

Continuing Education Options: A Retention and Recruitment Strategy

Abigail, L. Morris, Ed.D.
Director of Assessment and Accreditation
Educational Studies, Leadership, and Counseling
Murray State University
Murray, KY

Stephanie D. Sullivan, Ed.D.
Interim Chair
Educational Studies, Leadership, and Counseling
Murray State University
Murray, KY

Abstract

This quantitative study analyzed data gathered from P-12 educators who participated in a continuing education option (CEO) as part of a state-endorsed rank change program. The 12 to 18-month CEO professional learning experience is designed to allow educators to grow in their profession and achieve a rank change through field-based experience, research, and approved professional development. The research examined the teachers' experience with the CEO program and confidence in their ability to implement strategies and make instructional impacts on student outcomes. Innovative delivery methods that support work-based learning opportunities provide educators with authentic experiences beyond traditional modes of learning throughout the span of their careers. Collaboration between states, school districts, and institutions of higher education to develop certifications, additional avenues for increased salaries based on specializations, and incentives for educators to engage in continuing education options could increase the retention of highly qualified educators.

Keywords: continuing education option (CEO), retention, recruitment, professional learning, teacher shortage

Introduction

In a time when teacher shortages are prevalent, lower enrollments persist in traditional educator preparation provider (EPP) programs while the demand for an educator's ability to navigate a dynamic and diverse student landscape increases. This environment has led to the need for a magnified focus on continuous learning. Many districts have been forced to fill classroom vacancies with emergency certified educators, long-term substitutes, or piecemealing schedules to cover gaps left by a lack of qualified candidates. What can districts, departments of education, and EPP's do to support educators in the field that will increase positive impacts on student achievement, provide opportunities for districts to support educators with salary increases, and provide strong, embedded

professional learning to promote longevity in the classroom?

In Kentucky, educators are classified based on a rank system. Table 1 describes the requirements for the four common teacher ranks in the Commonwealth of Kentucky. For Kentucky educators, rank and years of service are factored into their salary schedule. A Rank I teacher will top out on the pay scale according to years of experience. Teacher earning power is factored into teacher retirement payments, so many educators earning a Rank I have a multiplier effect. Rank changes have historically been achieved through institutions of higher education, but in recent years, a focus on alternative methods has been more pronounced, such as the Continuing Education Option (CEO) Plan II.

Table 1

Teacher Ranks in Kentucky

Requirements for Rank in the Kentucky Education System			
Rank I Teacher	Rank II Teacher	Rank III Teacher	Rank IV Teacher
Hold Regular Certification	Hold Regular Certification	Hold Regular Certification	Hold Emergency Certification
Hold a Rank II	Hold a Rank III	Approved 4-year degree or equivalent	Earned required number of college credits or equivalent training experience
Master's degree or CEO certification or initial certification from National Board for Professional Teaching Standards	Master's degree or CEO certification or initial certification from National Board for Professional Teaching Standards		

CEO Plan II is one way an educator can earn a rank change in the Commonwealth of Kentucky. According to the Kentucky Educational Professional Standards Board (EPSB) (2018a), a CEO program:

supports teachers in achieving a Rank I or Rank II through individualized research-based, job-embedded professional development plans. A teacher may use the CEO for achieving Rank I or Rank II, but not both. Rank change through the CEO process is only recognized in Kentucky, and though it is not a master's degree, it does meet statutory requirements for continuing education (KRS 161.095). (section "Purpose of CEO")

This experience is a combination of synchronous and asynchronous learning. It embeds professional learning for the educator with the support of a coach. In addition, the educator is involved in an action research project that demonstrates learning through an instructional unit. The program is connected to either Kentucky Teacher Standards or Kentucky Teacher Leader Model Standards, based on the focus of the CEO program. Districts, groups of districts, and Kentucky institutes of higher education are allowed to submit a CEO Plan II proposal and, if approved, offer a CEO Plan II for rank change (EPSB, 2019).

Purpose

The purpose of this study was to investigate the relationship of how educators who have participated in continuous education opportunities (CEO) view their professional learning experience compared to that of higher education and traditional professional learning opportunities. In particular, the researchers sought to identify: (a) the impact teachers attributed to student learning as a result of their participation in a

CEO program, (b) how teachers perceive learning from a CEO program compared to a traditional professional learning opportunity, and (c) how teachers perceive learning from a CEO program compared to traditional EPPs.

The findings from this study will serve as a starting point for districts, EPPs and state departments to collaborate to find more effective ways to support educators and students.

Literature Review

National Teacher Shortage

According to the U.S. Department of Education, all 50 states experienced teacher shortages in 2022-2023, especially among special education teachers, science teachers, and math teachers. To adjust to this critical issue, districts increased class sizes, canceled courses, added duties to currently employed teachers, and hired people who were not qualified to fill the open positions, with 34% of new teachers not having certification in the area they were hired in the 2020-21 school year. All of these options likely led to adverse effects on students' learning (Darling-Hammond et al., 2023).

The Learning Policy Institute (LPI) released a report, *The Federal Role in Ending Teacher Shortages*, which shared actions the federal government could initiate to develop a nationwide strategy for teacher recruitment, preparation, support, and retention (Darling-Hammond et al., 2023). Seven key areas are listed below.

Increased Compensation

State/local levels determine teacher salaries; however, federal actions could include incentives to states and districts to raise salaries, provide tax credits and/or housing subsidies, and offer financial aid to eliminate education debt.

Debt-free Teacher Preparation to Strengthen Recruitment

Expanding service scholarships and loan forgiveness programs to cover the cost of educator preparation at both the undergraduate and graduate levels, including workforce “learn and earn” apprenticeships, could incentivize candidates to enter the teaching profession.

Improved Preparation by Expanding High-Retention Pathways

The effectiveness of a teacher and the probability of retention are greatly impacted by the preparation received. Improvements made in teacher preparation programs by promotion of models such as residency programs, Grow your Own programs, and other programs that build capacity could lead to increased preparation and enhanced retention.

High-quality Mentoring

Research indicates that beginning teachers who are not provided quality mentoring are twice as likely to leave the profession. Induction support delivered by expert veterans can lead to higher retention. Matching grants could be provided to states and districts to implement research-based induction models.

