



THE OHIO STATE UNIVERSITY

What is good teaching in physical education? 什么是好的体育教学？

Phillip Ward



Main Argument 首要讨论问题

- Creating *joy in moving in our students* should be a fundamental outcome of physical education. **收获运动中的快乐是体育教育的一个基本结果**
- Moving in the context of physical education is formalized play (i.e., sport, dance, & other movement forms) and it mostly requires movement competence for long term engagement. **在体育教育中涉及的运动通常是指正式的运动（包括各种运动项目，舞蹈和其他运动），只有具有一定运动能力的人才会长期参与。**

How to best serve children and youth to meet this outcome?

如何更好地为儿童和青少年服务才能实现这个目标呢？



Secondary Argument 次要问题

To increase the likelihood of meeting the joy-oriented focus we must improve the quality of teaching.

为了能够增加学生运动的快乐，我们必须提升体育教学的质量。

Secondary Argument 次要问题

The improvement of teaching in pre-service and in-service settings, requires a *focus on the practice of teaching*.

无论是职前还是在职体育教师，其教学能力的提升，都需要关注教学实践。

The **practice of teaching** should be grounded in the content to be taught relative to the needs of the students and standards for physical education.

教学实践应以满足学生需求的内容和体育教学的标准为基础。

Good teaching versus Effective teaching

好的教学VS有效教学

Mikael Quennerstedt (2019) is most recent scholar to ask the question:

What is educative in what we do in physical education?

Mikael Quennerstedt (2019) 最近提出这样一个问题：

我们在体育教学中所做的什么是具有教育性的？

The Educative Function of Joy

教育的快乐功能

Physical education classes that have a joy-oriented focus and produce students who love moving and this in turn enhances wellbeing developing life-long movers.

(Blankenship & Ayers, 2010; Kretchmar, 2008)

以快乐为本的体育教学注重和培养热爱身体活动，并最终成为以运动促进健康，终身从事体育的活动者。

Good teaching versus Effective teaching

好的教学VS有效教学

Quennerstedt (2019) in answering the *educative* question suggests that part of the problem lies with the content of what is taught.

Quennerstedt (2019) 在回答该问题时，指出教学的内容起到很大作用。

The larger problem, regardless of whether physical education is a classroom based focus or a movement based focus, is **how** physical education is taught?

不管是室内还是室外的体育课，都会存在体育课堂教学中教师如何教的问题？

By how physical education is taught I mean: 如何进行体育教学的内涵

- What curriculum and pedagogical approaches are used;
使用怎样的课程和教学方法；
- How the content is represented;
如何呈现教学内容；
- In what context physical education occurs.
体育教学环境如何。

Good teaching is defined by teachers who...

教学好的体育教师具有以下特征

- Know the content well enough to help students learn it,
非常了解所教内容，并能够帮助学生学习；
- Use evidence-based core teaching practices;
使用基于实证的核心教学实践；
- Create an educational environment that addresses and is characterized by social justice.
创设以社会公正为特征的教育环境。

Knowing the content well enough to help students learn it 非常了解所教内容，并能够帮助学生学习

- Do our teachers know their content well enough to teach it?

教师是否对其所教的内容足够了解呢？

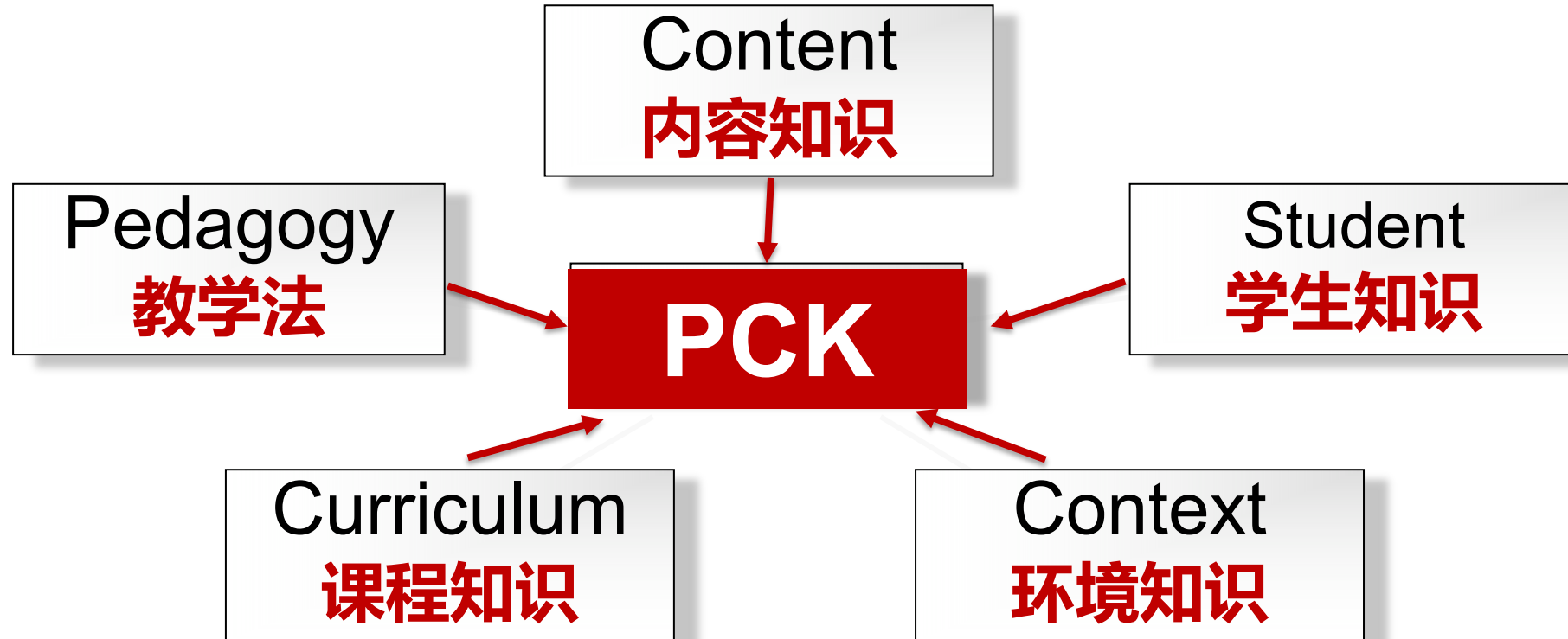
- It depends on how you define this content knowledge.

它取决于您如何定义学科内容知识。

Pedagogical Content Knowledge (PCK)

学科教学知识

PCK Informed by: 学科教学知识构成



Grossman (1990)

Shulman (1987) 舒尔曼的定义

Operationalization of PCK:

How content is “**organized, represented, and adapted to the diverse interests and abilities of learners and presented for instruction.**”

