		
Does a third party endorse this assertion?	No		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes		
Assertions (CLR Mapping)			
Recipient ID (learner)	Learner	Generated at time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Co-Curricular Record	Staff and/or Faculty of UC San Diego via Orbis Communications database	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (if Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Issue Date	Generated at time of Issue	6.1.5.9 "issuedOn"
Credits			6.1.5.4 "creditsEarned"
Source (Internship, etc.)			6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked?	Yes	Generated at time of Issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Competency validated	Generated at time of Issue	6.1.20.8 "resultType"
Result Value	Up to 3 of 12 competencies		6.1.20.7 "requiredValue"
Result Description			6.1.19.5 "resultDescription"
Alignments	AAC&U, CAS, WASC Senior College and University Commission Core Competencies, NACE		6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	isChildOf	Generated at time of Issue	6.1.6.1 "associationType"
Target ID	Co-Curricular Record	Generated at time of Issue	6.1.6.2 "targetId"
Repeat Achievement, Assertion and Association Data (row 47) as many times as needed to reflect your CLR Record. Note - Only 1 instance of each Achievement is needed if the achievement type repeats (e.g., individual engagements, Courses, Competencies, etc.)			

[University of Central Oklahoma – Student Transformational Learning Record \(STLR Snapshot\)](#)

The University of Central Oklahoma’s Student Transformative Learning Record (STLR) process helps develop students’ beyond-disciplinary skills and expand their perspectives of their relationships to self, others, community and environment. The STLR Snapshot is the record of this development.

Roughly half of the student population fit into one or more at-risk categories: first-generation, low-income, underrepresented. Over 80% of students are commuters to campus. The University has a metropolitan mission as a master's comprehensive university of 12,000+ students, a significant portion of whom are older adults returning to higher education.

“Beyond-disciplinary learning” includes employability and citizenship development, for example, and in some ways is what many might term “soft” or “essential” skills. The Transformative Learning approach at UCO, however, means STLR also helps develop students holistically in an intentionally designed process that tracks, assesses, and documents that development. The areas within which that development occurs — UCO's Central Six Tenets — includes one, Disciplinary Knowledge, in which student development is represented on the academic transcript. The other five are areas within which STLR assignments and activities contribute to student growth: Global and Cultural Competencies; Health and Wellness; Leadership; Research, Creative, and Scholarly Activities; and Service Learning and Civic Engagement.

There are rubrics for each of the STLR tenets. STLR engagement in the curriculum occurs when faculty ‘STLR-tag’ an existing assignment with one or more of the STLR tenets by having students provide responses to well-designed reflective prompts that connect the tenet(s) to the assignment. Faculty grade the assignment as usual, then use the tenet rubrics to assess the reflective prompts at one of three levels of achievement: Exposure (lowest), Integration (middle), Transformation (highest). In the co-curriculum, where STLR-tagged activities may have hundreds of students attending, UCO's ID card-swipe system has been integrated with the LMS to auto-assign the lowest level of achievement, Exposure, because all that is known for sure is that the student attended and was exposed to concepts embodied in the tenet(s). Co-curricular events, student groups, outside-of-class projects, on-campus internships, and many other types of STLR co-curricular activity does, however, allow for the collection of reflective artifacts by faculty or staff, and those reflections are assessed with the rubrics.

There is no requirement that students achieve any level in the tenets in order to graduate. Student STLR participation is voluntary, though it has become inevitable as the faculty continually add STLR-tagged assignments to their courses. There is no ‘leveling up’ across STLR achievement levels; because this development is evidence- and rubrics-based, having X number of achievements assessed at one level does not automatically mean that X+1 achievements in that tenet advances one to the next level up — each STLR reflective artifact is assessed against the rubrics.

Students may create different versions of the STLR Snapshots because anything they choose to put into the Snapshot has been vetted by the university. Official STLR Snapshots carry the Registrar's imprint.

STLR Snapshot – Rendered Sample (front and back)

100 N. University Drive
Edmond, OK 73034
FICE = 003152



UNIVERSITY OF
Central Oklahoma

Office of Enrollment Services
124 Nigh University Center
(405) 974-3741
FAX (405) 974-3841

Student Transformative Learning Record



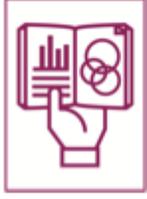
Global and Cultural Competencies		
Transformation	Integration	Exposure
Keen sense of cultural self and an identity as a global citizen has emerged.	Developing sense of cultural self; and relation to the global community.	Beginning awareness of cultural self; openness to learning.



Health and Wellness		
Transformation	Integration	Exposure
A holistic view of health and wellness for self and community is articulated and practiced.	A developing holistic view; some application to self and community with some ability to evaluate own behavior.	Beginning awareness and understanding of health and wellness; initial attempts at personal change.



Leadership		
Transformation	Integration	Exposure
Leadership knowledge and skill are applied effectively to community or campus issues.	Leadership is developing; knowledge and skills are applied at a basic to intermediate level.	Leadership skills are being tried out with increasing understanding.



Research Creative and Scholarly Activities		
Transformation	Integration	Exposure
The "why" and the "how" of research and creation are grasped and show in work.	Relevant inquiry about research and creative process & skills are developing.	Skills in research and the creative process are developing; ideas are beginning to emerge.



Service Learning and Civic Engagement		
Transformation	Integration	Exposure
Deep engagement in the community, both through learning and helping.	Awareness of community issues and the importance of engagement.	First experiences in volunteering and civic interest.

The Student Transformative Learning Record is an accurate reflection of the named student's transformative learning achievements at the University of Central Oklahoma. Information provided in the student's e-portfolio is not curated by the university and is therefore not an official representation of the student's work while enrolled at the University.

ACCREDITATION:
The University of Central Oklahoma is accredited by the Higher Learning Commission/North Central Association of Colleges and Schools as a bachelor's and master's degree granting institution.

NAME CHANGE HISTORY:

1890	Territorial Normal School	1939	Central State College
1904	Central State Normal School	1971	Central State University
1919	Central State Teachers College	1990	University of Central Oklahoma

