



National Center and State Collaborative

Managing Assessment Assets In a Changing Assessment Landscape

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Center for Assessment

This report provides an external management perspective to support cooperating state discussions of options now and into the future, based on the experiences of the NCSC Project and the context of the larger field. The views and opinions expressed in the report are those of the author and do not necessarily reflect the official policy or position of the NCSC project or partners.

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Purpose

The National Center and State Collaborative (NCSC) was one of four assessment consortium projects funded by the U.S. Department of Education to produce next generation assessment systems featuring high quality summative assessments as well as additional interim, formative, and/or instructional resources to support the implementation of college- and career-readiness content standards. NCSC, a collaboration of five national centers and more than two dozen states, was funded through the General Supervision Enhancement Grants (GSEG) program to develop an alternate assessment based on alternate achievement standards (AA-AAS) to measure academic achievement for students with significant cognitive disabilities. A self-described goal of the project was to develop an AA-AAS that would complement the work of the two state assessment consortia funded by the U.S. Department of Education through the Race to the Top Assessment program (RTTA), the Smarter Balanced Assessment Consortium (Smarter Balanced) and the Partnership for the Assessment of Readiness for College and Careers (PARCC).

As the end of the federally funded projects approached, NCSC and the other assessment consortium projects were faced with three critical tasks to fulfill their grant requirements as well as to meet the needs of the participating states:

- Produce a high-quality summative assessment system ready to be administered operationally by states during the 2014-2015 school year.
- Determine whether or how the project and consortium of states would function following the end of grant period.
- Ensure that assessment materials developed through the federally funded grant were available to states following the end of the grant period.

By the time 2014-2015 approached, it had become obvious that accomplishing all three of those tasks in a coherent manner involved much more than managing an operational state assessment program. Individual states had unique needs, constraints, and ways in which they wished to use the assessment materials produced by the project. Issues about what constitutes an assessment and assessment program that have simmered since the beginning of the No Child Left Behind (NCLB) era were brought to the surface. As occurred with the shift from commercial, off-the-shelf tests to custom-designed state assessments there was a change in the roles of the key players in the assessment process. And all of this is occurring in an environment in which the nature of assessments is changing as assessments are expected to measure more complex skills, are being held to higher standards of quality, and are being impacted by increased uses of technology. The combination of those factors has produced both unprecedented opportunities and technical challenges regarding the way that people conceive of assessment programs and the management of assessment materials.

The purpose of this report is to describe and discuss options for managing assessment assets developed by and/or for an assessment program. In doing so, we begin by discussing assessment assets in the context of the substantive ways in which the nature of an assessment and an assessment program has changed since the beginning of the NCSC project. We then discuss the specific case of the assets developed by the federally funded NCSC project; including identifying key similarities and differences between NCSC and the other federally funded assessment projects. Primarily, we focus on identifying the assets developed by the project, classifying them, and discussing options for their maintenance, short-term, and long-term use.

Finally, we address options for managing assessment assets in an ongoing assessment program. Specifically, we identify and discuss the roles and responsibilities of various parties within an operational assessment program.

Assessment Assets

Traditionally, assessments and assessment assets have been viewed as a fixed, static product; for example, similar to a book that has been written and published. Once published, for all intents and purposes, the assessment does not change until a new version is produced. There may be additional printings of the assessment, but the assessment does not change. There may be alternate formats of the assessment (e.g., large-print, Braille, digital, translations), but essentially the assessment does not change. That view of assessments and assessment assets was appropriate for the era in which large-scale assessment was synonymous with commercial, standardized, norm-referenced tests in which a single test form (or set of parallel test forms) was developed over the course of several years and administered intact for several years.

To a large extent, however, that view of assessment has persisted even though large-scale state assessment programs in the era of NCLB have reflected a significantly different approach to assessment development and use. In many large-scale state assessment programs, the content of the assessment changes on an annual basis as a portion of items are released annually (in some cases 50% - 100% of test items) and other items are rotated in-and-out of the assessment to avoid problems associated with over-exposure. The concept of fixed and parallel forms has been replaced by equivalent forms, based on a common test blueprint, that are linked from across years through equating and other procedures.

