



Transforming the Instructional Leadership Professional Development Landscape Utilizing National Board for Professional Teaching Standards (NBPTS) Resources

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Abstract

Increasing measurable student achievement is a primary goal for K-12 institutions worldwide. To this end, Instructional Leaders must be knowledgeable concerning instructional best practices, technology, and current research in education. This paper examines professional development for Instructional Leaders utilizing an accomplished teaching model that employs National Board for Professional Teaching Standards resources as the basis for instruction. Within the context of this paper, Instructional Leaders are defined as administrators that spend 50% or more of their time in direct delivery of instructional services to the following: teachers, principals, and/or other educators in administrative or supervisory positions.

Subject Areas

Education

Keywords

National Board for Professional Teaching Standards (NBPTS), Professional Development, Instructional Leaders, Vicarious Experiences, Online Learning, TASL, TILS Standards

1. Introduction

Instructional leaders are responsible for guidance related to curriculum, instruction, assessment, school climate and academic achievement. They must remain knowledgeable of current research based best practices and trends in education.

To this end, professional development provides the opportunity for ongoing learning to take place. Across America, most principals participate in professional development opportunities (Lavigne *et al.* 2016 [1]; Taie & Goldring 2019 [2]). In Tennessee, and for the purpose of this paper, instructional leaders are defined as administrators who are required to earn 14 hours of professional development credit each academic year if they spend 50% or more of their time in direct delivery of instructional services to the following: teachers, principals, and/or other educators in administrative or supervisory positions.

Professional development for Instructional Leaders has a profound effect on the progress and achievement of teachers and students. The reach of competent instructional school leaders/principals is immense. Instructional Leaders support the effectiveness of teachers in planning lessons and assessing students. An effective teacher could make the difference between students being prepared or underprepared when they move to the next grade level or to higher education.

Lech and Cohen (2021) [3] described the role of the instructional leader as complex, stating that Instructional Leaders must develop a strategic plan for the school and provide guidelines to bring all members (teachers and students) on-board by sharing the vision for the school. Instructional Leaders must also be problem-solvers while providing support for teachers. This leads to the fostering of teacher development, which has a direct impact on effective teaching and student learning. Therefore, the professional development for Instructional Leaders should be comprehensive and be combined with support practices such as mentoring or coaching (Zepeda, Jimenez & Lanoue, 2015) [4]. The principals involved in the Zepeda study were identified as “accomplished in every way possible”. A model was needed to support instructional leaders who were not accomplished in every content area. This approach helps to support a culture of ongoing learning and success.

Through NBPTS, ongoing mentoring/coaching/support is provided through “Accomplished Teaching, Learning and Schools” (ATLAS) videos and resources. Instructional leaders glean knowledge on what “accomplished” teaching in action looks like. Atlas provides over 1440 videos and commentaries by topic, grade level and framework. Principals can increase their instructional leadership capital by examining instructional best practices across various content areas.

The University of Chicago utilized the Theory of Investment Model, researched best practices, and the challenges Instructional Leaders face to develop their summer academy. This model used a social cultural approach in which a person invests in something with the understanding that they will gain more resources. These resources will in turn increase the value of their cultural capital and social power (Darvin & Norton, 2015) [5].

The four-day summer academy utilized the Theory of Investment Model as the foundational component for its professional development. Initially, the University arranged the Instructional Leaders into small cohort groups to foster discussion among and within the academy and set the stage for future interac-

tions and support after the academy ended. The final project for the academy would occur in October, with the participants returning to the University to discuss what they learned during the academy, how those strategies and/or techniques learned were implemented, and the results of those implementations. The University selected scholars, principals, psychologists, and other professionals in their field. These professionals utilized a variety of instructional methods to cover topics such as myths, realities and state/federal laws.

The Theory of Investment Model has three main components: identity, ideology and capital. Identity is determined by how they see themselves and relate to the world around them. Ideologies are dominant ways of thinking about society. It is important that Instructional Leaders are aware of their own ideologies because these ideas will be the bases in which various cultures are accepted and promoted within the school. Darvin and Norton (2015) [5] refers to the third element of the theory, Capital, as a social reproduction and transformational tool. Social capital, in turn, represents connections to networks of social power. Social culture is that which is directly related to the individuals prevailing central ideologies of specific groups or fields. These ideas are constantly changing. Bourdieu (1986) [6] describes capital as “power extending from the economic to the cultural and social types. Economic or material capital comprises the income, wealth, and property someone has. Cultural capital refers to educational credentials, knowledge, and appreciation of particular cultural forms like arts or sports.”