Creation of Collegial Environments that Encourage Collaboration

When educators expand and share their skills and expertise with others, effectiveness among colleagues is promoted, which in turn leads to retention. Strengthening professional learning that is job-embedded can be funded through Title II-A and Title III of the Elementary and Secondary Education Act, as well as federal incentives to attract expert teachers such as those certified by the National Board for Professional Teaching Standards.

Redesign of Schools to Support Teaching and Learning

Teachers are likely to remain in educational environments where they

believe they can have success. This success with students relies on strong relationships among students, educators, and families. Applying 21st-century approaches can better support teaching and learning for systemic change.

Rethink School Accountability

The reauthorized Elementary and Secondary Education Act - Every Student Succeeds Act - better measures school quality and equity with a focus on improvement, which lessens punitive metrics that prohibit educators from entering schools with high needs. The federal government could also increase Title I allocations, which are dispersed based on poverty levels, to recruit, prepare, support and retain a diverse workforce aimed at reaching all learners (Forsht, 2023).

Teacher Shortages in Kentucky

According to a report by the Kentucky legislature’s Office of Education Accountability (OEA), the teacher shortage is growing more severe. Teacher shortages have long existed in Kentucky; however, since 2019, the condition has escalated. The consistent theme is the lack of funding and the impact on teacher salaries and working conditions (Bailey, 2023). With teacher salary being a strong indicator of teacher shortages, many districts have increased pay to be more competitive and to recruit and retain a teaching workforce. Once recruited to the profession, working conditions play a major role in retention. After the pandemic, concerns about student behavior and other stressful factors have been attributed to teacher turnover. The federal ESSER funding allowed districts to compensate teachers; however, that opportunity is ending, which will cause additional financial challenges for districts (Kentucky Legislative Research Commission, 2023).

To address teacher salaries, districts have increased starting salaries, ranging from 3% to 22% from 2014 to 2023. The

lowest starting salary was reported at approximately \$34,000, with the highest being over \$45,000. Ironically, OEA reported that when comparing earnings after leaving the teaching profession, 65% of teachers were making \$5,000 more than when they transferred to the private sector. Many superintendents and principals stated that benefits and quality of life for teachers could also be possible causes of the teacher shortages. Additionally, teacher turnover was associated with working conditions as indicated by the Impact KY Working Conditions Survey (Kentucky Legislative Research Commission, 2023).

Federal funding through the Elementary and Secondary School Emergency Relief (ESSER) Funds, along with the Support Education Excellence in Kentucky (SEEK) program funds, have assisted districts in providing financial support to recruit, retain, and support teachers, as well as funding additional certified and classified positions to assist with academic challenges/deficits that exist as a result of the pandemic. The ESSER funds, \$13.2 billion allocated by Congress through the Coronavirus Aid Relief on March 27, 2020, had to be spent by September 30, 2024, so that source of funding has now come to an end (U.S. Department of Education, 2025). During 2023, these resources were able to fund over 2,300 certified positions and over 1,500 classified positions. Once funds were no longer available, schools lost this extra assistance. Additionally, since enrollment, as measured by average daily attendance (ADA), has declined since 2020, SEEK funding has proportionately decreased. Each of the 171 districts in Kentucky had lower attendance rates in 2023 than in 2019 (Kentucky Legislative Research Commission, 2023). The level of funding is 27% less than it was in 2008, resulting in average teacher pay failing to keep up with

inflation (Bailey, 2023). In 2024, Kentucky was ranked 40th in the country with an average teacher salary of \$54,574 (NEA, 2024).

In 2023, over 10% of teachers throughout Kentucky did not return to the profession. This was the highest percentage experienced during the 2014-2023 observation period. There has also been an increase in the number of teaching candidates who have pursued alternate routes to certification, including emergency certification. In 2023, there were nine options in Kentucky for alternative certification, with the most common being Option 6, comprising nearly 80% of alternate certificates between 2020 and 2023. Option 6 allows a candidate who has a bachelor's degree to teach while pursuing a post-baccalaureate program to earn a teaching certificate. Additionally, twenty partnerships were developed for the Option 9 program, which allowed school districts to partner with a college or university to develop a program allowing participants to earn initial teacher certification and a bachelor's degree while working at a school/district in a non-teaching (classified) role (Kentucky Legislative Research Commission, 2023).

The greatest barrier identified was the lack of qualified candidates, especially in certain content areas. More than 80% of respondents reported no available/satisfactory applicants in the area of physics, over 70% reported no candidates for chemistry or high school math, and between 50% and 60% reported no candidates for world languages, Earth science, middle school science, biology, and information technology (Kentucky Legislative Research Commission, 2023).

There have been efforts to reduce the teacher shortage including new teacher pathways, support for new teachers, innovative recruitment strategies, increased

pay, and scholarships for aspiring educators. Some districts have increased their rank change pay scales and have allowed teachers to change their rank twice during a school year. Some reimburse teachers for tuition, provide signing bonuses, and offer to compensate for relocation costs. For some difficult-to-fill positions, such as a high school math teacher, one district offered a \$10,000 stipend (Kentucky Legislative Research Commission, 2023).

The teacher shortage has other indirect impacts on the quality of education. Almost 80 districts reported that they retained certified staff that would have previously been terminated or non-renewed in previous years, prior to the teacher shortage, totaling over 300 positions. Therefore, teachers with poor performance are able to remain in the schools, which in turn impacts the teaching and learning of students (Kentucky Legislative Research Commission, 2023).

Rank Change Impacts on the Teacher Shortage

Due to the dire state that Kentucky school districts experienced regarding teacher shortages, the Education Professional Standards Board (EPSB) approved a waiver that removed the requirement for teachers to earn Rank II status. The intent of this move was to allow districts more flexibility in recruiting and retaining teachers. Previously, to move to Rank II, teachers were required to complete an approved master's degree program by the second renewal of the candidate's five-year professional certificate. While it was anticipated that many educators would continue to pursue the rank change to increase their salary, the flexibility allows the teachers to make that choice and complete it on their own timeline (Kentucky Teacher, 2018).

