INTEGRATED CURRICULUM IN PHYSICAL EDUCATION

By

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ABSTRACT

This paper seeks to address an absence of resources for teachers that highlight cross-curricular integration of physical education and core academics to benefit the learning, motivation, health, and academic outcomes of students. Curricular integration, or the highlighting of overlapping themes between subjects, has become a popular way to maximize educational time in schools. The benefits of curricular integration are well documented, however, less known are the benefits of curricular integration in the fields of physical education and special education. By analyzing existing literature, reviewing existing curricula and educational resources, and surveying educational professionals, a guide was created to support teachers in creating integrated physical education and core academic lessons. This project focuses on kindergarten through second grade and aims to support student development physically and academically through engaging lessons.

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INTRODUCTION

In modern development of curricula, a popular approach has been to focus on integration of content areas. Curricular integration highlights the overlapping themes between subjects with a goal of deepening understanding of each. While this method of curricular development has been popularized to maximize educational time for general education, less known are the benefits of curricular integration in the fields of physical education and special education. In this review of literature, the benefits of curricular integration are analyzed, particularly in the aforementioned fields, highlighting the positive impact that integrated physical education lessons can be for student learning, including students with disabilities. When implemented appropriately, a cross-curricular integration of physical education and core academics benefits the learning, motivation, health, and academic outcomes of students.

LITERATURE REVIEW

Reading, [w]riting, and ‘rithmetic have long been referred to as the three basic skills taught in schools. While it is clear that these focal areas are important, the breath of content delivered in schools today is much wider than these three original “R”s. It is now understood that science, physical education/health and the arts are also essential components of a complete curricular portfolio (Content Standards, 2020). However, as these new elements to a holistic education have been included in the curriculum and state standards, teachers have struggled to find the most effective way to teach them all. Teaching each subject in isolation has been an instructional strategy used by many teachers, but in doing so, several challenges are faced. Increased concern over a crowded school curriculum and the rise of standardized testing and school accountability has resulted in the marginalization of some critical components of holistic education (Riley et. al, 2015). As teachers grapple with the reality that their funding and resources rely on the outcome of student standardized test scores, the first content areas to be reduced are physical education, arts, and sciences (Riley et. al, 2015).

Another shortfall in teaching content areas in isolation is the avoidance of, or ignorance towards, the inherent overlaps in the curriculum. There are significant overlaps in the math, English language arts, and science core curriculum standards, and it does a disservice to students to teach the content areas in isolation (Cheuk, 2019). Teaching subjects in isolation may lead to short term memory gains, but does not foster long term learning or critical thinking (Drake, 2018). Because of this, teachers and education professionals have been working for years to develop curricular models that meet the

state standards, enhance student learning, and fit within the confines of the traditional school day.

Integrated Curriculum

While trends in the field of education have shifted throughout the past century, integrated curriculum has remained a talking point for many educators as a tool to support their students' development and growth while creating engaging and relevant curriculum. Integrated curriculum, defined by Parker (2005, p. 452), is the "a curriculum approach that purposefully draws together knowledge, perspectives, and methods of inquiry from more than one discipline to develop a more powerful understanding of a central idea, issue, person, or event." The purpose of integrated curriculum is not to eliminate the individual disciplines but instead to use aspects of each in combination (Parker, 2005). This curricular organization enables students to make connections among various subjects, increasing critical thinking, and also allows teachers to accomplish more in a limited time (Morris, 2003).

As integrated curriculum has been more widely implemented in schools and classrooms around the country, there have come to be three distinct categories of this curriculum approach: multidisciplinary integration, interdisciplinary integration, and transdisciplinary integration (Drake & Burns, 2004). Multidisciplinary integration focuses primarily on the disciplines, and the structure of curriculum is organized around a central theme. The interdisciplinary approach focuses on common learnings across disciplines, seen as the chunking together of common learnings embedded in the

disciplines to emphasize interdisciplinary skills and concepts, with the objective of developing understanding in each subject area (Cone et. al, 1998). The transdisciplinary approach organizes curriculum around student questions and concerns, supporting students in developing life skills as they apply interdisciplinary and disciplinary skills in a real-life context (Drake & Burns, 2004). For all of these models, student achievement is the primary goal and focus.

The benefits of integrated curriculum are seen in students' engagement, motivation, and success both in meeting the standards and on standardized tests. When curriculum is meaningful and personal, students are motivated to construct their own meaning and understanding of the content and its relation to their world (Drake & Burns, 2004). Organizing integrated curriculum to fit the needs and interests of students may increase student engagement with the material and foster greater educational growth. Integrated curriculum can also be used as a mode of meeting the common core standards. Using the standards as the anchor of interdisciplinary curricula leads to highly rigorous, motivating, and adaptable curricula (Drake & Burns, 2004). When content is designed to intentionally address the state standards, but subjects are used in conjunction, a more engaging, integrated curriculum is developed.

Using backwards design, teachers can use content integration to find the purpose of the lesson, create assessments, decide how to meet the standards, and plan learning experiences that will involve student inquiry and lead to the desired results (Leibold, 2011). As state standards get more difficult to address and teachers become responsible for more curriculum, they need to find ways to compact, or integrate, curriculum, using

one activity to meet multiple objectives (Jenkins, 2005). Lasty, studies have shown that programs using integration curriculum frequently produced equivalent or even better scores on standardized achievement tests than those where students were taught through the traditional discipline-oriented format (Morris, 2003). Broadly speaking, interdisciplinary curriculum benefits students by enriching student learning across academic disciplines, while appreciating the knowledge and expertise brought on by other teachers (Kaittani et. al, 2017). While interdisciplinary, or integrated, curriculum is shown to be beneficial for student engagement and success, it can be particularly beneficial for students with disabilities.

Integrated Curriculum for Students with Disabilities

In 1975, the Individuals with Disabilities Education Act (IDEA) was passed, ensuring a free and appropriate public education to all students. This law requires that schools provide the needed specialized academic instruction and related services to eligible students with disabilities to support them in accessing the core curriculum. As part of this requirement, students are entitled to an education in the least restrictive environment, meaning they should spend as much time as possible with peers who do not receive special education services. As a result of students spending time in both general education and special education classrooms, fragmented learning can happen. Interdisciplinary instruction focuses on meaningful learning that is cross-curricular and that will assist students in forming connections that will be useful in real-world

applications (Gardner et al., 2003). Interdisciplinary units are appropriate for a wide range of students and can be included in special education and inclusive classrooms.

Using integrated curriculum for students with disabilities can be effective and simple. Many students with disabilities benefit from additional support in the areas of independent living, social skills, and learning strategies (Reisberg, 1998). Implementing curricular integration by adding appropriate content from those areas into other academic studies could allow students to develop skills and knowledge, address their Individual Education Program (IEP) goals, and participate in their inclusive classroom. If teachers follow a traditional curricular model, however, such skills are often neglected. (Reisberg, 1998). The benefits of integrated education for students with disabilities is not limited to independent living skills or social skills, but includes core academic competencies as well.

In a study focusing on integrated language, literacy, and visual arts, integration programs were seen to promote social, academic, and learning outcomes as well as promoting a more equitable learning culture when children were given the opportunity to demonstrate conceptual knowledge through various means. (Scripp & Paradis, 2014). Literature-based integrative curriculum has also shown to be beneficial for language development for students with disabilities. “Literature-based approaches are structured around children’s books, focus on specific language targets, and integrate oral and written language” (Becker, 2019, p. 168). Children who are given multiple opportunities and methods to discuss, use vocabulary and grammatical structures, answer comprehension questions, and retell books in literature-based approaches show gains on vocabulary,

sentence-level, and discourse level measures (Gillam et al., 2012). This study demonstrates how coordinated efforts and interdisciplinary collaborations made by educators can uniquely contribute to the learning and development of students with disabilities. By using an integrated curriculum approach, students with disabilities are given the opportunity to develop critical skills and knowledge outlined in their IEPs, while participating in their general education classroom, working on state education standards, and actively engaging with lessons and units that feel relevant and motivating.

Integrated Curriculum in Physical Education

Curriculum integration is also an effective practice in physical education. It is well documented that there are physical and psychological health benefits that result from participating in the recommended levels of physical activity, especially for children (Sothern et al., 1999). Schools are in the unique position to offer physical education that represents one of the key opportunities to develop positive attitudes towards physical activity and teach students the knowledge and skills to lead active lifestyles (Riley et. al, 2014). However, as the academic standards have become increasingly rigorous, emphasis on quality physical education has diminished in effort to cover the core curriculum concepts addressed in the standardized tests. This has resulted in innovative ways of integrating physical activity into the classroom.

Integrating physical education and the common core standards may have positive effects on learning awareness and academic performance due to the connection between

physical education's conceptual knowledge base and common core academic competencies (Magnotta and Darst, 2015). Because of this correlation and the inherently interdisciplinary qualities of physical activity and physical education, there are "varied and comprehensive" curriculum models that can help support both physical activity and academic progress and attainment (Magnotta & Darst, 2015).

The integration of physical activity into classroom lessons is beneficial in several ways. These benefits extend beyond students realizing the health benefits of increased physical activity, and could even enhance learning in other curriculum areas (Riley et. al, 2014). As more research is conducted, there is a clearer association between physical activity and academic performance, and evidence exists that physical activity may enhance children's cognitive functioning, concentration, and on-task behavior (Riley et. al, 2014). Physically active academic lessons have the potential to increase children's physical activity levels during the school day without compromising academic time while simultaneously enhancing children's learning performance (Mavilidi et. al, 2018). Research suggests that students participating in an integrated physical education curriculum have greater success in remembering vocabulary and core academic concepts than students participating in a non-integrated program (Lepine, 2013). Physically active academic lessons are also cost effective, do not require additional teacher preparation time, are enjoyable for teacher and student, and result in improved academic achievement scores (Donnelly & Lambourne, 2011).