A particular set of assessment items, once considered the primary assessment asset, was relegated to the role of an ephemeral, replaceable widget within an assessment program.

As the assessment itself (i.e., individual items or test forms) became less of an asset, what then emerged to replace it as assessment assets? As states adopted content standards and established achievement standards, those standards began to define an assessment program and its assets. The test blueprint and a state's achievement standards became critical elements in defining the assessment program. Over time, simple test blueprints were supplemented with detailed descriptions of configurations of content standards to support specific claims and inferences about student performance and the development of detailed processes and specifications for developing assessment items to provide the evidence needed to support those claims and inferences (i.e., variations on the application of evidence-centered design principles). Likewise, the materials supporting achievement standards became more sophisticated and were used to drive assessment development rather than to simply provide a post hoc reflection on the results of the

assessment development process. Detailed achievement level descriptions, therefore, became an asset of the state assessment program.

Assessment Assets	
Item related	<ul style="list-style-type: none"> • Individual test items or sets of related test items • Test form (or set of test forms administered within a particular year)
Other	<ul style="list-style-type: none"> • Test Blueprint • Frameworks connecting the content standards, achievement standards, and assessment • Evidence-based processes for item development • Achievement standards with detailed achievement level definitions or descriptions

Table 1 Assessment Assets

Therefore, as one considers the management of assets for a project such as NCSC, it is critical to focus at least as much, if not more, on those materials and processes that we have classified as Other Assets as on the specific test items and test forms developed during the project. In one sense, those specific items and test forms could be better considered as proof-of-concept examples rather than as a primary byproduct or outcome of the project.

Assessment Materials

Notwithstanding the importance of the other assets, assessment items and the particular test forms created within an assessment program still have a value as assessment assets. Even when states work closely together in the development of an assessment program, however, it may be the case that a common test form is not seen as the primary asset produced by the collaboration. Within both Smarter Balanced and PARCC, there have been numerous examples of states wishing to use the consortia’s assessment materials in ways other administering the full assessment program.

Alternative Uses of Assessment Materials within Smarter Balanced and PARCC

Prior to the first operational administration of the assessments in 2014-2015 both the Smarter Balanced and PARCC were already receiving requests from participating states and states outside of the consortia interested in using assessment materials developed by the consortium project, but not fully participating in the operational administration of the assessment. Additional requests were received following the initial administration. Among the most highly publicized examples:

- In 2014, Kentucky led the charge for all states in requesting clarification from the U.S. Department of Education on how the state could access items developed by the two consortia to enhance its own custom-developed college- and career readiness assessments.
- Missouri explored options for constructing and administering very short test forms comprised of Smarter Balanced Items.
- Connecticut dropped their use of the performance-based task on the Smarter Balanced English Language Arts/Literacy test.
- Louisiana administered a single paper-based test form of the PARCC tests in 2014-2015 and administered assessments in 2015-2016 in which nearly half of the items were PARCC items.
- Massachusetts administered PARCC tests to a self-selected sample of schools in 2014-2015 and 2015-2016; and then, including items from the PARCC tests on its custom-developed state tests in 2016-2017.

Within those examples listed above, states varied in the way that they intended to use the consortia developed assessment materials. Potential uses ranged from simply including the consortium-developed items on the state assessment to using the consortium-developed reporting scale and achievement standards to report and interpret results.

Note that each of the alternative uses described above goes beyond states that elected not to make use of specific tests within a full assessment program. One example of that practice would include states that adopted grade 3 – 8 assessments developed by a consortium, but chose to administer a college admissions test such as the ACT or SAT (or similar suite of tests) at the high school level. A similar example would be a state that chose to administer English language arts and mathematics tests developed by the consortium, but not science tests. Such examples would not be considered as alternative uses of the assessment materials developed by the consortium.