PCK的操作性定义：

教师是如何组织、呈现和调整教学内容以满足不同类型学习者的兴趣和能力的，并在教学中进行呈现。

A definition of PCK

对PCK的定义

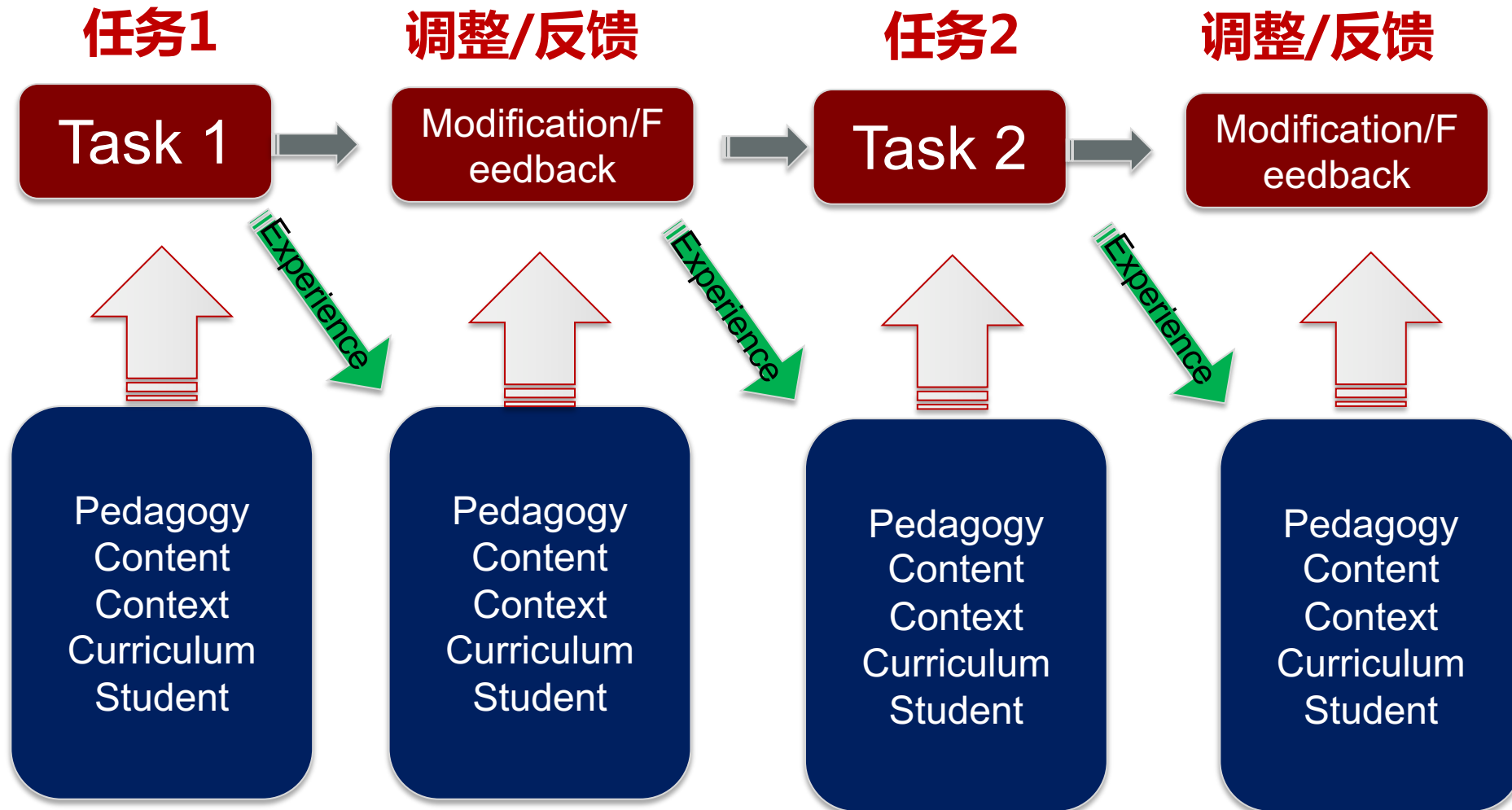
PCK is a focal point, a locus, defined as such as an **event in time** (and therefore specific contextually) where teachers make **decisions in terms of content** based on their understandings of a **number of knowledge bases** (e.g., pedagogy, students, content, curriculum).

Ward (2015)

PCK可以理解为在一个焦点，一个轨迹，或某个具体事件中（提供具体的语境），教师根据个人对自己所拥有的基础知识（如教学法知识、学生知识、学科内容知识、课程知识等）的理解来做出的决策。

Instructional Decisions as PCK- Adaptive competence

教学决策即PCK——调节能力



Content Knowledge (CK)

学科内容知识

An introductory task...

任务介绍



Consider the technique of the handstand! 以手倒立为例

Consider the sequence of task progressions for teaching the handstand from initial weight bearing to performing the handstand unassisted.

思考从最初的身体负重支撑到独立完成手倒立的任务发展步骤。

Which task progressions would you include/exclude if you were teaching 14 yr-olds (8th grade) who had at least one previous unit of gymnastics in school?

如果您教一位以前在学校至少学过一个单元体操的14岁（8年级）学生，您会选择哪些任务步骤呢？

Which task progressions would you include/exclude if you were teaching 6 year olds (1st grade) who had little experience with weight bearing on their hands?

如果您教的是一位没有任何双手身体负重经验的6岁（1年级）学生，您会设置怎样的任务步骤呢？

What kinds of knowledge did you just use?

思考您刚才使用了哪些知识？.....



Ball, Thames & Phelps (2008)

CCK

SCK

Rules &
Etiquette

Technique &
Tactics

Error Detection

Tasks &
Representations



Fitness Exercise Content Knowledge

体能练习的内容知识

Common Content Knowledge

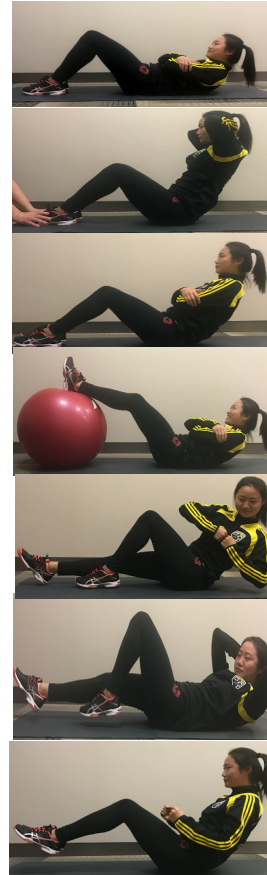
一般内容知识

Lie on your back on the floor, bend your knees 90 degrees, and plant your feet flat. Tuck your chin slightly toward your chest.....

仰面躺在地板上，膝盖弯曲呈90度，双脚平放。下巴微收贴向胸部.....

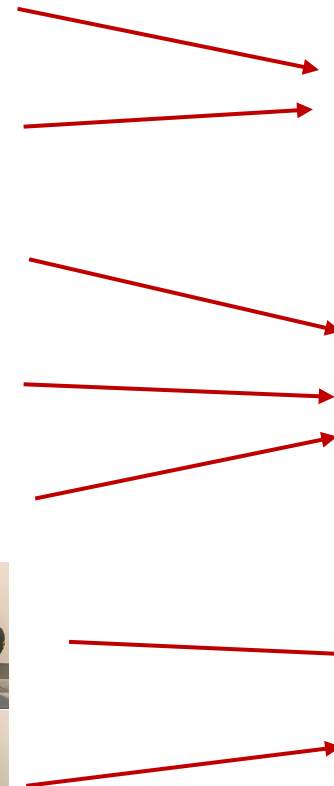
Specialized Content Knowledge

特殊内容知识



Pedagogical Content Knowledge

学科教学知识



Basketball Content Knowledge

篮球学习的内容知识

Common Content Knowledge

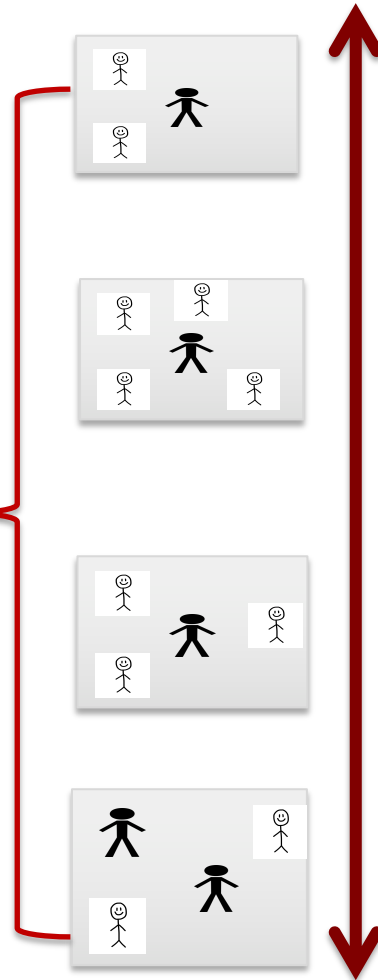
- Off the ball players: **move away from the defender**
- On the ball players: **Pass to the open player**

无球队员摆脱防守；有球队员向空位传球

Defense walks no interceptions
Defense jogs no interceptions
Defense runs and intercepts

无拦截的防守走动
无拦截的防守慢跑
有拦截的防守跑动

Specialized Content Knowledge



Pedagogical Content Knowledge

Beginners 初学者



Higher competence

高水平



Checking for understanding...