Instructional Leaders must realize they are not just leaders within the school, and that their leadership role extends beyond the school walls. They build relationships with the community in which they serve. Another purpose of arranging the participants into cohorts within the investment theory model was to foster relationship building with the idea of creating a lasting system of support. The investment is divided into intrinsic and extrinsic categories. The intrinsic category consists of a direct investment in relationships; some examples are time and money. Extrinsic investments are the results of an investment in a relationship, which are happy memories and shared friends (Rusbult, Martinez & Agnew, 2005) [7]. The University of Chicago utilized the Theory of Investment Model, researched best practices, specific techniques and strategies to produce or increase capital, and confidence in the Instructional Leaders, while acquiring a support system and new identity.

The Board of Education of South Carolina took a different approach in developing professional development for its Instructional Leaders. They implemented a psychometric model, which has a focus in the Item Response Theory (IRT). This statistical method of assessment was first developed in the 1960's. The IRT analyzes a participant's response on a test item and compares that score to an observable action (Bichi & Talib, 2018) [8]. This method of assessment is often used to evaluate students in medical school because it provides an accurate analysis of a person's ability. It provides a clear view of what a person thinks they

need to know, or what is actually needed after an observed skill or task is completed.

This theory compares the instructional leader's latent traits or leadership abilities to their observed responses on the survey. These latent traits are only accessible through an observed test or task items (Meijer & Baneke, 2004 [9]; Sijtsma, 1998). It used a survey instrument that allowed Instructional Leaders to select what they thought they needed from professional development opportunities. It also reported their leadership scores and compared them to their self-efficacy ratings. Parvathy (2019) [10] emphasized that limited research exists on the perceived professional development needs of principals. Westberry and Zhao (2021) [11] stated that one of the needs for professional development is preparation programs for Instructional Leaders that provide adequate time to practice all the skills necessary for school leadership. The results of the survey as outlined in **Table 1** revealed the three highest-ranking needs as reported by leaders:

Table 1. Descriptive Statistics of Survey Responses: Instructional Leaders selected what they thought they needed from professional development opportunities.

Item	1	2	3	4	5	6	7	8	9
1) Understanding and using data to inform instruction	2.69 (1.21)								
2) Developing a systems perspective	0.49*	2.50 (1.04)							
3) Understanding all elements of instructional leadership to include alignment, assessment and observation	0.62*	0.55*	2.61 (1.15)						
4) Understanding how to implement successful multi-tiered systems of support programs	0.39*	0.47*	0.54*	2.19 (1.11)					
5) Understanding how to effectively progress monitor as an administrator	0.54*	0.47*	0.59*	0.56*	2.47 (1.06)				
6) Understanding how to deal with difficult teachers	0.54*	0.54*	0.63*	0.47*	0.51*	2.47 (1.23)			
7) Understanding how to manage budgets	0.42*	0.43*	0.56*	0.48*	0.50*	0.57*	2.88 (1.30)		
8) Understanding how to effect cultural change	0.41*	0.47*	0.48*	0.45*	0.41*	0.57*	0.54*	2.30 (1.14)	
9) Understanding how to manage time effectively	0.34*	0.48*	0.50*	0.46*	0.42*	0.56*	0.52*	0.47*	2.44 (1.23)

Note: *Correlation is significant at the 0.01 level (2-tailed).

- Understanding and using data to inform instruction
- Understanding Instructional Leadership—Alignment, assessment and observation...
- Understanding how to effectively monitor progress as an administrator (Bichi & Talib, 2018) [8]

Based on the results of the survey, the South Carolina Board of Education developed professional development for Instructional Leaders with an emphasis on using data to drive instruction, providing an in-depth understanding of the instructional leadership role, which included the aligning of assessments and observations, and how to effectively monitor student and teacher progress. Westberry and Zhao (2018) [11] reported that effective Instructional Leaders have a direct correlation to student learning, teachers, and retention. Based on the literature, a need exists for professional development models for instructional leaders that provide instructional best practices across a variety of content areas with a focus on “accomplished teaching” in action.