Alternative Uses of Assessment Materials Outside of the Consortia

There are also examples of alternative uses of assessment materials by states outside of the Smarter Balanced and PARCC consortia. Assessment materials developed by Utah, for example, have been licensed for use in other states, most notably Florida. Other states have also explored the use of Utah items to facilitate cross-state comparisons of results for states not participating in an assessment consortium.

The concept of facilitating cross-state comparisons through shared assessment materials leads to consideration of states licensing access not only to their assessment items, but also to test forms, and other aspects of the assessment program (e.g., reporting scales, achievement standards). Such options will be discussed in the final section of this report.

Assessment Assets of the NCSC Project

From the beginning, the purpose of the NCSC project went well beyond simply developing an alternate assessment instrument. As stated in the excerpt from the NCSC website shown in Figure 1, the long-term assets of the NCSC project involved the development of processes, tools, and supports as well as a summative alternate assessment.

The National Center and State Collaborative (NCSC) is applying the lessons learned from the past decade of research on alternate assessments based on alternate achievement standards (AA-AAS) to develop a multi-state comprehensive assessment system for students with significant cognitive disabilities. The project draws on a strong research base to develop an AA-AAS that is built from the ground up on powerful validity arguments linked to clear learning outcomes and defensible assessment results, to complement the work of the Race to the Top Common State Assessment Program (RTTA) consortia.

Our long-term goal is to ensure that students with significant cognitive disabilities achieve increasingly higher academic outcomes and leave high school ready for post-secondary options. A well-designed summative assessment alone is insufficient to achieve that goal. Thus, NCSC is developing a full system intended to support educators, which includes formative assessment tools and strategies, professional development on appropriate interim uses of data for progress monitoring, and management systems to ease the burdens of administration and documentation. All partners share a commitment to the research-to-practice focus of the project and the development of a comprehensive model of curriculum, instruction, assessment, and supportive professional development. These supports will improve the alignment of the entire system and strengthen the validity of inferences of the system of assessments.

Figure 1 Purpose of the NCSC Project

A review of the Resources page on the NCSC project website reveals a long list of assessment assets developed during the course of the federally funded project. The category headings of those resources, shown in Table 2, are fixed assets of the project which have been disseminated and can be used to inform the ongoing operations of states using assessment materials developed through NCSC as well as informing the design and development of new alternate assessment programs.

Categories of Assessment Assets Developed Through the NCSC Project
<ul style="list-style-type: none"> • NCSC Resource for Planning and Providing Standards-Based Instruction • NCSC Briefs • NCSC Solution Architecture • NCSC papers form the 2015 AERA/NCME Conference • Spring 2015 Operational Test Administration Manual • NCSC Operational Test Blueprint • NCSC Curriculum and Instruction Resources • NCSC Resources for Parents • NCSC Presentations • NCSC Papers • NCSC Community of Practice Newsletters
Source: NCSC project website (http://www.ncscpartners.org/resources)

Table 2 Categories of NCSC Assessment Assets

Assessment Materials developed during the federally funded project.

Of course, the NCSC project did also develop an alternate assessment that was ready for states to administer operationally in the 2014-2015 school year. The computer-based testing platform and test materials (including scoring information and performance level cut scores) were made available to states for use following the project.

As shown in Figure 2, there have been two primary uses of the assessment materials developed through the NCSC project. The left column of Figure 2 reflects the ongoing assessment efforts of a group of NCSC states that formed a consortium to administer the Multi-state Alternate Assessment. Using the NCSC materials as a starting point, those states have refined and replaced the original assessment materials while continuing to implement the fundamental design of the assessment program developed through the NCSC project. As suggested by the shading of the boxes in Figure 2, eventually the original assessment materials will be replaced, but the assessment program will continue to function.