Step 2: Mapping of Learner Record Data to CLR Standard Elements

Draft- CLR Campus Planning/Mapping Template - V1- Draft			
University of Central Oklahoma STLR Snapshot			
Background		Response	
Author	Jeff King, jking47@uco.edu		
Institution Name	University of Central Oklahoma		
Institution Description	Master's Comprehensive State University, metropolitan-serving, 50%(ish) at-promise student population, 80%+ commuter students, 13,000+ student body		
Learner Description (full/part time, traditional, dual credit, etc.)	All UCO students		
Description of Record (co-curricular record, engagement record, transcript, etc.)	Evidence-based record of student development in one or more of UCO's five beyond-disciplinary Central Tenets: Global & Cultural Competencies; Health & Wellness; Leadership; Research, Creative, and Scholarly Activities; Service Learning and Civic Engagement		
Issuer of Record (Institution, Campus, School, Other unit on campus, etc.)	University of Central Oklahoma		
Primary and Secondary Data Repository(ies) (e.g., SIS, Bolt-on tables to SIS, LMS, Local Developed, Vended, etc.)	SIS and the LMS database housing STLR-relevant data		
Alignment with Learning Outcome or Competency Standard (e.g., CASE, LEAP, etc.)	Tenet rubrics are built on AAC&U VALUE rubrics, but STLR development does not result in any external-accredited or validated criteria		
Credential Rendering (e.g., Digital Badge, Digital Certificate, PDF, etc.)	In-house student user interface to build versions of the STLR Snapshot, which is a student-customized 'picture in time' of STLR beyond-disciplinary development; students can save out PDFs of all versions created, so the Snapshot is a formative tool as well as an end-of-degree document (or multiple versions of the end-of-degree document)		
Achievement, Assertion and Association General Questions			
Who's is the issuing authority of the credential (State Accreditation (degree), Institution, Campus, School, Department, etc.)?	University of Central Oklahoma		
How are your outcomes, milestones, events, engagements, courses, etc., related to the credential(s) being awarded? Are they hierarchical (a set of compiled engagements/activities required to receive an award OR each achievement stands on its own (be attested to separately) but may lead to a higher award OR other....	Each achievement stands on its own, but there are three levels at which an achievement can be assessed: Exposure (bottom level; learner reflection indicates only exposure to the Tenet's concepts), Integration (middle level; learner is beginning to integrate Tenet's concepts into a personal conceptual framework), and Transformation (top level; here's how I will think/act differently', for instance). These levels do not exist in a level-up' environment; they are assessed using STLR rubrics for each reflective artifact instance (i.e., getting X number of assessments at Exposure level does NOT ensure the X+1 engagement in that Tenet automatically assesses at the higher level). IN GENERAL, students build to transformative understandings and internal shifts over time, but in evidence- & rubrics-based aspect of assessment means each assessment stands on its own.		
Are there "potential" conceptual levels, chronological segments, aggregation points, that need to be represented within the record? Does an aspirational award or credential need to be represented in order to structure the events or curriculum supporting it? Examples include, but are not limited to, degree objectives, learning outcomes, certificates, etc.	No, because STLR achievements can stand alone, and there is not any requirement that any student need achieve any particular level in any of our Tenet areas. There is no graduation requirement or even a requirement that students participate in STLR (though it's pretty unavoidable due to the presence of STLR-tagged assignments in classes).		
In addition to your responses to above, are there other factors constituting to our mapping of records to Achievements and how these achievements relate to one another?	Because everything on a student's STLR Snapshot has been vetted by UCO, the fact that students can create multiple versions of our CLR (i.e., STLR Snapshot) differs markedly from academic transcript approaches. Relative to mapping of records to Achievements, it's important to note that one version of a Snapshot created by a student could be markedly different from another, but both are 'correct' because while some different things might be shown on the two Snapshots, ANYTHING a student puts on a Snapshot has been assessed and vetted at UCO. There can be no 'incorrect' or 'incomplete' Snapshot, each Snapshot meets the student's needs at that moment.		
Please describe your mapping of CLR data records to the IMS CLR Achievement Class.	The Achievement type is "Assessment." A STLR Snapshot is comprised of individual assessments of STLR reflective artifacts at a point in time, and those assessments do not connect or roll up to one another in any way. The record of the collection of assessments, though (& versions of it created by learners) represents student engagement across the range of STLR Tenets.		
Please describe how your achievements are related to one another and how you represented the relationship via the Association Class.	The Association type is "Other" because there aren't precedent or other relationships among the various levels of achievement in each Tenet, and the Tenets do not relate to each other in way that connects to a pathway for learner achievement. Each assessment of a learner-produced reflective artifact is a stand-alone statement at that point in time.		
Please describe if you added any additional information to the Assertion class beyond matching learner and achievement?	No		
CLR Record Profile			
Type	Response	Source of Data	CLR Class Description
IssuedON	CLR	Default	6.1.7 "Clr" class
	Any time a student creates a version of her STLR Snapshot.	Generated at time of issue	6.1.7.5 "IssuedOn"
Extension (e.g., internal tracking request number, etc.) - Please explain	A Parchment tracking request # is generated when a student requests a Snapshot, but students can get into the system via the student portal to see their STLR credits at any time. That view shows them all their STLR engagements, the achievement level reached, the Tenet, the place & time earned (e.g., Spring 2021 HIST 1113). Students then select what they want to show on a given version of a Snapshot they send to an employer, for example, and a request for that version is what's sent to Parchment. (Students can save each version for another use if they want.)		
Learner Data			
Family name	Ellician Banner: SPRIDEN_LAST_NAME	6.1.18.8 "name"	
Given name	Ellician Banner: SPRIDEN_FIRST_NAME	6.1.18.8 "name"	
Additional name (e.g., middle name)	Ellician Banner: SPRIDEN_MI	6.1.18.8 "name"	
sourcedID (unique ID for interoperability with other identity systems - if known)	Ellician Banner: SPRIDEN_PIDM	6.1.18.12 "sourcedId"	
student ID (Institutional)	Ellician Banner: SPRIDEN_ID	6.1.18.13 "studentId"	
student birthdate(?)	Ellician Banner: SPBPERS_BIRTH_DATE		
student address	Ellician Banner: SPRADOR_STREET_LINE1 (MA)	6.1.18.3 "address"	
student phone (Optional)	Ellician Banner: SPBTELE_PHONE_NUMBER (MA)	6.1.18.14 "telephone"	
student email	Ellician Banner: GOREMAL_EMAIL_ADDRESS (GOREMAL_PREFERRED_IND)	6.1.18.5 "email"	
student image (Optional)	NA	6.1.18.7 "image"	
CLR Publisher Data			
CLR Publisher (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	Yes, the Regional University System of Oklahoma (RUSO). UCO also is governed by regulations of the Oklahoma State Regents of Higher Education (OSRHE).		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organizational information	Yes, UCO issues the STLR Snapshot, which the Registrar has verified as accurate. Publishing the Snapshot occurs when the student engages with Parchment, our e-transcript vendor, to have the version of the Snapshot she wants to send externally delivered to that recipient (e.g., employer or grad school).		
CLR Publisher			
Issuer of CLR (Institution, campus, etc.)	Office of the Registrar, University of Central Oklahoma	6.1.18.8 "name"	
Issuer ID (Internally defined)	https://www.uco.edu/admissions-aid/enrollment-services/files/online-transcript-request.pdf	6.1.18.1 "id"	
Issuer address, telephone, email, web URL	100 N. University Dr. Edmond, OK 73034	6.1.18.3 "address"	
Issuer image/logo		6.1.18.7 "image"	
Issuer URL	https://www.uco.edu/	6.1.18.15 "url"	
Achievement, Assertion and Association Data			
Achievement 1 (General questions)			
What is the criteria for earning this achievement?	Assessment of the learner's critical reflective artifact against the STLR rubrics for the Tenet(s) to which the assignment or activity connects.		
Does this achievement have a possible range of results or a specific type of result (e.g., assessment score within a range)?	There are three levels of achievement: Exposure (lowest), Integration, Transformation (highest). Levels are assessed by faculty or staff based on rubrics.		
Is this achievement aligned to a skill or standard available in a framework? Describe.	The framework is UCO's Central Six Tenets. One Tenet, Disciplinary Knowledge, relates to Career Readiness (i.e., program-based skills & competencies). The other 5 Tenets are beyond-disciplinary skills/mindsets. The combination of Career Readiness + beyond-disciplinary skills comprise UCO's Institutional Learning Outcomes (ILOs).		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement?	Each Tenet has its own icon in a unique color. (Students assessed at any point at Transformation earn a recognition cord in that color, with these cords worn at graduation just as academic honor cords are worn.)		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	No		
	Response	Source of Data	CLR Class Description

Achievement 1 (CLR Mapping)			
Achievement ID (Internally assigned)			6.1.1.1 "id"
Achievement Label (Name) (?)			
Achievement Description			6.1.1.7 "description"
Achievement Type (See 2nd tab)	assessment		6.1.1.2 "type"
Issuer of Achievement (Issuer ID (Internally defined))	faculty or staff member	LMS course shell or course pseudoshell (for out-of-class & co-curric)	6.1.1.13 "issuer"
Human Code (?)			6.1.1.9 "humanCode"
Credits (if applicable)	N/A		6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)			6.1.1.4 "alignments"
Level (if applicable)			6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain			6.1.1.20 "extensions"
Achievement 1 Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Individual faculty or staff who assigns the achievement level within a Tenet based on assessment against rubrics -- OR -- auto-assignment of lowest achievement level based on exposure only by virtue of attending an event or activity		
Is a start and end date associated with this achievement?	No. There is not a planned pathway for participation in or required achievement of any level of a STLR-tagged assignment or activity. However, if the STLR engagement is an assignment in class, there is a timetable within the class itself for when students submit reflective artifacts that are assessed using STLR rubrics.		
Is a license number issued with this assertion?	No		
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Individual faculty or staff who assigns the achievement level within a Tenet based on assessment against rubrics -- OR -- auto-assignment of lowest achievement level based on exposure only by virtue of attending an event or activity		
What are the learner's specific results ?	Evidence of progress toward beyond-disciplinary skill development and/or perspective transformation in UCO's Tenets as expressed in self-reflective artifacts and assessed using quality rubrics (or auto-assigned at Exposure for mere attendance).		
What evidence is submitted by the learner?	Student's critical reflection artifact (written narrative, PPT, presentation, A/V clip, personal interview, etc.) is necessary to receive Integration- or Transformation-level assessments, but reflective artifacts may also only receive lowest-level of Exposure, which all attendance-only activities automatically generate for the student.		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)?	No		
Does a third party endorse this assertion?	No, except for faculty/staff who assess reflective artifacts, there is no outside credentialing or accrediting body involved.		
Does this assertion expire at a certain date or after a specific time period?	No. As with grades on a transcript, there is no expiration date.		
Can this assertion be revoked ?	No		
Assertions (CLR Mapping)			
	Response	Source of Data	CLR Class Description
Assertion ID			6.1.1.1 "id"
Recipient ID (learner)			6.1.5.12 "recipient"
Achievement ID (Achievement earned)			6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	learning artifacts in form of critical self-reflections	LMS	6.1.5.7 "evidence"
License (if Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	issue date (i.e., date student orders the student-built version of Snapshot)	Generated at time of issue	6.1.5.9 "issuedOn"
Credits	N/A		6.1.5.4 "creditsEarned"
Source (Internship, etc.)			6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked?	no	LMS	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results ID			6.1.20.1 "id"
Results Type	awarded	generated at time of issue	6.1.20.8 "resultType"
Result Value	rubric level awarded	generated at time of assessment	6.1.20.7 "requiredValue"
Result Description	Exposure or Integration or Transformation		6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Association 1 (General questions)			
Associations (CLR Mapping)			
Association ID			
Achievement Type			6.1.6.1 "associationType"
Source ID			??
Target ID			6.1.6.2 "targetId"
Repeat Achievement, Assertion and Association Data (row 46) as many times as need to reflect your CLR Record.			

University of Maryland Global Campus – Comprehensive Learner Record (UMGC CLR)

University of Maryland Global Campus is the largest online public university in the country. More than 80% of UMGC students work full or part time, more than 60% are affiliated with the military and nearly half of UMGC students are parents. The Comprehensive Learner Record provides UMGC students with needed support in being able to articulate their learning within the classroom. The overall nature of the CLR for the UMGC student population is

intended to connect students to the professional opportunities that lead them to seek education through UMGC.

As adult learners, UMGC students start at the Institution with a wealth of prior life and work experience, and this draws into their decision as to why they have decided to seek additional knowledge, skills and abilities through formal education. One of the goals with the UMGC CLR is to capture and show the progression of learning through each project completed, course completed, or badge earned. This gives the student the ability to show and articulate learning that happens throughout the program, not just once the program has been successfully completed. For UMGC students who are already working and connected to an employer, this could support them in their career progression even before a degree is officially completed.

The digital aspect of the CLR gives students the ability to share the work they are doing through social media, and with ease through various electronic means. The language used in the CLR to represent a students' learning in the classroom can be easily translated to resumes, and during interviews. The progressive nature of the document allows students to have a reference and cumulative visual of everything they have learned throughout the program, giving weight to all of their achievements within the program.

Resources: <https://www.umgc.edu/about/about-our-students-and-alumni/index.cfm>

UMGC CLR – Rendered Sample Overview and Badges

The image shows a rendered sample overview and badges for the UMGC Master of Business Administration (MBA) program. The header includes the University of Maryland Global Campus logo and the text "PROGRAM OVERVIEW". The student's name, "Jessica Lynn Cumberland", and the start date, "JAN 1, 2021", are displayed on the left, while the program name, "MASTER OF BUSINESS ADMINISTRATION (MBA)", is on the right. The main content area is divided into three sections: "About The Program", "Courses", and "Program Accreditation".

About The Program

The Master of Business Administration (MBA) degree program at UMGC is designed to develop analytics and leadership skills. The program provides opportunities to work on real-life business problems in teams with faculty, business mentors, and other adult learners from around the world. In the final capstone project, students develop a business idea and prepare a pitch-deck to present to an investor panel. Specialization areas for the MBA degree are available in Business Analytics, Marketing, and Project Quality Management.

Courses 50% Complete

PRO 600	MBA 610	MBA 620	MBA 630	MBA 640	MBA 670
Communicating, Problem Solving, and Leading in Professional Fields	Leading Organizations and People	Financial Decision Making	Leading in the Multicultural Global Environment	Innovation Through Marketing and Technology	Strategic Decision Making
2 Projects	4 Projects	4 Projects			

Program Accreditation

IACBE Accredited

University of Maryland Global Campus has received specialized accreditation for its business programs through the International Accreditation Council for Business Education (IACBE).