The role of physical activity is not only beneficial for school-aged children in general education classrooms, but has been found to play a pivotal role in improving the

health of individuals with developmental disabilities (Winnick, 2011). Not only does research suggest that cognitive functioning is strengthened by kinesthetic programs, physical activity, motor skill movements, and athletic engagement, but school physical education has also been linked to improving academic performance in students with intellectual disabilities (Everhart et. al, 2012). Because of this, finding ways to incorporate physical activity into the classroom may be beneficial.

As discussed previously, IDEA entitles students with disabilities an appropriate education in the least restrictive environment, including physical education. Because of this, thoughtful physical education programs are necessary to best support growth and development for students with disabilities. Integrated physical education programs may specifically benefit students who are kinesthetic learners, those who learn in nontraditional ways, or those who benefit from multiple means of reinforcement for maintenance and generalization of information. Implementing an integrated physical education curriculum that includes core academic concepts and physical activity may be a beneficial way to ensure physical activity for students with disabilities, giving them the opportunity to discover ways of being active that they enjoy and may continue throughout their life, while simultaneously making progress on academic IEP goals and state standards through an engaging and motivating curriculum.

Having considered the research regarding integrated curriculum and its influence on student engagement and success, and regarding physical activity and its benefits for learning and engagement for students, particularly those with disabilities, I have decided to complete a project for my Master's thesis that addresses those topics. This project is an

integrated curriculum template for educators that centers around the interdisciplinary benefits of core academics and physical education. The lessons included in this template are focused on younger elementary aged students, kindergarten through second grade, and meet the physical education state standards, address core curriculum state standards, and have built in accommodations and modifications to support students with disabilities. The core content areas addressed include math, English language arts, science, and social studies. For each grade level, there are embedded lessons and activities for each of the aforementioned core curricular subjects, and for each major state standard, there is an analysis of how the standard progresses over the course of early elementary school and a unique lesson plan made to meet that standard. The objective of this project is to create an integrated curriculum that may be used to support interdisciplinary learning, kinesthetic learners, and maintenance and generalization of learning across settings. By creating lessons that support classroom learnings in physically active ways, students with and without disabilities will benefit.

METHOD

The curriculum presented in this project is based on current literature, comparative curricula, and professional educators' feedback. The purpose of this project was to create a resource for teachers that supports them in developing integrated lessons that address core academic standards, as well as physical education standards for students kindergarten through second grade. To do this, I reviewed current literature to determine the need for such a resource, analyzing the benefits of curricular integration, the benefits of curricular integration for students with disabilities, and the benefits of curricular integration in physical education. Through a review of lesson plan templates, including core academic lesson plans and curricula, physical education lesson plans and curricula, and adapted physical education lesson plans, I identified the five components of each lesson that I deemed essential, including a core academic standard, a gross motor or manipulative skill physical education standard, a psychological or sociological physical education standard, differentiations that may be implemented, and assessments. I reviewed other curricula to assist in the formatting and creation of my product.

I identified five professional educators to review my product and provide feedback. Three general education teachers (a kindergarten teacher, a first grade teacher, and a second grade teacher), one education specialist, working with students with disabilities in kindergarten through third grade, and one adapted physical education teacher, working with students kindergarten through twelfth grade with extensive support needs, were selected. These reviewers were selected through a sample of convenience. Each reviewer was asked to read over the curriculum development guide I created and

provide feedback in a survey I sent out. This survey addressed each content area's relevance and completeness, as well as the entire project's relevance and ease of use (see Appendix B). The survey design will be discussed in the following section. The questions included in the survey were selected because of their likelihood of producing practical feedback about the content included in the guide, as well as to gauge the guide's ease of use and the perceived value it added to existing resources available to teachers. I used the feedback and suggestions provided to edit my product.

RESULTS

The purpose of this project was to create a resource for teachers that supported them in developing integrated lessons, combining physical education and core academic content. A survey was conducted by five professionals in the field of education regarding the resource's relevance, completeness, and value. The survey used a Likert scale of 1-5 to rank the level of relevance and completeness for each section with a comments section immediately following. The survey also included Likert scale ranking for the ease of use, value added to existing resources for teachers, and the likelihood of use. Lastly, the survey concluded with written sections addressing potential barriers, information deemed unnecessary, and content that they felt was missing. The following data was collected through that

survey.

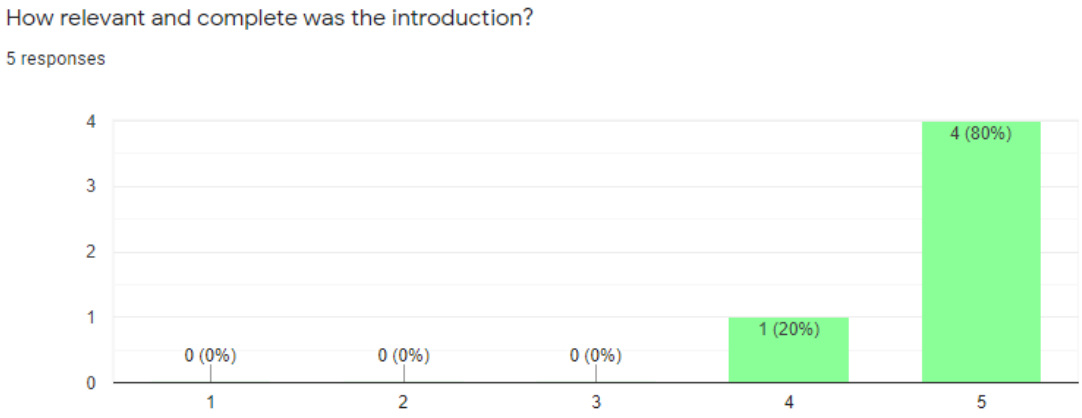

Figure 1: Respondent scoring regarding the relevance and completeness of the introduction.

Four out of five respondents concluded that the introduction was relevant and complete, with one respondent suggesting elaboration on the benefits of play for young children and ranking it a four out of five for its relevance and completeness.

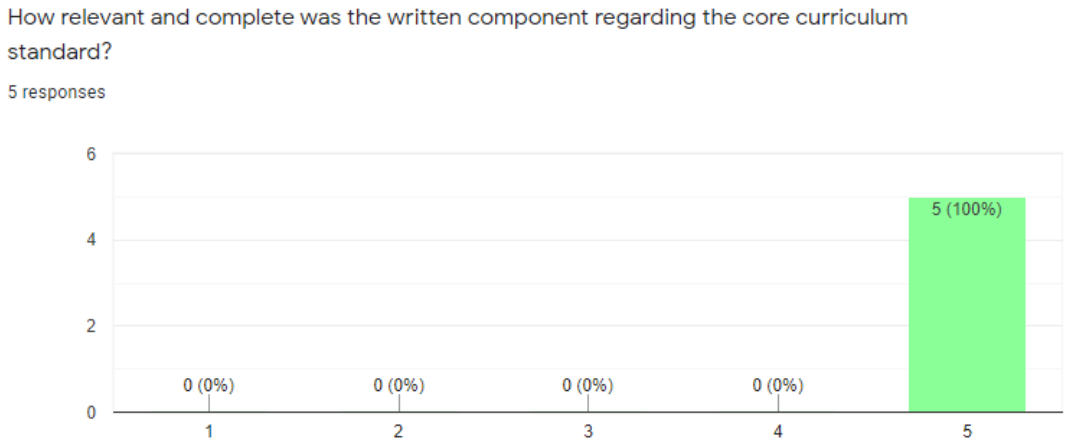

Figure 2: Respondent scoring regarding the relevance and completeness of the written component addressing core curriculum standards.

All respondents reported that the written component regarding the core curriculum standard was relevant and complete, with one respondent adding in the comments that, “I liked that you added a bit of history behind the development of common core. It

emphasizes how wide-reaching this guide can be."

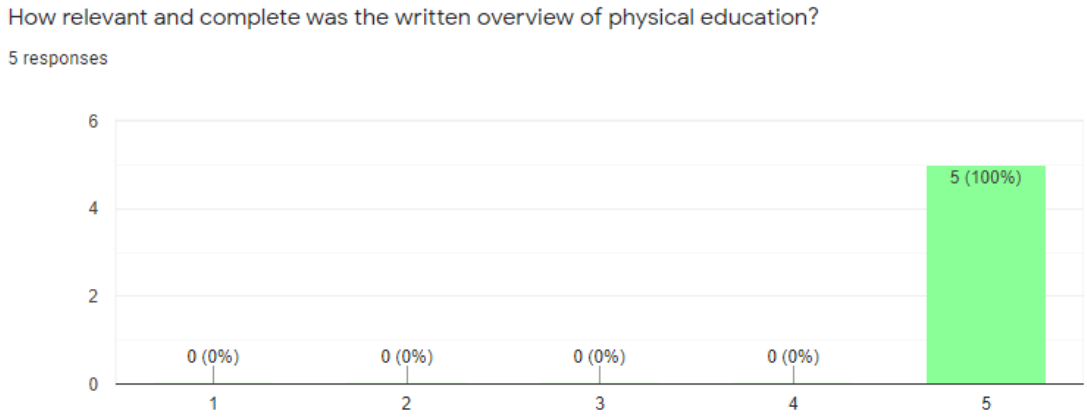

Figure 3: Respondent scoring regarding the relevance and completeness of the written overview of physical education.

