Tsukuba Summer Institute 2013

Collaborative Research Program Theory & Research Questions

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Where are we going today?

1. **Review Final Hot Topics**
2. **Identifying a theory**
   - **Identify a list of potential theories**
   - **Discuss the merits and weaknesses of each theory**
   - **Select one (or at most two) theory/theories for your study and identify how the theory grounds your study.**
3. **Construct 2- 3 Research Questions**

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- It provides a way of thinking about your hot topic
- It will help identify specific constructs (variables) that you need to examine in your hot topic
- It may suggest relationships between variables and ways in which to manipulate these variables

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- Helps with alignment of your RQs to your methods
- It can be an explanation of relationships that you want to test in your study
- Theories make explicit assumptions about phenomena or relationships between variables that can direct your methods
- Theory provides a mechanism for explanation/analysis of findings

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Selecting a theorist is like hiring someone for a job. There are many possibilities but you need to decide who is the best applicant.

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✓What job are you hiring a theorist for?

- Consider the kinds of characteristics that your theory will need to possess in order to be valuable for you.
- Ask yourself about your world view and how this might influence selection of a theory?
- Hire each “theorist” and then dismiss/fire them if they don’t work for you (literature review)
- Theories previously used in the literature
- Theories used in other literatures

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✓Identify a list of potential candidates (different kinds of theories) from:

✓Literature review

✓Consider their strengths & weakness for the job:

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✓What is helpful?

✓ What is a problem?

✓ Selecting an applicant (theorist) who provides the best overall value.

✓Know other theoretical view points

✓You need to understand other ways of thinking about your study (theories) and how this may change interpretation of your study

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✓Understand how people with a different theory might criticize your theoretical point of view & approach

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- **Why did I use this theory?**
- The most common theory to explain the motor development of children in the literature
- Is broad and considers individual, environmental and task constraints
- Provides a structure to manipulate task and environmental constraints that help me develop motor skill interventions for children
- Provides a structure to talk about how to "peturb" children's current motor competence and improve it.

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Hot topic: Many **PE teachers are uncertain or negative attitudes toward teaching students with disabilities, because of lack of: knowledge of disability types, movement patters, clinical experiences, modifications of activities, behavioral management, and educational resources.**

RQs

- **1. What are Japanese physical education teachers' experiences of teaching students with disabilities in physical education?**
- **2.What are Japanese physical education teachers' beliefs on teaching students with disabilities in physical education?**
- **3. What are Japanese physical education teachers' perspectives of teaching students with disabilities in urban schools?**

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Behavioral belief –

- beliefs about **consequences of positive or negative behaviors** (Ajzen, 1988, p.2).
- Normative belief - beliefs about the **expectations** of students with disabilities (Ajzen, 1988).
- Control belief refers to belief about the presence of factors that may show **future actions** of teaching behavior" (Ajzen, 1988, p.2

RQs

- **Is physical activity alone enough to teach virtues in PE?**
- **Are teaching methods & models enough to teach character in PE?**
- **How important are the indirect ways of teaching and being a good person in order to become a good PE teacher?**
- **How important is the difference in teaching virtue as content and teaching virtuously, and the implicit influence of the latter on character formation?**
- **What are the critical role of Sport Humanities (literature, arts and music, religion, philosophy, history etc.) in the preparation of PE teachers?**

Theorists

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- **Virtue Ethics**
  - **Aristotle, Alasdair MacIntyre**
- **Education as Initiation into a Practice**
  - **Paul Hirst, David Carr, Michael Oakeshott**
- **Physical Education**
  - **Peter Arnold**
- **Coaching**
  - **Alan Hardman, Cawryn Jones**

Central question/s:

- How do curriculum topics (including school PE and university kinesiology) come to have the form and substance they do?
- What can we learn from this about future forms of the field/s?

Key theorists (egs.):

- B. Bernstein: Social Production of Pedagogic Discourse
- I. Goodson: Curriculum History

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Methods (egs):

Policy analysis, content analysis (of curricula), media analysis

Analysis of historical documents, oral histories, photographs

Ethnography: Semi structured interviews, focus groups, participant observation, professional journals

Why did you "hire" this theorist?

