

Moving from POS to RPOS in Oklahoma

National Programs of Study Institute Final Report



The Challenge

In 2011, the Oklahoma CareerTech System had more than 161,000 enrollments of high school students and adults. These enrollments include nearly half of all high school students in the state.¹ CareerTech students must be prepared to participate in a 21st century economy that is fast paced, technology-driven, knowledge based and global. The future of these students, and the future of career and technical education, lies within the connection of academic and technical coursework to the world of work and the movement to Rigorous Programs of Study.

The January 2012 issue of Techniques magazine, produced by The Association for Career and Technical Education, focused on Programs of Study as business and industry recognizes the need for POS.² In the article Lessons Learned from Highly Implemented Programs of Study, POS are identified as a way to engage students in learning, to ensure that learning was the primary activity of students and a way to provide seamless education that results in certification. POS also increase the understanding and respect of career and technology education.³ The article Developing a POS Via a Statewide Career-Focused Reform Policy stated that career focused education offered through Programs of Study can provide students with opportunities to engage in career exploration and development, to establish career goals, to increase academic knowledge and skills, to test career preferences in applied settings and to make links between coursework and post-secondary careers and education.⁴

The National Association of State Directors of Career and Technical Education Consortium calls for CTE to be delivered through comprehensive programs of study aligned to the National Career Clusters Framework.⁵ The Southern Regional Education Board has identified the Program of Study as one of its key practices for the Technology Centers That Work⁶ and High Schools That Work⁷ initiatives. The Harvard University report Pathways to Prosperity calls for every young adult to develop an individualized plan that includes a Program of Study.⁸

The essential concepts of Programs of Study represent an opportunity to align initiatives like Common Core State Standards, Common Career Technical Core and Teacher and Leader Effectiveness while building upon CTE improvement efforts including Tech Prep, School-to-Work, Career Education, academies and others. Programs of Study are a hallmark of the Carl D. Perkins Career and Technical Education Act of 2006 and initial indications are that POS will play a larger role in the future reauthorization of the Perkins legislation.

According to the U.S. Department of Education, a program of study is a comprehensive, structured approach for delivering academic and career and technical education to prepare students for postsecondary education and career success. These programs, at a minimum, must:

- Incorporate and align secondary and postsecondary education elements,
- Include academic and CTE content in a coordinated, non-duplicative progression of courses,
- Offer the opportunity, where appropriate, for secondary students to acquire postsecondary credits, and
- Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

In Oklahoma, the four core components of Programs of Study exist at some level in many educational institutions across the state. The challenge is to help secondary and post-secondary educational institutions that do not have or do not recognize that they have Programs of Study to develop POS and to move all institutions towards Rigorous Programs of Study.

As educational institutions move from Programs of Study to Rigorous Programs of Study they will develop a mixture of the 10 subcomponents of the design framework: Legislation and Policies, Partnerships, Professional Development, Accountability and Evaluation Systems, College and Career Readiness Standards, Course Sequences, Credit Transfer Agreements, Guidance Counseling and Academic Advisement, Teaching and Learning Strategies and Technical Skills Assessments.

National Programs of Study Institute

Oklahoma was selected as one of four states/territories through a competitive RFP process to participate in the National Programs of Study Institute conducted by the National Research Center for Career and Technical Education at the University of Louisville in Louisville, Ky.

The purpose of the NPOSI was to move research into practice by applying current research and to support participants in addressing barriers to implementing Programs of Study. The NRCCTE has been engaged in POS research since 2007. Three field-based longitudinal studies (and two multi-state qualitative investigations) conducted by the NRCCTE have yielded lessons brought to the Institute and shared with the participants. The NRCCTE brought together evidence-based resources to help address implementation barriers identified by the participants and provided expert facilitators, POS researchers and others as resources.⁹

The Oklahoma RFP answer was submitted in late December 2011, and Oklahoma was notified of its acceptance in January 2012. The first session was completed in February

2012, and the final session was held in June 2012. Oklahoma participated in the Institute with Guam, Kentucky and Minnesota.

The RFP called for the formation of a team from each state. Members of Oklahoma's team were Becki Foster, team leader; Jeremy Zweiacker, in-state facilitator; and Kelly Arrington, Janet Cooper, Twila Green, Dr. Linda Hubbard and Tommi Leach. Oklahoma was assigned a national facilitator to work with the team and provide ongoing assistance during the term of the project. Dr. Rob Shumer, University of Minnesota, was the facilitator who worked with Oklahoma.

Oklahoma worked with Lisa-Ann Ferris, M.Ed., University of Louisville, who completed a workforce development project titled Analysis of Stakeholder Interpretations of Programs of Study in Oklahoma. The purpose of this project was to investigate perceptions of Programs of Study in Oklahoma.

As part of the NPOSI, a series of six sessions were held. The sessions consisted of three held in-state at Tulsa Technology Center and Meridian Technology Center, as well as three national sessions held in Louisville, Ky.; Washington, D.C.; and via web conferencing.

In addition to the NPOSI sessions, a series of additional monthly meetings were held to further provide guidance as Oklahoma moves from Programs of Study to Rigorous Programs of Study. These meetings are scheduled through the beginning of 2013.

As part of the facilitated process, each state team creates an actionable plan for addressing one or more POS implementation barriers. One barrier identified in Oklahoma to successful transitioning to RPOS is the misunderstanding and confusion caused by the lack of a common language. As a result of participation in the NPOSI, the concept for the Oklahoma Programs of Study Institute and Oklahoma Programs of Study Summit was developed.

Analysis of Stakeholder Interpretations of Programs of Study in Oklahoma

Before Oklahoma can move from Programs of Study to Rigorous Programs of Study, a common language among stakeholders must be refined. To provide evidence of this need, Oklahoma had an opportunity to work with Ms. Lisa-Anne Ferris, M.Ed., graduate research student at the National Research Center for Career and Technical Education, as part of the NPOSI.