进一步加深理解

The critical elements - the technique of the handstand!

关键要素——倒立的技术

The sequence of task progressions for the teaching the handstand from initial weight bearing to performing the handstand unassisted!

从身体负重支撑到独立完成倒立的任务发展步骤。

Which task progressions would you exclude if you were teaching 8th graders who had at least two previous units of gymnastics?

面对一位在学校至少经历过2个单元体操学习的14岁（8年级）学生，您会选择哪些任务步骤呢？

Which task progressions would you exclude if you were teaching 1st graders who little experience with weight bearing on their hands?

面对一位没有任何双手身体负重经验的6岁（1年级）学生，您会设置怎样的任务步骤呢？

一般内容知识

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特殊内容知识

Specialized Content Knowledge (SCK)

学科教学知识

Pedagogical Content Knowledge (PCK)

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一般内容知识

Common Content Knowledge (CCK)

特殊内容知识

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学科教学知识

Pedagogical Content Knowledge (PCK)

Do teachers know their content ?

教师是否了解他们所教的内容呢？

I suggest that CCK varies and that SCK is universally poor and we need to pay close attention to improving it worldwide.

不同的体育教师可能在CCK方面有差异，但是在SCK方面基本相同，缺乏SCK，世界各地都需要关注并提升体育教师的SCK.

Total Sample Size and Scope

研究样本和涉及范围

- >10,000 preservice teachers
- >1000 In-service **teachers**
- Tennis, Badminton, Basketball, Volleyball, Soccer, Fitness, Gymnastics, Locomotion and Object Control and other elementary content.
- **10,000 多位职前体育教师**
- **1000 多位在职体育教师**
- **涉及项目：网球，羽毛球，篮球，排球，足球，体能，体操，移动和操控技能以及其他小学的学习内容。**

Study Locations 研究分布

USA, WALES, ENGLAND, BELGIUM, TURKEY
美国, 威尔士, 英格兰, 比利时, 土耳其



中国, 韩国, 日本

CHINA, SOUTH KOREA, JAPAN

Common Content Knowledge? Measurement: Knowledge Tests

一般内容知识？
测试
知识测试

CCK Findings

一般内容知识的研究结果

Different countries require different amounts of time spent on content.

In China 60-80%; In USA 40-60%

不同的国家在内容知识上花费的时间要求不同。

在中国：60-80%；在美国：40-60%

Classes in most countries focus on playing and performance outcomes.