The purpose of this paper is to present an online professional development model for instructional leaders that addresses the aforementioned needs. This includes the “Descriptive Statistics of Survey Responses” which encompasses the items that Instructional Leaders selected based upon what they thought they needed from professional development opportunities. These include:

- 1) Understanding and using data to inform instruction;
- 2) Developing a systems perspective and;
- 3) Understanding all elements of instructional leadership to include alignment, assessment and observation.

The Teacher Training Institute Leadership (TTIL) Model focuses on understanding all elements of instructional leadership to include alignment, assessment and observation

2. Teacher Training Institute Leadership (TTIL) Model

The Teacher Training Institute Leadership (TTIL) online professional development model utilizes National Board for Professional Teaching Standards (NBPTS) resources within the context of instructional leadership professional development. Each professional development course is aligned to the Tennessee Instructional Leadership Standards, and more specifically “Professional Growth and Learning” (TILS). Per the Tennessee Department of Education.

Standard C: Professional Learning and Growth

An ethical and effective instructional leader develops the capacity of all educators by designing, facilitating, and participating in collaborative learning informed by multiple sources of data.

Indicators:

- 1) Collaborates with stakeholders to establish, communicate, and facilitate a clear, compelling vision for professional learning and growth.
- 2) Implements and monitors a rigorous evaluation system using an approved

Tennessee evaluation model.

3) Uses educator evaluation data to inform, assess, and adjust professional learning goals and plans.

4) Engages faculty and self in data-informed, differentiated professional learning opportunities for educators, aligned with the Tennessee Standards for Professional Learning.

5) Collaborates with others to induct, support, retain and grow/extend effective educators based on evidence of student and educator outcomes.

6) Identifies and supports potential teacher-leaders and provides growth opportunities in alignment with the Tennessee Teacher Leadership Standards.

7) Improves self-practice based on multiple sources of feedback, including performance evaluation results and self-reflection. (Tennessee Instructional Leadership Standards, 2015) [12]

The TTIL model begins by employing “best practice” training for educators that incorporates National Board for Professional Teaching Standards (ATLAS) videos. ATLAS is a searchable online library of authentic video cases showing National Board Certified Teachers at work in the classroom. ATLAS videos are indexed by subject, topic, grade level and framework. Framework alignment includes: InTASC Model Core Teaching Standards, edTPA™, National Board Standards, Teaching Works High-Leverage Practices, Common Core State Standards, Next Generation Science Standards, C3 Framework for Social Studies State Standards, and Deeper Learning Competencies (National Board for Professional Teaching Standards, 2022) [13].

Each Teacher Training Institute Leadership course consists of several modules, which includes both content (readings) and NBPTS (ATLAS) videos. Based on the research of Albert Bandura, the TTIL promotes self-efficacy through “Vicarious Experiences”. Vicarious Experiences (shadowing, internships and clinical experiences) are especially useful for Instructional Leaders who have not had the opportunity to create or have mastery experiences in various disciplines. Throughout the TTIL, Instructional Leaders review/read content and watch “accomplished” NBPTS certified teachers applying “best practice” techniques. The volume of ATLAS videos helps to ensure that the relevant course, grade level, standard, and instructional practice are reviewed.

Within the State of Tennessee, the Tennessee Department of Education (TDOE) utilizes the Tennessee Educator Acceleration Model (TEAM) Rubric. Per TDOE, “The goal of the TEAM evaluation process is to provide educators with a model that helps them continuously improve their practice. Within the TEAM General Educator Rubric, teachers are evaluated based upon three domains: Planning, Environment and Instruction.” The domains address the following:

1) Planning—Instructional Plans (IP), Student Work (SW) and Assessment (AS)

2) Environment—Expectations (EX), Managing Student Behavior (MSB), Environment (ENV) and Respectful Culture (RC)

3) Instruction—Standards and Objectives (SO), Motivating Students (MS), Presenting Instructional Content (PIC), Lesson Structure and Pacing ((LS), Activities and Materials (ACT), Questioning (QU), Academic Feedback (FEED), Grouping Students (GRP), Teacher Content Knowledge (TCK), Teacher Knowledge of Students (TKS), Thinking (TH) and Problem Solving (PS)

The TEAM domains are also embedded within the frameworks that are aligned with the NBPTS (ATLAS) resources. They include the InTASC Model Core Teaching Standards, edTPA™, National Board Standards, Teaching Works High-Leverage Practices, Common Core State Standards, Next Generation Science Standards, C3 Framework for Social Studies State Standards, and Deeper Learning Competencies.