The purpose of this research project was to gauge the interpretation of key stakeholders across the state of Oklahoma regarding Programs of Study. This project used qualitative research methods to identify and understand administrators, CareerTech specialists and teachers' interpretations of POS in Oklahoma.¹⁰

A series of questions was asked to each participant:

1. How do you define Programs of Study? Plans of Study? Career Majors? Which term does your district most frequently use?
2. What are your sources of information on this topic? (Referring to archival information as well as how does one receive new information)
3. When you are at meetings or having conversations, do you think everyone is on the same page regarding Programs of Study, Plans of Study and Career Majors?
 - a. No: In what sense? Why do you think there is such mismatching? (Between and within leadership groups)
 - b. Yes: In what sense?
4. When any mismatching happens, how do you usually remedy the issue?
5. What are your thoughts on the importance of consistency regarding people's interpretations on this topic?
6. How does consistency impact the future of CTE in OK?
7. Anything else relevant to this topic that I did not ask?

The study was conducted beginning in February and concluding in April 2012. The report includes several quotes from different interviewees and additional information.

All recommendations point to the need for consistent communication across the local and state levels for the successful implementation of RPOS in Oklahoma. There was absolute agreement on the importance of this consistency and how it relates to the future of CTE in Oklahoma and the country. This report sheds light on the emerging issue that ODCTE is facing regarding interpretations of POS. The next step is to use this information to create a more common language for POS in Oklahoma as well as create a more consistent statewide implementation system.

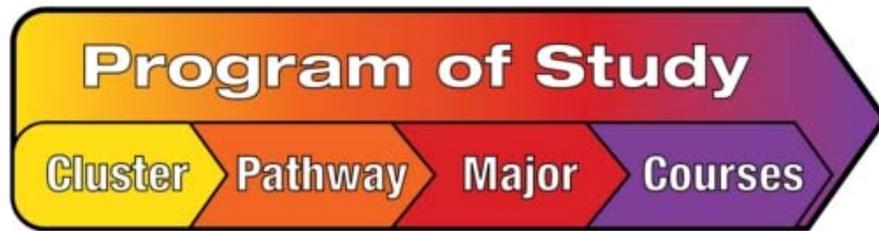
The report in its entirety is included as Appendix A.

Creating a Common Language

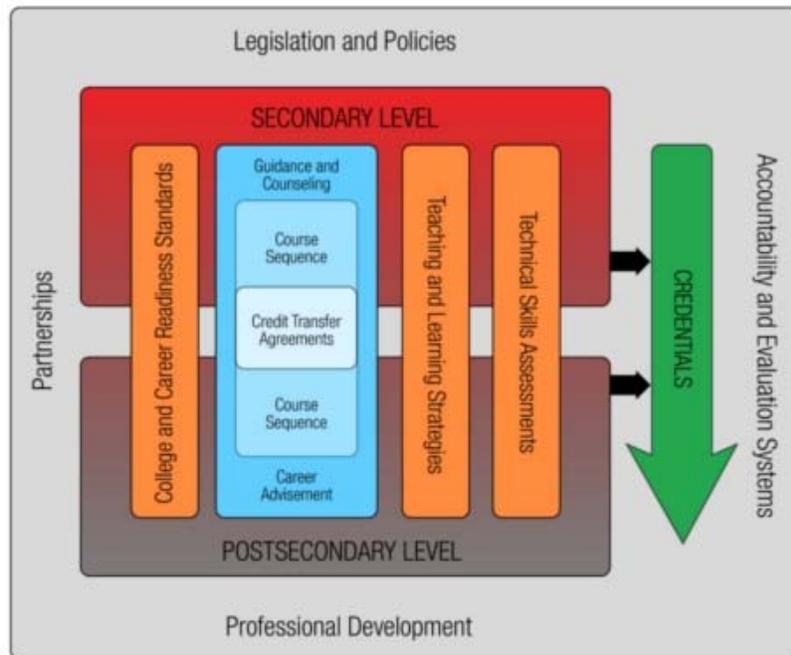
Currently, several different terms are used interchangeably and describe concepts that are close to one another. Examples of this are the terms career major, plan of study and programs of study. Even though each describes a different subject, they are used by many to mean the same thing.

To help provide clarification and move toward a unified language:

- Several members of the Oklahoma team met to help update the CareerTech glossary. The CareerTech glossary is used by CTE administrators and educators and contains common words and phrases used in Oklahoma CTE while describing the intended meaning. This glossary did not contain strong Programs of Study language and the opportunity was used to add this language as well as including additional POS language. This updated glossary, when completed, will be made available on the ODCTE website at www.okcareertech.org
- To create further cohesion around a common Programs of Study language, team members met to develop a proposal for the Oklahoma Association of Technology Center's Gold Star School program. This program is designed to recognize technology center districts that have met rigid and demanding criteria demonstrating a high level of excellence.¹¹ Criteria in the application was close to the POS language, and the team decided that it should reflect the federal definitions as provided in Carl D. Perkins Career and Technical Education Act of 2006. The team proposal was sent to the Gold Star School Application Review Committee, which approved the proposal in June 2012 for the 2013-2014 application.
- A Plan of Study is a document that shows the course sequence a student will take as part of a Career Pathway and Career Major. Using terminology that shares the same acronym with POS creates confusion. The team decided that the term "Individual Career Plan," or "ICP," would be used in place of Plan of Study. This term separates Programs of Study and Plans of Study and allows for less confusion when using the acronym POS. It also better defines the subject as the sequence of courses a student takes to his or her educational goals. These updated definitions will be included in the CareerTech glossary, updated on the ODCTE website and communicated to the field during professional development events.
- The team worked with ODCTE's Creative Services Division to develop and improve graphics related to RPOS implementation. The team worked to change the colors of the Perkins Collaborative Resource Network's POS graphic, as well as developed a matching graphic to help explain where RPOS fits in with Oklahoma's Career Clusters initiative. The team developed the graphics as a way to visually demonstrate how RPOS is a more holistic approach to CTE, show instructors and administrators how POS fit together and reference core components and subcomponents of the POS framework.



PROGRAM OF STUDY DESIGN FRAMEWORK



The resulting language will be solidified at the ODCTE and communicated to secondary and post-secondary educational institutions through professional development activities such as Summer Conference and GuidanceFest.