36 Total Credits Required

18 Credits Completed

Legend: ■ Complete ■ In Progress ■ Remaining

PAGE x OF x



Jessica Lynn Cumberland
JAN 1, 2021

MASTER OF BUSINESS ADMINISTRATION
(MBA)

10 Projects Completed

Completed Projects



Current Projects

PRO 600

Apply Critical Thinking
Work as a Team

MBA 610

Project 1: Assessing Your Strategic Leadership
Capacity and Potential
Project 2: Situation Audit
Project 3: Culture, Climate, and Ethical Decisions
Project 4: Implementing Virtual Teams

MBA 620

Project 1: Applied Economics for Managers
Project 2: Accounting for Managers
Project 3: Analyzing Financial Reports
Project 4: Finance and Investment Decisions

MBA 630 Leading in the Multicultural Global Environment



Project 1: Introduction to the Legal Environment of Business

In the first project, you will gather information, evaluate the legal questions raised by several cases, and provide a written assessment of, and rationale for, the likely outcomes.



Project 2: Making Decisions That Are Legal and Ethical

In this project, you will analyze complicated issues related to contracts, employment law, and potential civil and criminal liability that have arisen in various subsidiaries of a company. You will produce a report for executives at the company that includes specific recommendations of what action, if any, should be taken based on your analysis and conclusions.



Project 3: Leading Ethically and Legally at Home and Abroad

In this project, you will perform ethical and legal analyses of a business case and provide a report in which you present your analyses and recommendation about what actions, if any, HR should take.



Project 4: Structuring a New Business Venture

In this project, you will research the steps to create and manage a small business, as well as prepare a presentation for potential investors about the legal form and organizational structure for your new business.



Project 5: Managing a Global Business

In the final project in this course, you will work with a team to review several situations involving multinational businesses and evaluate the political, legal, and cultural factors involved. For each case, the team will make specific recommendations on what action, if any, that the CEO should take based on its analysis and conclusions.

PAGE x OF x



Jessica Lynn Cumberland
JAN 1, 2021

MASTER OF BUSINESS ADMINISTRATION
(MBA)



Business Communication

Excellence in Communication: communicate clearly in writing and speaking, meeting expectations for content, purpose, organization, audience, and format.



Organizational Leadership

Excellence in Leadership: set strategic goals for an organization and motivate team members to accomplish these goals.



Global Business

Excellence in Global Business: plan, evaluate and manage the strategic implications of an organization's global operations.

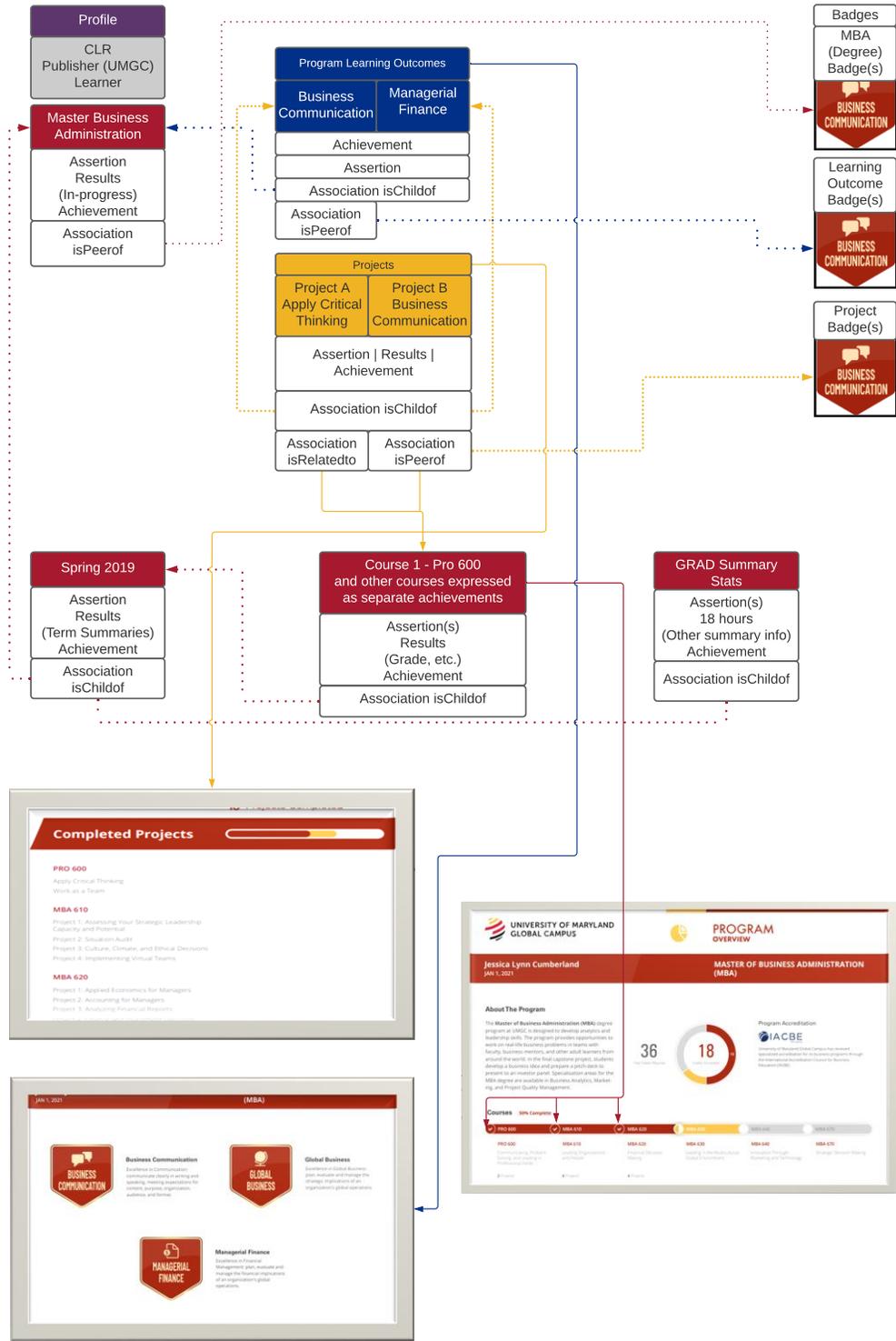


Managerial Finance

Excellence in Financial Management: plan, evaluate and manage the financial implications of an organization's global operations.

PAGE x OF x

Step 1: High-Level Mapping of Record to CLR Standard Elements



Step 2: Mapping of Learner Record Data to CLR Standard Elements

Draft- CLR Campus Planning/Mapping Template Final			
Institution and CLR Title			
Background	Response		
Author	Insiya Bream		
Institution Name	University of Maryland Global Campus		
Institution Description	University of Maryland Global Campus was founded more than 70 years ago to serve working adults and servicemembers. We're an online state university that offers online academic programs in fast-growing and in-demand fields. With no-cost digital course materials in nearly every course, and locations in Maryland and at military installations around the world, we give you the opportunity to earn a respected degree from just about anywhere life takes you.(https://www.umgc.edu/about/index.cfm)		
Learner Description (full/part time, traditional, dual credit, etc.)	<p>the average age of stateside undergraduate students is 31</p> <p>More than 80 percent of UMGC students work full- or part-time</p> <p>Nearly half of UMGC students are parents</p> <p>More than 60 percent of our worldwide student population are military-affiliated</p> <p>28 percent of our students are African-American</p> <p>Minority students constitute 53 percent of total enrollment</p> <p>Minority students earned 52 percent of all UMGC degrees and certificates awarded in FY 2020 (https://www.umgc.edu/about/about-our-students-and-alumni/index.cfm)</p>		
Description of Record (co-curricular record, engagement record, transcript, etc.)	UMGC's CLR is a reflection of learning within the MBA program. The curriculum for the MBA program is an iterative learning process that does have foundations in a CBE learning model and competencies associated directly with the coursework.		
Issuer of Credential (Institution, Campus, School, Other unit on campus, etc.)	University of Maryland Global Campus		
Primary and Secondary Data Repository(ies) (e.g., SIS, Bolt-on tables to SIS, LMS, Local Developed, Vended, etc.)	UMGC houses information from the Learning Management System into a Data Warehouse that is managed by a third party called Heliocampus. The information rendered on the CLR comes directly from the Data Warehouse.		
Alignment with Learning Outcome or Competency Standard (e.g., CASE, LEAP, etc.)	UMGC's CLR will be in line with the IMS Global Standard		
Credential Rendering (e.g., Digital Badge, Digital Certificate, PDF, etc.)	UMGC students will receive a PDF that is generated through Parchment's Credential Builder Platform. The CLR will also represent badges (up to 4) that are issued based on Academic performance in the classroom throughout the program.		
Achievement, Assertion and Association General Questions			
Who is the issuing authority of the credential (State Accreditation (degree), Institution, Campus, School, Department, etc.)?	University of Maryland Global Campus (UMGC)		
Do your achievements (competencies, courses, awards, etc.) have a hierarchical relationship? For example, do competencies roll up to a course or courses roll up to a degree?	Yes. The first level of achievement would be projects. Once successfully completed, these projects roll up into successfully completing courses, successfully earning badges, and successfully completing the program that eventually leads to a degree.		
Do any of your achievements "stand alone" i.e. not roll up to a higher order award or achievement? If your achievements can be both (that is stand alone AND support a higher level award), please explain.	All out our achievements roll up to a higher order		
Are there "potential" conceptual levels, chronological segments (such as a term-based header), aggregation points, that need to be represented within the record?	The record shows a student's progression within the program, noted by project completion, course completion, degree completion and if earned and applicable, the distribution of up to 4 badges.		
Does an aspirational award or credential need to be represented in order to structure the events or curriculum supporting it? Examples include, but are not limited to, degree objectives (student major), higher level learning outcomes e.g., critical thinking), certificates, etc.	The record reflects what the student has accomplished within the program.		
In addition to your responses to above, are there other factors constituting to our mapping of records to Achievements and how these achievements relate to one another?	N/A		
Please describe your mapping to the IMS CLR Achievement Class.	The UMGC CLR reflects learning in the classroom starting with completion of projects within a course, successfully completing a course, successfully completing the program and receiving up to 4 badges representing competencies earned within the MBA program.		
Please describe how your achievements are related to one another and how you represented the relationship via the Association Class.	The UMGC CLR reflects learning in the classroom starting with completion of projects within a course, successfully completing a course, successfully completing the program and receiving up to 4 badges representing competencies earned within the MBA program.		
Please describe if you added any additional information to the Assertion class beyond matching learner and achievement? For example, honors notations, learning artifacts, etc.	Not in this first version		
CLR Record / Package			
	Response	Source of Data	CLR Class Description
Type	CLR	Default	6.1.7 "Cl" class
IssuedON	Date	generated at the time of issue	6.1.7.5 "issuedOn"
Extension (e.g., internal tracking request number, etc.) - Seldom used but if used please explain	N/A	N/A	
Learner Data			
Family name	Family Name	Last Name (SIS)	6.1.18.8 "name"
Given name	Preferred Name	First Name (SIS)	6.1.18.6 "name"
Additional name (e.g. middle name)	Middle (if designated)	Middle (if designated)	6.1.18.8 "name"
student ID (Institutional)	xxxxxxx	Student Identification Number	6.1.18.13 "studentId"
student birthdate (Optional)	N/A	N/A	TBD
student address (Optional) - includes street, locality, region, country, postalcode	N/A	N/A	6.1.18.3 "address"
student phone (Optional)	N/A	N/A	6.1.18.14 "telephone"
student email	N/A	N/A	6.1.18.5 "email"
student image (Optional)	N/A	N/A	6.1.18.7 "image"
CLR Publisher Data			
CLR Publisher (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	University System of Maryland (UMD)		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organization information	UMGC is the issuer, but Parchment is the publisher		
CLR Publisher			
Issuer of CLR (Institution, campus, etc.)	Institution		6.1.18.8 "name"
Issuer address, telephone, email, web URL	3501 University Blvd. East, Adelphi, MD 20783	*this information is not rendered on the CLR	6.1.18.3 "address"
Issuer image/logo			6.1.18.7 "image"
Issuer URL	www.umgc.edu		6.1.18.15 "url"
Achievement, Assertion and Association Data			