Five out of five respondents reported that the overview of physical education, including the health and learning benefits of physical activity as well as the California P.E. standards for elementary school, was relevant and complete. The comments section reflected that, and one respondent reported that it was unclear that the following two pages were only addressing P.E. standard one and five.

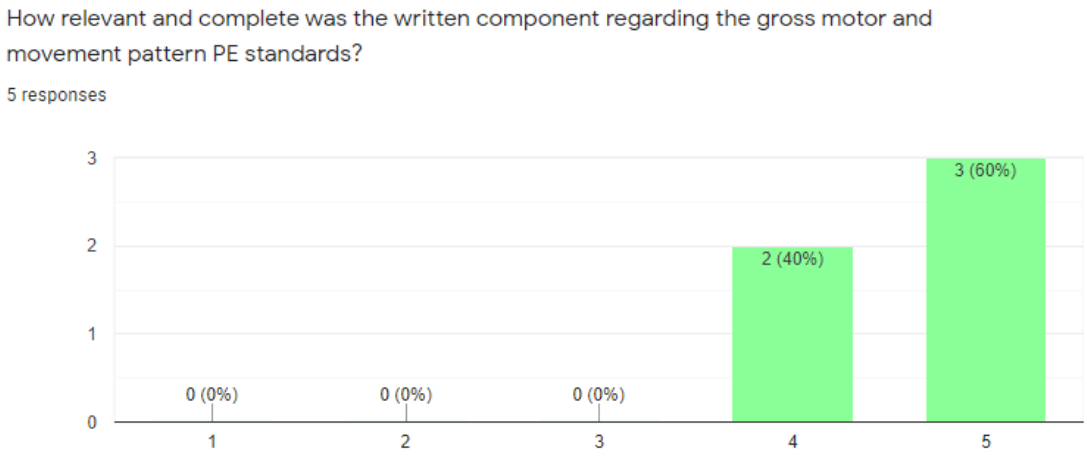

Figure 4: Respondent scoring regarding the relevance and completeness of the written component addressing gross motor and movement pattern PE standards.

Three out of five respondents reported that the section regarding California P.E. Standard 1: Gross Motor and Movement Patterns, was relevant and complete. Two respondents ranked this section's relevance and completeness as a four out of five. Respondents suggested adding links to videos for gross motor movement models, including sliding into the list of movements, and highlighting the need to teach P.E. lessons in isolation as well as through integrated lessons.

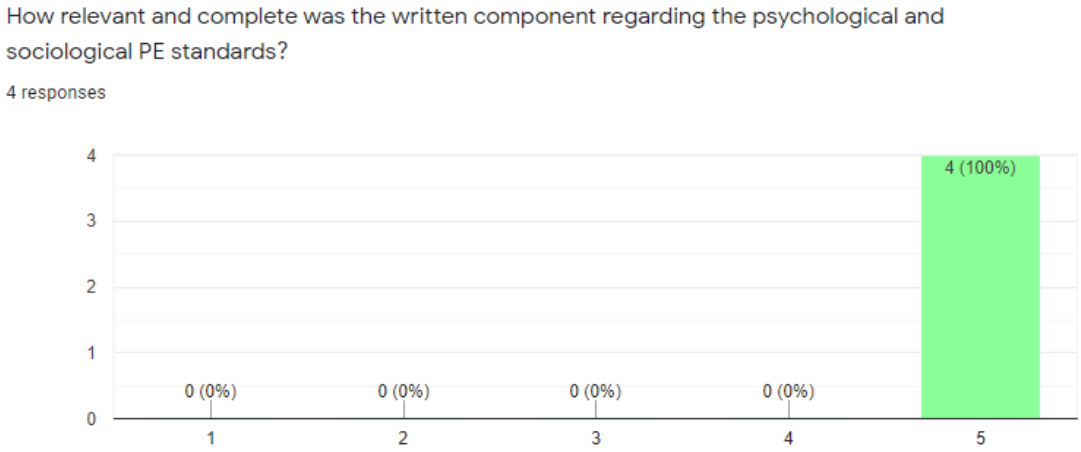

Figure 5: Respondent scoring regarding the relevance and completeness of the written component addressing psychological and sociological PE standards.

All respondents reported that the written component regarding California P.E. Standard 5: Psychological and Sociological Skills, was relevant and complete. One suggestion was to include examples of how students can encourage and praise each other during activities.

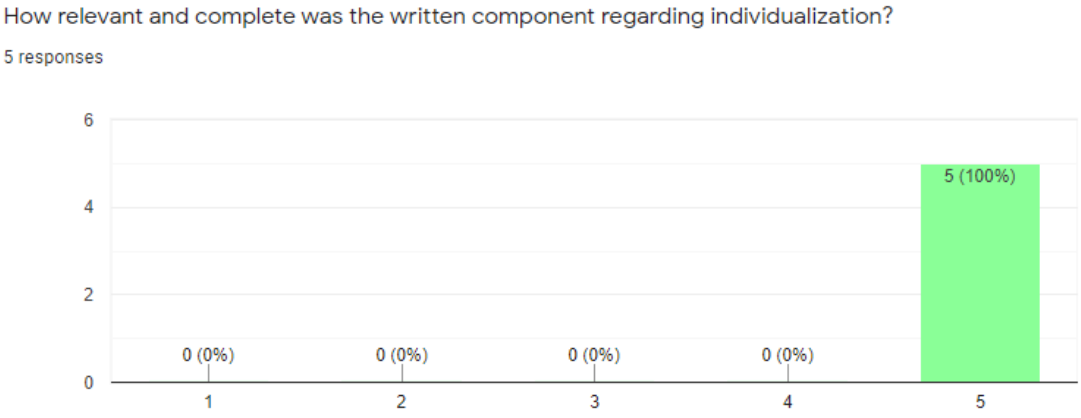

Figure 6: Respondent scoring regarding the relevance and completeness of the written component addressing individualization.

Five out of five respondents reflected that this section was relevant and complete, addressing that in the comment section as well. One respondent suggested including some examples of how teachers could individualize lessons using things such as, “changing the size or type of ball used, using additional visuals, or adding something about the hierarchy of prompting.”

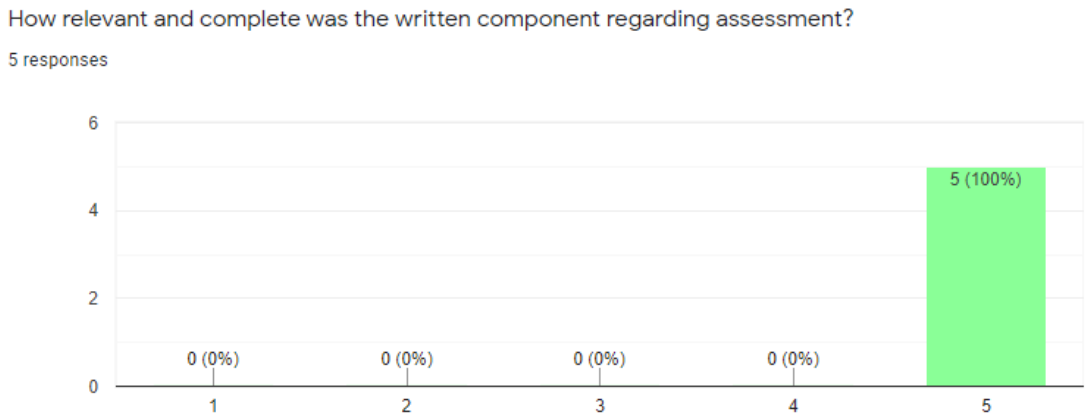

Figure 7: Respondent scoring regarding the relevance and completeness of the written component addressing assessment.

100% of respondents concluded that the written component addressing assessment was relevant and complete and added in the comments that the inclusion of assessment templates was helpful. One respondent also added that they were glad to see the inclusion of a debrief, as it “is always a very important component that is often overlooked.” Another respondent commented that they appreciated the discussion of formative and summative assessments in this section.

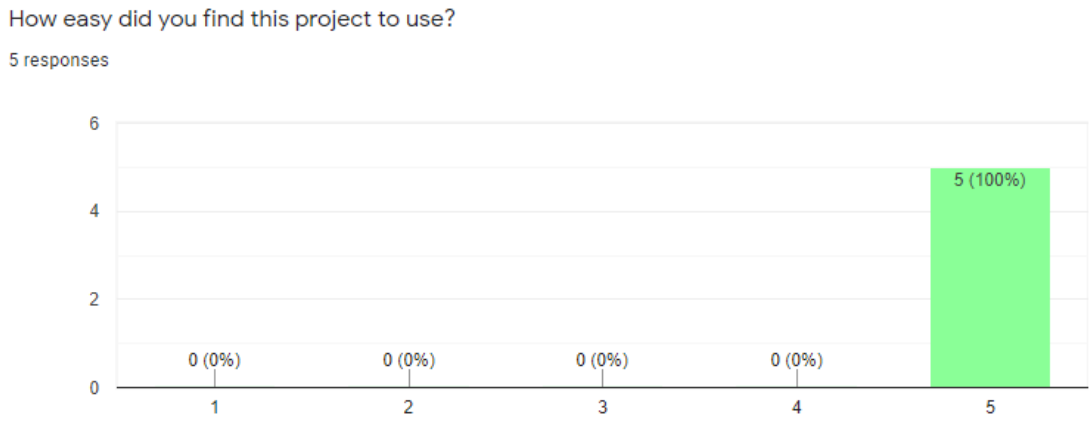

Figure 8 Respondent scoring regarding the ease of use of the integrated curriculum development guide

All respondents reported that the product was easy to use and implement. In the comments, respondents noted, “the layout of the lesson plans alone was incredibly easy to read and use. This would be a great addition to a teacher's classroom,” “it's very visually attractive, succinct, and inspiring, and says and displays all the things included in a quality lesson plan and learning experience for the children,” and, “it was quick and easy to read through and the lessons were a breeze to implement with my students. It was helpful to be able to reference the lesson plans after my first read through and before/after my class tried it out.”