Oklahoma Programs of Study Institute

In order to effectively and efficiently reach as many CTE educators as possible the team pursued the development of the Oklahoma Programs of Study Institute.

The OkPOSI is intended to support educational institutions in enhancing and strengthening the quality of career and technical education instruction provided to secondary and post-secondary students. Using the national institute as a model, the OkPOSI will specifically support secondary, technical and post-secondary schools in addressing barriers to moving from Programs of Student to Rigorous Programs of Study. Participants will be held as state models for RPOS implementation, and input from the OkPOSI will be used in the development of the Carl Perkins State Plan upon reauthorization of the law.

Participating institutions are Tulsa Public Schools, Claremore High School, Choctaw High School, Meridian Technology Center, Mid America Technology Center and Oklahoma State University Institute of Technology.

Timeline:

September 11, 2012 - OkPOSI Session I

Session I will be held at Meridian Technology Center in Stillwater, Okla., from 9 a.m. to 2 p.m. Participants will learn about RPOS and conduct an implementation assessment using Programs of Study: Local Implementation Readiness and Capacity Self-Assessment¹² to discover their strengths.

OkPOSI Project

Between Session I and Session II, participants will more fully research their POS strengths. They will use the assessment conducted during Session I to guide conversations about how to move from POS to RPOS at their educational institutions.

November 15, 2012 - OkPOSI Session II

Session II will be held at Meridian Technology Center in Stillwater, Okla., from 9 a.m. to 2 p.m. Participants will share their projects and receive input from other participants. Participants will help develop the Carl Perkins State Plan and define what a fully implemented Rigorous Programs of Study looks like in Oklahoma. Participants will also assist in developing the agenda for the Oklahoma Programs of Study Summit.

Each team will identify a team leader who will serve as the project contact and be responsible for coordinating activities before, during and after the OkPOSI sessions. The team will be composed of an administrator (superintendent, principal, president), instructor and guidance personnel. The team will commit to active participation in the

Oklahoma Programs of Study Summit and present their discoveries to move Oklahoma forward in implementing RPOS.

Draft agendas for Session I and Session II are included as Appendix B.

Oklahoma Programs of Study Summit

On February 12, 2013, ODCTE will conduct the Oklahoma Programs of Study Summit. This one-day summit will be held at the Tuttle Seminar Center of the ODCTE and consist of two sessions beginning at 9 a.m. and 1 p.m.

The purpose of the summit is to share the discoveries of the National Programs of Study Institute and the Oklahoma Programs of Study Institute with all Carl Perkins eligible recipients. Oklahoma Programs of Study Institute participants will help develop the summit and present how an RPOS is defined in Oklahoma. The summit will be recorded for archival use.

At the conclusion of the OkPOSS, Carl Perkins eligible recipients will have the knowledge to write their answers to the Perkins RFP. Eligible recipients will understand the definitions of Rigorous Programs of Study and how they look at a mature site. They will understand how each of the four core components and 10 subcomponents relate to career and technology education and how RPOS makes the connection of academic and technical coursework to the world of work.

Measuring Programs of Study

The purpose of the OkPOSI and OkPOSS is to put research into practice as Oklahoma moves from POS to RPOS. It is essential that ODCTE researches its practice to better inform itself and local education partners for a full and consistent implementation of RPOS across the state. This research includes not only measuring short-term results for increasing RPOS awareness and understanding, but the long-term results of implementation quality and student performance outcomes. This data will be analyzed to inform decision makers at both the state and local levels in moving RPOS forward.

In the short term, increased awareness of essential elements of RPOS will be evidenced through follow-up surveys administered to OkPOSS participants. These surveys will measure perceived knowledge before and actual knowledge after the summit. Results will be used to determine professional development needed and provided by ODCTE.

Long-term implementation quality of programmatic RPOS will be assessed through the Federal Legislation Assistance Division of ODCTE. The FLA Division is responsible for the administration of the Carl D. Perkins Career and Technical Education Act and annually

manages the Perkins application, conducts self-evaluations with Perkins LEAs and submits the Consolidated Annual Report to the Office of Vocational and Adult Education. The FLA Division receives assistance from ODCTE Regional Administrators in conducting five-year evaluations of local sites.

Student performance outcomes related to RPOS will be analyzed and used to improve the application and evaluation processes. Data currently collected includes:

- Student performance data as required by Perkins legislation including academic and skill attainment, graduation and placement.
- Student performance data such as a student's Career Major status (e.g., completed career major, course concentrator), Educational Status (e.g., attending technology center as adult, attending public collegiate school as an adult student) and Employment Status (e.g., employed full-time civilian).
- Certification data (e.g., tested/passed, tested/did not pass) with the ability to match student records with Oklahoma State Regents for Higher Education and determine degree completion.
- Employment data (e.g., current salary) with the ability to match student records with Oklahoma Employment Security Commission.

Collecting data on implementation quality and student performance outcomes is essential to the movement from POS to RPOS in Oklahoma. As the state moves forward in RPOS implementation, changes in the data collected and how it is evaluated will take place as we work on continuous student and program improvement.

The Future of RPOS in Oklahoma

The future of Rigorous Programs of Study in Oklahoma is exciting. The National Programs of Study Institute can be credited with jumpstarting the interest in moving from POS to RPOS in Oklahoma at the state level. The Oklahoma Programs of Study Institute will highlight well developed sites and prepare the plan to move CTE forward. Through the Oklahoma Programs of Study Summit, local educational institutions will understand mature RPOS and be prepared to move forward for the future of CTE in Oklahoma.

The Oklahoma CareerTech System will continue to receive technical assistance and professional development related to Rigorous Programs of Study, past the OkPOSI and OkPOSS, through the Career and Academic Connections and Federal Legislation Assistance Divisions. These are the divisions that will be charged with ensuring that the movement from POS to RPOS is continued and implemented.

The connection of academic and technical coursework to the world of work through Rigorous Programs of Study will prepare CareerTech students for the 21st century economy.

References

¹ Oklahoma Department of Career and Technology Education (ODCTE), CareerTech 2011 Annual Report.

² Bray, Janet. "Welcome to 2012!" *Techniques*, January 2012, 6.

³ Natalie Stipanovic, Ph.D., Rob Shumer, Ph.D., and Sam Stringfield, Ph.D., "Lessons Learned from Highly Implemented Programs of Study," *Techniques*, 87, no. 1 (2012): 20-23,

⁴ Catherine Mobley, Ph.D., Cathy Hammond, Ph.D., Cairen Withington, Sam Stringfield, Ph.D., Natalie Stipanovic, Ph.D., Julia Sharp, Ph.D., and Sam Drew, Ph.D., "Developing a POS Via a Statewide Career-Focused Reform Policy," *Techniques*, 87, no. 1 (2012): 25-27,

⁵ National Association of State Directors of Career and Technical Education Consortium (NASDCTEc), "Reflect, Transform, Lead: A New Vision for Career Technical Education." Last modified 2010. Accessed June 26, 2012.

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⁶ Southern Regional Education Board, "Key Practices." Accessed June 26, 2012.

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⁷ Southern Regional Education Board, "Key Practices." Accessed June 26, 2012.

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⁸ Symonds, William, Robert Schwartz, and Ronald Ferguson. Harvard Graduate School of Education, "Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century." Last modified February 2011. Accessed June 26, 2012.

http://www.gse.harvard.edu/news_events/features/2011/Pathways_to_Prosperty_Feb2011.pdf.

⁹ National Research Center for Career and Technical Education, "NRCCTE." Accessed December 2011. <http://136.165.122.102/mambo/>.

¹⁰ Lisa-Anne Ferris, "Analysis of Stakeholder Interpretations of Programs of Study in Oklahoma," (University of Louisville), 2012

¹¹ Oklahoma Association of Career and Technology Education, "Oklahoma ACTE." Last modified June 2008. Accessed March 28, 2012. <http://www.okacte.org>.

¹² Jardine, Elizabeth, Steve Klein, and Jim Schoelkopf. MPR Associates, "Programs of Study: Local Implementation Readiness and Capacity Self-Assessment A Tool for Local College and Career Readiness." Accessed June 27, 2012.

<http://cte.ed.gov/docs/POSLocalImplementationTool-9-14-10.pdf>.

Appendices

- A. Lisa-Anne Ferris M.Ed., " Analysis of Stakeholder Interpretations of Programs of Study in Oklahoma," (University of Louisville), 2012
- B. Oklahoma Programs of Study Institute Agenda

Appendix A

Analysis of Stakeholder Interpretations of Programs of Study in Oklahoma
Lisa-Anne Ferris M.Ed.
University of Louisville

Executive Summary

The purpose of this research project was to gauge the interpretation of key stakeholders across the state of Oklahoma regarding Programs of Study. The Carl D. Perkins Career and Technical Education Improvement Act of 2006 mandated that every organizing body that receives funding or can be eligible for funding provide a Program of Study (POS). Programs of Study are the pathways a CTE student chooses in secondary school that lays out the road map of guidelines, advisors, technical instruction, and courses sequences, among other things that prepare a student for college and careers. Implementation utilizes several strategies that include state level control and also more locally controlled POS. Regardless of the implementation strategy, it is important to stay consistent across the state of OK for the sake of the students and what they are learning and being prepared for in the real world.

This project utilized qualitative research methods to identify and understand administrators, career tech specialists, and teacher's interpretations of POS in OK. Interview data suggested an agreement of the importance of consistent language across the state, but this consistency was not supported. There was a split in the clarity and consistency between administration and teachers. This gap in language causes confusion and frustration among stakeholders and also poses the risk of inconsistent implementation. It is recommended that all stakeholders be on the same page regarding POS through increases in communication and knowledge. It is suggested in this report that career tech specialists bridge the gap between teachers and administrators as well as a possible creation of a Clearinghouse consisting of shared information and common language between all stakeholders.

The implications of this paper are a part of a larger research project for the National Programs of Study Institute report for the state of Oklahoma. This report's purpose is to find early data that supports the hypothesis that there is confusion and inconsistent language among key people in CTE in OK.

Literature Review

The purpose of this research project was to examine the consistency of terminology used across the state of Oklahoma regarding the implementation of Programs of Study on both the state and local levels. Multiple stakeholders were interviewed who represent career and technical education for the state of Oklahoma. These stakeholders included those in administrative positions as well as career tech specialists and teachers. It was the goal of this project to identify and understand the mechanisms through which stakeholders define and further discuss programs of study, plans of study, and career majors. Identification of this understanding enables the researcher, the Oklahoma Department of Career and Technical Education, and those who work with the National Programs of Study Institute as it relates to Oklahoma, to discover new ways to approach

conversations about Programs of Study and create a more common and consistent language.

As with most topics, an understanding of the literature base is essential for precise and informed research. This report will focus on the literature available on Programs of Study. The history of the Oklahoma Department of Career and Technical Education will be outlined as this entity was the central focus of the research project from an organizational standpoint. Finally, the research project itself will be explained followed by the researcher's impressions and conclusions.

Programs of Study

In 2006, the re-authorization of the Carl D. Perkins Career and Technical Education Improvement Act, or Perkin's IV, brought about major changes in secondary and postsecondary education as it relates to the implementation of career and technical education practices. The fourth version of this legislation mandated that each entity that receives funds, or those that are eligible to receive funds, must provide at least one Program of Study (POS) (Lewis, Kosine, & Overman, 2008). This term was completely new to the field of career and technical education and education in general for that matter. Six years later, the nomenclature used to describe what was once a novel term is still largely unexplained and inconsistent across the state of Oklahoma. This is not to say the state implementation of the Perkin's IV legislation is inconsistent, however, the terms used to describe Programs of Study appear to be different for many regions in the state as well as gaps between national, state, and local lexicon.

The goal of Programs of Study is to align technical instruction with academic content in an attempt to prepare youth for college and careers. Alignment between secondary and postsecondary education is an essential component of the system (Lewis et al., 2008). Students entering into a program of study in secondary education commit four years during high school to completing their course of study which is chosen from 16 Career Clusters provided by this national effort. The program of study a student chooses can be thought of as a roadmap a student starts in 8th grade when it is chosen, all the way through high school graduation. Within that roadmap includes all the necessary coursework and applied learning that will enable a student to be a successful person whether they move on to college or straight into a career.

What was once termed "Model Sequences of Courses" by the House and "Career Pathways" by the Senate formed into what the field now calls Programs of Study, which may be some of the reason there is still confusion and inconsistency regarding the language used to describe POS (Lewis et al., 2008). It seems that even at the beginning POS were called different names. Although the name has evolved, much of the foundational aspects have been used in career and technical education since Perkins I. Regardless of the title, the federal government encouraged that this initiative integrated secondary and postsecondary education, created programs that were articulated, and

developed measures of accountability and effectiveness. Specifically, there are four major components of Programs of Study.

These include:

- 1) incorporation of secondary and postsecondary education,
- 2) content that is academically challenging as well as up to date career and technical lessons taught in a non-duplicative manner,
- 3) pathways to credentials/certificates or postsecondary degrees
- 4) the ability of secondary students to earn postsecondary credit while in high school (Shumer, Stringfield, Stipanovic, & Murphy, 2011).

Expanding on these four components, it can be gathered that Programs of Study aim to align secondary and postsecondary education by means of college credit/certificate transfer and attainment through challenging technical and academic instruction. A framework has been introduced within the literature that operationalizes the implementation of those four components. Elements of this framework encourage active participation from all stakeholders so that the process of implementation is smooth and outcomes are achieved. Elements to the framework, according to the Office of Vocational and Adult Education (2010) as cited in MRP Associates Inc. (2010) include,

“...legislation, partnerships, course sequences (plan of study), college and career readiness standards, teaching and learning strategies, guidance counseling and academic advisement, credit transfer agreements, professional development, technical skills assessment, accountability and evaluation system (p. 7).”

Strategies for the implementation of Programs of Study are diverse across all states as one can imagine. Lewis et al., (2008) coded all 53 state plans for implementation of Programs of Study and examined the strategies/themes that surfaced. Most of the state plans (71.4%) left the implementation of POS to the local districts. The states provide templates, models and frameworks to the local districts but the primary responsibility of implementation rests on the local level. Other strategies for implementation across the states include statewide articulation agreements (30.6%), state developed POS that will be implemented by the local districts (30.6%), utilization of already implemented initiatives similar to POS such as Tech Prep or Career Pathways with the goal to expand those programs (30.6%), and finally an “Other” category (18.4%) (Lewis et al., 2008). Some examples of strategies in the “Other” category include Iowa and South Dakota’s focus on the importance of a strong transition from community college to a 4 year college, California’s focus on dissemination of outstanding local POS, and Arizona’s state-wide POS that upon completion will be accepted as the first two year’s towards a Bachelor’s degree at three state universities. Most states, including Oklahoma, base their POS on the 16 career clusters adopted by the Office of Vocational and Adult Education (Lewis et al., 2008).

“State” Examples of Implementation Strategies

To better understand Programs of Study it would be beneficial to review specific examples of how some states have implemented the system. A study was conducted that examined six states implementation of POS (Shumer & Digby, 2011). These states were chosen at random from a pool of states that applied for formal technical assistance from a national organization, and a pool of states that did not receive formal technical assistance for POS implementation. Out of these pools, six states in total were chosen for this study. The states were de-identified in this report because the goal of the report was not to compare the states, but rather to offer insights into the process, strengths, and challenges that come with implementation of Programs of Study. State profiles are as follows: State A, located in Western United States, implemented POS through the local district strategy as stated above. State B, a Midwestern state, also uses the local strategy. State C was also a Midwestern state that used what was described as a “top down” strategy where the state developed the POS and the local district adopted the system. State D, a state located in the eastern part of the country also used this “top down” approach. State E, also in the East, used a combination of “top down” and “bottom up” approaches wherein “bottom up” was described as the locally controlled strategy that other states were also using. Finally, State F, again in the East used the “top down” structure.

Data collection methods included site visits as well as participatory journals from three selected people within the state from secondary, postsecondary, and business and industry (Shumer et al, 2011). Site visits included interviews from recommended personnel within the state given by the CTE POS coordinator for the state. Audio recordings were made of interviews, focus groups, and general interactions with participants in the study. The participatory journals were written by each of three people chosen on the different levels as mentioned above. These reports were reflections of the involvement of that person in the process of POS. In all, 40 recordings and 30 written documents were collected and analyzed for themes which will be explained below.

There were many themes that emerged from the data gathered on all six states that implemented POS utilizing several different strategies. Both positive areas as well as challenges faced were identified.

Four general themes identified were:

- 1) “Technical assistance is provided at both the state and local levels.
- 2) No matter what the context, ‘relationships matter.’
- 3) Champions deliver much of technical assistance.
- 4) POS are more than just about CTE: They are about basic education reform connecting academic learning with real-world contexts” (Shumer et al., 2011, pp. 3-5).

In summary, both state and local authorities work collaboratively through advisory councils and committees to ensure implementation and consistency for POS in all states. Even though some states were more “top down” and others “bottom up” most used some kind of combination. Collaboration between the state and local authorities proved to be a strength regarding the ability to effectively produce challenging curriculum and frameworks that guide the success of the POS roadmap. Those that are knowledgeable about CTE, Perkins IV, and Tech Prep were utilized the most and termed experts in development and implementation. Finally, the link that POS creates between secondary, postsecondary, and business is relevant to all sectors, not just CTE. Giving real-life context to this system is positive and inevitable (Programs of Study Joint Technical Group, 2011). Other studies reported similar themes in the success of programs of study (Stipanovic, Shumeer, & Stringfield, 2012). Essential aspects of successful implementation include engagement, environment that promotes supported learning, content that supports the mandate that students receive pathways to credentialing, an educative system that allows for easy transition from secondary to postsecondary, the difference the high quality teacher can make on the implementation of POS, and an increased respect for the field of CTE.

Literature states some challenges with implementation of POS that can be generalized to other states that implement POS. These challenges include misalignment between secondary and postsecondary because of cultural barriers and mission statements, a lot of commitment and resources are needed in the effective development and implementation of POS from all parties involved, and the non-linear pathways that surfaced regarding occupational attainment in the “real world” (Shumer et al., 2011). These are just some examples of themes of POS relevant to this study. Although general, these themes represent many implications for the implementation of Programs of Study across the country.

Implications on Current Project

As just mentioned there are several implications that this literature review has on the current research project. Research has shown that POS can create a positive climate for students as they are being prepared for their careers. POS have kept students engaged in their career plans as it provides relevant technical instruction that is directly applicable as well as comprehensive academic content in their chosen career path

(Alfeld & Bhattacharya, 2012; Sundell, Castellano, Overman, & Aliaga, 2012). One of the ways in which POS creates positive change and development in youth is through career guidance (Mobley, Hammond, Withington, Stringfield, Stipanovic, Sharp, & Drew, 2012). Career guidance is one of the elements in the framework of POS and starts much of this process. Also, within POS, students are able to receive an education that not only taps into academic content but also technical instruction, giving them a hands on approach to skills that will better prepare them for the future than just academic instruction alone. Students are able to receive college credit while still in high school at the same time practicing skills and new concepts in the real world (Hyslop, 2012). This has many implications for the future success of the student in this applied learning setting, one of the big one's being networking opportunities. The link that POS have to business and industry is another positive trait the system provides. Frazier and Swygert (2012) contend from their studies on a technical college system's POS pathway that support from the private sector is essential to the success of students in POS. Consistency between all stakeholders involved is an important link in the transition from college to career, a main focus of POS and this research project.

With any project it is always important to become an expert on the topic of research one is conducting. Learning about Programs of Study and what the term means from a national standpoint is essential in understanding what is going on in the state of Oklahoma, which is the focus of this project. It seems that many states use different strategies in their implementation of POS regarding the involvement of both state and local levels. Although the foundation of POS implementation is grounded and consistent, because of different levels of involvement from the state and local authorities, there may be cause to understand why inconsistency's of language are expressed. In this research project there is a concern to remedy this situation in the state of OK. Perhaps the situation in Oklahoma can be generalized to other states as well as they may also be having issues with consistency. Following is an explanation of the Oklahoma Department of Education (ODCTE) as well as the process of the current research project.

Organizational Focus

The organization in which this writer worked closely with during this project is the Oklahoma Department of Career and Technical Education, more specifically with Jeremy Zweiacker who is the Tech Prep and Alliance Coordinator for the state. In order to fully understand the purpose of this research project it may be beneficial to understand the organization as well. Understanding the ODCTE will enable the reader to also infer the importance of the project. The ODCTE was founded in 1929 and it has become a national leader in preparing students for college and careers (okcareertech.org). Along with the State Department of Education and the Regents for Higher Education it is foundation for OK's educational system. There are programs in 400 public districts, 29 technology centers that have 57 campus sites, and 16 skill centers in correctional facilitators. ODCTE is partnered with Cooperative Alliance Program that enables

students to receive college credit while still in high school. This program also serves adult populations as well. The program spans 29 technology centers in 18 colleges and universities. Students can receive credit towards as well as finish an Associate's in Applied Science (A.A.S). Annually, enrollment in CareerTech is about 500,000 students. In fact, CareerTech graduates add \$2 billion to economy compared to students with high school diplomas.

The ODCTE offers pathways for students to become successful in college and careers and as mentioned before it is one of the nation's leaders in doing so. ODCTE offers Programs of Study for those students who wish to have careers in CTE. The broad components of POS were outlined in the literature review. These components are the framework through which students complete their studies. Within this framework are terms such as Plans of Study and Career Majors. A plan of study is the course sequences that are mapped out for the student after a career major is chosen from 16 career clusters (okcareertech.org). There are two kinds of plans of study: cluster plan of study and pathway plan of study. The cluster plan of study is a broad plan of study that focuses on occupational commonalities. The pathway plan of study uses a subset of similar occupations within a career cluster. Career Majors relate to the plan of study regarding sequence of courses. Also the career majors include advisory councils, instruction, and certification/licensure requirements for the chosen career pathway. Because of its relevance, OK has declared Career Majors as Programs of Study.

The POS system incorporates plans of study and career majors. It is essentially an educative system that is funneled from the federal government, down to the state level, and finally to the local level with all three levels working together. As one can imagine, clarity and consistency are key aspects of a functional system. Those are the key issues that will be addressed in this report.

The purpose of this research study is to examine the clarity and consistency among stakeholders involved in the Programs of Study in the state of Oklahoma. These stakeholders include administrative personnel such as Superintendent's of schools or Academic Advising in Community College settings. Other stakeholders include Career Tech specialists, implementers, and teachers of these CTE programs. The scope of the project is to gauge participant's knowledge and interpretation of Programs of Study, Plans of Study and Career Majors at high schools, technology centers, and collegiate partners offering career and technical education. Gauging interpretations will enable ODCTE and other stakeholders to envision a more consistent language for Programs of Study. Multiple perspectives were used from people in different jobs that gave insight into the correct direction on how to remedy this situation and better plan for the future.

The major issue facing the organization is the inconsistent language used among stakeholders in the system. With so many programs across the state, it has come to the attention of Career Tech Specialists and Coordinators that there is a disconnect with the language some districts are using on their local level. When the local levels merge at state and national meetings, confusion and frustration occur, as well as inconsistencies

with the implementation of the Perkin's legislation. Currently the organization is conducting meetings to discuss how to better align the common language that is necessary which is where this report fits into the bigger picture of statewide Perkin IV's POS implementation. The results of this study could better explain reasons for inconsistent language and confusion and build a bridge to a better foundational understanding for all involved. Other states that implement POS can also avoid issues like this that they may also be facing in their statewide implementation.

Purpose

The goals of this project were to utilize research out in the field as well as conduct qualitative data to create an understanding of Programs of Study implementation as it relates to the state of Oklahoma. The objectives were to see what the literature discussed about implementation of Programs of Study as outlined in the literature review section as well as conduct open-ended qualitative interviews with stakeholders about their understanding of Programs of Study. Understanding what the literature says about Programs of Study, and going out in the field and interviewing those within the system enabled the researcher to identify what sort of common language was already out there and being used, and what were the gaps in language or definitions in conversations about Programs of Study.

As mentioned before the state of Oklahoma's CTE population is extremely large and this is an immense project to undertake. As such, this project is spanning into the summer months to fully get the sample needed to make strides in how to rectify this situation and produce a more common language. Contact was made with Jeremy in mid-February and details were discussed about this writer's role in the project. This report belongs in a much larger project for the Oklahoma Programs of Study report for the National Programs of Study Institute. Data was collected from the end of February up until the present time. This writer conference called on a National Programs of Study Institute in State Session as well as interviewed key stakeholders. Data was analyzed through a qualitative approach that examined the themes and descriptions related to the interpretation of POS in the state of Oklahoma. Themes were examined after the first data collection sweep ended in April. Impressions and recommendations were developed at the end of April. The next data collection sweep continued until a large enough sample of stakeholders were interviewed for the National Programs of Study report. Frequent contact was made and data was shared between this writer and the Tech Prep Coordinator all throughout the months described above. For the purpose of this report, data summaries on the collected data will be discussed in the next section as well as impressions and conclusions.

Data Results

In State Session

Data was first collected from the National Programs of Study Institute in state session. Themes that were apparent are the need for communication and consistency with programs of study terminology. This terminology ultimately affects the plans of study that are customized for school districts as well as students. There is a need for national language that uses the same data and performance measures so that everyone in Oklahoma is receiving the same education and pathways to college and careers. Without consistency starting at the programs of study level, plans of study and therefore career major achievements cannot be aligned student to student and even district to district. As a national leader in the development of Career Clusters it is of great importance to provide consistent and aligned information regarding national and state initiatives, industry based standards, and state plans of study.

Interviews

Qualitative interviews were conducted with stakeholders within the CTE system in Oklahoma. There were over 35 participants in this research project that included administrators, career tech specialists and teachers. The group was divided into administration and teachers because it was hypothesized that there was inconsistencies and confusion across the state of OK specifically between administration and those actually implementing the program. Data supported this hypothesis.

Interview questions were created and discussed among the team from ODCTE and this writer. An excel spreadsheet was created by ODCTE specialists where contact information was made available on all potential participants. This spreadsheet enabled the interviewer to choose at random who would be contacted. This alleviated any bias on behalf of those that created the spreadsheet. Participants were contacted through email first about participation and later telephoned. Phone interviews were conducted on the participants after initial contact was made from Jeremy and the researcher. Emails were also sent to participants that answered the open ended questions in writing. The method of sampling was a convenience sample because those that answered emails with a desire to be in the study were included; those that did not respond to the original email were not included. Below are the data summaries for each interview question (Appendix A). Data summaries include the question, theme, and quotes to support the theme that emerged. Again, administration and teachers were analyzed separately so they will be reported in that way

Question 1: How do you define Programs of Study, Plans of Study and Career Majors? What definition does your school district/sector use?

The theme from administration was that their understanding of POS was general and some lacked specificity when it came to differentiating between plans of study and career majors. Several general definitions were given as well. One superintendent described programs of study as, "A course of action students take in reference to a career as well as the experience they will pursue." These definitions were consistent as

they marked a “path” or “transition” students take to earn a degree; however, multiple names were also used to describe the constructs. For example, instead of plan of study one school calls them graduation plans. Data revealed that administration views Programs of Study, Plans of Study, and Career Majors as a holistic view of a student’s path towards earning a degree.

Teachers gave a lot of consistent and comprehensive definitions of programs of study, plans of study, and career majors. Some had inconsistent language such as calling POS pathways or instructional programs but the definitions were the same. Plans of study were identified as course sequences and career majors were identified as certification requirements and completion towards a specific career. Some instructors, however, reported that their district doesn’t use any definition for the constructs and that they are waiting on ACTE, for example, to provide them with some. A majority of instructors relayed that administrators are not aware of what exactly each term means because of lack of expertise in the classroom setting and further implementation. One teacher noted, “School administrators have yet to discuss Programs of Study. If mentioned, they confuse it with the career majors and plans of study. They do not seem to understand the underlying current that these will define us as a system.”

Question 2: What are your sources of information on Programs of Study/Plans of Study/Career Majors? (Referring to archival information as well as how does one receive new information?)

The theme from this question was consistent across both groups. Both administration and teachers contended that most of the information disseminated comes from CareerTech meetings and the website from the ODCTE. One administrator stated, “We take our sophomores to CareerTech where they receive a lot of information that is needed.” As mentioned above teachers agreed with administrators on this answer and expanded to a couple more resources. One teacher stated, “The Oklahoma Department of Career and Technical Education does a superb job of making sure we are well informed and educated on what resources and updates are available to us in all areas.” Other resources mentioned were Career Tech Program Specialists, ACTE, conferences, National CTE State Directors, and Perkins Contacts.

Question 3: When you are at meetings or having conversations at the local, state and national level, do you think everyone is on the same page regarding Programs of Study/Plans of Study/Career Majors? Please describe.

The theme that emerged from administration was mixed. For example, one administrator noted about his school, “Locally we can have our kids on same page because we are a small school. I do not go to any state or national meetings so CareerTech teachers could answer better.” Other administrators that believed the question pertained to them stated that levels of experience within CTE in OK had much to do with people not being on the same page regarding these constructs. It is believed that a lot of instructors and specialists have varying years of experience and this

experience lends to different mindsets and beliefs about Programs of Study in OK. There could be implementation differences, as noted by some administrators, for instance, ACTE uses World of Work, while some districts use Career Clusters as a framework. These implementation differences continue to muddle the consistency of CTE definitions in OK.

The teachers had mixed results on this question as well. Some teacher's thought that everyone is on the same page regarding POS. One teacher stated, "This being a standardized system for the entire CareerTech system allows us to follow the college format that students will follow after high school." Another teacher stated, "Yes, but it is restructured every year so it seems we are always transitioning... I am ready for it to stay the same!" Teacher's that agreed that the system and those within were not on the same page also felt strongly about this question. One teacher noted, "I am not sure everyone knows what is referred to by these terms and I am not sure that everyone is convinced of the importance of all these." Another teacher agreed, "The ones at the table are the superintendents and campus directors who are not specialists in curriculum design and implementation. The decision makers need to be in the same room as the curriculum specialists because relaying information never works."

Question 4: If mixed definitions occur how do you usually remedy the issue?

Administration was consistent with the belief that open conversations, such as articulation meetings, could be the key to remedying this situation. There is a need for all involved to ask for clarification on these specific issues. Other administrators refer teachers/instructors back to the Regional Accreditation Officer or the State Career Tech website.

For teachers, they shared that planning meetings were a major help in these kinds of situations. One teacher stated, "Our Advisory Committee meeting held each year in the fall provides an opportunity for teachers, administrators, and parents to view our curriculum, projects, equipment, and state-of-the-art technology." Other teachers agreed that consulting with program specialists helped but sometimes the situation is remedied by an administrator. This is not consistent with the themes apparent in the first couple of questions regarding the knowledge that administrators have regarding programs of study implementation and how this could remedy the inconsistent construct agreement. Yet other teachers believed that remedying this situation has much to do with the training that teachers receive and that the simpler the constructs the better when implementing training workshops so to lessen confusion.

Question 5: What are your thoughts on the importance of consistency regarding people's interpretations of Programs of Study/Plans of Study/Career Majors?

Both administrators and teachers were consistent on the importance of consistency regarding people's interpretation of POS. One administrator stated that consistency, "...helps spread the word across the state." Another administrator added, "Young people and teachers alike have a lot of things on their mind," so consistency is

important. In contrast, one administrator believed that consistency, although important, is not an end in itself, that it may not be completely necessary. It is believed that local input is invaluable and should not be taken away by a more cohesive program. Business and industry needs may be different at these levels and there is a goal to satisfy and align with entities beyond academia.

Teachers as well thought consistency was crucial for the success of CTE. As an example one teacher relayed, "I believe since Oklahoma is one of the few states that have career and technology centers instead of technical colleges, the language will be vital in order for us to be competitive on the national level for federal funding for technical studies."

Question 6: How does a consistent language concerning Programs of Study/Plans of Study/Career Majors impact the future of CTE in OK?

Again there was consistency on the impact this topic has on the future of POS in OK. One administrator stated, "If everyone is on the same page then CTE in OK can only get stronger and more competitive nationally" Teachers alike shared the same sentiment, "I think understanding the nature of the programs that prepare completers for entry into practice is critical for promoting the transition from educational level to the next. Shared terminology certainly plays a role in achieving this goal."

Impressions and Recommendations

It is clear that there is an astute awareness between professionals within ODCTE including the stakeholders interviewed that there is confusion and inconsistency with the common language regarding Programs of Study and how that effects the present and future of CTE in Ok. Awareness of this issue across the board is a key step in the right direction on how to solve the problem. In these early steps of the larger research project that this report belongs to, identification of the interpretation of Programs of Study in OK was achieved, which was the goal and purpose for this phase of research. As the Tech Prep Coordinators stated in the National Programs of Study Institute in state session and data also suggested; this inconsistency is also grounded in a split between the impressions of administrators and teachers.

One of the first recommendations for positive change within the ODCTE would be for all stakeholders to be on the same page regarding POS implementation language. One suggestion would be to utilize career tech specialists as a bridge between administration and implementers/teachers. Communication between all three parties is essential in the creation of a common language. To do so, another recommendation would be to create a Clearinghouse to boost communication back and forth. Language can be shared and discussed on this interactive website and feedback and resources can also be given. Another recommendation to provide a channel for stakeholders to be on the same page is to disseminate information more, although ODCTE already does a great job at this as data revealed, but also disseminate information in the middle of a semester instead of at the end of semester as one teacher explained in the data.

All of these recommendations point to the need for consistency and communication across the local and state levels for the implementation of POS in OK. There was absolute agreement on the importance of this consistency and how it relates to the future of CTE in OK and the country. This report hopefully shed light on the emerging issue that ODCTE is facing regarding the interpretation of POS. The next step in this project is to close the gap on this issue and use this information to create a more common language for POS in OK as well as create a more consistent statewide implementation system.

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Appendix A

Programs of Study Interview Questions:

Purpose: To gauge participant's knowledge and interpretation of Programs of Study, Plans of Study and Career Majors at high school, technology center and collegiate partners offering career and technical education.

Questions:

1. How do you define Programs of Study, Plans of Study and Career Majors? What definition does your school district/sector use?
2. What are your sources of information on Programs of Study/Plans of Study/Career Majors? (Referring to archival information as well as how does one receive new information?)
3. When you are at meetings or having conversations at the local, state and national level, do you think everyone is on the same page regarding Programs of Study/Plans of Study/Career Majors? Please describe.
4. If mixed definitions occur how do you usually remedy the issue?
5. What are your thoughts on the importance of consistency regarding people's interpretations of Programs of Study/Plans of Study/Career Majors?
6. How does a consistent language concerning Programs of Study/Plans of Study/Career Majors impact the future of CTE in OK?
7. Anything else relevant to Programs of Study/Plans of Study/Career Majors that I did not ask?

Appendix B

Proposed Agendas for Oklahoma Programs of Study Institute

Oklahoma Programs of Study Institute Session I
Meridian Technology Center
September 11, 2012

9:00 a.m. - Ice Breaker

9:15 a.m. - Welcome

10:20 a.m. - Break

10:30 a.m. - Programs of Study

- What is a Program of Study?
- What is your Plan of Study?
- How does it compare to a Program of Study?

11:30 a.m. - Lunch

12:15 p.m. - Needs Assessment Survey

1:25 p.m. - Break

1:30 p.m. - OkPOSI Project

2:00 p.m. - Adjourn

Oklahoma Programs of Study Institute Session II
Meridian Technology Center
November 15, 2012

9:00 a.m. - Welcome

9:15 a.m. - Project Presentations, Overviews and Input

12:15 p.m. - Lunch

1:00 p.m. - Oklahoma Programs of Study Summit Planning

2:00 p.m. - Adjourn