In 2019, the EPSB approved amendments to 16 KAR 8:020 to create a

pathway for additional rank change programs. Rather than earning a rank change through the completion of a master's program, the continuing education option (CEO) through CEO, Plan II allowed districts, groups of districts, and Kentucky institutions of higher education to submit CEO Plan II programs to the EPSB for approval. The proposals included the following components: a rationale for educators' professional growth needs in content knowledge, instructional practice, and/or leadership skills, with supporting evidence such as district data aligned to the comprehensive improvement plan; identified standards for program completion from the Teacher Leader Model Standards or Kentucky Teacher Standards; eligibility requirements; justification for program completers; letter of support from the district superintendent, director, or dean; estimated time commitment; high-quality research-based resources; program staff and credentials; and details of the capstone action research project and how it meets identified standards and positively impacts learning outcomes for candidates and students, including rubrics, sequence of targets of professional growth, and publication requirements (Education Professional Standards Board, 2019).

The CEO Plan II option has attracted many candidates because it is a cost-effective program that is often offered at a lower cost than the typical master's degree program. Many institutions of higher education have allowed prior learning experience from professional learning, such as the CEO, to provide credit toward graduate programs, leading to future rank changes and/or certificates, endorsements, or degrees (Kentucky Rank Advancement Academy, n.d.). Educators who have successfully completed CEO Plan II programs have provided candidates the opportunity to gain rank changes through

job-embedded experiences with mentor support (Education Professional Standards Board, 2019).

Job-Embedded Professional Learning

Professional learning in p-12 institutions is a commonly understood practice used to support educators in order to increase knowledge, adjust practices, and improve learning environments to better address the needs and outcomes of students (Hattie, 2011). Several studies have found that improved content knowledge and practice has had a positive impact on student outcomes (King & South, 2017; Kennedy, 2016). A school is better apt to support high levels of student achievement and positive student outcomes when it emphasizes intentional and focused learning for teachers along with rigorous instructional objectives (Little, 2012). However, not all professional learning is created equal, and as a result, the impact of lower-quality professional learning can create unequal results. A common issue with professional learning is the disconnectedness participants feel from the reality of their daily work. In addition, educators exposed to professional learning with limited content, engagement, and/or administrative support tend to feel professional learning is a waste of time (Berrett et al., 2015). The CEO Plan II has overcome these barriers through the job-embedded professional learning design.

Effective professional learning supports an educator in many of the same ways effective classroom instruction supports a student. Teachers need to have the opportunity to construct understanding, feel prepared and confident in the content and skills being addressed, and need to be afforded the opportunity to build upon skills over time. These effective learning experiences can provide teachers enhanced self-efficacy, a critical step in the professional learning process (Lowell & McNeil, 2022; Morris & Pryor, 2024).

Little (2012) describes four pillars that provide reasons for schools to prioritize professional learning for teachers: collective efficacy; increased content, skill, and disposition of teaching force; increase in professional learning communities within the school day; and increase in retention to the teacher profession. Collective teacher efficacy is defined by Hattie as the ability of the group of educators to believe they can make a positive difference in the lives of their students (Visible Learning, 2018). Collective teacher efficacy was more predictive of elementary students' math and reading achievement than gender, ethnicity, and even socio-economic status (Goddard et al., 2000).

Teacher Self-Efficacy

Teacher self-efficacy (TSE) is rooted in social cognitive theory and has often been associated with positive student outcomes. Just like collective teacher efficacy, it is based on the belief that (in this case, a singular teacher's belief in themselves) the teacher can produce positive outcomes for students, even among the most challenging and complex student needs. Henson (2001) noted that students who have teachers with high levels of TSE outperform students in other classrooms. Additionally, teachers with high levels of TSE often exhibit the following behaviors/beliefs: (a) support inclusionary practices for students with individualized education plans (special education), (b) experiment with instructional practices seeking continuous improvement, and (c) commitment to effective professionalism. Through the completion of the CEO capstone project, the educator applies research-based practices to positively impact student outcomes, which leads to higher levels of TSE.

Professional Learning Design

Professional learning plays a large part in many plans to improve outcomes for students and the school community. Hiring

strong teacher candidates is a common goal for schools; however, teachers need to continuously grow in their professional role to account for the ever-changing demands created by complex social, behavioral, and academic needs of students. Professional learning provides the avenue for educators to learn more over time about their content, students, and pedagogical practices in order to make more informed decisions regarding impact on student outcomes (Little, 2012).

Bates and Morgan (2018) identified seven elements from a meta-analysis of 35 studies that aid developers and implementers of professional learning in seeking impactful experiences for teachers. The following elements are key to quality professional learning: (a) content-focused, (b) active learning, (c) supports collaboration, (d) models effective practices, (e) coaching support, (f) feedback, and (g) sustained exposure/duration. All of these are components required of an approved CEO Plan II program.

An attribute of the CEO Plan II program is its ability to embed learning through the on-going work of the educator. A teacher's content knowledge is widely understood to be critical for positive student outcomes, but it alone is not sufficient. How teachers embed learning structures within the content is paramount, and this combination of content knowledge and content-specific strategies is critical in creating meaningful professional learning experiences (Bates & Morgan, 2018). Pedagogical content knowledge, which includes a teachers' understanding of student learning and content knowledge, is complex due to the dynamic nature of the content topic, teacher, and context (diverse student population, time of day, prior knowledge, etc.). Professional learning should incorporate content knowledge that supports professional practice, instructional

strategies, and reflection (VanDriel & Berry, 2012).

In addition to ongoing and embedded learning, the CEO Plan II program incorporates an active learning approach with the content presented. Active learning in professional learning settings is critical to engaging teachers with the content. Allowing educators to spend time implementing ideas and applying their learning improves the conditions that support educator growth. Engagement through collaborative learning processes is also an important design feature of professional learning that is evidence-based. Another evidence-based structure is the use of modeling, the intentional learning strategy demonstrated by educators to show a new idea, process, or skill (Salisu & Ransom, 2014). Short and Hirsh (2020) emphasized a specific type of professional learning style that incorporates many of the features of curriculum-based professional learning. This form of professional learning leverages modeling, experiential learning, teacher understanding of purpose, and repeated exposure over time as essential elements to implement impactful shifts in professional beliefs.