The right column of Figure 2 reflects a secondary use of the original NCSC assessment materials. States had the option to access the assessment items and/or delivery system and administer the intact test forms developed through the project. States may continue to administer this test form as long as they desire to do so. In most cases, the repeated use of a single set of test forms is not an optimal approach to implementing and maintaining an assessment program. In the case of an alternate assessment program, however, there is a stronger case for the continued use of the NCSC items than would be the case with the non-alternate portion of the state assessment program. In general, concerns about maintaining security of the items from test administrators prior to testing is not as great because often test administrators must directly interact with the items at multiple points in the process including the following: printing items and stimulus materials for paper-based administration, presenting the item to the student on a one-to-one basis, and recording the student response. The depth and breadth of the content covered on the alternate

assessment in comparison to the general grade level assessment also alleviates some of the concerns related to exposure of teachers' prior exposure to the items.

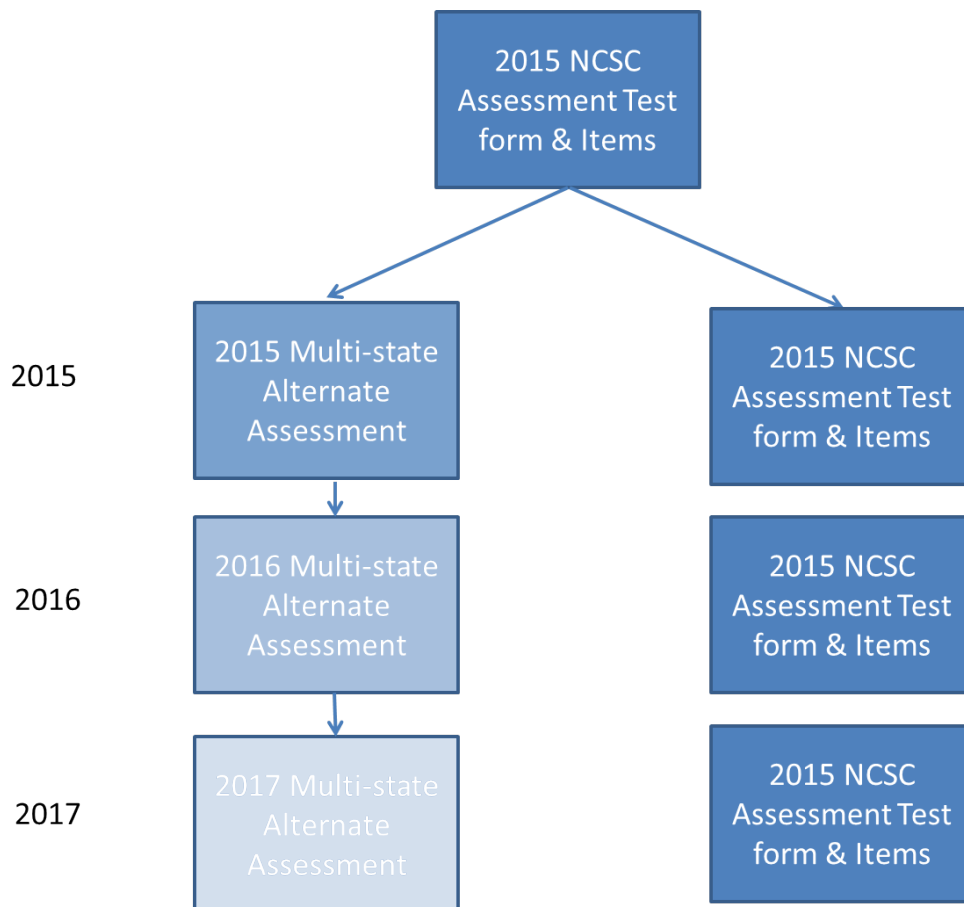


Figure 2 Ongoing Use of NCSC Assessment Materials

Managing Assets in an Ongoing Assessment Program

In this final section of the report, we discuss options for managing assessment assets in an ongoing assessment program such as the Multi-state Alternate Assessment. We begin by reviewing popular options for managing assessment assets and identifying the key established and emerging players in the assessment process. Based on that information, we propose alternatives for states interested in managing their own assessment assets or making use of assets developed by other parties. The proposed alternatives are intended to apply to individual states implementing their own state assessment programs, states participating in a consortium, and organizations managing a consortium of states.