School districts across Tennessee offer incentives for achieving and maintaining National Board Certification. In an effort to support aspiring National Board candidates in their pursuit of certification, the Tennessee Department of Education also offers candidates who teach in Tennessee public schools access to candidate support resources.

This model can be replicated for other educational entities (districts, ISDs, states, countries...) by utilizing their educator evaluation tool. The TTIL and NBPTS are based on best practices; educational entities should see alignment with their instructional evaluation tool and the TTIL model and resources. The benefits of the model include:

- Improved instructional leader professional development (NBPTS related training);
- Observations of Accomplished Teachers;
- Online ATLAS library of over 1400 videos;
- Videos listed by Subject/Topic, Grade Level and Framework;
- Commentary—Instructional Context for each video outlining the course makeup, curriculum, instruction and assessment practices;
- Increased partnerships between academia, industry, and others (NBPTS).

3. Self-Efficacy

In 1977, Psychologist Albert Bandura developed the concept of self-efficacy. It is defined as an individual's belief in their capability to exercise control over their own functioning and over events that affect their lives. It is a person's belief in their ability to succeed in a situation. Self-efficacy is developed from four sources:

1) **Mastery Experiences**—How well you have “mastered” a task in the past. Past experiences aid in providing a reinforced perception of future success or failure. Hence, if a person has experienced repeated success on a task (teaching Mathematics), they tend to believe that they will continue to experience success in that arena.

2) **Vicarious Experiences**—Seeing others “like you” succeed at a task (content, grade, ethnicity...). Hence, if you examine successful or accomplished

teachers or leaders “like you” in action, then you might believe that you could be a successful teacher or leader.

3) **Social Persuasion**—Receiving positive verbal feedback that instills confidence within an individual that they can accomplish a task. For example, consistently telling a teacher that they think and process information/skills like a leader may “persuade” the teacher to pursue a career in leadership. Social persuasion is also utilized when educators and influencers operate with a growth mindset (Yeager & Dweck, 2020) [14].

4) **Emotional States**—“The emotional, physical, and psychological well-being of a person can influence how they feel about their personal abilities in a particular situation.” Hence, if an individual generally has low self-esteem, they may believe that they cannot accomplish/achieve a task. For these individuals, interventions must be put in place to address their needs and move them from a closed mindset to a growth mindset.

According to Bandura (1977) [15], self-efficacy can be developed through “Vicarious Experiences.” Vicarious, is defined as “experienced or realized through imaginative or sympathetic participation in the experience of another” (American Psychological Association, 1977; Merriam-Webster, 2022) [16]. Vicarious Experiences include shadowing, internships and clinical experiences, and are especially useful for Instructional Leaders who have not had the opportunity to create mastery experiences.

Within education preparation programs, practicum experiences—like student teaching—allow pre-service teachers to have a “vicarious” teaching experience. Throughout the experience, the pre-service teacher will watch, model, question, and adjust their teaching practice based upon the shadowing of their “mentor/master/cooperating teacher”.

4. Mentor/Master/Accomplisher Teacher—National Board for Professional Teaching Standards (NBPTS) ATLAS Resources

According to the National Board for Professional Teaching Standards (2022) [17], National Board Certification was designed to:

Develop, retain and recognize accomplished teachers and to generate ongoing improvement in schools nationwide. It is the most respected professional certification available in K-12 education. Created by teachers, for teachers, National Board Standards represent a consensus among educators about what accomplished teachers should know and be able to do. Board certification is available in 25 certificate areas spanning 16 disciplines from Pre-K through 12th grade. The certification process requires that teachers demonstrate standards-based evidence of the positive effect they have on student learning in alignment with the Five Core Propositions. They must exhibit a deep understanding of their students, content knowledge, use of data and assessments and teaching practice. They must show that they participate in learning communities and provide evi-

dence of ongoing reflection and continuous learning.