Achievement (number) (General questions)		Project Completion		
What is the criteria for earning this achievement?		Earning a meets expectations or higher on a grading Rubric		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?		Meetings expectations or higher on a pre-determined number of projects and/or assignments		
Is this achievement aligned to a skill or standard available in a framework? Describe.		no		
Is this achievement endorsed by a third party? Describe.		no		
Is an image associated with this achievement?		no		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.		no		
		Response	Source of Data	CLR Class Description
Achievement (Number) (CLR Mapping)				
Achievement (Name)	Project Completion	LMS Rubric Information X-Meets or X= exceeds		6.1.1.10 "name"
Achievement Description	Successful completion of projects within a course	Data Warehouse		6.1.1.7 "description"
Achievement Type (See 2nd tab)	Assessment	Data Warehouse		6.1.1.2 "type"
Issuer of Achievement (Issuer ID (Internally defined))	UMGC	Data Warehouse		6.1.1.13 "issuer"
Human Code (Optional)	N/A			6.1.1.9 "humanCode"
Credits (if applicable)	N/A			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)	N/A			6.1.1.4 "alignments"
Level (if applicable)	N/A			6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain	N/A			6.1.1.20 "extensions"
Achievement (Number) Assertion (awarding achievement to a specific learner)				
Assertions (General Questions)				
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?		MBA faculty within UMGCC		
Is a start and end date associated with this achievement?		NO		
Is a license number issued with this assertion?		NO		
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?		MBA faculty within UMGCC		
What are the learner's specific results ?		Awarded		
What evidence is submitted by the learner?		none		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)		none		
Does a third party endorse this assertion?		NO		
Does this assertion expire at a certain date or after a specific time period?		NO		
Can this assertion be revoked ?		Yes		
		Response	Source of Data	CLR Class Description
Assertions (CLR Mapping)				
Recipient ID (learner)	Learner	Generated at the time of Issue		6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Project Completion			6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)				6.1.5.7 "evidence"
License (if Applicable)	N/A			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	N/A			6.1.5.16 "role"
Date issued (IssuedOn)	Issue Date	Generated at the time of Issue		6.1.5.9 "issuedOn"
Credits	N/A			6.1.5.4 "creditsEarned"
Source (Internship, etc.)	N/A			6.1.5.18 "source"
Start Date (if needed)	N/A			6.1.5.19 "startDate"
End Date (if Needed)	N/A			6.1.5.5 "endDate"
Can this assertion be revoked?	N/A			6.1.5.15 "revoked"
Extensions (as needed)	N/A			6.1.5.3 "achievement"
Results Section				
Results Type	Awarded			6.1.20.6 "resultType"
Result Value	Awarded			6.1.20.7 "requiredValue"
Result Description				6.1.19.5 "resultDescription"
Alignments				6.1.20.3 "alignments"
Extensions (as needed - please explain)				
Associations (CLR Mapping)				
Achievement Type	Assessment			6.1.6.1 "associationType"
Target ID				6.1.6.2 "targetId"
Repeat Achievement, Assertion and Association Data (row 47) as many times as needed to reflect your CLR Record. Note - Only 1 instance of each Achievement is needed if the achievement type repeats (e.g., individual engagements, Courses, Competencies, etc.)				
Achievement, Assertion and Association Data (2)				
Achievement (number) (General questions)		Course completion		
What is the criteria for earning this achievement?		Passing Grade		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?				
Is this achievement aligned to a skill or standard available in a framework? Describe.		no		
Is this achievement endorsed by a third party? Describe.		no		
Is an image associated with this achievement?		no		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.		no		
		Response	Source of Data	CLR Class Description
Achievement (Number) (CLR Mapping)				
Achievement (Name)	Course Completion	LMS Rubric Information X-Meets or X= exceeds		6.1.1.10 "name"
Achievement Description	Successful completion of all coursework within a course	Data Warehouse		6.1.1.7 "description"
Achievement Type (See 2nd tab)	Course	Data Warehouse		6.1.1.2 "type"

Issuer of Achievement (Issuer ID (Internally defined))	UMGC	Data Warehouse	6.1.1.13 "issuer"
Human Code (Optional)	N/A		6.1.1.9 "humanCode"
Credits (if applicable)	N/A		6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)	N/A		6.1.1.4 "alignments"
Level (if applicable)	N/A		6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain	N/A		6.1.1.20 "extensions"
Achievement (Number) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?		MBA faculty within UMGCG	
Is a start and end date associated with this achievement?		NO	
Is a license number issued with this assertion?		NO	
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?		MBA faculty within UMGCG	
What are the learner's specific results ?		Awarded	
What evidence is submitted by the learner?		none	
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)		none	
Does a third party endorse this assertion?		NO	
Does this assertion expire at a certain date or after a specific time period?		NO	
Can this assertion be revoked ?		Yes	
	Response	Source of Data	CLR Class Description
Assertions (CLR Mapping)			
Recipient ID (learner)	Learner	Generated at the time of Issue	6.1.5.12 "recipient"
Achievement_ID (Achievement earned)	Course completion	Data Warehouse	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (if Applicable)	N/A		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	N/A		6.1.5.16 "role"
Date issued (IssuedOn)	Issue Date	Generated at the time of Issue	6.1.5.9 "issuedOn"
Credits	N/A		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	N/A		6.1.5.18 "source"
Start Date (if needed)	N/A		6.1.5.19 "startDate"
End Date (if Needed)	N/A		6.1.5.5 "endDate"
Can this assertion be revoked?	N/A		6.1.5.15 "revoked"
Extensions (as needed)	N/A		6.1.5.3 "achievement"
Results Section			
Results Type	Awarded		6.1.20.8 "resultType"
Result Value	Awarded		6.1.20.7 "requiredValue"
Result Description			6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	Assessment		6.1.6.1 "associationType"
Target ID			6.1.6.2 "targetId"
Achievement, Assertion and Association Data (3)			
Achievement (number) (General questions)			
What is the criteria for earning this achievement?		All courses within a program successfully completed	
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?		All courses within a program successfully completed	
Is this achievement aligned to a skill or standard available in a framework? Describe.		no	
Is this achievement endorsed by a third party? Describe.		no	
Is an image associated with this achievement?		no	
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.		no	
	Response	Source of Data	CLR Class Description
Achievement (Number) (CLR Mapping)			
Achievement (Name)	Program Completion	LMS Rubric Information X-Meets or X= exceeds	6.1.1.10 "name"
Achievement Description	Successful completion of all coursework within a program	Data Warehouse	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Degree	Data Warehouse	6.1.1.2 "type"
Issuer of Achievement (Issuer ID (Internally defined))	UMGC	Data Warehouse	6.1.1.13 "issuer"
Human Code (Optional)	N/A		6.1.1.9 "humanCode"
Credits (if applicable)	N/A		6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)	N/A		6.1.1.4 "alignments"
Level (if applicable)	N/A		6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain	N/A		6.1.1.20 "extensions"
Achievement (Number) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?		MBA faculty within UMGCG	
Is a start and end date associated with this achievement?		NO	
Is a license number issued with this assertion?		NO	
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?		MBA faculty within UMGCG	
What are the learner's specific results ?		Awarded	
What evidence is submitted by the learner?		none	
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)		none	
Does a third party endorse this assertion?		NO	
Does this assertion expire at a certain date or after a specific time period?		NO	
Can this assertion be revoked ?		Yes	
	Response	Source of Data	CLR Class Description