Options for managing assessment assets

As states have begun to design, develop, and implement new English language arts, mathematics, and science assessments, many have looked beyond the traditional approach of starting from scratch either on their own or in collaboration with other states by issuing a request for proposals, selecting an assessment contractor, and building an assessment program. Three options have emerged for obtaining test items, test forms, or even full assessment programs which we classify as Licensing Items, Licensing an Assessment, and Licensing an Assessment Program.

Note that each of these options is presented for use outside of an established assessment consortium or collaborative. Similar options for sharing of resources, of course, also could be managed as part of a formal collaborative relationship. Aspects of these options are also similar to obtaining items or assessment resources from a commercial vendor. In this context, it is the parties managing the transactions rather than the type of transactions being conducted that make these options somewhat novel and more complex.

Licensing Items

Licensing items refers to the practice of making individual items or sets of items available for use by other parties in their own state assessment program. The determination of what constitutes an item and consequently what information and materials are provided as part of the licensing is a critical initial step in the licensing process. The fundamental information to be licensed, of course, would be the item content with scoring keys and/or scoring guides. As shown by the information in Table 1, however, there is a great deal of additional information that must also be considered in the licensing of items.

Licensing Items – Levels of Information included in Item Licensing	
Level 1 (minimum)	<ul style="list-style-type: none"> • Agreements for appropriate use and security requirements • Agreements for format of item delivery • Basic classification system (e.g., mapping items to grade level, content domain, individual standards or performance expectations) • Item content with scoring keys and/or scoring guides
Level 2	<ul style="list-style-type: none"> • Item history and basic item statistics • Advanced classification system
Level 3	<ul style="list-style-type: none"> • Item parameters • Item delivery system • Agreements for reciprocal use of item information

Table 3 Licensing Items

Licensing an Assessment

Similar to licensing items, licensing an assessment refers to making an entire intact test form or set of test forms, and related materials available for use by an interested third party. The arrangement may or may not include use of a common reporting scale and achievement standards.

Licensing an Assessment – Levels of Information included in Licensing an Assessment	
Level 1 (minimum)	<ul style="list-style-type: none"> • Agreements for appropriate use and security requirements • Agreements for format of delivery of materials • Item content with scoring keys and/or scoring guides
Level 2	<ul style="list-style-type: none"> • Scoring materials • Test administration manuals and related materials
Level 3	<ul style="list-style-type: none"> • Item parameters • Raw score to scale score conversion tables (or equivalent procedures) • Report shells and interpretive materials • Item delivery system • Agreements for reciprocal use of item information

Table 4 Licensing an Assessment

Licensing an Assessment Program

We refer to a third option as licensing an assessment program. This option is similar to licensing an assessment, but differs in that the party is interested in licensing full participation in the existing assessment program including all aspects of the test administration, scoring, and reporting procedures. In most cases, this is likely to involve a process for establishing a contract or buying into the existing contract with the established assessment contractor. States choosing to license English language arts and mathematics assessments, but not science assessments could still fall under the umbrella of licensing an assessment program.

Note that this option differs from joining an assessment consortium in that the joining party assumes no rights to control over or input into the content or operations of the existing program. They are interested in becoming a user of the established assessment, but not in becoming an equal partner or co-owner of the assessment program. It may also be the case that the current owner of the assessment is not interested in ceding control or ownership of the program.

Licensing an Assessment Program – Levels of Information included in Licensing an Assessment Program	
Level 1 (minimum)	<ul style="list-style-type: none"> • Agreements for maintaining test security • Agreements for entering into contracts with the assessment contractor(s)
Level 2	<ul style="list-style-type: none"> • Agreements for the timely transfer of information needed to administer the program. • Agreements for ending the relationship
Level 3	<ul style="list-style-type: none"> • Agreements for the appropriate use and interpretation of assessment results.

Table 5 Licensing an Assessment Program

Established Players

Beginning with the shift to custom state assessments that began to emerge in the mid-1980s through the NCLB era, there have been three key players in the large-scale assessment process: states, assessment vendors, and more recently, assessment managers. The actual tasks and functions performed by each of these established players will vary based on the design of the particular assessment program. Although there is a high degree of overlap in the specific functions and tasks that each performs, each player serves a primary role within the assessment process.