大多数国家的课程都比较注重学生的运动比赛能力和技术展示能力。

Specialized Content Knowledge? Measurement: Depth of Content Knowledge

特殊内容知识？
测试
内容知识的深度

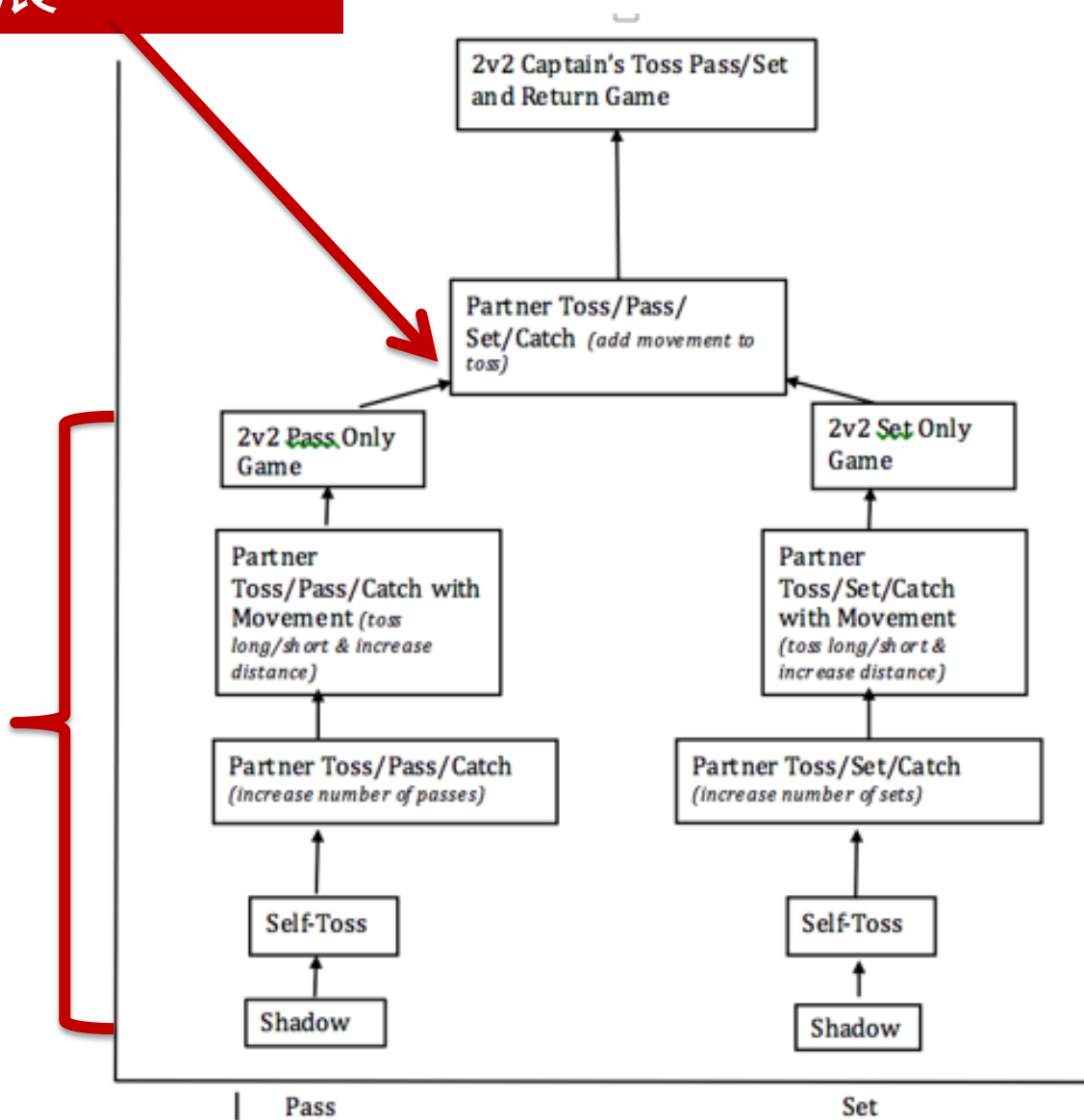
Relational development 不同技术的关联发展

Volleyball

排球

Sequential development

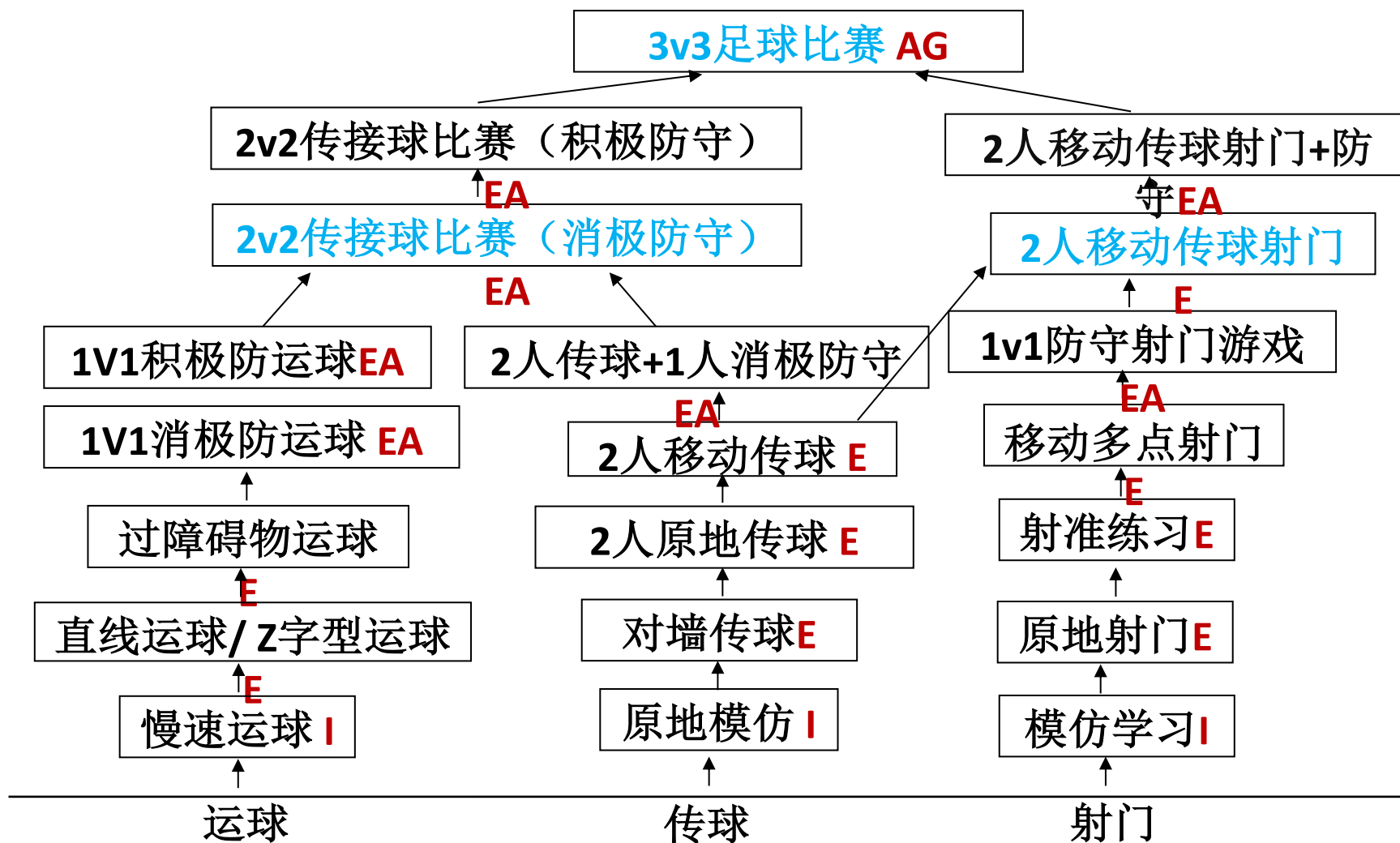
任务发展步骤



Pass

Set

Content Map Coding 内容图编码



体育教师内容图的编码案例

Depth of Content Development

内容知识的发展深度

tasks that develop the task

Initial task

$$\frac{4 \text{ developing tasks}}{4 \text{ initial tasks}} = 1.0$$

$$\frac{12 \text{ developing tasks}}{4 \text{ Informing tasks}} = 3.0$$

拓展任务 + 完善任务 + 运用任务

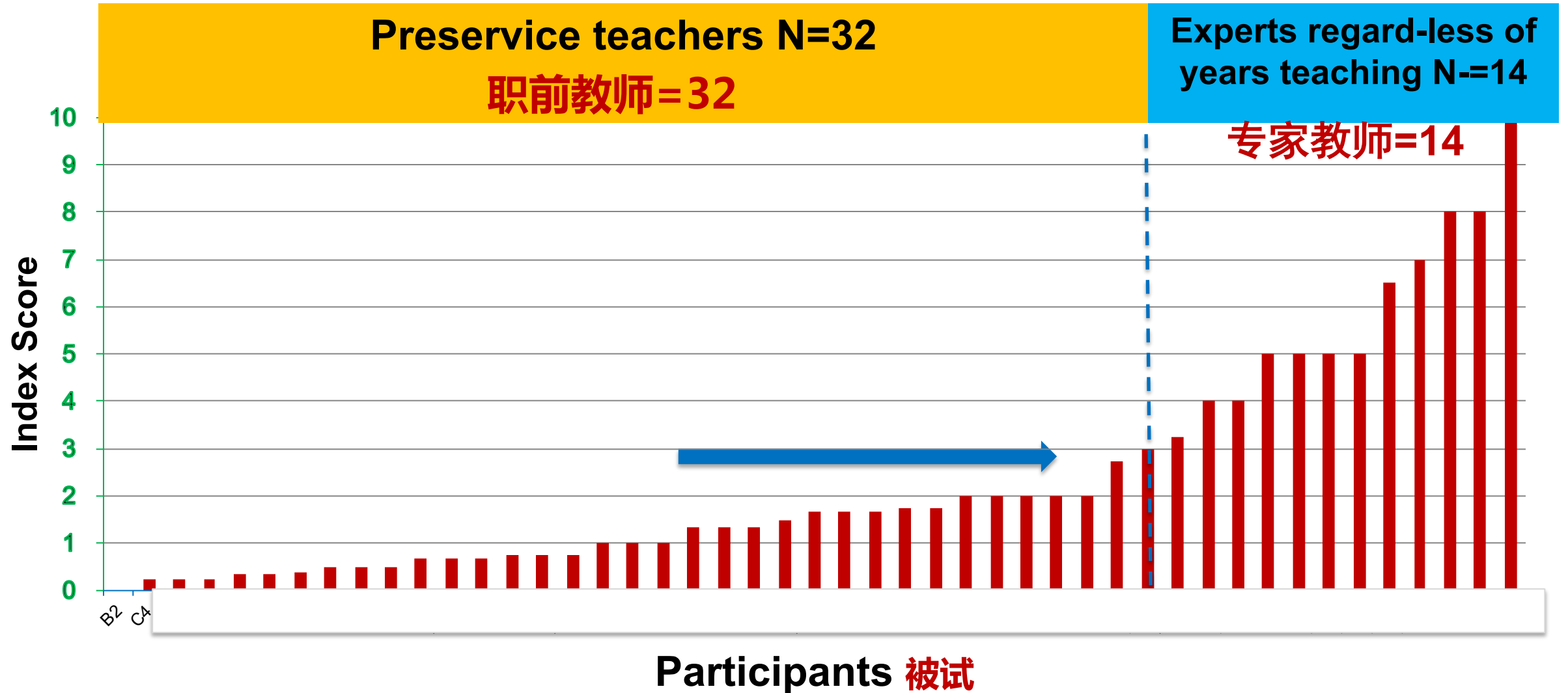
起始任务

$$\frac{3 \text{ 拓展任务} + 0 \text{ 完善任务} + 1 \text{ 运用任务}}{4 \text{ 起始任务}} = 1.0$$

$$\frac{5 \text{ 拓展任务} + 4 \text{ 完善任务} + 3 \text{ 运用任务}}{4 \text{ 起始任务}} = 3.0$$