Methodology

The purpose of this quantitative study was to investigate the relationship of how current educators who have participated in a continuing education opportunity (CEO) viewed their professional learning experience compared to that of higher education and traditional professional learning opportunities. In particular, the researchers sought to identify: (a) the impact teachers attributed to student learning as a result of their participation in a CEO program, (b) how teachers perceived their learning from a CEO program compared to a traditional professional learning opportunity, and (c) how teachers perceived their

learning from a CEO program compared to traditional EPPs.

Participants

All participants included in the research study were current educators in grades K-12. All participants were volunteers who completed the Qualtrics online survey. This research specifically looked at two school districts that allocated ESSER funds for educators to participate in a continuing education opportunity (CEO). This research did not intentionally exclude or seek out participants based on gender, race, ethnic background, or age, as these demographics were not collected.

Participants had the opportunity to share the link with fellow educators. While the researchers did not collect IP addresses, Qualtrics prevented multiple submissions from the same IP address. It was possible, though unlikely, that a single participant submitted multiple responses.

Prior to the data collection process, received IRB approval was obtained. Participants were informed that participation was voluntary and there would be no compensation for their time or participation. While anonymity was not guaranteed, measures were taken to protect privacy. Data was aggregated upon collection and no personally identifiable information was collected.

Of particular interest were two schools within the university's service area. A contact from the school districts was used to share the survey link. These two schools represented both a county and city school, and both used ESSER funding to support educators by paying for their CEO program. School districts represented in this research had an average economically disadvantaged student population of 66.8% (Kentucky Department of Education, 2023). The communities in this service area dealt with economic concerns, having a 53.7% workforce participation rate, the fourth

lowest workforce participation rate in Kentucky. In addition, Kentucky's per capita income in 2022 was reported at \$52,109 compared to \$65,423 per capita income for the U.S., a gap that has continued to widen (Kentucky Center for Statistics, 2023).

Survey and Data Analysis

The survey (see Appendix) consisted of questions regarding participation in a CEO program and the teacher experience including: beliefs, application, and perceived impact on student learning. The survey consisted of 13 questions, six questions related to demographics and three questions were comparison questions regarding the CEO program to other types of training/professional learning experience, including EPPs. Other questions included professional growth, student impact, and the program experience related to support. Additionally, Dr. Tschannen-Moran's Teacher Sense of Efficacy Scale (2001) was used to gain insights into teachers' beliefs relative to various school activities, including pre- and post- CEO program participation.

Once the survey was completed, Qualtrics XM data analysis tool, Stats iQ, was used to support description and analysis of the data. Only responses that indicated approval to use the data for research and that indicated participation, either current or completed, in a CEO program were used. No identifiable information was retained. Descriptive statistics were used to provide an overview for results. A Chi-Squared test was performed when two category variables were compared.

Results

Demographics

All participants were current educators, teaching in K-12 classrooms in Kentucky (N=24). Twenty-one participants were pursuing a Rank I and three were

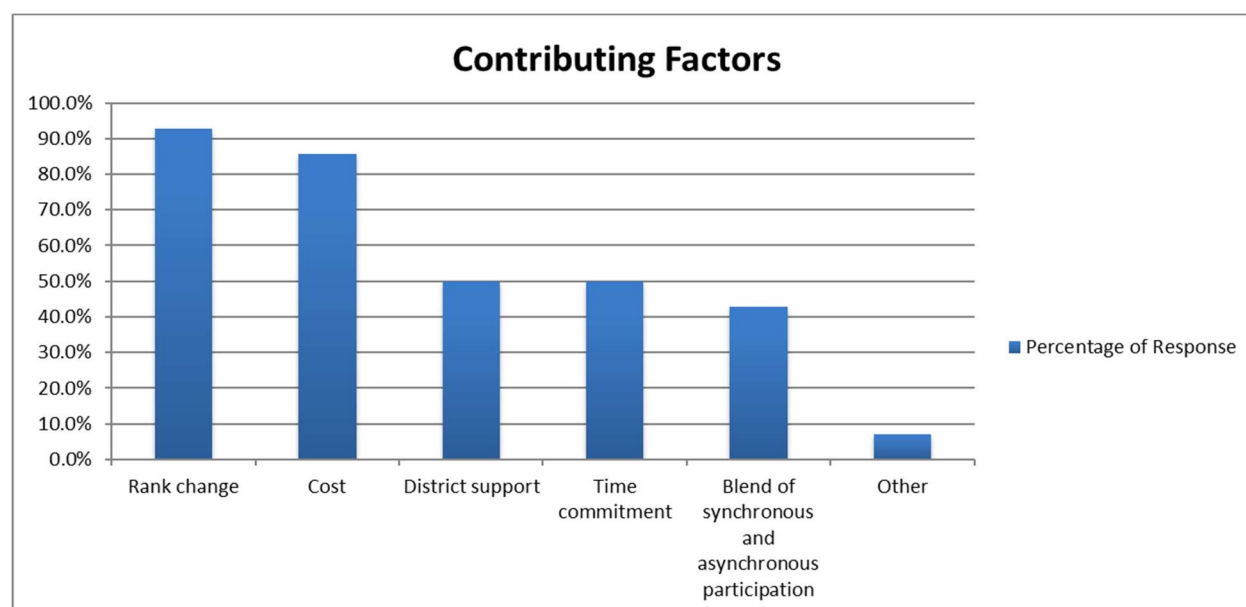
pursuing a Rank II. Of the 24 participants, 12.5% described themselves as Pre-K, 54.2% as elementary school teachers, 4.2% as middle school teachers, and 29.2% as high school teachers. Participant experience included 14 educators with 13-22 years of teaching experience, six educators with 6-12 years of teaching experience, and four educators with 0-5 years of teaching experience.

Factors for Choosing a CEO Program

Of the educators surveyed, when asked to select all contributing factors for choosing a CEO program that applied, rank change and cost were overwhelmingly the two most predominant factors. Figure 1 displays the breakdown of all factors contributing to teachers' decisions to participate in a CEO program.