Research indicates that the students of nationally board certified teachers perform better academically than non-board certified ones. With the NBPTS accomplished teacher resources, viewing NBPTS teachers utilizing research based best practices allows Instructional Leaders to see accomplished teachers in action. These video examples provide instructional leaders documentation of researched based best practice techniques that support lesson planning, classroom environments, and instruction.

Accessing these resources will increase Instructional Leaders' belief in their capability to recognize "accomplished teaching" and exercise control over their own functioning and thus providing them with the tools to succeed. ATLAS serves as one of the key NBPTS resources and is a library of authentic video cases showing National Board Certified Teachers at work in the classroom. ATLAS provides access to more than 1,400 cases covering most subjects, grades, and school settings. The cases are indexed to standards and frameworks for teachers and students and they offer a visual representation of these standards while providing a clear image of accomplished teaching. All ATLAS cases are from National Board Certified Teachers. Each video case has been validly assessed as accomplished practice, according to National Board Standards. The video cases consist of an authentic unedited video, the teacher's written reflection about the lesson, and related instructional materials.

5. Teacher Training Institute Leadership (TTIL) Professional Development Model Instructional Delivery

Hertz *et al.* (2022) [18] indicated that evidence from the 2019 Organization for Economic Co-operation and Development (OECD) Teaching and Learning International Survey shows that many teaching professionals struggle to access and benefit from continued professional development. The survey further indicated that 54% of teachers in the participating countries report conflicts with their work schedule as a barrier to continued professional development. Hertz *et al.* (2022) [18] further indicated that the most common format of teacher continued professional development has been *on-site* courses, conferences, or seminars and that this had not changed in the last decade before the COVID pandemic. However, as noted by Hill-Jackson *et al.* (2022) [19], the way in which professional development is offered for educators is evolving to meet their "just-in-time" personal learning needs. There is increasing appeal for online continuing professional opportunities that offer on-demand training.

It was with this in mind that the decision was made to offer the TTIL, Tennessee Academy for School Leaders (TASL) professional development courses as an interactive, web-based suite of courses, delivered asynchronously and on-demand to accommodate the professional development needs of the Instructional Leaders. Delivery of the instruction in this online format also extended

these professional development opportunities to every corner of the State including the more rural areas, thus broadening access. The suite, or series, consists of three courses, and each course has an associated number of contact or TASL hours. From April 2021-April 2022, Instructional Leaders had the opportunity to enroll in one or more of the following six Teacher Training Institute Leadership (TTIL) Professional Development courses:

- TASL: Learning Theories 2020/2021—TASL03120-21
- TASL: Sociocultural Perspectives 2020/2021—TASL03220-21
- TASL: Multiple Intelligences 2020/2021—TASL03320-21
- TASL: Learning Environments 2021/2022—TASL03121-22
- TASL: Learning Strategies 2021/2022—TASL03221-22
- TASL: Learning and the Brain 2021/2022—TASL03321-22

TTIL collaborated with a local Historically Black College and University (HBCU) committed to creating learning environments that provide opportunities for life-long learners to engage in personal, career, and/or professional development courses, and activities. The role of the Continuing Education unit at the Institution was to help ensure the quality of the TTIL, non-credit programming, being offered by not only providing support services for instructional design and content development, but by also by awarding the Continuing Education Units (CEUs) to the Instructional Leaders upon successful completion of the program.

The TTIL-TASL courses were delivered via the University's Learning Management System (LMS) and the Continuing Education staff, which oversee and assist with each participant's registration and enrollment in the respective TTIL-TASL course (see [Figure 1](#)).

In order to encourage student engagement, and to provide Vicarious Experiences per Bandura's social cognitive theory of promoting self-efficacy, instructional design practices that were content-focused and offered models of effective practice were implemented with the TTIL-TASL courses. Kappa & Derelict (2019) [20] describe instructional design principles that also support this area of cognitivism involve the grouping or chunking of information into logical groupings, or micro learning. Micro learning is an educational approach that delivers small focused units of learning through short-term activities and is used to teach a particular skill or area of knowledge, focusing on underlying concepts (Prior Filipe *et al.*, 2020) [21]. Furthermore, a study in the Journal of Applied Psychology found that micro learning was 17% more efficient in transferring knowledge than typical classroom training. Researchers found that information delivered in short, focused chunks, was easier to comprehend and recall than the same learning delivered in a longer, more comprehensive, format (Tipton, 2020) [22]. The incorporation of micro learning in the design of the TTIL-TASL courses took into consideration the learner's needs by providing the information nuggets that were "right-sized" for cognitive processing (Major & Calandrino, 2018) [23].