Assertions (CLR Mapping)			
Recipient ID (learner)	Learner	Generated at the time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Course completion	Data Warehouse	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (If Applicable)	N/A		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	N/A		6.1.5.16 "role"
Date issued (IssuedOn)	Issue Date	Generated at the time of Issue	6.1.5.9 "issuedOn"
Credits	N/A		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	N/A		6.1.5.18 "source"
Start Date (if needed)	N/A		6.1.5.19 "startDate"
End Date (if Needed)	N/A		6.1.5.5 "endDate"
Can this assertion be revoked?	N/A	yes	6.1.5.15 "revoked"
Extensions (as needed)	N/A		6.1.5.3 "achievement"
Results Section			
Results Type	Awarded		6.1.20.8 "resultType"
Result Value	Awarded		6.1.20.7 "requiredValue"
Result Description			6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	degree		6.1.6.1 "associationType"
Target ID			6.1.6.2 "targetId"
Achievement, Assertion and Association Data (4)			
Achievement (number) (General questions)	Earning a Badge		
What is the criteria for earning this achievement?	Algorithm that defines "meets" or "exceeds" in certain competencies throughout the program		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	All courses within a program successfully completed		
Is this achievement aligned to a skill or standard available in a framework? Describe.	no		
Is this achievement endorsed by a third party? Describe.	no		
Is an image associated with this achievement?	no		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Yes. This is Associated with successfully completing projects throughout the program		
Response		Source of Data	CLR Class Description
Achievement (Number) (CLR Mapping)			
Achievement (Name)	Badge	LMS Rubric Information X-Meets or X= exceeds	6.1.1.10 "name"
Achievement Description	Up to 4 badges can be earned representing competencies represented in the program	Data Warehouse	6.1.1.7 "description"
Achievement Type (See 2nd tab)	Badge	Data Warehouse	6.1.1.2 "type"
Issuer of Achievement (Issuer ID (Internally defined))	UMGC	Data Warehouse	6.1.1.13 "issuer"
Human Code (Optional)	N/A		6.1.1.9 "humanCode"
Credits (if applicable)	N/A		6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)	N/A		6.1.1.4 "alignments"
Level (if applicable)	N/A		6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain	N/A		6.1.1.20 "extensions"
Achievement (Number) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	MBA faculty within UMGCC		
Is a start and end date associated with this achievement?	NO		
Is a license number issued with this assertion?	NO		
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	MBA faculty within UMGCC		
What are the learner's specific results ?	Awarded		
What evidence is submitted by the learner?	none		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	none		
Does a third party endorse this assertion?	NO		
Does this assertion expire at a certain date or after a specific time period?	NO		
Can this assertion be revoked ?	NO		
Response		Source of Data	CLR Class Description
Assertions (CLR Mapping)			
Recipient ID (learner)	Learner	Generated at the time of Issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Earning of Badge	Data Warehouse	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	Rubric Data		6.1.5.7 "evidence"
License (If Applicable)	N/A		6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)	N/A		6.1.5.16 "role"
Date issued (IssuedOn)	Issue Date	Generated at the time of Issue	6.1.5.9 "issuedOn"
Credits	N/A		6.1.5.4 "creditsEarned"
Source (Internship, etc.)	N/A		6.1.5.18 "source"
Start Date (if needed)	N/A		6.1.5.19 "startDate"
End Date (if Needed)	N/A		6.1.5.5 "endDate"
Can this assertion be revoked?	N/A	yes	6.1.5.15 "revoked"
Extensions (as needed)	N/A		6.1.5.3 "achievement"
Results Section			
Results Type	Awarded		6.1.20.8 "resultType"
Result Value	Awarded		6.1.20.7 "requiredValue"
Result Description			6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	Badge		6.1.6.1 "associationType"
Target ID			6.1.6.2 "targetId"

University of North Texas – Career Connect Pathways

The University of North Texas (UNT) is one of the nation's largest public research universities with 40,000+ students. It offers 106 bachelor's, 88 master's, and 37 doctoral degree programs. In 2020, UNT students earned 9,600 degrees last year from its 14 colleges and schools. Ranked a Carnegie Classification Tier One research university, UNT is a catalyst for creativity, fueling progress, innovation, and entrepreneurship for the North Texas region and the state.

UNT's Career Connection program works to empower students to easily connect, track and share the marketable skills that they attain during their educational programs and college experiences. The Texas Coordinating Board governs higher education and mandates that each educational program identify marketable skills for their students. The Career Connect program manifests these skills by mapping them to the assignments completed in individual courses, using Canvas learning management system and Badgr Concentric Sky badging technologies.

The program strives to enable students to make connections among and between their high impact learning experiences and the acquisition of marketable skills. It provides administrators a granular view of student progress (learning outcomes) throughout their course experience(s). The program also works to bridge the skills gap between learning experiences and signals of demonstrated competence to employers.

Tracking student progress and outcomes is done through dashboards. Both students and administrators have dashboards that provide views of progress toward outcomes across eight marketable skills:

- ⇒ Social responsibility
- ⇒ Personal responsibility
- ⇒ Critical thinking
- ⇒ Oral communication
- ⇒ Written communication
- ⇒ Empirical and qualitative skills
- ⇒ Leadership
- ⇒ Teamwork

These skills can then be mapped to the content delivered across academic courses and programs. UNT began its work with the degree in French, demonstrating how students attain them across that curriculum. The plan is to expand these maps across more academic disciplines.

Career Connect Pathways – Administrative Dashboard view

Member: Select Member Manage Groups

Critical Thinking Skill Credential Pathway

990 MEMBERS

473 Not Started	517 In Progress	0 Completed
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Group Progress - 990 members

473 Not Started	517 In Progress	0 Completed
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Published: Apr 7, 2020

About this Pathway

Critical Thinking Skill Credential Pathway

990 MEMBERS

473 Not Started	517 In Progress	0 Completed
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Critical thinking is defined as a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusions.

Completion Badge 0/990

This badge will be automatically awarded when the requirements for

Career Connect Pathways – Student Dashboard view

Dashboard My Badges My Pathways Issues Useful Links MN

Critical Thinking Skill Credential Pathway

990 MEMBERS

473 Not Started	517 In Progress	0 Completed
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Group Progress - 990 members

473 Not Started	517 In Progress	0 Completed
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Published: Apr 7, 2020

About this Element

Counts toward parent completion

Required Badges 2/4

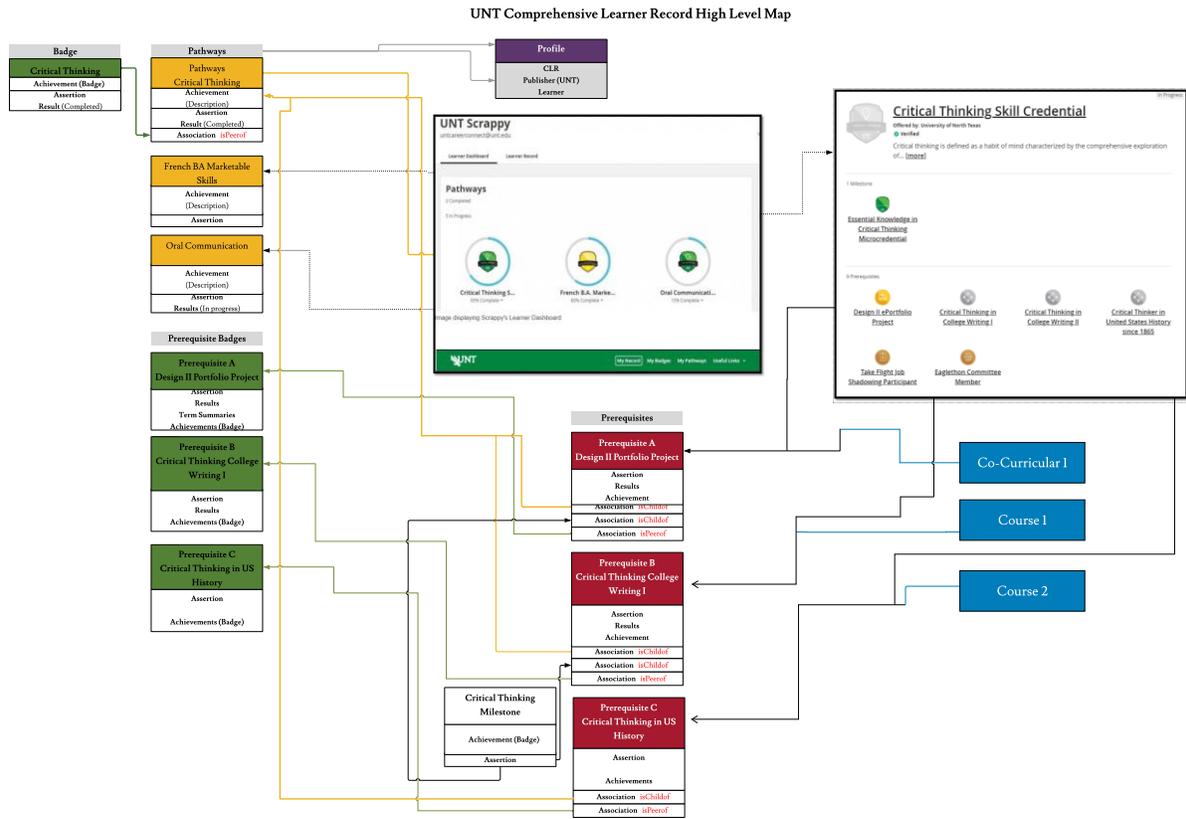
A recipient must have earned 2 of the following badges in order to complete this element.

- Drawing II ePortfolio Project - University of North Texas
- Introduction to Fashion Design ePortfolio Project - University of North Texas
- Design II ePortfolio Project - University of North Texas
- Advocacy In Action Service-Learning Experience - University of North Texas