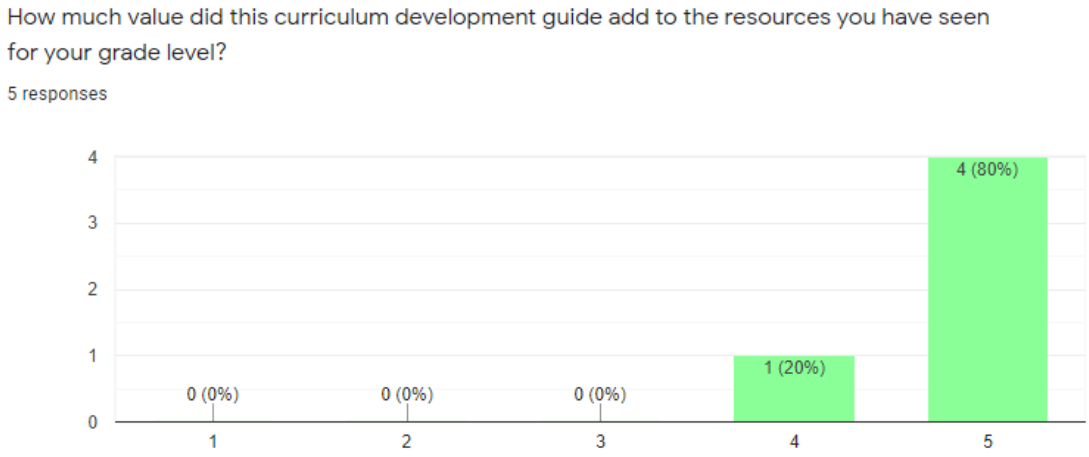

Figure 9: Respondent scoring regarding the perceived value the integrated curriculum development guide added to existing resources for teacher.

Four out of five respondents reported that this resource adds significant value to the available resources to teachers in their grade level. One respondent scored the guide's added value a four out of five. One respondent noted that while they are a P.E. teacher, they would, "definitely pass this amazing resource to all teachers that [they] work with, both in [their] district and the other districts that [they] work with." Another respondent commented that this guide encouraged them to think of more ways to incorporate physical activity into their lessons.

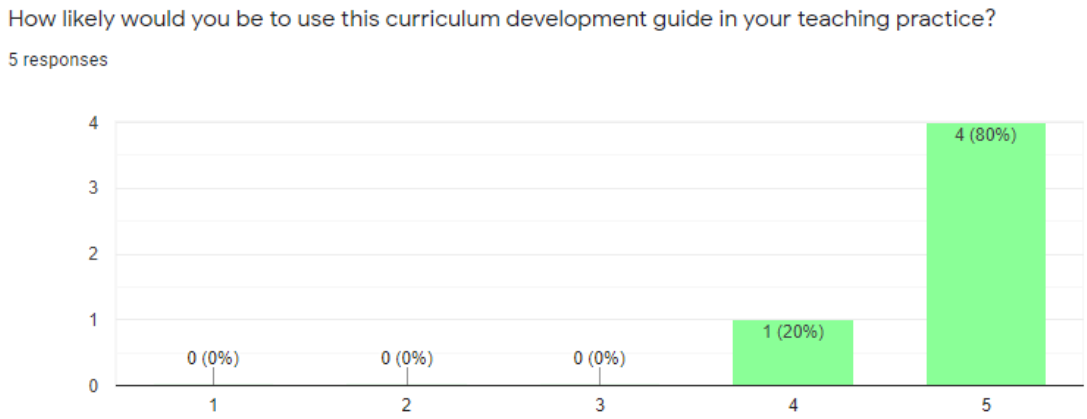

Figure 10: Respondent scoring regarding the likelihood of use for the integrated curriculum development guide.

80% of respondents reported that they would be very likely to use this curriculum development guide in their teaching practice. Two respondents ranked their likelihood of use to be a four out of five. One respondent wrote in the comments section, “I really like the guide and could see myself using it frequently.” Another respondent wrote, “I found your examples of lesson plans to be very engaging. I also feel that the differentiation options provided would be effective, making the activities more accessible.”

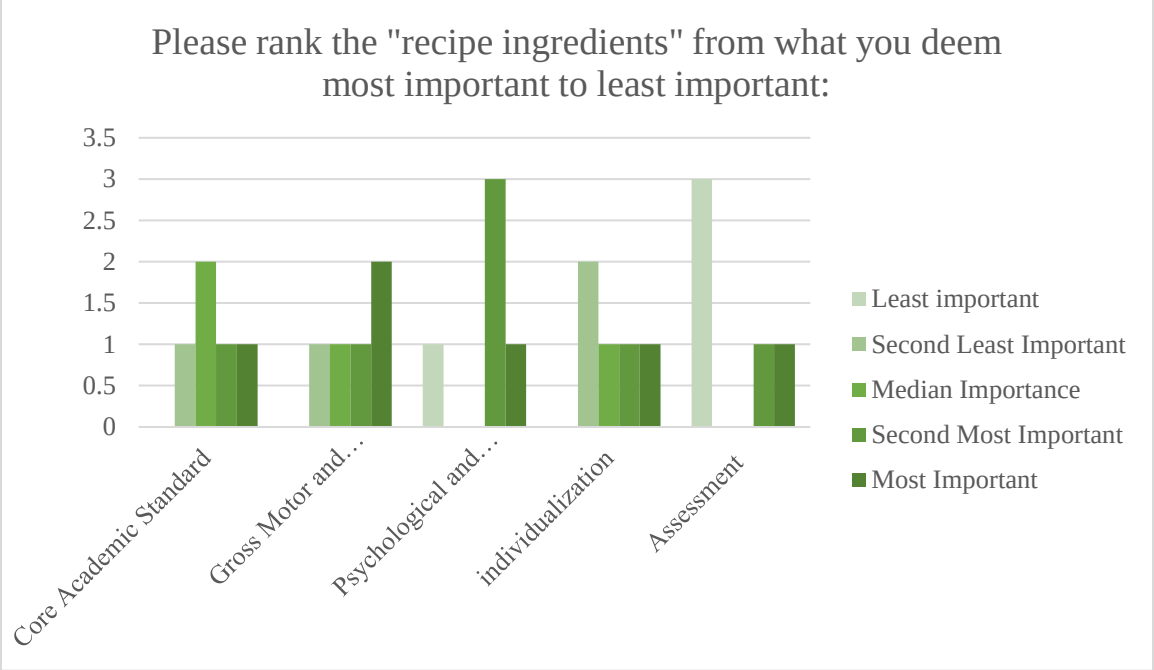

Figure 11: Respondent scoring regarding the perceived importance of each "recipe ingredient" included in the integrated curriculum development guide.

When asked to rank the "recipe ingredients" on a scale from 1-5, 1 being the least important, and 5 being the most important, 60% of respondents agreed that assessment was the least important and 60% agreed that the psychological and sociological skill standard was the second most important ingredient. Opinion about the most important ingredient varied, with each ingredient receiving at least one vote. 40% of respondents believed that the gross motor/movement pattern standard was most important.

The final section of the survey consisted of three written response questions and a general comments section. In the discussion of barriers that the respondents could foresee, the topics of time, space, and equipment were recurring. When asked if any information was included in the guide that should not have been, respondents reported that they thought everything that was addressed was pertinent and relevant. When asked

if any information was left out that should have been included, respondents reported that they thought everything was addressed. One respondent wrote that while there was nothing missing, there are some parts that could be elaborated on. Another respondent noted that following the implementation of one of the included sample lessons, "Something [they] quickly realized was the importance of pre-teaching lots of locomotor skills and giving students alternatives if they struggle with one of them." In the final comments section, respondents reflected on how they could see the guide being utilized, with multiple respondents commenting that they believe the guide could be easily incorporated by teachers into their teaching practice.

DISCUSSION

The data derived from this survey demonstrated the relevance and completeness of the content within the integrated curriculum development guide, as well as the ease of use in lesson development and implementation, the value this guide adds to existing resources, and the likelihood of use within educators' teaching practice. Overall, the content of the guide was determined to be 98% relevant and complete. The suggestions and inquiries added to the comments section were used to edit the document and highlight components that were not addressed to the extent deemed necessary. Although some of the suggestions given by respondents in the survey were implemented in the guide, others were not due to space or relevance to the overall goal of the guide.

One typographical error was corrected in the introduction in response to a comment on the survey. Individual page numbers were added for each lesson in the table of contents to clarify where to find them in the guide. Some sections of the guide were bolded to provide clarity or emphasize an important point. For example, in the section providing broader information about physical education, I bolded the first and fifth California P.E. standards to make it more clear that those were the standards being addressed in the guide. Another section that was made to be in bold font was the teacher's note regarding teaching P.E. lessons in isolation, not just through integrated lessons. This decision was made at the request of one of the respondents to emphasize the importance of teaching P.E. concepts independently, and addressing all of the P.E. standards, not just the first and the fifth. In the sample lessons, I included a note

highlighting the importance of pre-teaching movement patterns and skills following the feedback received from field testing.