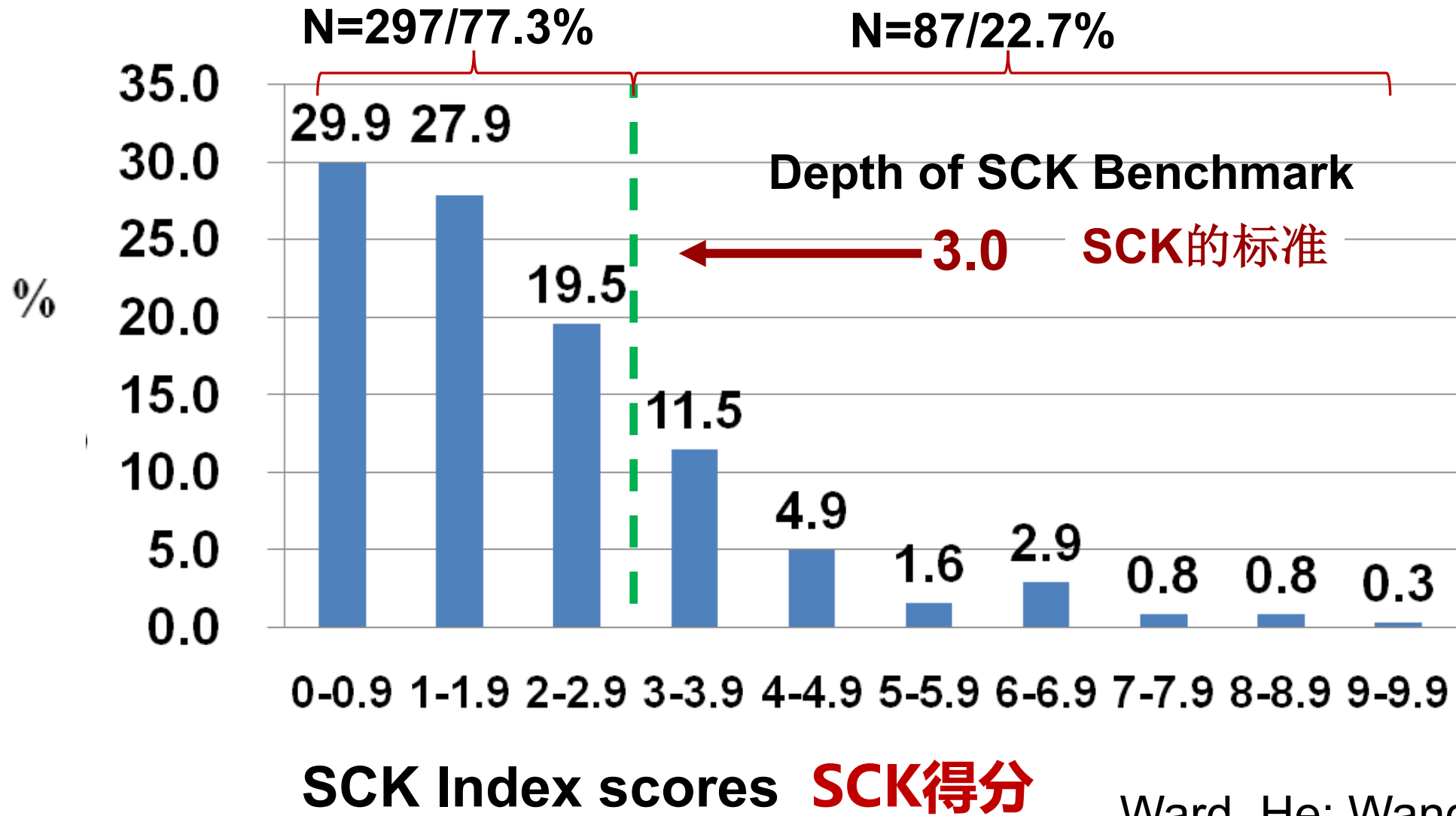
SCK Index Scores Low to High Expertise- USA

SCK的得分分布情况



Depth of Specialized Content Knowledge of Soccer - 384 Chinese Secondary PE teachers

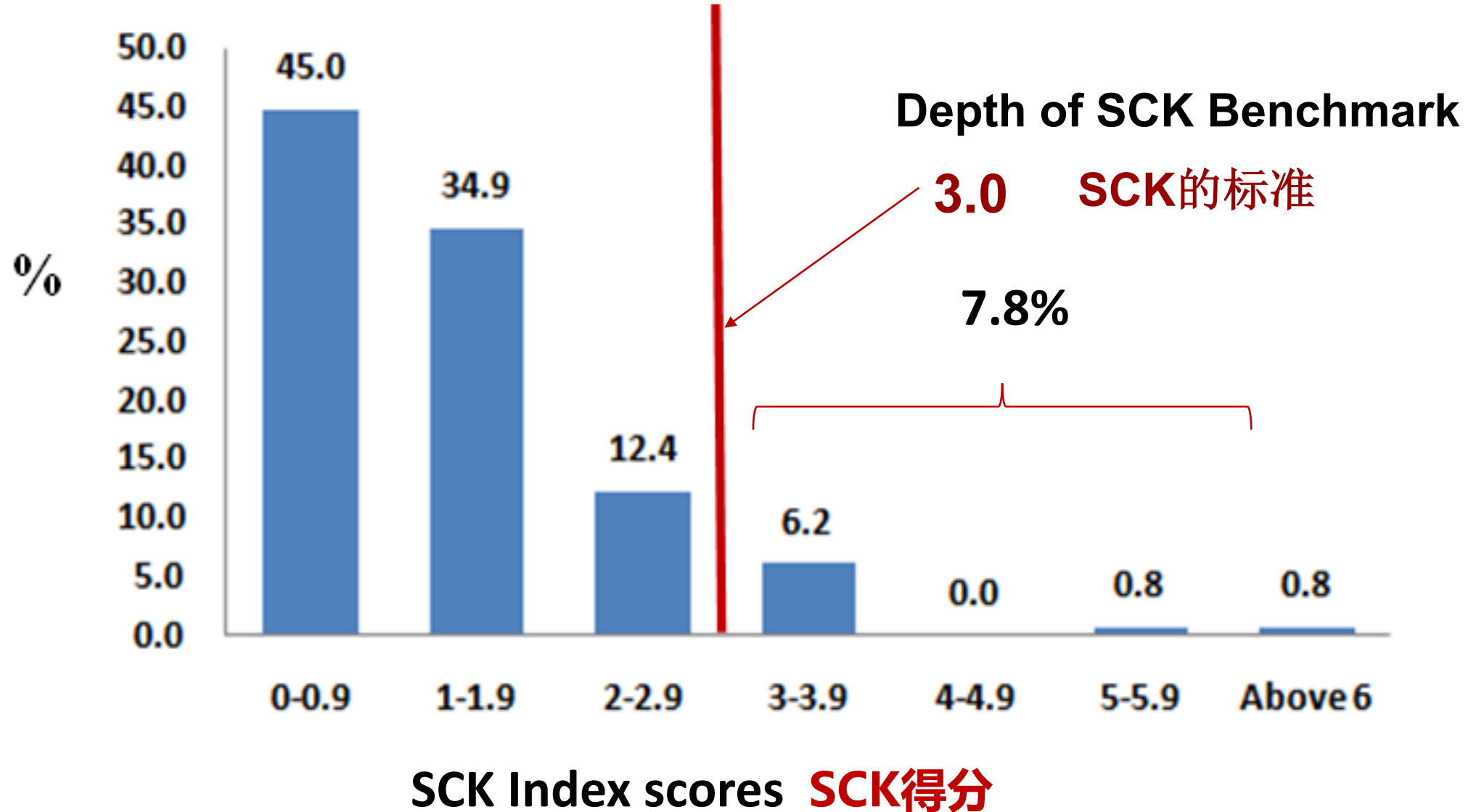
中国中学体育教师足球SCK深度



Ward, He; Wang, & Li, (2018)