Selected Element

<https://unt.badgr.com>

Step 1: High-Level Mapping of Record to CLR Standard Elements



Step 2: Mapping of Learner Record Data to CLR Standard Elements

Draft- CLR Campus Planning/Mapping Template - V1- Draft			
Institution and CLR Title			
Background		Response	
Author	Meena Naik		
Institution Name	University of North Texas		
Institution Description	4 year +, Public, Large, Residential, R1, HSI, Enrollment ~40,000		
Learner Description (full/part time, traditional, dual credit, etc.)	Learner is a undergraduate 4-year or transfer student. Both commuter and residential undergraduates, large population of non-traditional and returning learners in addition to traditional students		
Description of Record (co-curricular record, engagement record, transcript, etc.)			
Issuer of Credential (Institution, Campus, School, Other unit on campus, etc.)	university-wide interdisciplinary skills: University of North Texas degree-based skills: the issuing college (College of Liberal Arts and Social Sciences, College of Science, College of Merchandising and Hospitality, etc.)		
Primary and Secondary Data Repository(ies) (e.g., SIS, Bolt-on tables to SIS, LMS, Local Developed, Vended, etc.)	Canvas (LMS), Foliolek (ePortfolio), ITSS/SIS for Sign On and Verification, EIS for identity, and Badgr/Concentric Sky to award and issue open-badger assertions and achievements and to track longitudinal skill attainment		
Alignment with Learning Outcome or Competency Standard (e.g., CASE, LEAP, etc.)	There are two credential types: one credential is based on evaluations on modified AAC&U VALUE Rubrics, Texas LEAP frameworks, and is crosswalked to other competency standards (e.g., NACE). The other are degree-based skills that are mapped to industry based standards and certifications.		
Credential Rendering (e.g., Digital Badge, Digital Certificate, PDF, etc.)	All assertions are rendered as a digital open badge (2.0) standard on a record that contains visualizations of pathway completion, wherein a pathway is a collection of individual microcredentials.		
Achievement, Assertion and Association General Questions			
Who is the issuing authority of the credential (State Accreditation (degree), Institution, Campus, School, Department, etc.)?	UNT Career Connect within the Office of the Provost (Curricular Innovation and Academic Partnerships) on behalf of UNT and/or the issuing College		
Do your achievements (competencies, courses, awards, etc.) have a hierarchical relationship? For example, do competencies roll up to a course or courses roll up to a degree?	Individual achievements are stacked to additional credentials. For university-wide credentials, 5 foundation experiences and 3 individually assessed exploration experiences at threshold levels result in an essential knowledge microcredential; 2 individually assessed integration experiences result in a demonstrated proficiency skill credential. Earning both results in an overall skill attainment credential awarded by and endorsed by the University. Degree specific are more variable but generally occur through longitudinal assessment of pre-determined signature assignments that contribute to degree-based skill proficiency. Each skill under a degree can be earned discretely based on pre-requisite assignments/assessments, and together will result in an overall skill credential based on the degree itself.		
Do any of your achievements "stand alone" i.e. not roll up to a higher order award or achievement?	Each skill (with it's own hierarchical structure) can be earned individually. A student can earn one skill achievement from an experience and while not earning another skill, and therefore can demonstrate proficiency and be awarded a skill attainment credential in one skill but not another. If those are not earned, the student can still carry each individual experience-based skill assertion on its own without the overall credential ever being earned.		
Are there "potential" conceptual levels, chronological segments (such as a term-based header), aggregation points, that need to be represented within the record?	Aggregation points are by level (foundation vs. exploration vs. integration) and are not by term or chronological		
Does an aspirational award or credential need to be represented in order to structure the events or curriculum supporting it? Examples include, but are not limited to, degree objectives, learning outcomes, certificates, etc.			
In addition to your responses to above, are there other factors constituting to our mapping of records to Achievements and how these achievements relate to one another?	For university-wide skills: all experiences (taking place in courses or co-curriculars) must use a common rubric for a skill, and occur through a HIP-based learning. These are mapped into predefined pathway based on the rigor of the learning experience (determining level). For degree-based skills: skills are identified and linked to individual assignments in courses that are individually assessed with minimum scores triggering an assertion in a predefined pathway that stacks each individual microcredential to build up to overall skill achievements through degrees.		
Please describe your mapping to the IMS CLR Achievement Class.	Digital Badges = microcredentials		
Please describe how your achievements are related to one another and how you represented the relationship via the Association Class.	Individually assessed experiences and assertions are children of the skill microcredential; each skill microcredential is a child of the overall skill credential (UNT wide) Individually assessed experiences is a child of each degree-based skill microcredential; each degree-based skill microcredential is related to the overall degree skill credential.		
Please describe if you added any additional information to the Assertion class beyond matching learner and achievement? For example, honors notations, learning artifacts, etc.			
CLR Record / Package			
	Response	Source of Data	CLR Class Description
Type	CLR	Default	6.1.7 "Cl" class
IssuedOn	Date	Generated at time of assessment and/or assertion (manual)	6.1.7.5 "issuedOn"
Extension (e.g., internal tracking request number, etc.) - Seldom used but if used please explain			
Learner Data			
Family name	Family Name	Last Name (EIS/SIS)	6.1.18.8 "name"
Given name	Given Name	First Name (EIS/SIS)	6.1.18.8 "name"
Additional name (e.g. middle name)			6.1.18.8 "name"
student ID (Institutional)	abc1234	Enterprise Unique Identifier (EIS/SIS)	6.1.18.13 "studentId"
student birthdate (Optional)			TBD
student address (Optional) - includes street, locality, region, country, postalcode			6.1.18.3 "address"
student phone (Optional)			6.1.18.14 "telephone"
student email	abc1234@unt.edu and/or firstlast@my.unt.edu	Student email Address/Alised Email Address (EIS/SIS)	6.1.18.5 "email"
student image (Optional)			6.1.18.7 "image"
CLR Publisher Data			
CLR Publisher (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	University of North Texas		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organization information	The credential is published by UNT Career Connect on behalf of the issuing authority. The validation/assessment generating the assertion is done by staff and/or faculty on a common rubric		
CLR Publisher			
Issuer of CLR (Institution, campus, etc.)	University of North Texas and/or College for degree		6.1.18.8 "name"
Issuer address, telephone, email, web URL	UNT Address, marketableskills@unt.edu; no phone		6.1.18.3 "address"
Issuer image/logo	UNT brand or College Brand		6.1.18.7 "image"
Issuer URL	unt.edu or any college page (class.unt.edu or engineering.unt.edu etc.)		6.1.18.15 "url"
Achievement, Assertion and Association Data			
Achievement (number) (General questions)			
What is the criteria for earning this achievement?	UNT-wide - yes: proficient or higher on a common rubric (AAC&U and/or UNT core rubric) Degree-Based: yes, threshold on individual assessments pre-set by department		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No; threshold is a minimum score only		
Is this achievement aligned to a skill or standard available in a framework? Describe.	UNT wide: AACU Value, LEAP		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement?	microcredential Image, yes.		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Yes - part of stack towards next tier microcredential		
	Response	Source of Data	CLR Class Description
Achievement (Number) (CLR Mapping)			

Achievement (Name)	Skill in Experience	Badgr	6.1.1.10 "name"
Achievement Description			6.1.1.7 "description"
Achievement Type (See 2nd tab)	Assessment	Badgr	6.1.1.2 "type"
Issuer of Achievement (Issuer ID (Internally defined))	UNT and/or College	Badgr	6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)	EMSI (and in some cases, Credential Registry)	Badgr	6.1.1.4 "alignments"
Level (if applicable)			6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain			6.1.1.20 "extensions"
Achievement (Number) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Staff/Faculty at UNT or external supervisors (e.g. internships) evaluate students on a common/AACU rubric for any skill aligned with the HIP experience or on the appropriate learning/experience requirements		
Is a start and end date associated with this achievement?	No		
Is a license number issued with this assertion?	No		
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Staff/Faculty at UNT or external supervisors (e.g. internships) evaluate students on a common/AACU rubric for any skill aligned with the HIP experience		
What are the learner's specific results ?	Skill attainment (UNT-wide or degree-based)		
What evidence is submitted by the learner?	Artifacts related to the learning experience		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	Possible but not required		
Does a third party endorse this assertion?	No		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes		
	Response	Source of Data	CLR Class Description
Assertions (CLR Mapping)			
Recipient ID (learner)	Learner	Generated at time of issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	Experience-based skill microcredential	Staff/Faculty Assessment on Common Rubric via Canvas LMS or Foliolet	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)			6.1.5.7 "evidence"
License (if Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Issue Date	Generated at time of assessment and/or assertion (manual)	6.1.5.9 "issuedOn"
Credits			6.1.5.4 "creditsEarned"
Source (Internship, etc.)	Experience Skill Evaluation	Generated at time of issue	6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked ?	Yes	Generated at time of issue	6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Completed	Generated at time of issue	6.1.20.8 "resultType"
Result Value	Designated Competency in experience	Generated at time of issue	6.1.20.7 "requiredValue"
Result Description			6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	isChildof	Generated at time of issue	6.1.6.1 "associationType"
Target ID	CLR	Generated at time of issue	6.1.6.2 "targetId"
Achievement Type	isChildof	Generated at time of issue	6.1.6.1 "associationType"
Target ID	Milestone (skill credential)	Generated at time of issue	6.1.6.2 "targetId"
Achievement Type	isPeerof	Generated at time of issue	6.1.6.1 "associationType"
Target ID	Experience-based skill microcredential	Generated at time of issue	6.1.6.2 "targetId"
Achievement, Assertion and Association Data			
Achievement (number) (General questions)			
What is the criteria for earning this achievement?	Predetermined value of prerequisite achievements (e.g. 3 exploration or 2 integration)		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No		
Is this achievement aligned to a skill or standard available in a framework? Describe.	UNT wide: AACU Value, LEAP		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement?	microcredential image, yes.		
Is this achievement associated with another achievement such as a sub-achievement or prerequisite? Describe.	Yes, counts as part of 2nd level stack towards final credential		
	Response	Source of Data	CLR Class Description
Achievement (Number) (CLR Mapping)			
Achievement (Name)	Skill Proficiency - Demonstrated or Knowledge	Badgr	6.1.1.10 "name"
Achievement Description			6.1.1.7 "description"
Achievement Type (See 2nd tab)	Badge	Badgr	6.1.1.2 "type"
Issuer of Achievement (Issuer ID (Internally defined))	UNT and/or College	Badgr	6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)	CASE, EMSI, and/or Credential Registry	Generated at time of issue	6.1.1.4 "alignments"
Level (if applicable)			6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain			6.1.1.20 "extensions"
Achievement (Number) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	None, generated based on prerequisite assertions		
Is a start and end date associated with this achievement?	No		

Western Governors University – Bachelor of Science in Business Administration Micro-Credentials

Western Governors University is an online, competency-based education institution, founded to expand access to higher education for underserved communities, including working adults who have some college but no degree. The University has traditionally offered degree programs. It intends to add additional worth and modularity to its programs, enabling students to obtain incremental value throughout their learning journey in the form of skills-based competencies that are aligned to labor market needs and expressed through a set of four open standards, which are referred to as the Diamond of Interoperability.

The students in the largest of the pilot programs incorporating these standards are full-time undergraduate students in the College of Business. The median age of a WGU student is 37, and 82% of all students work while being enrolled full-time. Of those employed, 70% are working full-time. 65% of all students are female while 69% of all students are from one or more underserved populations, including first-generation college students, students of color, low-income earners and rural residents.

In the Bachelor of Science in Business Administration (BSBA) program, learning is captured in a set of micro-credentials. These reflect different emphases within the context of the degree, such as business essentials and human resource management. Underneath each micro-credential are a list of competencies that have been aligned to skills using the Rich Skills Descriptor schema developed by WGU in partnership with the Open Skills Network.