All of the respondents reported that the guide was easy to use and visually attractive. The layout was determined to be logical and efficient in delivering the pertinent information. The majority of respondents rated the value this guide adds to existing resources for their grade a five out of five, with one respondent rating it a four. This reflects well on the guide and it's potential to support teachers in their practice. Similarly, all but one respondent rated their likelihood of using this guide a five out of five, with one respondent rating it a four. This demonstrates the combination of the previously mentioned survey items: ease of use and value added. With the product being easy to use and implement in the classroom and being unique to other available resources for teachers, the likelihood of use may be higher.

In order to expand the usage of this curriculum development guide to other teachers and school staff, I would like to create a dissemination plan. This may include providing the guide as a free resource to teachers in my school district, contacting the county office of education and/or the SELPA (Special Education Local Plan Area) to see if there are any opportunities to present my guide to local teachers, and inquiring with my thesis advisor about the possibilities and pathways toward publication. It is my goal to see this guide support teachers in rethinking their lessons to include more physical activity, and to see students learning through play.

This guide was limited in scope to only include kindergarten through second grade standards and content. While it scored well with general education teachers

teaching in those grade levels, an education specialist working with students in that age range, and an adapted physical education teacher working with students kindergarten through twelfth grade, it is hard to generalize that to all grade levels. Moving forward, it would be beneficial to create a similar guide focused on upper elementary, middle school, and secondary school, to determine the value of a similar program across the K-12 spectrum.

CONCLUSION

Curricular integration, or the highlighting of overlapping themes between subjects with a goal of deepening understanding of each, has become a popular way to maximize educational time in schools across the country. As pressure increases for teachers to fit more content into limited time, some important subjects are more likely to be cut short. Although the benefits of physical activity for all students is well documented, there is often less emphasis on physical education than core academic competencies. Knowing the benefits of physical activity for students and the evidence of academic benefits through integrated curricula, there is an opportunity to address physical education concepts while not sacrificing academic time. However, little research has been conducted about the benefits of integrating physical education and core academic competencies into cohesive lessons.

The intent of this project was to create a resource for teachers to develop integrated lessons focusing on P.E. and core academic standards using a simple and easy to follow "recipe." After reviewing other curricula to assist in the formatting and creation of the guide, a draft was created and distributed to five education professionals. Through the completion of a survey, data was collected regarding the relevance and completion of the informational pages in the guide, and the value added to additional resources for teachers working with students kindergarten through second grade. The majority of respondents reported that the guide was well organized, well informed, and added value to existing resources for teachers. This project was limited in scope and could be

expanded through further projects, and further research could indicate the effectiveness of integrated physical education and core academic concepts into cohesive lessons.

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APPENDIX

Appendix A: Integrated Curriculum Development Guide


"Play gives children the chance to practice what they are learning."
MR. ROGERS
Why is Integration Important?
In modern development of curricula, a popular approach has been to focus on integration of content areas. Curricular integration highlights the overlapping themes between subjects with a goal of deepening understanding of each, enabling students to make connections among various subjects, increase critical thinking, and also allow teachers to accomplish more in a limited time. The benefits of an integrated curriculum are seen in students' engagement, motivation, and academic success.
While forms of curricular integration have been widely adopted to address the core curriculum and state standards, less frequently is physical education included in integrated lesson planning.
Why Physical Education?
Research widely reports that including physical activity during the school day not only benefits the health of students, but also increases student engagement and success. Integrating core academic concepts into physical education lessons leads to the increase of children's physical activity levels during the school day without compromising academic time and simultaneously enhancing student performance. Thoughtful integration of these content areas is beneficial for all students, including those with disabilities.
Our Program
THE RECIPE
The goal of this curriculum development guide is to provide K-2 teachers the necessary tricks and tools to create their own integrated PE and core academic lessons. This centers around the five essential "ingredients."
A Core Curriculum Standard
A Gross Motor/Movement Pattern Physical Education Standard
A Psychological/Sociological Physical Education Standard
Individualization
Assessment
i


Table of Contents
1 Core Curriculum Standard
2 PE Overview
3 Gross Motor or Movement Pattern PE Standard
4 Psychological and Sociological PE Standard
5 Individualization
6 Assessment
7 Sample Lessons
7 Musical Dribbling
8 Reading Balloons
9 Shape Stations
10 Catching Some Sun
11 Cooperative Coordinates
12 Index
ii

1. Core Curriculum Standard

Why is Standards-Based Instruction Important?

Standards-based instruction (SBI) is a critical component of educational programming and student achievement. Grade level standards are a required component of elementary and secondary education, as they assess student progress and achievement in reaching college and career readiness goals. They also benefit teachers by setting clear and measurable goals, assisting in instructional planning, and enabling clear measures of achievement.

Since the 1980s, grade level standards have played an important role in educational programming and reform. The reauthorization of the Elementary and Secondary Education Act (ESEA) in 1994, otherwise known as the Improving America's Schools Act, required states to establish standards for each subject and grade level. While states are responsible for establishing standards, they are also accountable for student performance. In 2009, a state-led effort to create universal, real-world learning goals resulted in the release of the Common Core Standards. These standards address the English language arts and mathematics skills that students should know before graduating college, and break down the skills to specifically address learning goals by grade level. Today, 41 states, the District of Columbia, four territories, and the Department of Defense Education Activity have adopted the Common Core standards.

California is one of the states that has adopted the Common Core Standards for English language arts and mathematics, but there are also state educational standards for other domains. These include history-social science, science, art, and physical education.

Teachers also benefit from the implementation of SBI. State standards outline the learning objective for each subject of each grade level. Using this information, it enables teachers to plan lessons with specific content standards, assessment tools, and student learning outcomes in mind. When teachers have a clear understanding of what the expected outcome is, they are able to raise expectations for all students, promote varied means of representing knowledge, and provide differentiated support to meet the needs of their students (Laturnau, 2001).

Everyone wins when the standards are at the center of our educational planning!

Physical Education is Important!

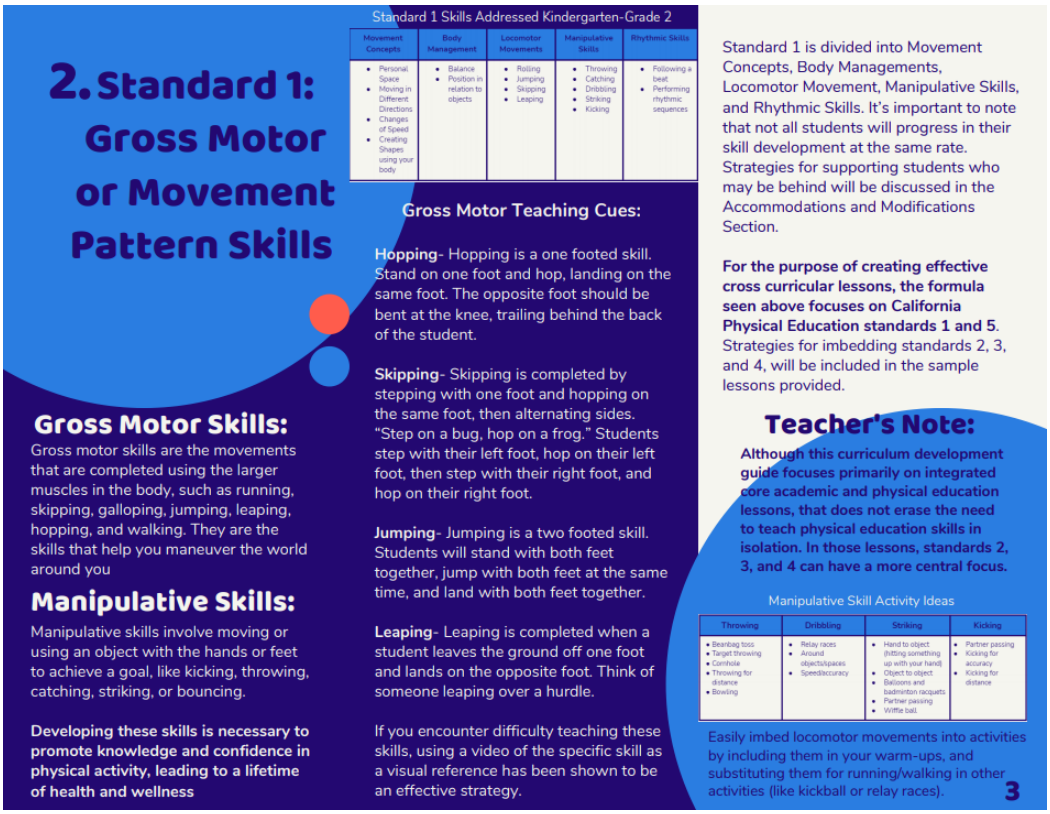
Physical education and physical activity significantly contributes to the health and well-being of students. Not only does a highly effective, standards-based physical education program support the physical health of students, it also helps improve self-confidence and academic achievement. Students who participate in physical education are more likely to have positive attitudes towards physical activity and participate in physical activity throughout their lives. Implementing physical activity in the classroom also has academic benefits as active bodies lead to active minds. Research has shown that implementing physical activity in the classroom leads to higher academic engagement and decreased off-task behaviors.

Physical education standards are often broken down into five main goals for students to achieve. These include demonstrating physical competency in a variety of motor skills and movement patterns, applying knowledge of concepts and strategies related to movement and performance, demonstrating knowledge and skills to achieve and maintain health-enhancing physical fitness, exhibiting responsible personal and social behavior, and recognizing the value of physical activity for a variety of purposes. California's physical education standards have been developed using the framework of the SHAPE America's national standards, and highlight the same key components.