129 Middle & High School Chinese PE teachers

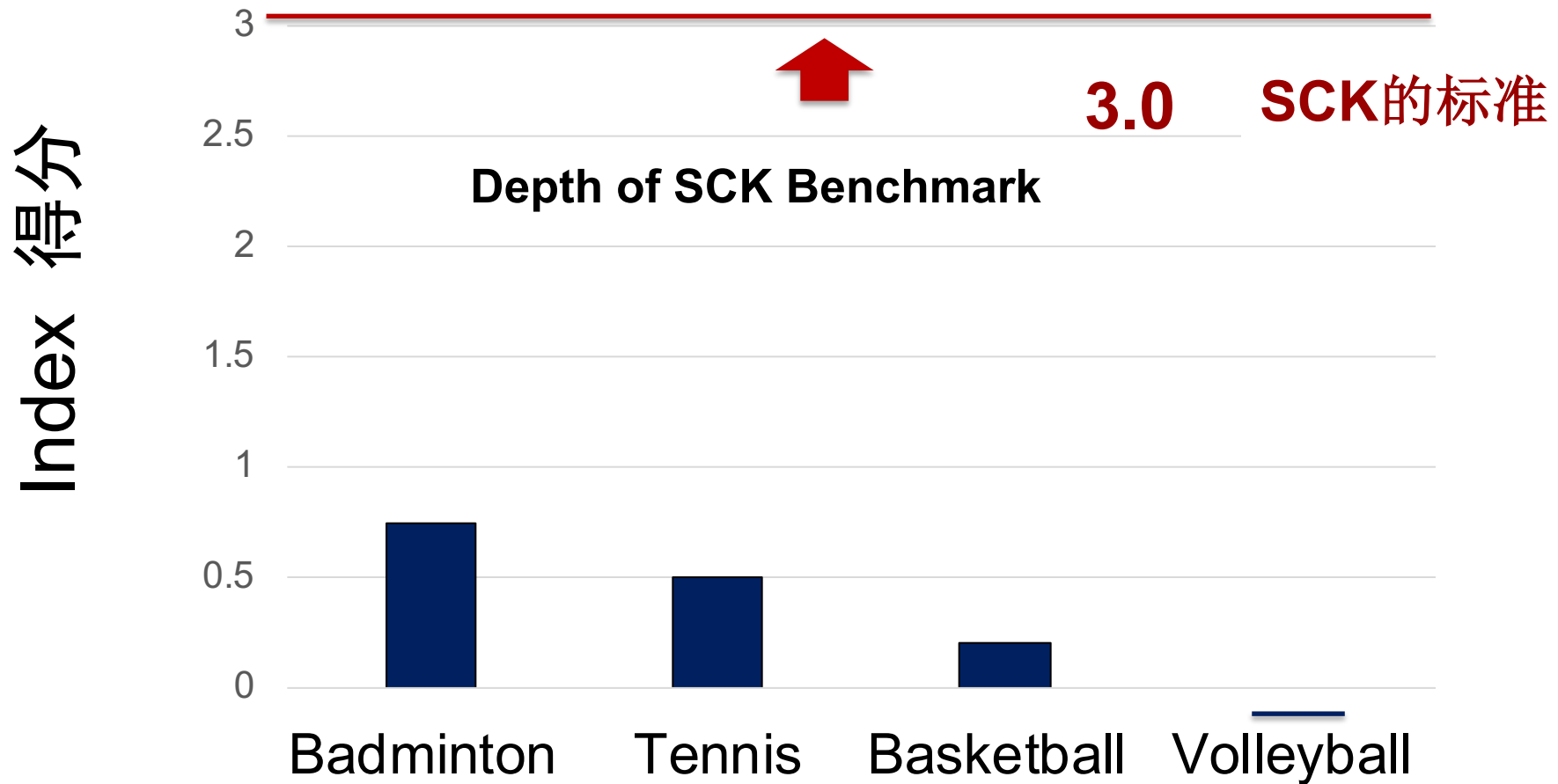
129名中国初高中体育教师研究



Specialized Content Knowledge

190 US Undergraduate students PE= 72; Other Majors N= 119

190名美国大学生，其中体育教育专业72人，其他专业119人



A Mid-Presentation Quiz: Which of these correlate with deeper SCK? **小测试：以下哪些因素与SCK深度有关**

- Educational background – degree type **教育背景—学历**
- Content expertise in college- **大学专业知识**
- Age **年龄**
- School- middle school or high school **学校—初中或高中**
- Gender **性别**
- Teaching rank young-mid-late career **职称排名：低中高**
- Years playing soccer **多年踢足球的经验**
- Number of soccer lessons taught per year **每年教足球课的数量**
- Years of teaching **教龄**
- Years of teaching soccer **足球教学年限**
- Number of professional development workshops **参加专业培训的次数**