Figure 1

Contributing Factors for Choosing a CEO Program



Alternate Text: This graph illustrates the factors that led to candidate participation in a CEO program: 91% rank change, 85% cost, 50% district support, 50% time commitment, 41% synchronous/asynchronous blend, and less than 10% other.

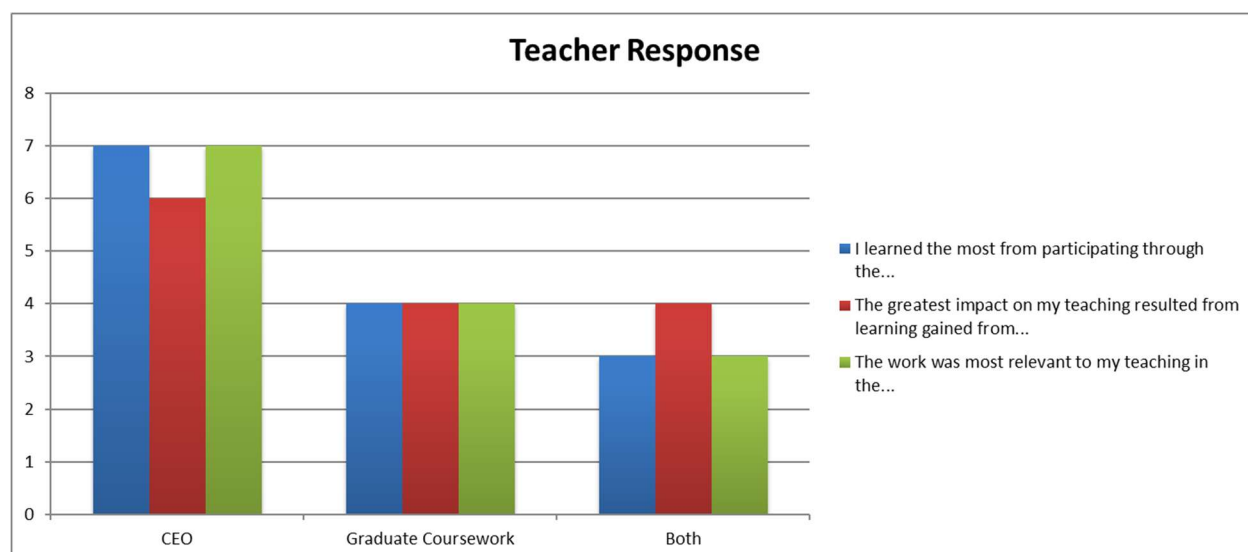
Finding 1

Participants were asked to compare the CEO program to other graduate work/training they had experienced and indicate which learning opportunity they preferred, given a series of statements. The candidates indicated their preference as follows: CEO, Graduate Coursework, or Both. Participants indicated, “I learned the most from...” CEO (N=7), Graduate

Coursework (N=4), and Both (N=3); “The greatest impact on my teaching resulted from learning from...” CEO (N=6), Graduate Coursework (N=4), and Both (N=4); and “The work was most relevant to my teaching in the ...” CEO (N=7), Graduate Coursework (N=4), and Both (N=3). Figure 2 shows the distribution of responses. Candidates preferred a CEO program over graduate coursework.

Figure 2

Teacher Preference Response: CEO vs Graduate Coursework

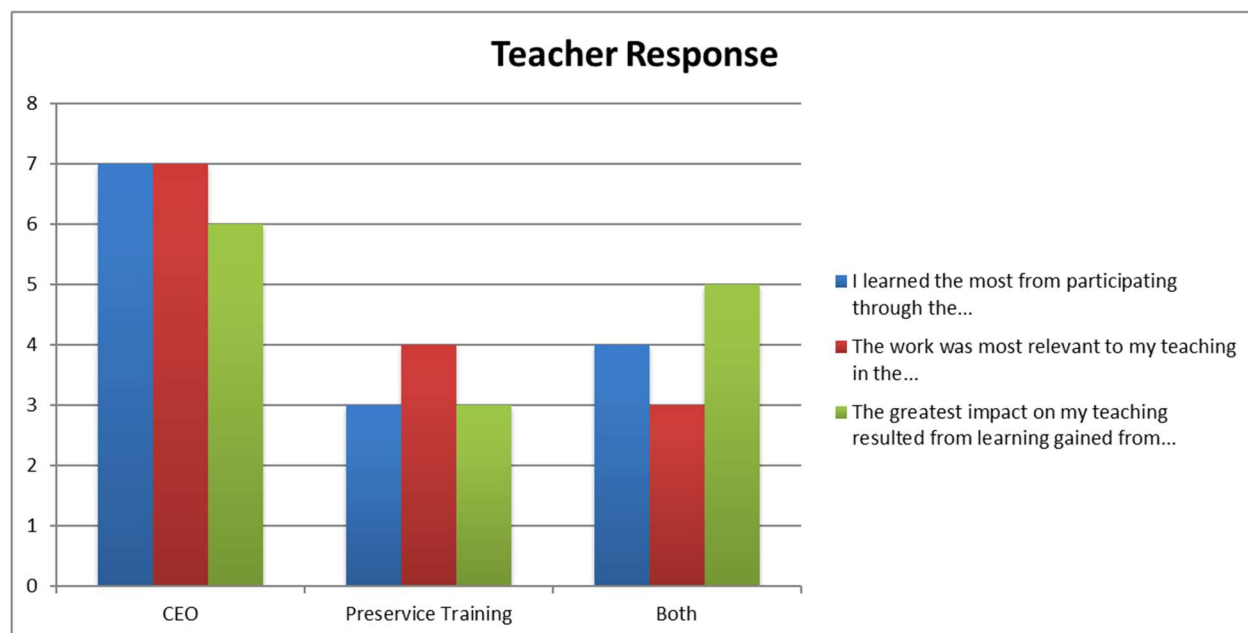


Alternate Text: This graph illustrates teachers believed they learned the most from a CEO program, the CEO program had the greatest impact on their teaching and was most relevant to their teaching. This was in comparison to both graduate coursework or a combination of both CEO program and graduate coursework.