Each standard is then broken down further into skill categories with grade specific subcomponents that build on each other through the grades. Each of these categories have one or more specific skills that students should master before entering second grade. The skills in these subcategories are built upon the following year with more complex movements and movement patterns.

California Physical Education Standards for Elementary and Middle School:

1. **Students demonstrate the motor skills and movement patterns needed to perform a variety of physical activities.**
2. Students demonstrate knowledge of movement concepts, principles, and strategies that apply to the learning and performance of physical activities.
3. Students assess and maintain a level of physical fitness to improve health and performance.
4. Students demonstrate knowledge of physical fitness concepts, principles, and strategies to improve health and performance.
5. **Students demonstrate and utilize knowledge of psychological and sociological concepts, principles, and strategies that apply to the learning and performance of physical activity.**


2. Standard 1: Gross Motor or Movement Pattern Skills
Standard 1 Skills Addressed Kindergarten-Grade 2
Movement Concepts
Personal Space
Moving in Different Directions
Changes of Speed
Creating Shapes using your body
Body Management
Balance
Position in relation to objects
Locomotor Movements
Rolling
Jumping
Skipping
Leaping
Manipulative Skills
Throwing
Catching
Dribbling
Striking
Kicking
Rhythmic Skills
Following a beat
Performing rhythmic sequences
Gross Motor Skills:
Gross motor skills are the movements that are completed using the larger muscles in the body, such as running, skipping, galloping, jumping, leaping, hopping, and walking. They are the skills that help you maneuver the world around you
Manipulative Skills:
Manipulative skills involve moving or using an object with the hands or feet to achieve a goal, like kicking, throwing, catching, striking, or bouncing.
Developing these skills is necessary to promote knowledge and confidence in physical activity, leading to a lifetime of health and wellness
Gross Motor Teaching Cues:
Hopping- Hopping is a one footed skill. Stand on one foot and hop, landing on the same foot. The opposite foot should be bent at the knee, trailing behind the back of the student.
Skipping- Skipping is completed by stepping with one foot and hopping on the same foot, then alternating sides. "Step on a bug, hop on a frog." Students step with their left foot, hop on their left foot, then step with their right foot, and hop on their right foot.
Jumping- Jumping is a two footed skill. Students will stand with both feet together, jump with both feet at the same time, and land with both feet together.
Leaping- Leaping is completed when a student leaves the ground off one foot and lands on the opposite foot. Think of someone leaping over a hurdle.
If you encounter difficulty teaching these skills, using a video of the specific skill as a visual reference has been shown to be an effective strategy.
Standard 1 is divided into Movement Concepts, Body Managements, Locomotor Movement, Manipulative Skills, and Rhythmic Skills. It's important to note that not all students will progress in their skill development at the same rate. Strategies for supporting students who may be behind will be discussed in the Accommodations and Modifications Section.
For the purpose of creating effective cross curricular lessons, the formula seen above focuses on California Physical Education standards 1 and 5. Strategies for imbedding standards 2, 3, and 4, will be included in the sample lessons provided.
Teacher's Note:
Although this curriculum development guide focuses primarily on integrated core academic and physical education lessons, that does not erase the need to teach physical education skills in isolation. In those lessons, standards 2, 3, and 4 can have a more central focus.
Manipulative Skill Activity Ideas
Throwing
Beanbag toss
Target throwing
Cornhole
Throwing for distance
Bowling
Dribbling
Relay races
Around objects/spaces
Speed/accuracy
Striking
Hand to object (hitting something up with your hand)
Object to object
Balloons and badminton racquets
Partner passing
Wiffle ball
Kicking
Partner passing
Kicking for accuracy
Kicking for distance
Easily imbed locomotor movements into activities by including them in your warm-ups, and substituting them for running/walking in other activities (like kickball or relay races).
3

3. Standard 5: Psychological & Sociological Skills

Teacher's Note:

Look to imbed psychological and sociological skills throughout the activity. At the beginning, set expectations for positive interactions. During the activity, provide opportunities for leadership, cooperation, and prosocial behaviors. At the end of lesson, encourage self reflection, including identifying their feelings about the activity, as well as how their social interactions enhanced their experience.

Also included in each lesson is a section addressing language demands where much of this collaborative conversation would be considered "language in action".

Teaching social/emotional skills to young students is important for their academic success as well as their lives outside of school. Early social and emotional skills in children have been linked with academic and career success later in life, as well as the ability to persist through challenging situations. These skills also have been linked to higher quality of life as students are better able to form and maintain meaningful relationships. Because of these benefits, social and emotional skill building has become an important component of many elementary education programs, including physical education programs.

Physical education is much more than just running around and giving students a brain break. While physical education should be fun, students should be learning important life skills in the process. These can be in the form of social/emotional skills imbedding into physical activities and physical education lessons.

As mentioned before, physical education standards often address social/emotional skills along with the physical ones. These standards address things such as self-management, responsible decision-making, self-awareness, social awareness, and relationship skills. Finding ways to highlight these concepts, while simultaneously working on the gross motor and manipulative skills, will create more engaging lessons for students, and in turn promote a more positive attitude towards physical activity.

Psychological and Sociological Skills addressed Kindergarten-Grade 2

Self Responsibility:

- Identifying feelings relating to activity
- Participation
- Dealing appropriately with challenges, successes, and failures
- Accepting responsibility

Social Interaction:

- Sharing
- Cooperation
- Discuss why social interaction make PE fun
- Offer others turns
- Acknowledging opponents
- Encouraging classmates
- Respecting self, others, and equipment
- Solving interpersonal problems

Group Dynamics:

- Participate as a leader and follower
- Being a good partner
- Being a good group member

4. Individualization

As we all know, lesson planning is not a one size fits all venture. Students learn and grow at different rates and lessons need to address all students, including those who may be behind in their understanding or development. This is why differentiation is so important. By identifying and removing barriers to learning, lessons can be universally designed to support all students. Embedding differentiated activities in each lesson allows students to pick the challenge that is the best fit for them, while removing stigma around modified work for students with disabilities. However, even the most thoughtfully designed lesson may necessitate further individualization to enable the inclusion of all students. This individualization takes the form of accommodations and modifications which allow all students to participate and enhance their learning.

In the context of this guide, accommodations and modifications can be made to both the academic expectations, as well as the physical activity components of the lessons.

Everyone benefits from differentiation!

5. Assessment

Why is Assessment Important?

Knowing where students are at in their individual understanding and development is necessary for planning instruction that caters to all learners. Assessment is how that information is gathered. By collecting data regarding student performance and growth over time, educators are better able to determine students' strengths, identify areas of concern, and evaluate the effectiveness of their instruction. Assessment also allows teachers to track progress on the state standards and ensure that their students' needs are being met.

Assessments can be taken throughout lessons, as well as at then end of the activity. Formative assessments are those that gather information during the lesson. These concurrent assessments enable teachers to evaluate how the lesson is going and clarify anything that students are struggling with. They also provide students opportunities to reflect on their performance. Summative assessments occur after the lesson or unit and address the learning outcomes. Teachers use these assessments to determine if the topic was widely understood, and if not, what areas need to be addressed further. Both formative and summative assessments play an important role in instructional decision making. During integrated lessons, teachers should perform assessments in all content areas.

Physical education assessments can come in many forms. For kindergarten through second grade, the primary focus of standard 1 is on developing foundational movement patterns. To assess these skills the following types of assessments can be useful:

Skill Mastery Assessment	This assessment is a quick way to determine what skills students possess. It can be a simple checklist of locomotor or manipulative skills that you mark if the student has mastered it or not.
Scoring Rubric	This type of assessment breaks the skills down into several rated categories, getting progressively closer to mastery.
Task Analysis	This assessment breaks down individual skills to their smallest parts to enable teachers to identify the specific aspect of the movement that students are having difficulty with.

Blank templates included in the index!

Lesson Plan 1!

Second Grade Standards Used

Musical Dribbling

Grade Level Standards Addressed:
PE Standard: 1.14 Hand-dribble, with control, a ball for a sustained period.

PE Standard: 5.7 Participate positively in physical activities that rely on cooperation.

Core Academic Standard: CCSS.MATH.CONTENT.2.OA.B.2

Learning Objectives:
Students will apply competent manipulative skills needed to dribble a ball in place and utilize math strategies to add and subtract within 20

Equipment Needed:
Brain Balls/Basketballs with numbers on them

Cones

Music

Pre-teaching:

- Verbal explanation of expectations
- Physical model of movements

Pre-teaching note: This should be outside the classroom, in the area that the activity will be taking place.

Dynamic Warm-Up:

- Have students line up in 2 lines, facing cones 15 feet away
- Students will perform one locomotor skill to the cone and back, then go to the back of the line to wait their turn.
- Play music during the warm up
- After each locomotor skill, pause the music and say "freeze"
- Practice freezing a few more time during the warm up

Skip
Jog
Leap
Jump

Dribble Practice:

- Give each student one ball
- Practice dribbling with one dominant hand

Musical Dribbling:

- Spread Brain Balls (or basketball with numbers written on them) around the activity area
- As music plays, students will perform one locomotor skill (teacher selected) until music stops
- Students will then find a brain ball and a partner and identify the number on their ball and their partner's ball, add them together, and complete that number of dribbles
- They will then put the ball down, and when the music starts again they will do a different locomotor skill.