BSBA Micro-Credential – Rendered Sample

Managing Cloud Security

Accepted

Course

Decline

Organization Information

Credentials Details

Relationships & Alignments

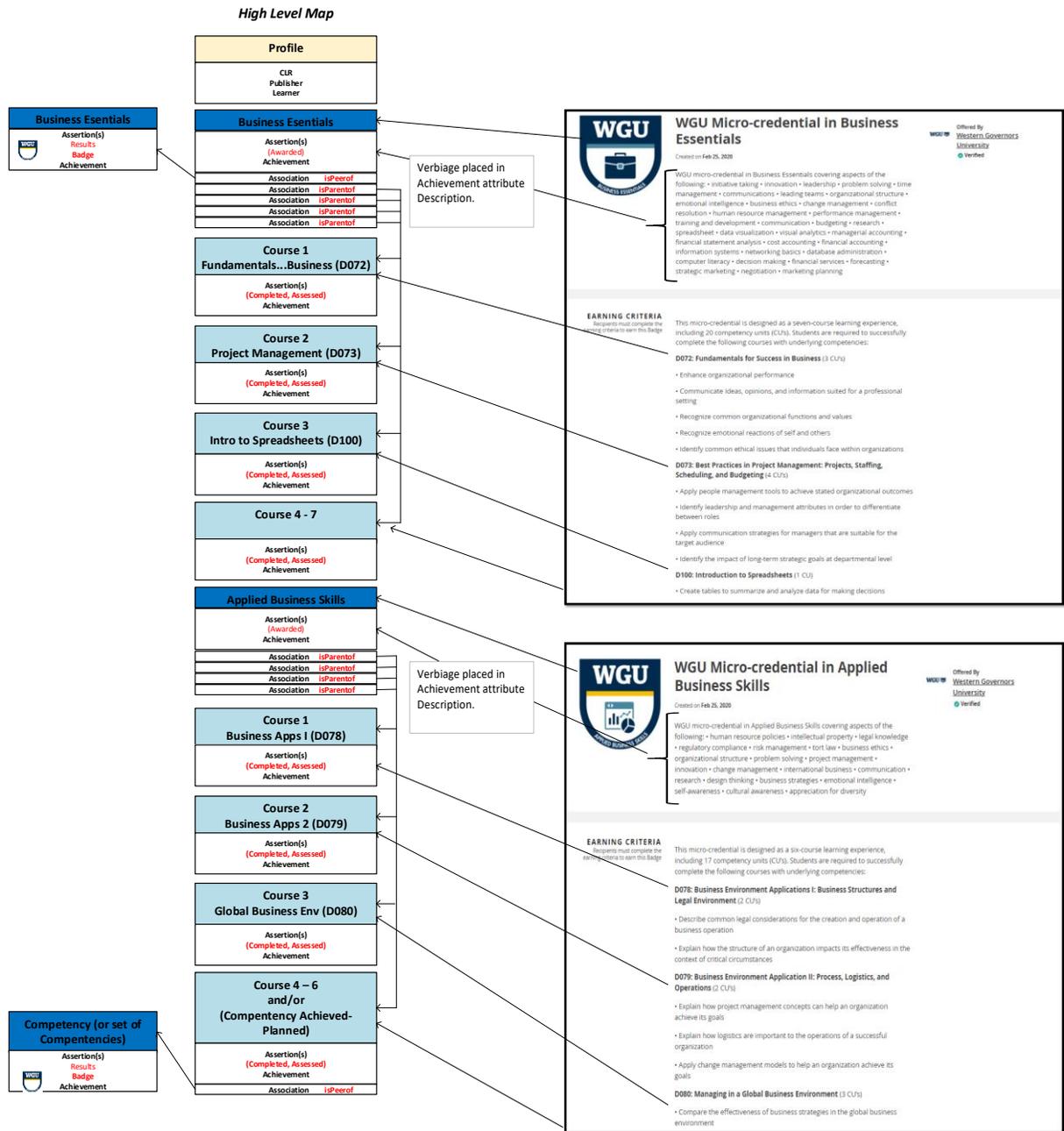


Course Description

Managing Cloud Security will prepare students to design solutions for cloud-based platforms and operations that maintain data availability while protecting the confidentiality and integrity of information. Many of today's companies and organizations have outsourced data management, availability, and operational processes through cloud computing. Topics include security controls, disaster recovery plans, and continuity management plans that address physical, logical, and human factors.

<p style="margin: 0; font-size: 0.8em;">Field of Study / Concentration Area</p> <p style="margin: 0; font-size: 0.8em;">Info Assurance & Security</p>	<p style="margin: 0; font-size: 0.8em;">Credits / Competency Units</p> <p style="margin: 0; font-size: 0.8em;">4</p>	<p style="margin: 0; font-size: 0.8em;">Credits Earned by Student</p> <p style="margin: 0; font-size: 0.8em;">4</p>
<p style="margin: 0; font-size: 0.8em;">Type of Grade Scale for Course</p> <p style="margin: 0; font-size: 0.8em;">RubricScore</p>	<p style="margin: 0; font-size: 0.8em;">Grade Earned for Course</p> <p style="margin: 0; font-size: 0.8em;">Passed</p>	<p style="margin: 0; font-size: 0.8em;">Course Number or Code</p> <p style="margin: 0; font-size: 0.8em;">C838</p>
<p style="margin: 0; font-size: 0.8em;">Degree Number or Code</p> <p style="margin: 0; font-size: 0.8em;">C838</p>	<p style="margin: 0; font-size: 0.8em;">Course Name or Title</p> <p style="margin: 0; font-size: 0.8em;">Managing Cloud Security</p>	<p style="margin: 0; font-size: 0.8em;">Date of Achievement/Badge Earned</p> <p style="margin: 0; font-size: 0.8em;">Sep 30, 2020</p>
<p style="margin: 0; font-size: 0.8em;">Issuer</p> <p style="margin: 0; font-size: 0.8em;">Western Governors University</p>	<p style="margin: 0; font-size: 0.8em;">Level of Achievement</p> <p style="margin: 0; font-size: 0.8em;">Bachelors</p>	<p style="margin: 0; font-size: 0.8em;">Course Requirements</p> <p style="margin: 0; font-size: 0.8em;">Validate Plans for a Secure Cloud Infrastructure • Critique Plans to Secure and Manage Cloud Operations • Manage the Critical Requirements of Cloud Architecture • Describe Legal and Compliance Requirements of Cloud Operations • Create Secured Network Solutions • Examine Security in Cloud Software</p>
<p style="margin: 0; font-size: 0.8em;">Unique ID/URI</p> <p style="margin: 0; font-size: 0.8em;">urn:uuid:urn:uuid:b5ecd55c-3f9a-40cf-84cd-9c934b048033</p>	<p style="margin: 0; font-size: 0.8em;">Badge Narrative</p> <p style="margin: 0; font-size: 0.8em;">Student has successfully passed the requirements for this achievement,</p>	

Step 1: High-Level Mapping of Record to CLR Standard Elements



Step 2: Mapping of Learner Record Data to CLR Standard Elements

Draft- CLR Campus Planning/Mapping Template - V1- Draft			
Western Governors University - BSBA Micro-Credentials			
Background		Response	
Author	Lesley Cotta		
Institution Name	Western Governors University		
Institution Description	4+ year, Private, Not-for-Profit, Enrollment 140,000+, Competency-Based Education		
Learner Description (full/part time, traditional, dual credit, etc.)	Learner is a full-time student pursuing an undergraduate degree		
Description of Record (co-curricular record, engagement record, transcript, etc.)	A suite of Micro-Credentials have been embedded into several undergraduate programs and, as learners complete bundles of courses in a specific subject matter area, are awarded to the student. The Micro-Credentials enable the learner to represent their achievement to third-parties and each Micro-Credential underscores the underlying competencies and skills that are aligned to the courses that the learner completed. Anyone who authenticates the credential is able to view the earning criteria and the credential is able to be shared via JSON and to various social media platforms, including LinkedIn.		
Issuer of Credential (Institution, Campus, School, Other unit on campus, etc.)	The Office of the Registrar		
Primary and Secondary Data Repository(ies) (e.g., SIS, Badgr on tables to SIS, LMS, Local Developed, Vended, etc.)	SIS and CRM		
Alignment with Learning Outcome or Competency Standard (e.g., CASE, LEAP, etc.)	None currently but working towards CASE		
Credential Rendering (e.g., Digital Badge, Digital Certificate, PDF, etc.)	Digital Badge and transcribed		
Achievement, Assertion and Association General Questions			
Who is the issuing authority of the credential (State Accreditation (degree), Institution, Campus, School, Department, etc.)?	The Office of the Registrar under the auspice of the Director of Academic Records and Credentials		
Do your achievements (competencies, courses, awards, etc.) have a hierarchical relationship? For example, do competencies roll up to a course or courses roll up to a degree?	Yes, we have a modular structure with relationships working from the top down, such that a degree may be parent to micro-credential(s), course(s) and competency level achievements. The micro-credential may be parent to course(s) and competency. The course may be parent to competencies. Competencies are the smallest level and do not have children.		
Do any of your achievements "stand alone" i.e. not roll up to a higher order award or achievement?	Yes.		
Are there "potential" conceptual levels, chronological segments (such as a term-based header), aggregation points, that need to be represented within the record?	Not at this time		
Does an aspirational award or credential need to be represented in order to structure the events or curriculum supporting it? Examples include, but are not limited to, degree objectives, learning outcomes, certificates, etc.	No		
In addition to your responses to above, are there other factors constituting to our mapping of records to Achievements and how these achievements relate to one another?	No		
Please describe your mapping to the IMS CLR Achievement Class.	There are digital badges awarded when a micro-credential (certificate-level achievement) is earned.		
Please describe how your achievements are related to one another and how you represented the relationship via the Association Class.	The micro-credentials are parents to the course bundles		
Please describe if you added any additional information to the Assertion class beyond matching learner and achievement? For example, honors notations, learning artifacts, etc.	Not at this time		
CLR Record / Package			
	Response	Source of Data	CLR Class Description
Type	CLR	Default	6.1.7 "Clr" class
IssuedON	Date	Generated at time of issue	6.1.7.5 "issuedOn"
Extension (e.g., internal tracking request number, etc.) - Seldom used but if used please explain			
Learner Data			
Family name	Family Name	Last Name (SIS)	6.1.18.8 "name"
Given name	Given Name	Preferred Name (SIS)	6.1.18.8 "name"
Additional name (e.g. middle name)			6.1.18.8 "name"
student ID (Institutional)	123456789	Banner ID (SIS)	6.1.18.13 "studentId"
student birthdate (Optional)			TBD
student address (Optional) - includes street, locality, region, country, postal code			6.1.18.3 "address"
student phone (Optional)			6.1.18.14 "telephone"
student email	student@wgu.edu	Student Email Address (SIS)	6.1.18.5 "email"
student image (Optional)			6.1.18.7 "image"
CLR Publisher Data			
CLR Publisher (General Question)			
Is there an organization that this issuer belongs to? (e.g. university system)	Western Governors University		
Is the issuer of the credential also the publisher? For example, a school may be the issuer of the credential, but the Registrar is the publisher. If not, please provide additional organization information	Yes		
CLR Publisher			
Issuer of CLR (Institution, campus, etc.)	Office of the Registrar, Western Governors University	Generated at time of issue	6.1.18.8 "name"
Issuer address, telephone, email, web URL	registrar@wgu.edu	Generated at time of issue	6.1.18.3 "address"
Issuer image/logo	https://api.badgr.io/public/issuers/UP3FmZ9nS0amwFynM_5yUA/image		6.1.18.7 "image"
Issuer URL	https://www.wgu.edu/		6.1.18.15 "url"
Achievement, Assertion and Association Data			
Achievement (number) (General questions)			
What is the criteria for earning this achievement?	Successfully passing all courses in the associated course bundle of which this achievement is the parent of		
Does this achievement have a possible range of results or a specific type of result (e.g. assessment score within a range)?	No		
Is this achievement aligned to a skill or standard available in a framework?	Yes, aligned to skills in a RSD (Rich Skill Descriptor) framework.		
Is this achievement endorsed by a third party? Describe.	No		
Is an image associated with this achievement?	Yes		
Is this achievement associated with another achievement such as a sub-achievement or a parent achievement?	Not at this time		
	Response	Source of Data	CLR Class Description
Achievement (Number) (CLR Mapping)			