Primary Role of Established Players within an Assessment Program	
States	Establishing policy and managing the ongoing operations of its state assessment program
Assessment Vendors (contractors)	Providing services required to support the implementation of assessment programs
Assessment Managers	Coordinating and managing activities for an established assessment consortium or collaborative of states

Table 6 Primary Roles of Established Players

States

The primary role of the state is to establish policy and manage the ongoing operations of its state assessment program.

Historically, state involvement in the design, development, and operations of assessment has ranged from a hands-off approach with virtually total reliance on an assessment vendor to the state assuming full

responsibility for one or more key aspects of the testing program (e.g., item development, scoring, reporting). In all cases, however, the primary role and responsibility of the state is to manage the operations of its state assessment program. That is true whether the state is a member of an assessment consortium or acting on its own to administer a commercially-developed or custom-developed assessment. Activities not directly related to the goal of successfully implementing the state assessment program should be carefully considered and undertaken with cautious and careful planning.

Whether a state is operating on its own or as part of an assessment consortium, the staffing requirements for a state assessment team are dependent on its level of involvement in various aspects of the assessment process. It is expected that the composition of the state assessment team, with regard to both numbers and qualifications of staff members, will be commensurate with the state's level of involvement in the assessment process.

Assessment Vendors (contractors)

In the NCLB era, the primary role of assessment vendors has been to provide services needed to support states in the annual administration of their custom state assessment programs at grades 3 through 8 and high school. Prior to the NCLB era, contractors were more likely to offer ready-made, off the shelf, assessment solutions to individual states.

Assessment vendors, or contractors, enter into contracts with states to perform specified functions and execute specific tasks to ensure the successful implementation of the state assessment program. The level of involvement of assessment vendor and the level of responsibility assigned to the vendor will vary based on the requirements and needs of the state.

Assessment Managers

The primary role of the assessment manager is the management of the operations of the assessment consortium. It is important to note that management of the consortium is a separate task from management of the state assessment program.

Assessment managers emerged as a distinct player in the assessment process with the formation of large-scale assessment consortia. As with states and assessment vendors, the specific tasks and functions assigned to assessment managers can vary greatly across assessment consortia. The level of staffing and required expertise, of course, should be commensurate with the assigned responsibilities.

Emerging Players

In addition to the established players described above, the assessment process has always included additional players who provide specialized or niche services to support the process. Organizations that provide services related to the printing of test booklets, creation of scannable documents, and scanning services are three examples of players whose role may be waning in the shift to computer-based testing. At the same time, other types of organizations are emerging as key players in the assessment process. Some of the types of organizations listed in Table 7 (e.g., those providing scoring services) have been part of the assessment process for a long time, but are assuming a new place within the process or are taking on increased importance or significance because of changes in the assessment landscape.

Emerging Players in the Assessment Process	
Item Developers	Organizations formed specifically for the purpose of developing items and item banks for use in assessment programs by states, districts, schools, or assessment vendors
Platform Developers	Organizations providing the platforms and other technological support needed to administer computer-based assessment programs
Security Specialists	Organizations specializing in issues related to assessment security
Providers of Ancillary Services	A wide range of organizations providing management services, communications support, professional development services, scoring services, business/legal support, or technical support.

Table 7 Emerging Players in the Assessment Process

The various ways in which these emerging players can and should interact with the established players in the assessment process is still unfolding.

Managing Assessment Assets – Matching options with players

To date, none of the established or emerging players in the large-scale assessment process fulfills a role that is directly related to the management of assessment assets. In particular, as shown in Table 6, managing assessment assets is not the primary role of any of the established players. Therefore, implementing any of the three options described in the previous sections (or any alternative options that might emerge) is likely to conflict with the player fulfilling their primary role. Acknowledging that conflict; evaluating and understanding its impact on the program; and allocating resources accordingly will be critical to the successful management of assessment assets as well as the ongoing successful operations of the assessment program.