Finding 2

Participants were asked to compare the CEO program to their preservice training experience and indicate which learning opportunity was preferred, given a series of statements. The candidates could indicate they preferred CEO, Preservice Training, or Both. Participants indicated, "I learned the most from..." CEO (N=7), Preservice Training (N=3), and Both (N=4); "The

greatest impact on my teaching resulted from learning from..." CEO (N=6), Preservice Training (N=3), and Both (N=5); and "The work was most relevant to my teaching in the ..." CEO (N=7), Preservice Training (N=4), and Both (N=3). Candidates preferred a CEO program over Preservice Training. Figure 3 shows the distribution of responses.

Figure 3*Teacher Preference Response: CEO vs Preservice Training*

Alternate Text: This graph illustrates teachers believed they learned the most from a CEO program, the CEO program had the greatest impact on their teaching and was most relevant to their teaching. This was in comparison to both preservice training or a combination of both preservice training and graduate coursework.

Finding 3

The researchers asked participants a series of questions related to student outcomes and teacher efficacy, pre-CEO and during/post-CEO, instructing them to mark one of the following responses to each question: "quite a bit," "some influence," "great deal," "very little," or "nothing." When comparing the pre- to during/post-responses to like questions, no statistically significant relationships were found except when looking at the question, "How much can you use a variety of assessment strategies?". Table 2 shows the results of the teachers' responses to this question. This

statistically significant relationship was found by performing a chi-square test of independence, $\chi^2(4, N = 11) = 13.4$, $p = .0093$, suggesting that the observed association was unlikely to have occurred by chance. The effect size, as measured by Cramer's V, was .782, indicating a large effect size (based on common thresholds for Cramer's V: small ≥ 0.1 , medium ≥ 0.3 , and large ≥ 0.5). Given the small sample size ($N = 11$), caution should be taken in generalizing these results. Six candidates perceived their ability to use a variety of assessment strategies grew from pre-CEO to during/post-CEO.

Table 2*Teacher Efficacy: Pre CEO vs During/Post CEO**Teacher Belief: “How much can you use a variety of assessment strategies?”*

Pre-CEO Responses		During/Post CEO Responses		
		Some Influence	Quite a Bit	Great Deal
Some Influence	n=4	0	4	0
Quite a Bit	n=3	1	0	2
Great Deal	n=4	0	0	4

Note. The response categories of “Very Little” and “Nothing” were not selected by any respondent.

Finding 4

The researchers asked participants about their perception of student impact as a result of their participation in a CEO program. Figure 4 shows the distribution of

the responses. Overwhelmingly, teachers indicated that their participation did have a positive impact on student outcomes and teacher collaboration.

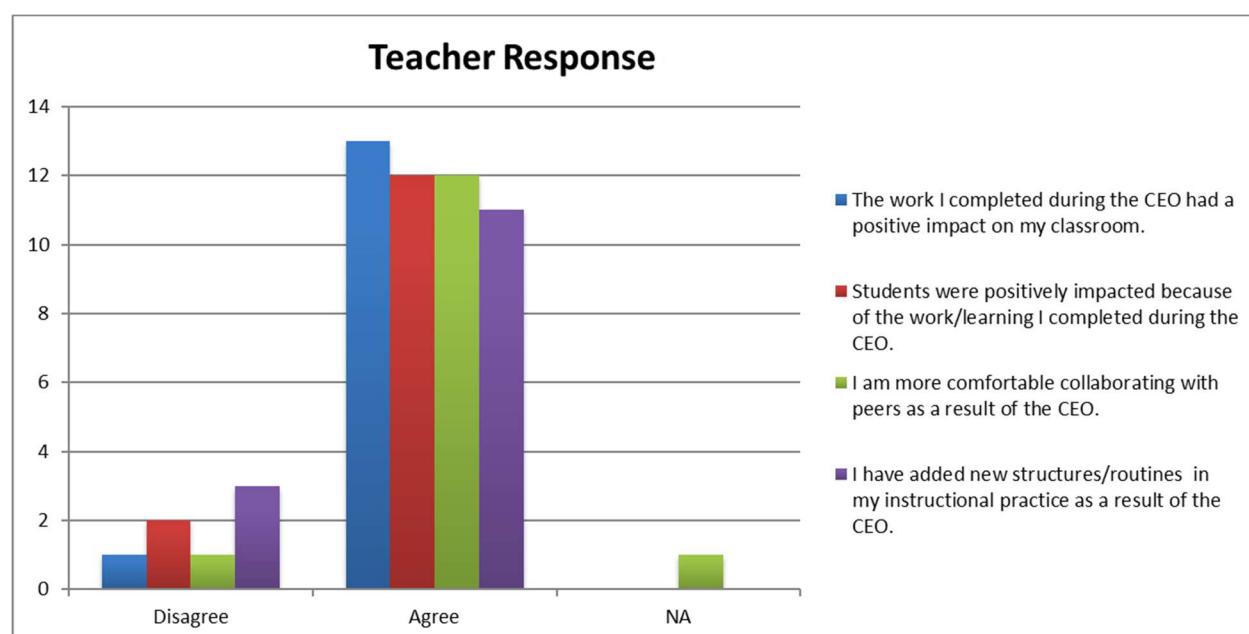
Figure 4*Teacher Perception of CEO Impact*

Figure 4 (continued)

Alternate Text: This graph illustrates teachers' belief that the work completed in the CEO program had a positive impact on their classroom and their students, increased teachers' confidence in collaborating with peers, and increased exposure to new structures and routines in instructional practice.

Discussion

This research study investigated the relationship of how current educators who had participated in a continuing education option (CEO) rated their professional learning experience compared to that of higher education and traditional professional learning opportunities. In particular, the researchers sought to identify: (a) the impact teachers attributed to student learning as a result of their participation in a CEO program; (b) how teachers perceived their learning from a CEO program compared to a traditional professional learning opportunity; and (c) how teachers perceived their learning from a CEO program compared to traditional EPPs.

EPP Recruitment

Overwhelmingly, educators preferred a CEO program over graduate coursework. Candidates selected CEO programs because of affordability and the ability to earn a rank change. These two conditions speak to an educator's focus on cost savings and earning potential. The Learning Policy Institute (LPI) highlighted increased compensation and debt-free teacher preparation in their report as a tool to strengthen teacher recruitment (Darling-Hammond et al., 2023). As EPPs navigate enrollment declines and increased costs to educate students, CEO programs might offer a win-win opportunity by providing a cost-efficient model for initial graduate students and a pathway to completion of graduate work for EPPs. When an EPP offers a CEO program that connects with additional degree attainment, they are providing a cost-efficient pathway for candidates. For

educators looking to stay in the teaching profession, earning a Rank I is important to maximize pay and retirement benefits in the Commonwealth of Kentucky. Kentucky educators are currently allowed one CEO program to earn a rank change, indicating a combination of CEO rank change and graduate degree as an affordable option to earn both Rank II and Rank I educator status. This would allow the candidate to maximize their salary within their district's pay scale. In turn, candidates can complete both Rank II and Rank I within an EPP which helps generate enrollment in graduate programs.

District Teacher Retention

The high cost of teacher turnover and a continuing teacher shortage continue to plague school districts. Induction programs have been shown to help districts effectively combat teacher turnover by having a positive impact on new teacher job satisfaction, retention, and performance (Ingersoll & Strong, 2011). Support for new teachers within the first several years of their development is critical to reducing the rate of teacher turnover (Morris, 2023). CEO programs have shown positive results in impacting student achievement, increasing collaboration between peers, and providing support to candidates. The findings of this research indicate the positive potential CEO programs have in helping to shape teacher efficacy, a critical disposition for teachers that has shown positive impacts on student outcomes (Goddard et al., 2000). Districts that include CEO programs as part of their induction program, paired with collaboration with EPPs, can create mutually beneficial partnerships. Districts can

provide ongoing, job-embedded training and support for induction programs, and EPPs can create a continuation of learning for their newly graduated teacher force, truly creating a continuing education pathway for the EPP.

Departments of Education

Education departments attempting to address teacher retention through rank change options, like Kentucky's CEO Plan

II program, might consider factors such as affordability, district collaboration, and time commitment. Collaboration with institutes of higher education by allowing a hybrid of graduate level coursework and professional learning modules might provide increased support and participation from EPPs. In addition, it could also help support further degree attainment within the field.

References

- Bates, C. C., & Morgan, D. N. (2018). Seven elements of effective professional development. *The Reading Teacher*, 71(5), 623–626. <http://www.jstor.org/stable/26632647>
- Berrett, B., Murphy, J., & Sullivan, J. (2015). Administrator insights and reflections: Technology integration in schools. *The Qualitative Report*, 17(1), 200–221. <https://doi.org/10.46743/2160-3715/2012.1815>
- Darling-Hammond, L., DiNapoli, M., Jr., & Kini, T. (2023). *The federal role in ending teacher shortages*. Learning Policy Institute. <https://doi.org/10.54300/649.892>
- EPSB. (2019, September 19). *Continuing education option - Plan II*. <http://www.epsb.ky.gov/mod/page/view.php?id=481>
- EPSB. (2018a, June 25). *CEO overview*. <http://www.epsb.ky.gov/mod/page/view.php?id=436#:~:text=Purpose%20of%20CEOFor%20sht>
- Forsht, R. (2023, September 5). *Addressing teacher shortages, back to school, and future of the Department of Education*. National Science Teaching Association. <https://www.nsta.org/blog/addressing-teacher-shortages-back-school-and-future-department-education>
- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37(2), 479–507. <https://doi.org/10.2307/1163531>
- Hattie, J. (2011). *Visible learning for teachers & students: How to maximize school achievement*. Routledge. <https://doi.org/10.4324/9781003024477>
- Ingersoll, R., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Education Research*, 81(2). https://repository.upenn.edu/gse_pubs/127
- Kennedy, M. (2016). How does professional development improve teaching? *Review of Educational Research*, 86(4), 945–980. <https://doi.org/10.3102/0034654315626800>
- Kentucky Legislative Research Commission. (2023, November 1). *Kentucky public school employee staffing shortages: Research report no. 486*. <https://legislature.ky.gov/LRC/Publications/Research%20Reports/RR486.pdf>
- Kentucky Rank Advancement Academy. (n. d.). *Kentucky rank advancement academy guide: Foundational and personalized professional growth plan micro-credential option*. Kentucky Education Association. <https://www.kea.org/wp-content/uploads/2024/04/KY-Rank-Advancement-Academy-Guide-final.pdf>

- Kentucky Teacher. (April 21, 2018). *EPSB board approves waiver removing requirement for Rank II*. <https://www.kentuckyteacher.org/news/2018/08/epsb-board-approves-waiver-removing-requirement-for-rank-ii/>
- King, J., & South, J. (2017). *Reimagining the role of technology in higher education: A supplement to the national education technology plan*. US Department of Education, Office of Educational Technology. <https://files.eric.ed.gov/fulltext/ED591047.pdf>
- Little, J. W. (2012). Professional community and professional development in the learning-centered school. In *Teacher learning that matters* (pp. 22-43). Routledge.
- Lowell, B. R., & McNeill, K. L. (2022). Changes in teachers' beliefs: A longitudinal study of science teachers engaging in storyline curriculum-based professional development. *Journal of Research in Science Teaching*, 60(7), 1457–1487. <https://doi.org/10.1002/tea.21839>
- Morris, A. (2023). Beyond certification: Innovative strategies to tackle the teacher shortage. *Kentucky Teacher Education Journal: The Journal of the Teacher Education Division of the Kentucky Council for Exceptional Children*, 10(1). <https://digitalcommons.murraystate.edu/do/search/?q=Beyond%20Alternative%20Certification%20%E2%80%93%20Teacher%20Shortage%20in%20Kentucky&start=0&context=7364626&facet=>
- NEA (2024, October 17). *Educator pay data 2024*. nea.org/resource-library/educator-pay-and-student-spending-how-does-your-state-rank?utm_medium=paid-search&utm_source=google&utm_campaign=rankings-estimates-report&utm_content=&ms=ads-rankings-estimates-report-se&gad_source=1&gclid=Cj0KCQjwztOwBhD7ARIsAPDKnkDFbFurr2Am2M8dBNq7CoRGISTW_GZrUD-nFR8fsxsO7zf-xORXYT0aAsoaEALw_wcB&gclidsrc=aw.ds
- U.S. Department of Education. (2025, February 19). *Elementary and secondary school emergency relief fund*. <https://www.ed.gov/grants-and-programs/formula-grants/response-formula-grants/covid-19-emergency-relief-grants/elementary-and-secondary-school-emergency-relief-fund>
- Van Driel, J. H., & Berry, A. (2012). Teacher professional development focusing on pedagogical content knowledge. *Educational Researcher*, 41(1), 26–28. <http://www.jstor.org/stable/41413082>
- Visible Learning. (2018, October 12). *Collective teacher efficacy (CTE) according to John Hattie*. <https://visible-learning.org/2018/03/collective-teacher-efficacy-hattie/>