384 Chinese Secondary PE teachers

384名中国中学体育教师的研究

- **Small negative correlation:**

- for years teaching
- teaching rank

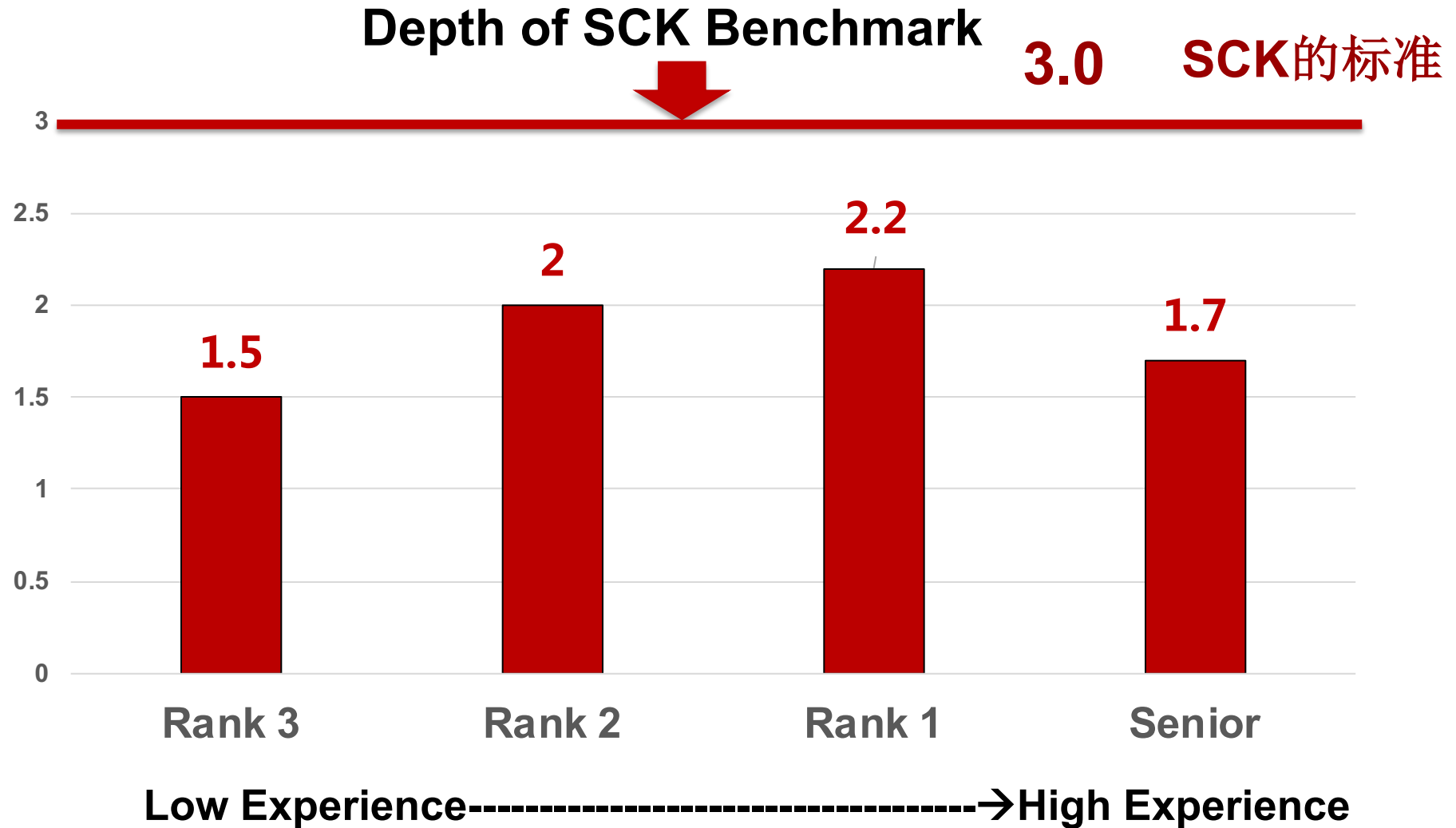
体育教师的教龄和职称与SCK水平存在弱负相关

- **No meaningful correlations for other variables.**

其他变量与被试的SCK水平没有显著相关

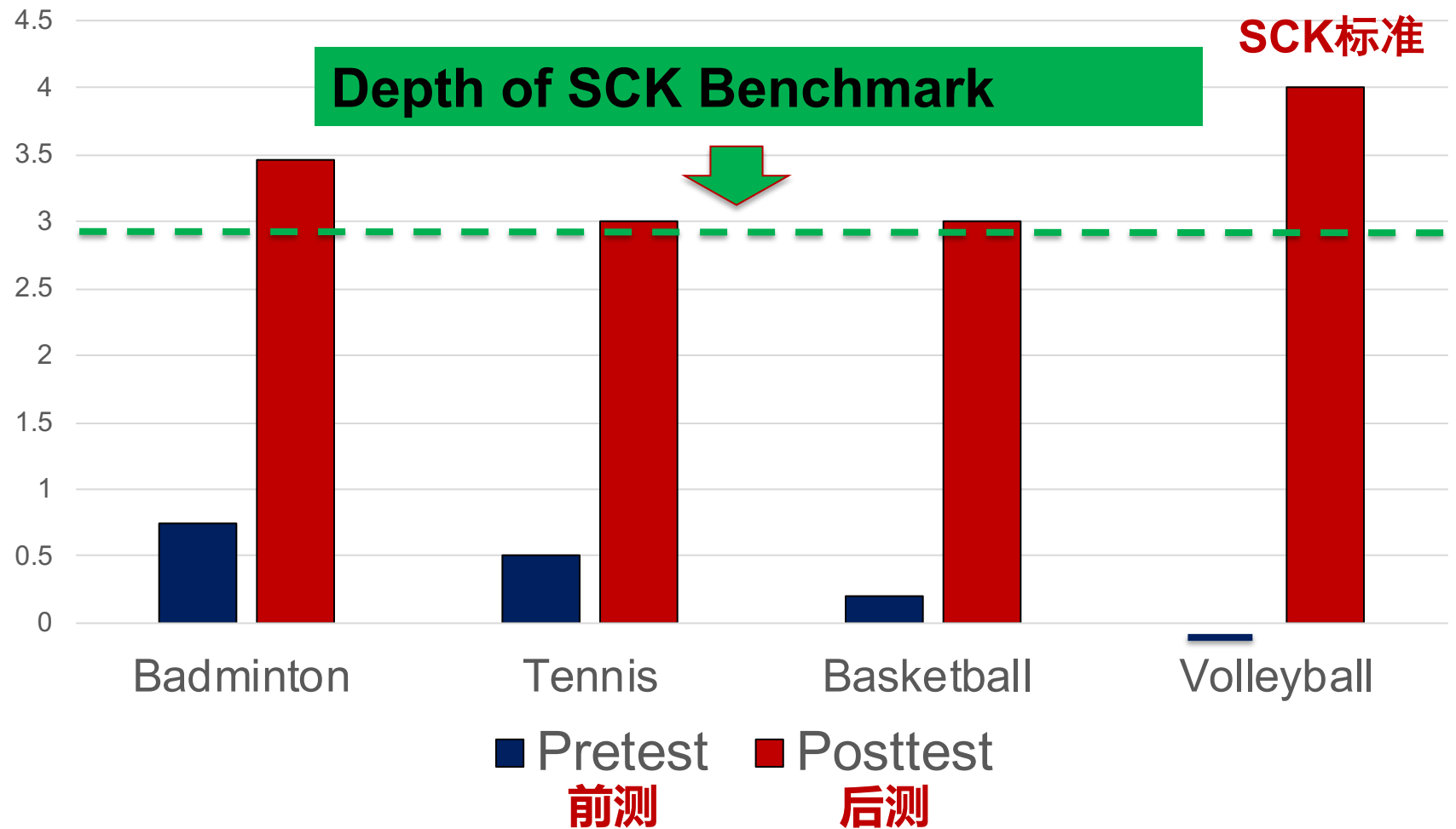
384 Chinese Secondary PE teachers

384名中国中学体育教师的研究



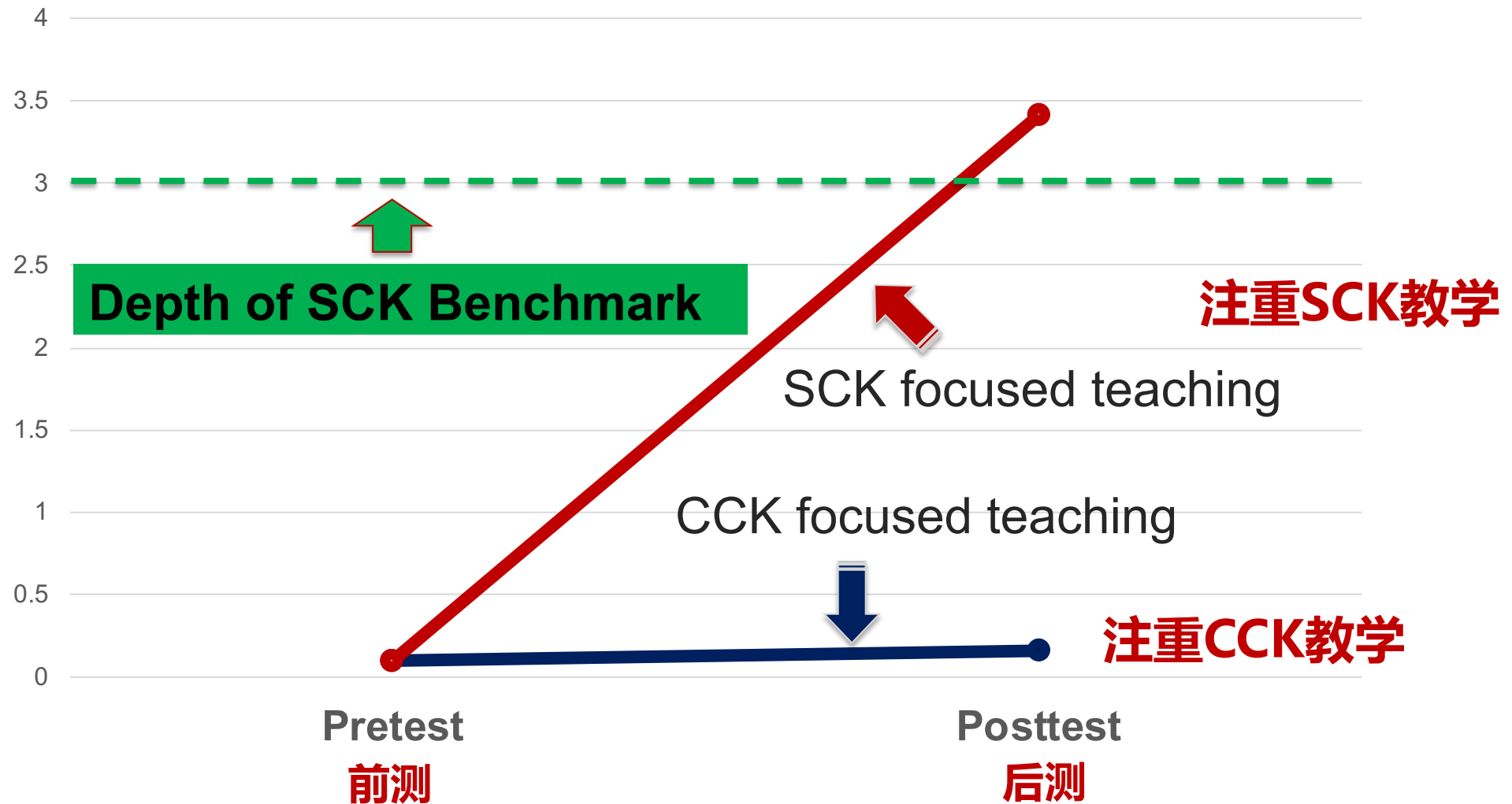
Specialized Content Knowledge Preservice Teachers N= 72 US