Based on consideration of the roles and responsibilities of the established players in the assessment process as well as their makeup, we offer a proposal for matching players with options for managing assets is presented in Figure 3.

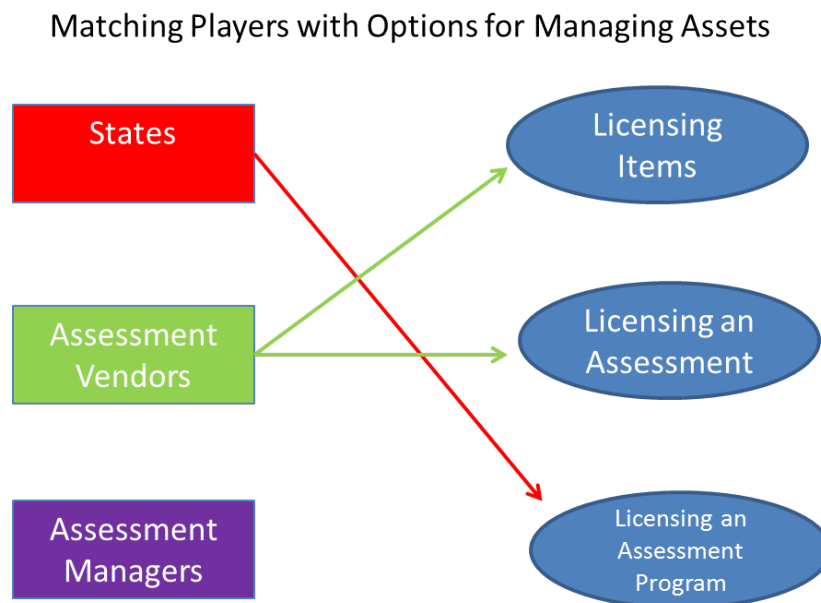


Figure 3 Matching Players with Options for Managing Assets

Perhaps most notable in Figure 3, is that we do not see the position of Assessment Manager, as it is currently constituted, as particularly well-positioned to implement any of the three options for managing assessment assets. In part, that conclusion is based on considerations of issues related to ownership and control of assessment assets and the authority to enter into agreements that might impact the operations of state assessment programs. In part, that conclusion is based on the lack of overlap between the skill sets necessary to fulfill the role of assessment manager and the skill sets necessary to manage assessment assets. That is not to say, however, that assessment managers could not emerge who possess those skill sets or that different ownership models could not be established.

With regard to licensing items and licensing an assessment, we view these roles as most closely related to the traditional roles filled by assessment vendors prior to the NCLB era. It also seems likely based on current practices that the assessment vendor will be required to play a critical role in executing whatever licensing agreement is implemented.

As for states, we conclude that the most appropriate role for states might be in the licensing of an assessment program. The primary reason for this conclusion is that of the three options, licensing an assessment program seems to require the least active involvement on the part of the state after the initial agreement is reached. In addition, the option of licensing an assessment program appears least likely to require the state to engage in ongoing commercial transactions (i.e., establish itself as a business for licensing assessment materials). If an individual state, or consortium of states, is interested in sharing its assessment program with other parties, the all-or-noting approach of licensing the assessment program seems to be best suited to their role in the assessment process.

As these options for managing assessment assets continue to develop, and additional options emerge, we anticipate that established players such as assessment vendors and assessment managers will adapt to be better prepared to take on the role of managing assessment assets. We also anticipate that new organizations will emerge to provide specific services related to licensing and managing assessment assets.

Finally, the experiences of the federally funded consortia revealed the complexity of the issues associated with the concept of making assessment assets freely available to states and those interested and qualified to develop assessments for states. We imagine that similar issues will emerge with the commitment to increased availability of open educational resources (OER). In addition, it is likely that the framework for large-scale assessment will continue to change in keeping with the needs of states and other parties for the information traditionally provided by large-scale assessments and the availability of that information through a variety of resources. Therefore, efforts to develop immediate or short-term solutions to managing assessment assets should be considered in the context of likely long-term developments in assessment impacting what those assets might be.

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