Hot topic: Do caring teachers in HPE have a unique and special role in the social and moral education of young people?

RQs:

- **On what grounds and according to what criteria can we claim HPE as a moral enterprise?**
- **How did HPE become a technology of moral training?**
- **How and why do HPE teachers engage in caring relationships?**

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Critique and provide an alternative perspective to Nel Noddings – the leading theorist on caring teaching

Why Foucault?

- **Role of power (pastoral power) in shaping subjects/citizens**
- **Ethical fourfold – useful and easy framework**
- **Complex and comprehensive "toolbox" of concepts**

Now it is your turn……

TASK: Identify a theory

- **Identify a list of potential theories**
- **Discuss the merits and weaknesses of each theory**
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Now it is your turn…..

- **Review your 10 research articles**
  - **What theory have the researchers used?**
  - **Identify weaknesses/strengths**
  - **Consider usefulness of each theory/theorist for your specific hot topic**
  - **Do you know of another (more useful/new) theory?**
- **Following this review and discussion select your theory/theorist.**

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Communicating the importance of your topic

Researchers must be able to communicate to other scientists and the public about the importance of their research topic.

When communicating with others about a topic researchers must:

- be clear about why their topic is important
- use terms that can be understood by the public and
- avoid the use of jargon.
- be convincing in highlighting the importance of the topic.

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Now it is your turn…..

Write a paragraph explaining the importance of your topic (300 words max.) The intent of this paragraph is to persuade the reader that this topic needs to be studied. Outline the key findings from the literature you will draw upon to support the importance of your topic. Describe the theoretical perspective/s you will use to inform your study. Consider implications of this research to professional practice and policy.

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Constructing Research Questions

The development of precise research questions is critical for a quality study.

A good research question/s will be:

- Clearly worded and state a single focus of the topic
- Inform the research design
- Feasible – appropriate according to scope (how big or small), available time, available resources and your expertise
- Scientifically important (literature review)
- Socially important
- Align with your chosen theory

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Many research questions will pose a hypothesis to be tested or explored

Research questions will need constant review and maybe refinement.

Research questions will vary depending on whether a study is quantitative or qualitative.

Quantitative or Qualitative?

Quantitative researchers: gather data by objective methods to provide information about relations, comparisons and predictions

Typically, quantitative researchers will work with numerical data

In quantitative research:

- research questions should be precisely stated and clearly measureable.
- RQS are sometimes written in a way that anticipates a specific outcome, e.g. "The motor skill intervention group will be significantly better than the control group on object control skill performance from pretest to posttest".
- RQs can also be written in a way that does not anticipate a specific outcome, e.g. "What is the effect of a motor skill program on the object control skill performance of children?"

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Quantitative or Qualitative?

Qualitative: focus on the ways in which people make sense of their experiences and the world they live in….seeks to understand phenomena in real-world settings where the researcher does not manipulate the phenomenon of interest

Typically, the data that qualitative researchers will be words and text

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In qualitative research:

- RQs are written differently more in the form of guiding questions or questions that reflect the central themes to be explored according to the hot topic, literature review or theory, e.g. "How do children make meaning of their motor competence from participation in a motor skill program?".

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To investigate the influence of a 12-week Project SKIP program on fundamental motor skills and perceived motor competence of preschool children who are disadvantaged.

- H^1 - Children will be developmentally delayed in FMS with boys having better OC skills than girls at the pretest.
- H^2 - There will be no significant differences between the SKIP group and Comparison group at the pretest.
- H^3 - The SKIP group will demonstrate greater pretest to posttest gains in FMS and perceived motor competence than the Comparison group.

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Now it is your turn…..

TASK: Write 2-3 research questions for your research study

- **Consider**
  - **Quantitative or qualitative??**
  - **Clear focus**
  - **Key terms of hot topic**
  - **Language of theorist**
  - **Hypothesis, explore, comparisons ??**

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