**TASL Professional Learning and Growth: Foundations of Learning
Workshop Series
Self Registration Instructions**

1. Go to the eLearn site: <https://elearn.university.edu>
2. Click on “External Registration” link found directly under the log-in area.
3. Select the “I do not have a username and password” option and click “Submit.” If this is your second or third course registration, then select the “I have an existing username and password” option.
4. Click on course offering link associated with the course in which you wish to register:
 - a) TASL: Learning and the Brain 2021/2022
 - b) TASL: Learning Environments 2021/2022
 - c) TASL: Learning Strategies 2021/2022
5. Click on Register (please use your work email address to assist with the registration approval process).
6. Enter required information.
7. You will be assigned a username and password. *You will not be given an opportunity to change the password, so be sure to make note of it for future reference and keep in a safe place.* Contact Jane Doe (jdoe@university.edu) directly for assistance with your passwords; please do not contact the TSU HelpDesk.
8. **Important Notice:** Your login credentials will not work until your registration is approved by the Course Instructor and/or Coordinator. Once you receive the Enrollment Confirmation email, you may then attempt your login. **Skip Step 1 outlined in the Enrollment Confirmation about resetting the password; use the one assigned initially.**

Figure 1. Sample TASL course self registration instructions.

With respect to modeling, Bandura notes that learners can use modeling to make sensible connections and see the possibility of positive outcomes if they enact the behaviors (Abelli, H) [24]. As previously noted, the Instructional Leaders would review/read content and watch “accomplished” NBPTS certified teachers applying “best practice” techniques within the course activities.

As a part the professional development program evaluation, the following course and process revisions were identified and implemented:

1) enabled the LMS release condition feature; this feature allows one to create a custom learning path through the course materials and helped to ensure that participants completed all of the content prior to accessing and completing the course assessment.

2) added a non-graded reflection exercise after each video view to allow the participants to think about how to apply what was learned in practice and to further support the idea of learning vicariously.

3) automated the process for enrolling participants in the LMS, due to the purchase and implementation of a new Education Management System (EMS) for the University’s non-credit programming; upon registration completion, par-

ticipants are automatically enrolled in the LMS—making for a much smoother transition into the learning environment and providing easier access to the course materials.

6. Methods

A pre-posttest course survey should be administered to ascertain if instructional leaders better understood all of the elements of instructional leadership, which include alignment, assessment and observation.

Survey Questions:

- 1) Please rate your understanding of curriculum, assessment and teacher observation alignment (1 - 10).
- 2) Please rate your understanding of classroom assessment (1 - 10).
- 3) Please rate your understanding of classroom observations (1 - 10).

Researchers should include participant and school/district demographic data and note any relevant correlations.

7. Conclusions

The Teacher Training Institute Leadership (TTIL) online professional development model utilizes National Board for Professional Teaching Standards (NBPTS) resources within the context of instructional leadership professional development. Research indicates that the students of nationally board certified teachers perform better academically than non-board certified ones. Each TTIL professional development course is aligned to the Tennessee Instructional Leadership Standards, and more specifically “Professional Growth and Learning” (TILS-C). The purpose of this paper is to present an online professional development model that addresses instructional leaders’ needs. This includes the “Descriptive Statistics of Survey Responses” which encompasses the items that Instructional Leaders selected based upon what they thought they needed from professional development opportunities. These include, “Understanding all elements of instructional leadership to include alignment, assessment and observation”.

The Teacher Training Institute Leadership (TTIL) model provides online asynchronous high quality professional development to instructional leaders by utilizing examples of “accomplished teaching”. This approach can potentially advance knowledge in the field of Instructional Leadership professional development by providing a model to create, train, and support Instructional Leaders such as content specialists, building principals and district staff. This model can be researched and replicated worldwide for all content areas and K-12 grade levels.

Conflicts of Interest

The authors declare no conflicts of interest.

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