Debrief:

- Get students together and ask questions like:
  - Did you have fun?
  - Was it hard?
  - What was challenging?
  - What was your favorite part?

Assessments:

Dribble Scoring Rubric

Locomotor Skill Mastery Checklist

Dribbling Differentiation:

To make it easier: Students can practice bounce-catching if dribbling with one hand is too difficult.
Added Challenge: Students can practice dribbling with non-dominant hand.

Academic Differentiation:

To make it easier: Students can practice counting just the number on their balls
Added Challenge: Get into groups of 3 and add 3 numbers together instead of 2

Language Demands:

Vocabulary: Skip, Leap, Jumps, Dribble
Language in Action: Partner based problem solving, Debrief

Lesson Plan 2!

First Grade Standards Used

Reading Balloons

Grade Level Standards Addressed:
PE Standard: 1.18 Strike a balloon upward continuously, using arms, hands, and feet

PE Standard: 5.6 Identify and demonstrate effective practices for working with a group without interfering with others.

Core Academic Standard: CCSS.ELA-LITERACY.RF.1.3.G

Learning Objectives:
Students will apply competent manipulative skills needed to keep a balloon in the air and utilize recognize and read irregularly spelled words

Equipment Needed:
Balloons

Markers

Pre-teaching:

- Verbal explanation of expectations
- Physical model of movements

Pre-teaching note: This should be outside the classroom, in the area that the activity will be taking place.

Warm-Up:

- Arm circles
- Arm stretches
- Underhand arm movement

Individual Practice:

- Give each student one balloon with an irregularly spelled word on it
- Have students practice keeping the ball in the air using their hands, spelling out each letter as they strike it

Have students switch balloons a couple of times to try new words

Partner Practice:

- Students will pair up, greet their partner, and strike the balloon back and forth between them, spelling one letter of the word on it with each hit
- Students will rotate partners to spell different words

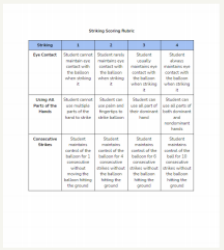
Group Practice:

- Students will then be put into small groups and will work together to keep the balloon in the air and spell the word written on it
- Groups will rotate balloons to spell different words
- At the end of the activity, provide each group a couple of minutes to talk about what was easy, what was hard, what worked well, and what things they might do differently next time

Debrief:

- Get all the students together for a whole class debrief and ask the questions again to get each group's responses

Assessments: Striking Scoring Rubric



Striking Differentiation:

To make it easier: Students can strike with two hands at once to gain more control.
Added Challenge: Students can strike the ball with other parts of their hands/bodies

Academic Differentiation:

Fun Tip: Color code your balloons to indicate the difficulty of words! Have one color represent review words, one color represent target words, and another color represent reach words. You can assign groups to certain words, or allow students to self select the right level.

Language Demands:

Vocabulary: Strike
Language in Action: Partner based problem solving, group problem solving, group discussion, and debrief

Lesson Plan 3!

Kindergarten Standards Used

Shape Stations

Grade Level Standards Addressed:
PE Standard: 1.4 Create shapes at high, medium, and low levels by using hands, arms, torso, feet, and legs in a variety of combinations.

PE Standard: 5.4 Describe how positive social interaction can make physical activity with others more fun

Core Academic Standard: CCSS.MATH.CONTENT.K.G.B.5

Learning Objectives:
Students will apply knowledge of shapes and figures and apply competent motor skills needed to create shapes using their bodies

Equipment Needed:
Shape Visuals

Cones

Classroom materials that can be utilized as obstacles

Pre-teaching:

- Verbal explanation of expectations
- Physical model of movements

Pre-teaching note: This should be outside the classroom, in the area that the activity will be taking place.

Dynamic Warm-Up:

- Students line up in 2 lines, facing cones 15 feet away
- Students will perform one locomotor skill to the cone and back, then go to the back of the line to wait their turn.

Shape Making Practice:

- Students will be given a shape and asked to find a partner to make the given shape with
- Do a couple of rounds so students get practice making several shapes

Skip
Jog
Leap
Jump

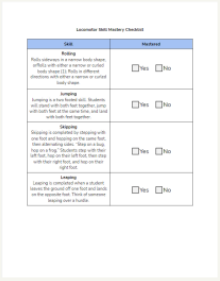
Obstacle Course with Shape Stations:

- Create an obstacle course out of classroom materials that includes several segments of exercises (i.e. running through cones, leaping over carpet squares, jumping from hula hoop to hula hoop, etc.)
- Between each exercise have a visual of a shape
- Put students into pairs or small groups
- Students will go through the obstacle course stopping at each shape with their team to create the shape using their bodies
- Students will receive teacher approval before moving on to the next exercise
- Students will wait with their team until it is their turn to go once one group is finished with the first shape, the next team can go

Debrief:

- Get students together and ask questions like:
  - Was it fun?
  - How did working in pairs make the activity more fun?
  - Was it challenging/hard? How?

Assessments: Locomotor Skill Mastery Checklist



Course Differentiation:

To make it easier: Provide an alternate route or skill to complete with less physical demand (leap instead of jump for example)
Added Challenge: You can have students race to determine the fastest time.

Academic Differentiation:

To make it the right fit for everyone: Divide shapes into 3 buckets. Have one bucket contain simple shapes, one bucket contain shapes that are moderately challenging, and one bucket contain challenging shapes. That way students can pick the challenge level that feels right for them.

Language Demands:

Vocabulary: Skip, Leap, Jump
Language in Action: Partner based problem solving, Debrief

Lesson Plan 4!

First Grade Standards Used

Catching Some Sun

Grade Level Standards Addressed:

PE Standard: 1.11 Demonstrate the overhand movement (throw) pattern and 1.13 Catch, showing proper form, a gently thrown ball

PE Standard: 5.5 Identify and demonstrate the attributes of an effective partner in physical activity.

Core Academic Standard: 1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted.

Learning Objectives:
Students will apply competent manipulative skills needed to throw a ball to a partner, catch a ball, and roll a ball back to a partner. Students will apply knowledge of the patterns of the motion the sun.

Equipment Needed:

Balls

Cones

Pre-teaching:

- Verbal explanation of expectations
- Physical model of movements

Pre-teaching note: This should be outside the classroom, in the area that the activity will be taking place.

Dynamic Warm-Up:

- Arm circles
- Arm stretches
- Overhand arm movement

Warm-ups should include movements used in the lesson

Daytime/Nighttime Review:

- Students will face the instructor who is the "sun"
- The teacher will shout out "daytime" or "nighttime"
- When "daytime" is called, students face the sun, and when "nighttime" is called, student face away.
- Do a few rounds of this with quick transitions, almost like red light/greenlight

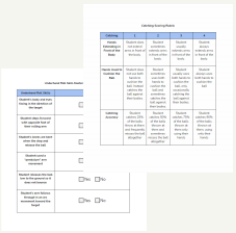
Daytime/Nighttime Catching:

- Students will be put into two groups. The students in the first group will line up in a line labeled "East" and students in the second group will line up in a line labeled "West." Student will stand across from someone in the opposite line and that will be their partner.
- Students in the East line will start will a ball and practice throwing it to their partner. While throwing it, the students will declare "daytime" as the ball travels across the sky.
- Students in the West line practice catching the ball and rolling it back to their partners, declaring "nighttime" as they roll it.
- Students participate in their rows for a while, then switch roles.

Debrief:

- Get students together and ask questions like:
  - Was it fun?
  - How did you have to work with your partner?
  - How did this activity demonstrate the movement pattern of the sun?

Assessments: Catching Scoring Rubric



Underhand Roll Skill Mastery Assessmnet

P.E. Differentiation:

To make it easier: Students can throw underhand if it is too difficult to throw overhand with accuracy, or decrease the distance between partners

Added Challenge: Increase the distance between partners

Academic Differentiation:

To make it the right fit for everyone: Teachers can assign pairs, pairing students that may need additional support with students that understand the academic concept better and could explain it.

Language Demands:

Vocabulary: East, West, daytime, nighttime, throw, catch, roll

Language in Action: Partner based problem solving, Debrief

10

Lesson Plan 5!

Second Grade Standards Used

Cooperative Coordinates

Grade Level Standards Addressed:

PE Standard: 1.9 Catch a gently thrown ball above the waist, reducing the impact force.

PE Standard: 5.4 Encourage others by using verbal and nonverbal communication.

Core Academic Standard: Social Science Content Standard 2.2.1

Learning Objectives:
Students will apply knowledge of a simple grid system to locate desired location and apply competent manipulative skills to toss a ball with accuracy and catch a ball above their waist.

Equipment Needed:
Grid (hula hoops, jump ropes, four square court, chalk, etc.)

Bean Bags/Tossing Objects

Letter and Number Visuals

Pre-teaching:

- Verbal explanation of expectations
- Physical model of movements

Pre-teaching note: This should be outside the classroom, in the area that the activity will be taking place.

Dynamic Warm-Up:

- Arm circles
- Arm stretches
- Underhand arm movement

Toss and Catch:

- Students will be paired up and will practice tossing the ball back and forth to each other, using an underhand toss and catching the ball above waist
- Do a few minutes of this to get students ready

While waiting their turn, students should cheer on their classmates and provide encouragement

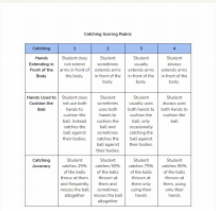
Mapping Tosses:

- Create a grid system using classroom/PE equipment (see equipment section for ideas) and include a line a few feet away from the grid for students to stand behind when tossing
- Lay out ABC and 123 visuals along the x and y axis
- Put students into pairs and have groups of two take turns approaching the grid
- One student will identify a coordinate (ex. A3) and the other student will try to toss the object into that coordinate's box, then students will switch jobs
- Once all the objects are tossed, one student will go retrieve the objects and toss them back to their partner, who will work on catching them above their waist
- If you can, set up several grids to reduce the number of students waiting

Debrief:

- Get students together and ask questions like:
  - Was it fun?
  - How did it feel when your classmates cheered you on?
  - Was it challenging/hard? How?