Appendix

CEO Survey

The following questions were administered for this qualitative research study.

Start of Block: CEO Participant

Q1 I am currently enrolled or I have completed a Continuing Education Option (CEO)

- ☐ Yes, I am currently enrolled in a CEO (1)
- ☐ Yes, I have finished a CEO (3)
- ☐ No I am not enrolled in nor completed a CEO (4)

Q2 I give consent to use my responses for future research with the understanding demographic information to include name, position, or places of employments will be kept anonymous and confidential.

- ☐ Yes. I give permission for my responses to the following survey to be used for future research. (1)
- ☐ No. I do not give permission for my responses to the following survey to be used for future research. (2)

Q3 Please select what level you predominantly work with.

- ☐ Elementary (1)
- ☐ Middle (2)
- ☐ High (3)
- ☐ Pre-K (4)

Q4 How many years have you been teaching?

- ☐ 0-5 years (5)
- ☐ 6-12 years (6)

- o 13-22 years (7)

Q5 I am pursuing/pursued a CEO to earn a rank:

- o One (1)
- o Two (2)

CEO System Quality:

Q6 Compare the CEO program to other professional development training you have experienced, indicate which learning opportunity you prefer

	Program			
	CEO (1)	OTHER Professional Development (2)	Both (3)	NA (4)
I learned the most from participating through the... (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The work was most relevant to my teaching in the... (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The greatest impact on my teaching resulted from learning gained from... (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 Compare the CEO program to other preservice coursework/training you have experienced, indicate which learning opportunity you prefer

	Program			
	CEO (1)	Preservice Training (2)	Both (3)	NA (4)
I learned the most from participating through the... (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The work was most relevant to my teaching in the... (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The greatest impact on my teaching resulted from learning gained from... (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Compare the CEO program to other graduate level coursework/training you have experienced, indicate which learning opportunity you prefer

	Program			
	CEO (1)	Graduate Coursework (2)	Both (3)	NA (4)
I learned the most from participating through the... (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The work was most relevant to my teaching in the... (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The greatest impact on my teaching resulted from learning gained from... (3)

o o o o

Q9 Rate your growth through this program.

	Program		
	Developing (1)	Proficient (2)	Distinguished (3)
Before I started the CEO, I would rate my understanding of the content covered in the CEO as: (1)	o	o	o
I currently rate my understanding of the content covered in the CEO as: (2)	o	o	o
Before I started the CEO, I would rate my application of the content covered in the CEO as: (3)	o	o	o
I currently rate my ability to apply the content covered in the CEO as: (4)	o	o	o

Q10 Please indicate your stance on the following statements:

	Student Impact		
	Disagree (1)	Agree (2)	NA (3)
The work I completed during the CEO had a positive impact on my classroom. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students were positively impacted because of the work/learning I completed during the CEO. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more comfortable collaborating with peers as a result of the CEO. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have added new structures/routines in my instructional practice as a result of the CEO. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 The coaching support I received through the CEO program was:

- ☐ Beneficial (1)
- ☐ Adequate (2)
- ☐ Not beneficial (3)

Q12 What factor(s) contributed to your selection of the CEO program (select all that apply)

- ☐ Cost (1)
- ☐ District support (2)
- ☐ Blend of synchronous and asynchronous participation (3)
- ☐ Time commitment (4)
- ☐ Rank change (5)
- ☐ Other (6)

Educator Challenges:

Q17 This question is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each 12 statements below based on your thinking prior to participating in the CEO Plan II and then after/during completing the CEO Plan II.

	Pre CEO					During/Post CEO				
	Nothing (1)	Very Little (2)	Some Influence (3)	Quite A Bit (4)	Great Deal (5)	Nothing (1)	Very Little (2)	Some Influence (3)	Quite A Bit (4)	Great Deal (5)
How much can you control disruptive behavior in the classroom? (1)	o	o	o	o	o	o	o	o	o	o

How much can you motivate students who show low interest in school work? (3)	o	o	o	o	o	o	o	o	o	o
How much can you do to get students to believe they can do well in school work? (5)	o	o	o	o	o	o	o	o	o	o
How much can you do to help your students value learning? (7)	o	o	o	o	o	o	o	o	o	o
To what extent can you craft good questions for your students? (9)	o	o	o	o	o	o	o	o	o	o
How much can you do to get children to follow classroom rules? (11)	o	o	o	o	o	o	o	o	o	o

How much can you do to calm a student who is disruptive or noisy? (13)	o	o	o	o	o	o	o	o	o	o
How well can you establish a classroom management system with each group of students? (15)	o	o	o	o	o	o	o	o	o	o
How much can you use a variety of assessment strategies? (17)	o	o	o	o	o	o	o	o	o	o
To what extent can you provide an alternative explanation or example when students are confused? (19)	o	o	o	o	o	o	o	o	o	o

How much can you assist families in helping their children do well in school? (21)	o	o	o	o	o	o	o	o	o	o
---	---	---	---	---	---	---	---	---	---	---

How well can you implement alternative strategies in your classroom? (26)	o	o	o	o	o	o	o	o	o	o
--	---	---	---	---	---	---	---	---	---	---