美国72名职前教师的SCK



Specialized Content Knowledge Instructional Effects

SCK的教学培训效果



Implications and Recommendations

SCK的教学培训效果

- CCK is typically acquired from performing an activity.
CCK通常是从运动活动的展示中获得的。
- SCK is acquired poorly from performing and must be specifically taught to teachers.
SCK的水平很差，需要针对性地进行SCK教学。
- Most countries do a very poor job of teaching SCK.
大多数国家在教授SCK方面做得很不好。
- CCK and SCK must be taught better in content classes.
CCK和SCK必须要学科知识教学中获得。

Good teaching is defined by teachers who...

教学好的体育教师具有以下特征

- know the content well enough to help students learn it,
非常了解所教内容，并能够帮助学生学习；
- Use evidence-based core teaching practices;
使用基于实证的核心教学实践；
- Create an educational environment that addresses and is characterized by social justice.
创设以社会公正为特征的教育环境。

Using evidence-based core teaching practices

使用基于实证的核心教学实践

Much of what we are doing in teacher education is neither empirically based nor is it working.

我们在教师教育方面所做的许多工作既不是基于经验，也常不是有效的。

Teacher education & professional development

教师教育与专业发展

What we are doing too often is not focusing on the **practice of teaching**, but instead focusing on **theories of teaching that are often unproven**. 我们经常做的不是专注于教学实践，而是专注于那些往往未经证实的教学理论。

Not an argument to eliminate the study of theory, **but an argument for the application of theories and the use of practices that are validated**. 这并不是要否定理论研究，而是指要运用经过检验的理论和实践。

Focusing on the Practice of Teaching

重视教学实践

A focus on the practice of teaching requires a much more sophisticated and precise understanding of the process of teaching and of teacher education.

重视教学实践就需要对教学过程和教师教育有更为复杂和精确的理解。

重视教学实践就

Practice-based teacher education movement

以实践为基础的教师教学活动。

Core Teaching practices...**核心教学实践**

represent the core task domains of teaching such as organizing and representing content or designing and then teaching lessons to meet an objective.

主要涉及教学中的主要核心任务，如组织、呈现内容或设计及实施教学以达成学习的目标。

Ball et al., 2009; Grossman, et al., (2009)

Definition of Core Teaching Practices

核心教学实践的定义

- occur with high frequency in teaching; **在教学中频繁发生;**
- novices can enact in classrooms across different curricula or instructional approaches;
新手教师可使用不同的课程或教学方法在课堂上进行实践。
- novices can actually begin to master; **新手可以逐渐地掌握。**
- allow novices to learn more about students and about teaching;
- **让新手更多地了解学生和教学。**
- preserve the integrity and complexity of teaching, and, are research-based and have the potential to improve student achievement.

保持教学的完整性和复杂性,并以研究为基础,具有能提高学生学习成绩的潜力。

Core Practices in Practice-Based Teacher Education

以实践为基础的教师教育

- must help teachers frame the challenges of teaching relative to their beliefs;
必须帮助教师建立与他们信念相关的教学挑战；
- must be derived from the evidence-based professional knowledge to impact student learning;
必须从基于证据的专业知识中获得，并影响学生的学习；
- provide appropriate experiences in the use of professional judgement.
在使用专业判断时要基于适当的经验。

Examples of Core Practices

核心实践的例子

- Establishes and uses rules and routines [.35] **规则常规的建立和使用**
- Establishes & maintains rapport with students [.74] **与学生建立并保持良好的关系。**
- Represents developmentally appropriate content to students in small understandable chunks of information [2.48] **以易于理解的简短信息向学生呈现适宜的发展性学习内容。**
- Uses accurate demonstrations in presenting content to students [7.3] **正确地使用示范向学生展示内容**
- Designs a developmentally appropriate sequence of lessons to teach content that meets unit objectives[7.6] **设计循序渐进的教学步骤来教授内容，以达成单元学习目标。**
- Differentially modifies tasks to accommodate student learning for all students [2.11] **不断地调整和改编任务以适应所有学生的学生学习**
- Analyzes and improves specific elements in their own teaching [.75] **分析和改进自己教学中的特定要素**

Ward (in review)

Teacher as decision maker- Adaptive Competence

教师作为决策者- 调整教学

- Context matters and a teacher's professional judgment in adapting core practices to differing contexts, matters.

环境很重要，教师在专业实践中根据不同环境所做的判断和决策更重要。

Implications/Recommendations

结论与建议

- Core practices are not prescriptive, they require application of knowledge and skill to address specific contexts
核心实践不是规定不变的，它们需要在不同的环境中灵活运动知识和技能。
- Core practices require extensive rehearsal and practice much more than is currently provided in teacher education programs.
核心实践需要更大量的重复实践和演练，远远高于目前教师教育提供的。
- Content and pedagogy are tied integrally together in most core practices. **大多数核心实践中教学内容和教学方法是密不可分的。**

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创设以社会公正为特征的教育环境。

Creating an educational environment that addresses and is characterized by social justice

创造出一个以社会公正为特征的教育环境

We don't teach physical education—we teach children and youth physical education

我们不教体育——我们教儿童和青少年体育

Social justice in physical education is and creates a space that is: **社会公正在体育教育主要表现为：**

- Hopeful, joyful, kind, and visionary
充满希望，快乐，善良，梦想
- Participatory and experiential. **参与和体验**
- Culturally sensitive **文化敏感**
- Critical **批判性的**
- Activist **积极的人**
- Within the context of the lesson content. **在课堂内容环境中**

Social justice as a teaching practice in physical education characterized by **社会公正作为体育教学实践的特点**

- Kindness, **友好**
- Eye contact, **眼神交流**
- Meeting the student where they are, **在学生所处的地方与他们见面**
- Listening to students and giving them voice, **倾听学生并给予他们话语权**
- Giving students input into the lesson. **促使学生投入课程学习**

Social justice as a teaching practice

社会公正作为一种教学实践

- knowing a little bit about every student's background;
了解每个学生的学习背景
- linking to real-world problems and using this to discuss issues;
联系现实世界中的问题，并进行讨论
- creating a classroom community focused on conscience through the use of rules and practices that teach fairness in classroom discussions and behavior.

通过在课堂中使用规则、在课堂实践教授和讨论公平及其行为，创建一个专注于良知的共享课堂。

Implications 作为一种教学实践

- Practices that demonstrate a social justice orientation also reflect the best practices in teaching.

体现社会公正取向的实践也反映了在教学中的最佳实践。

- Not arguing for a change of content but for embedding social justice in our teaching.

这不是说要改变教学内容，而是要在教学中融入社会公正。

Recommendations 建议

We must first create a social justice environment in our teaching before talking about examining it outside of classrooms otherwise we do not model what we are teaching.

我们必须先在教学中创造一个社会公平的环境，然后再在教室外讨论如何检验它，否则我们就不能模拟我们正在教学的内容。



All this is service of 结论

Creating *joy in moving* must be a fundamental outcome of physical education.

收获运动中的快乐是体育教育的一个基本结果。



THE OHIO STATE UNIVERSITY

Thank you 谢谢!

Please contact me if you have questions

如果有问题请给我发邮件

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Learning to teach physical education research program

学会体育教学研究项目