Achievement (Name)	WGU Micro-credential in Business Essentials	Experience Category = 'CERT'	6.1.1.10 "name"
Achievement Description	Business Essentials micro-credential from Western Governors University		6.1.1.7 "description"
Achievement Type (See 2nd tab)	Certificate	Generated at time of issue	6.1.1.2 "type"
Issuer of Achievement (Issuer ID (Internally defined))	Office of the Registrar, email	Generated at time of issue	6.1.1.13 "issuer"
Human Code (Optional)			6.1.1.9 "humanCode"
Credits (if applicable)			6.1.1.6 "creditsAvailable"
Alignments (e.g., CASE)	Rich Skills Descriptors from OSMT		6.1.1.4 "alignments"
Level (if applicable)	Bachelor's		6.1.1.14 "level"
Extensions (e.g., School/Department Name, etc.) - Please explain			6.1.1.20 "extensions"
Achievement (Number) Assertion (awarding achievement to a specific learner)			
Assertions (General Questions)			
What entity is the source of this assertion (e.g. org or person that assessed the achievement)?	Office of the Registrar		
Is a start and end date associated with this achievement?	No		
Is a license number issued with this assertion?	No		
What are the learner's specific results ?	Awarded		
What evidence is submitted by the learner?	None		
Did the learner have a specific role or title with this achievement (e.g. President, Intern, Captain, etc.)	No		
Does a third party endorse this assertion?	No		
Does this assertion expire at a certain date or after a specific time period?	No		
Can this assertion be revoked ?	Yes		
	Response	Source of Data	CLR Class Description
Assertions (CLR Mapping)			
Recipient ID (learner)	Learner	Generated at time of issue	6.1.5.12 "recipient"
Achievement ID (Achievement earned)	WGU Micro-credential in Business Essentials	Experience Category = 'CERT'	6.1.5.3 "achievement"
Evidence (e.g., URL, Learning Artifacts, etc.)	https://badgr.com/public/badges/nwFPa8i5QjvurqCV-7M-l-w		6.1.5.7 "evidence"
License (if Applicable)			6.1.5.10 "licenseNumber"
Role (if appropriate - e.g., President, civic advocate, etc.)			6.1.5.16 "role"
Date issued (IssuedOn)	Issue Date	Generated at time of issue	6.1.5.9 "issuedOn"
Credits			6.1.5.4 "creditsEarned"
Source (Internship, etc.)			6.1.5.18 "source"
Start Date (if needed)			6.1.5.19 "startDate"
End Date (if Needed)			6.1.5.5 "endDate"
Can this assertion be revoked ?	Yes		6.1.5.15 "revoked"
Extensions (as needed)			6.1.5.3 "achievement"
Results Section			
Results Type	Awarded	Generated at time of issue	6.1.20.8 "resultType"
Result Value	Passed	Generated at time of issue	6.1.20.7 "requiredValue"
Result Description			6.1.19.5 "resultDescription"
Alignments			6.1.20.3 "alignments"
Extensions (as needed - please explain)			
Associations (CLR Mapping)			
Achievement Type	Badge		6.1.6.1 "associationType"
Target ID			6.1.6.2 "targetId"
Repeat Achievement, Assertion and Association Data (row 47) as many times as needed to reflect your CLR Record. Note - Only 1 instance of each Achievement is needed if the achievement type repeats (e.g., individual engagements, Courses, Competencies, etc.)			

Conclusion

The Comprehensive Learner Record (CLR) is an evolving credential that will continue to be innovated by new and existing users to reflect the educational programs of institutions, and the needs of learners. As that occurs, the Standard may also need to evolve and users will need to stay abreast of updates, if and when they occur.

Additional areas for CLR issuers to watch are the emerging digital credentials from employment and the military. The latter represents millions of learners whose training and education needs to be integrated into education records in a more robust and seamless manner. The former represents up to 200 million people in the United States alone who may begin to present digital credentials with learning outcomes and evidence of learning. These, too, will need to be

considered by higher education institutions as they seek to enroll and educate adult learners. The United States Chamber of Commerce Foundation has established a T3 Network to coordinate the interests of business with those of the military and higher education. By following the T3 Network, higher education practitioners can stay abreast of the emergence of these new record types and prepare for their consideration toward educational credentials.

Finally, America is not alone in pursuing digital credentials in higher, tertiary or further education. Nearly every developed nation is also pursuing the production and exchange of their credentials. Networks have formed and it will be vital for the mobility of learners to have access to place their digital credentials into one or more global networks, and for the United States to receive these as easily as we receive digital transcripts from American institutions today.

While this is a fast-paced environment, there are three global networks to consider today. The first is the Groningen Declaration Network, formed by countries and systems that were interested in fostering student mobility and the use of digital credentials. The second is the Europass network, which is working to provide digital mobility of higher education credentials across the European Union. The third is the IEEE Standards Association Integrated Learner Records Working Group. This multinational task force is working to link together many of the initiatives in other global regions and establish an international protocol for records exchange between networks.

Appendix A. Resources

Overview of the IMS Global CLR Standard

<https://www.imsglobal.org/spec/clar/v1p0/cert#comprehensive-learner-record-clar-standard-conformance>

AACRAO Review of the IMS Global CLR Standard

[https://www.aacrao.org/docs/default-source/signature-initiative-docs/clar/guidance-on-the-review-of-the-comprehensive-learner-records-\(clar\)-standard-from-ims-global_released05052020.pdf](https://www.aacrao.org/docs/default-source/signature-initiative-docs/clar/guidance-on-the-review-of-the-comprehensive-learner-records-(clar)-standard-from-ims-global_released05052020.pdf)

AACRAO Comprehensive Learner Record Phase II Report

[https://www.aacrao.org/resources/newsletters-blogs/aacrao-connect/article/comprehensive-learner-record-\(clar\)-phase-ii-report-is-out-now](https://www.aacrao.org/resources/newsletters-blogs/aacrao-connect/article/comprehensive-learner-record-(clar)-phase-ii-report-is-out-now)

AACRAO Comprehensive Student (now Learner) Record Phase I Report

https://www.aacrao.org/docs/default-source/signature-initiative-docs/clar/comprehensive-student-record-project-final-report-9_2017---pub-version.pdf?sfvrsn=19401bf4_2

AACRAO CLR Data Integration Workgroup White Paper

https://www.aacrao.org/docs/default-source/signature-initiative-docs/clar/data-integration-white-paper-9_2018.pdf?sfvrsn=229bbe8c_2

Appendix B. Workgroup Member Roster

First Name	Last Name	Institution	Title
Mark	McConahay	Indiana University	Assistant Provost and University Registrar, Workgroup Chair
Jeff	King	Central Oklahoma University	Executive Director, Center for Transformational Learning
Rock	McCaskill	Clemson University	Associate Registrar for Operations, AACRAO Board of Directors
Rodney	Parks	Elon University	University Registrar
Justine	Nienow	Elon University	Senior Assistant Registrar for Technology
Patrick	Elliott	Hartford Community College	AVP Enrollment Management
Jeff	Bohrer	IMS Global	Technical Program Manager
Mark	Leuba	IMS Global	Vice President, Product Management
Laura	Wankel	Northeastern University/NASPA	AACRAO Consulting, Northeastern U
Tuan An	Doh	San Francisco State University	Director of ERP and Business Intelligence
Cindy	Lyons	University of California San Diego	University Registrar
Kristi	Wold-McCormick	University of Colorado	University Registrar, AACRAO Board of Directors
Insiya	Bream	University of Maryland Global Campus	Registrar
Meena	Naik	University of North Texas	Program Director, Academic Affairs
Tim	Amyx	Volunteer State Community College	Registrar and Director of Admissions
Lesley	Cotita	Western Governors University	Lead Business Owner
Tom	Green	AACRAO	Associate Executive Director, Workgroup staff

Appendix C. Attributions and Thanks

Colleagues from Indiana University Bloomington whose expertise, hard work and dedication contributed to the support of the workgroup and the IUB implementation of the IMS Global CLR Standard:

- Ethan Bernhardt, Senior Associate Director, Office of Strategic Planning and Research
- Erika Knudsen, Associate Registrar, Office of the Registrar
- Clint McElroy, Systems Analyst/Programmer, Office of Strategic Planning and Research

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