Assessments: Catching Scoring Rubric



Physical Differentiation:

To make it easier: Students can identify the coordinate and place the object in it if it is too difficult to toss it. You could also provide several distance lines to toss from and allow students to pick the challenge that is the best fit for them

Added Challenge: You can have students play a game of tic-tac-toe, where they first identify the coordinate and then toss it, trying to get three in a row

Academic Differentiation:

To make it the right fit for everyone: Teachers can create grids of various sizes to limit the coordinate options. Also, teachers can assign pairs, pairing students that may need additional support with students that understand the academic concept better and could explain it.

Language Demands:

Vocabulary: Coordinates, Toss, Catch

Language in Action: Partner Collaboration, Peer Encouragement, Debrief

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- **Assessments in Order of Appearance:**
  - Dribbling Scoring Rubric
  - Locomotor Skill Mastery Assessment
  - Striking Scoring Rubric
  - Catching Scoring Rubric
  - Underhand Roll Skill Mastery Assessment

Dribble Scoring Rubric

Dribble	1	2	3	4
Waist Level	Student cannot contact ball with one hand at about waist level	Student rarely contacts ball with one hand at about waist level	Student contacts ball with one hand at about waist level some of the time	Student always contacts ball with one hand at about waist level
Fingertips	Student cannot push the ball with fingertips	Student rarely pushes the ball with fingertips	Student pushes the ball with fingertips some of the time	Student always pushes the ball with fingertips
Consecutive Bounces	Student maintains control of the ball for 1 consecutive bounces without moving their feet to retrieve the ball	Student maintains control of the ball for 2 consecutive bounces without moving their feet to retrieve the ball	Student maintains control of the ball for 3 consecutive bounces without moving their feet to retrieve the ball	Student maintains control of the ball for 4 consecutive bounces without moving their feet to retrieve the ball

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Locomotor Skill Mastery Checklist

Skill	Mastered
Rolling Rolls sideways in a narrow body shape, orRolls with either a narrow or curled body shape (1); Rolls in different directions with either a narrow or curled body shape.	☐Yes ☐No
Jumping Jumping is a two footed skill. Students will stand with both feet together, jump with both feet at the same time, and land with both feet together.	☐Yes ☐No
Skipping Skipping is completed by stepping with one foot and hopping on the same foot, then alternating sides. "Step on a bug, hop on a frog." Students step with their left foot, hop on their left foot, then step with their right foot, and hop on their right foot.	☐Yes ☐No
Leaping Leaping is completed when a student leaves the ground off one foot and lands on the opposite foot. Think of someone leaping over a hurdle.	☐Yes ☐No

Striking Scoring Rubric

Striking	1	2	3	4
Eye Contact	Student cannot maintain eye contact with the balloon when striking it	Student rarely maintains eye contact with the balloon when striking it	Student usually maintains eye contact with the balloon when striking it	Student always maintains eye contact with the balloon when striking it
Using All Parts of the Hands	Student cannot use multiple parts of the hand to strike	Student can use palm and fingertips to strike balloon	Student can use all part of their dominant hand	Student can use all parts of both dominant and nondominant hands
Consecutive Strikes	Student maintains control of the balloon for 1 consecutive without moving the balloon hitting the ground	Student maintains control of the balloon for 4 consecutive strikes without the balloon hitting the ground	Student maintains control of the balloon for 6 consecutive strikes without the balloon hitting the ground	Student maintains control of the ball for 10 consecutive strikes without the balloon hitting the ground

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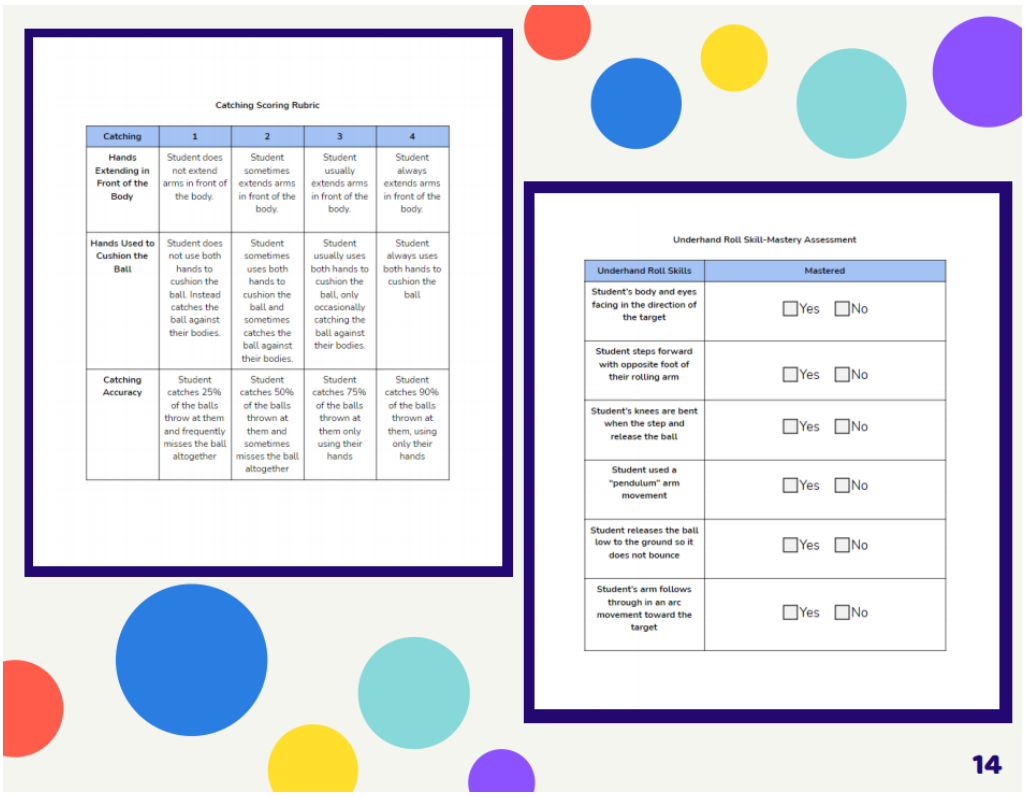

Catching Scoring Rubric

Catching	1	2	3	4
Hands Extending in Front of the Body	Student does not extend arms in front of the body.	Student sometimes extends arms in front of the body.	Student usually extends arms in front of the body.	Student always extends arms in front of the body.
Hands Used to Cushion the Ball	Student does not use both hands to cushion the ball. Instead catches the ball against their bodies.	Student sometimes uses both hands to cushion the ball and sometimes catches the ball against their bodies.	Student usually uses both hands to cushion the ball, only occasionally catching the ball against their bodies.	Student always uses both hands to cushion the ball
Catching Accuracy	Student catches 25% of the balls throw at them and frequently misses the ball altogether	Student catches 50% of the balls thrown at them and sometimes misses the ball altogether	Student catches 75% of the balls thrown at them only using their hands	Student catches 90% of the balls thrown at them, using only their hands

Underhand Roll Skill-Mastery Assessment

Underhand Roll Skills	Mastered
Student's body and eyes facing in the direction of the target	☐Yes ☐No
Student steps forward with opposite foot of their rolling arm	☐Yes ☐No
Student's knees are bent when the step and release the ball	☐Yes ☐No
Student used a "pendulum" arm movement	☐Yes ☐No
Student releases the ball low to the ground so it does not bounce	☐Yes ☐No
Student's arm follows through in an arc movement toward the target	☐Yes ☐No

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Appendix B: Survey

Integrated Curriculum Development Guide Evaluation and Feedback

Please fill out this form to help me edit my product and make it amazing and useful! Thank you so much!

* Required

1. Your Name *

_____

2. How relevant and complete was the introduction?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

3. Comments:

_____

_____

_____

_____

_____

4. How relevant and complete was the written component regarding the core curriculum standard?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

5. Comments:

6. How relevant and complete was the written overview of physical education?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

7. Comments:

8. How relevant and complete was the written component regarding the gross motor and movement pattern PE standards?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

9. Comments:

10. How relevant and complete was the written component regarding the psychological and sociological PE standards?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

11. Comments:

12. How relevant and complete was the written component regarding individualization?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

13. Comments:

14. How relevant and complete was the written component regarding assessment?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

15. Comments:

16. How easy did you find this project to use?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

17. Comments:

18. How much value did this curriculum development guide add to the resources you have seen for your grade level?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

19. Comments:

20. How likely would you be to use this curriculum development guide in your teaching practice?

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

21. Comments:

22. Please rank the "recipe ingredients" in order from what you deem most important to least important: * *Mark only one oval per row.*

	1 (least important)	2	3	4	5 (mo import
Core Academic Standard					
Gross Motor/Movement Pattern PE Standard					
Psychological/Sociological PE Standard					
Individualization					
Assessment					

23. What barriers do you foresee in the implementation of this guide?

24. Was there anything included in this guide that you feel should not have been?

25. Was there anything that was not addressed in this guide that you feel should have been?

26. Comments and Suggestions: