

Identifying Disciplinary Peers:

A Process for Classifying Fields of Study based on Faculty Preference



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Today's Agenda

- Purpose & Goals of the Study
- Methods
- Results & Lessons Learned
- Future Research
- Q&A



Purpose

- **Identify disciplines that share similar**
 - **research practices**
 - **teaching practices**
 - **perceptions of student engagement in academic activities**
- **Develop a method for grouping disciplines**



Our Goal

- **Create field/disciplinary comparisons for students and faculty that...**
 - **appeal to faculty at a single institution**
 - **appeal to disciplinary-based groups interested in teaching and learning**
 - **provide IR professionals with an approach to presenting campus assessment data to faculty groups**



Literature Review

- **Discipline**
 - a means of membership and identification within the academic profession
(Clark, 1987)
 - “...usually reflects the values and norms held by its constituent individuals or dominant groups”
(Nelson Laird, Shoup, Kuh, & Schwarz, 2008, p. 472)
- **Research, teaching, and learning may vary by discipline**
(Borden & Young, 2007)



Disciplinary Classification Systems

- **High & Low Paradigmatic Development**
(Braxton, Olsen, & Simmons, 1987)
- **Approaches to different academic tasks**
(Biglan, 1973a, b)
- **High & Low Consensus**
(Braxton & Hargens, 1996)



Information Source: FSSE

- **Faculty Survey of Student Engagement (FSSE)**

Survey designed to complement NSSE and to measure faculty expectations for student engagement in educational practices that are known to be empirically linked with high levels of learning and development
- **Two Survey Options (Course-Based & Typical Student)**
- **2010 administration**
 - more than 19,000 faculty from 154 institutions
 - extra set of items on “Peer Comparison Fields”
 - 38 institutions
 - 4, 652 faculty respondents



“Peer Comparison Field” Items

- Please list and rank the 3 fields against which your field should be compared based on [write-in]:
 - Research and other scholarly activities
 - Faculty teaching practices
 - Student engagement in academic activities



Method

- In each of the three categories, separated the top two fields selected by each discipline
- Identified pairings (agreement between 2 disciplines) for each category
 - Tight Pairing: $\geq 40\%$ agreement by at least one discipline
 - Loose Pairing: 26-40% agreement by at least one discipline
 - Tentative Pairing: $\leq 25\%$ agreement by both disciplines
- Identified clusters (agreement between 3 or more disciplines) for each category

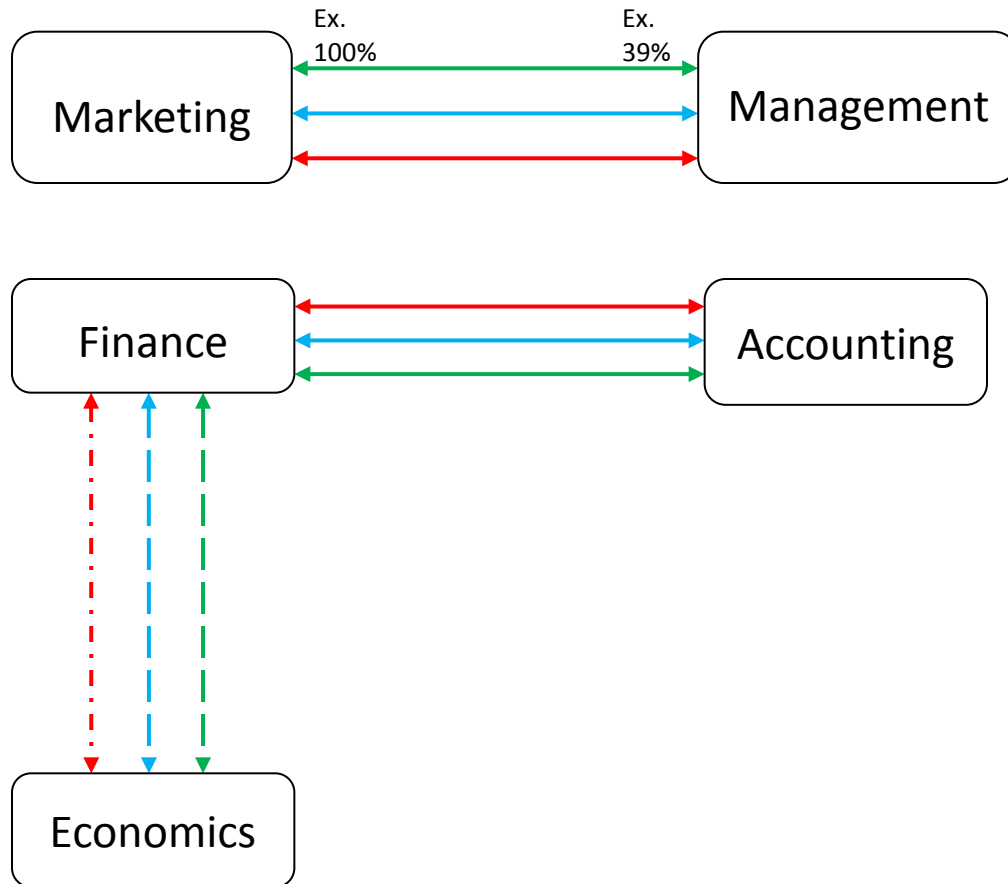


Results

- **Peer Fields of Study**
 - 14 disciplinary pairs across all three categories
 - 4 disciplinary clusters within individual categories
 - Peer relationships are similar across 'research & scholarly activities' and 'student academic engagement'
- **Consistency with Biglan's (1973) categories:**
 - hard—soft
 - pure—applied
 - Life—non-life

Peer Field Pairings

Biglan Dimensions: Soft-Applied-NonLife



1. research and scholarly activities
2. student academic engagement
3. teaching practices

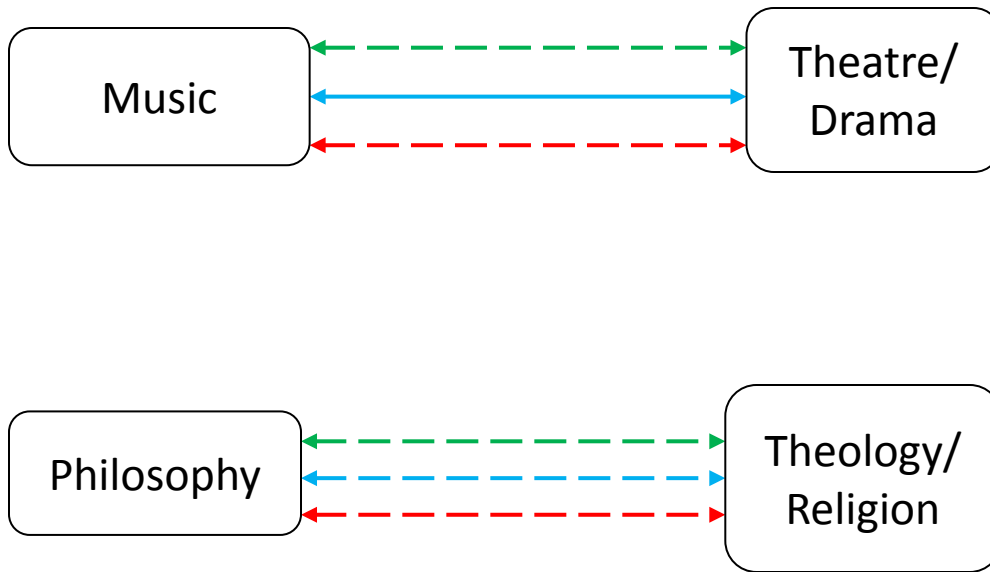
Tight pairing ($\geq 40\%$)

Loose Pairing ($< 40\%$)

Tentative Pairing ($\leq 25\%$)

Peer Field Pairings

Biglan Dimensions: Soft-Pure-NonLife



1. research and scholarly activities
2. student academic engagement
3. teaching practices

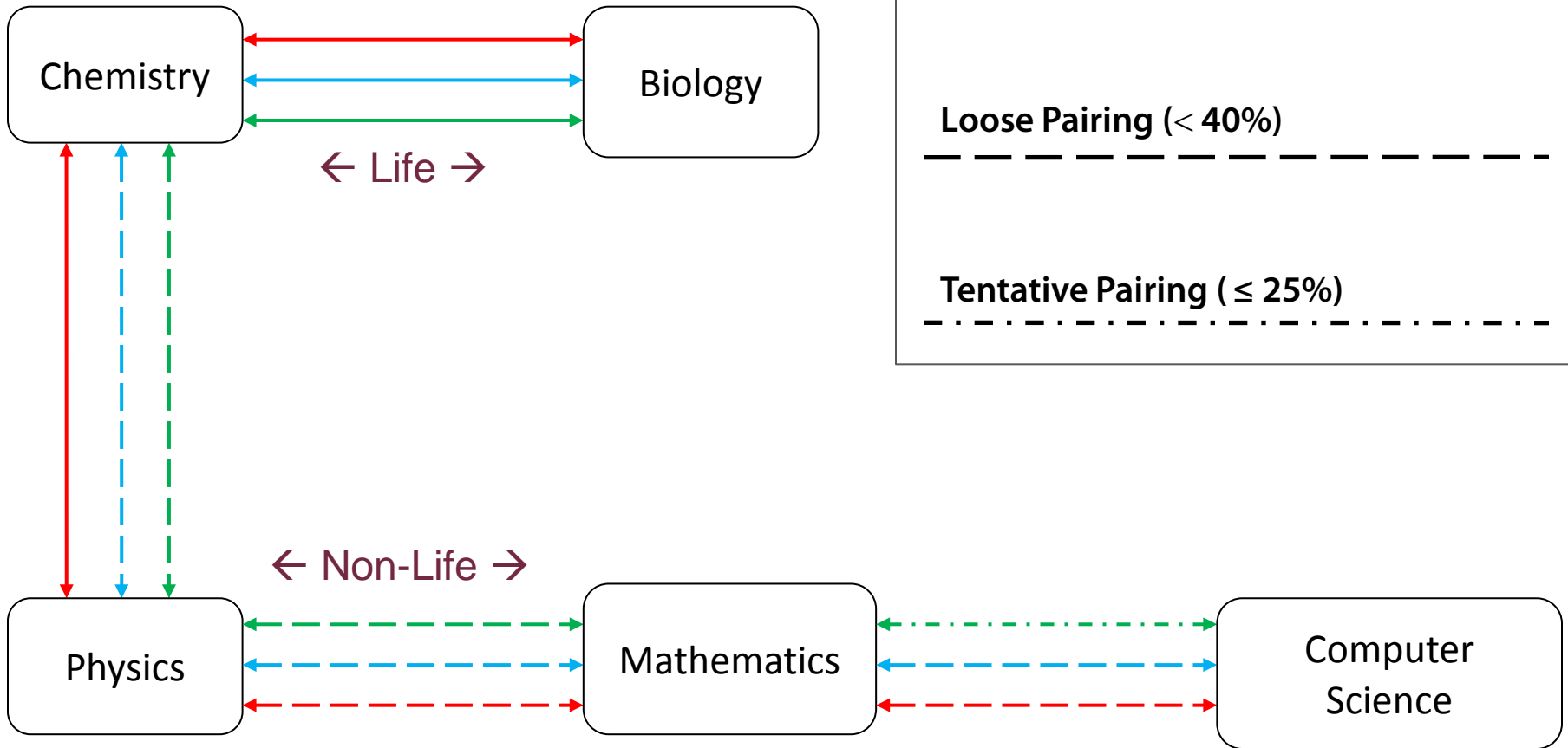
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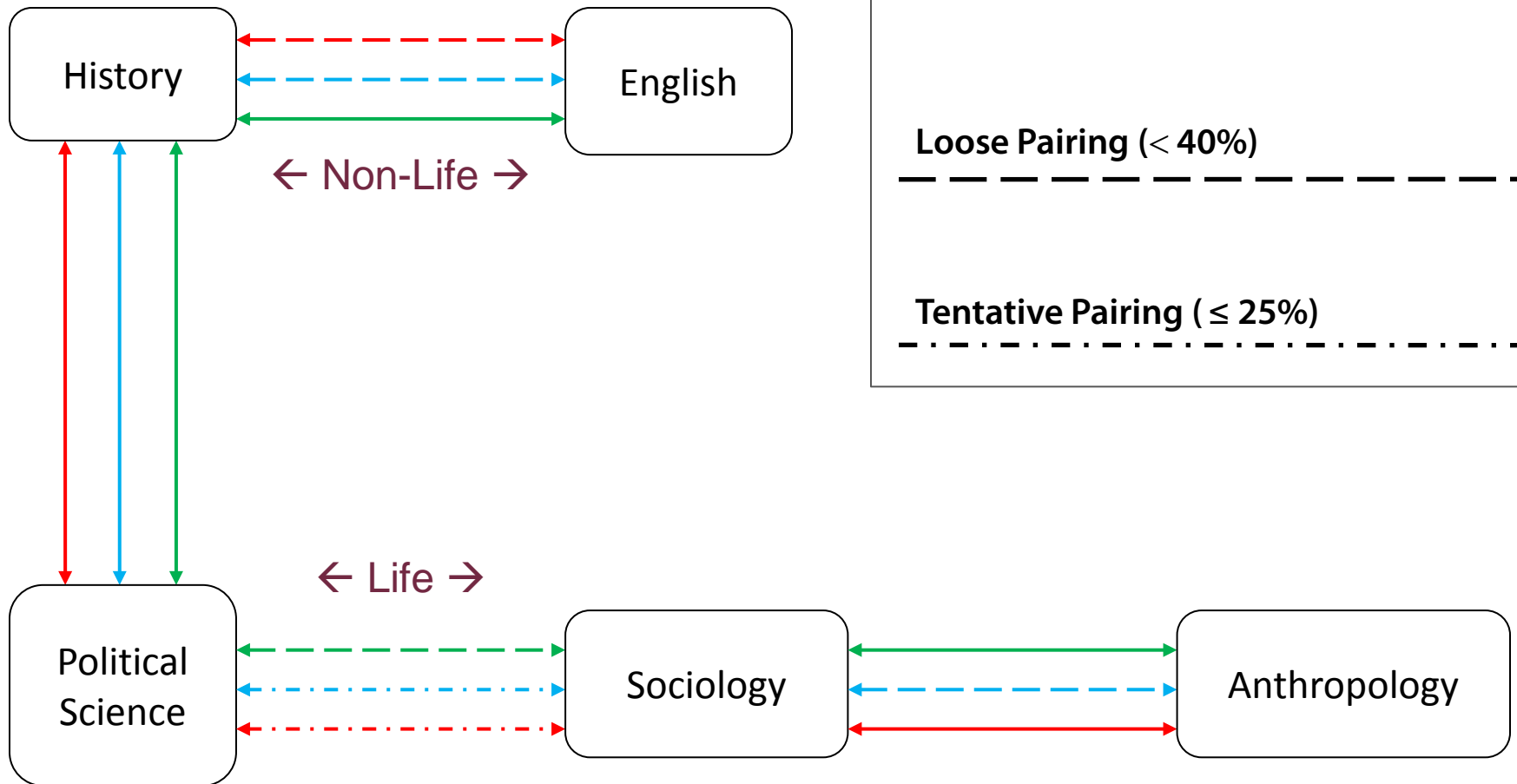
Peer Field Pairings

Biglan Dimensions: Hard-Pure



Peer Field Pairings

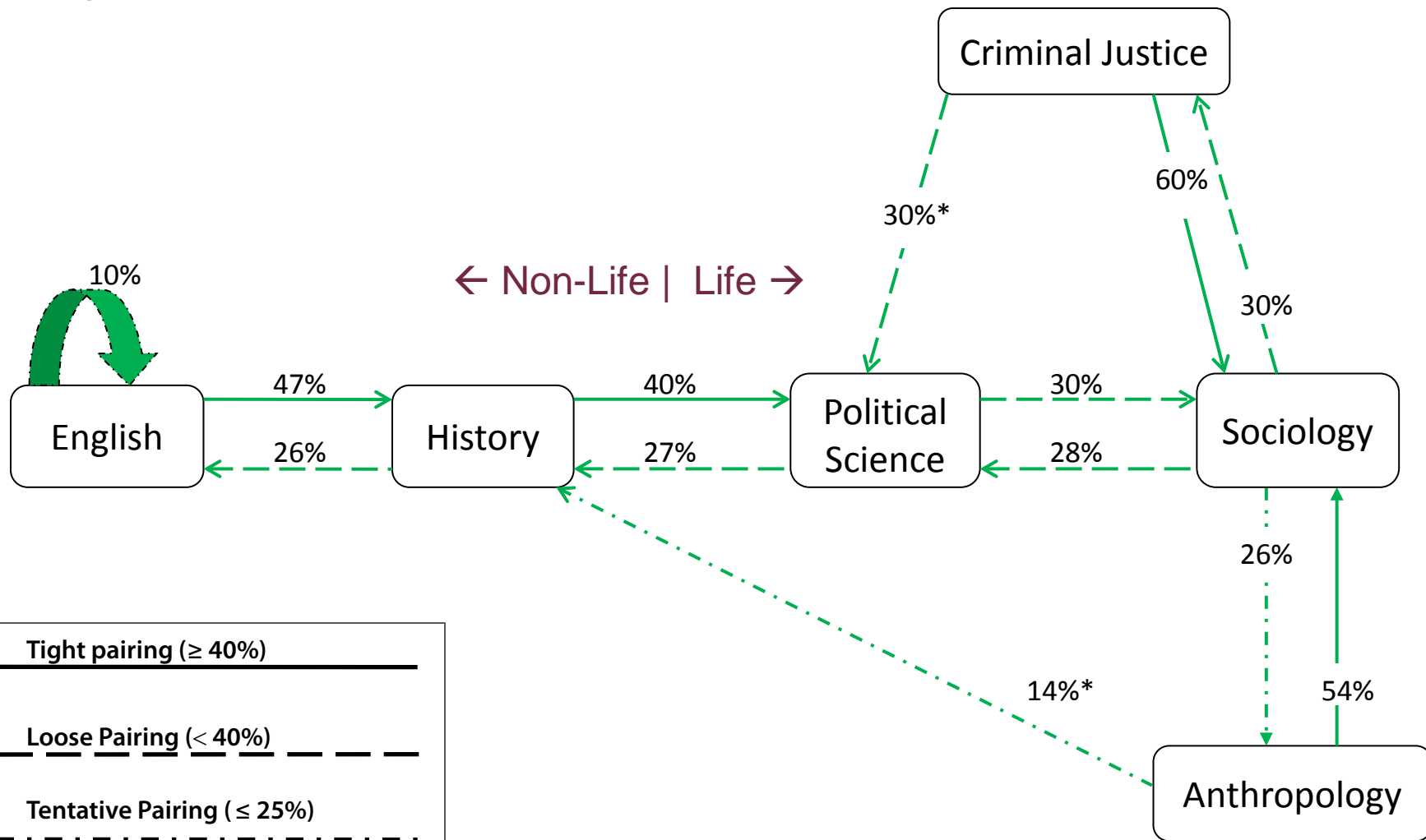
Biglan Dimensions: Soft-Pure



Peer Field Clusters

Category: research and other scholarly practices

Biglan Dimensions: Soft-Pure

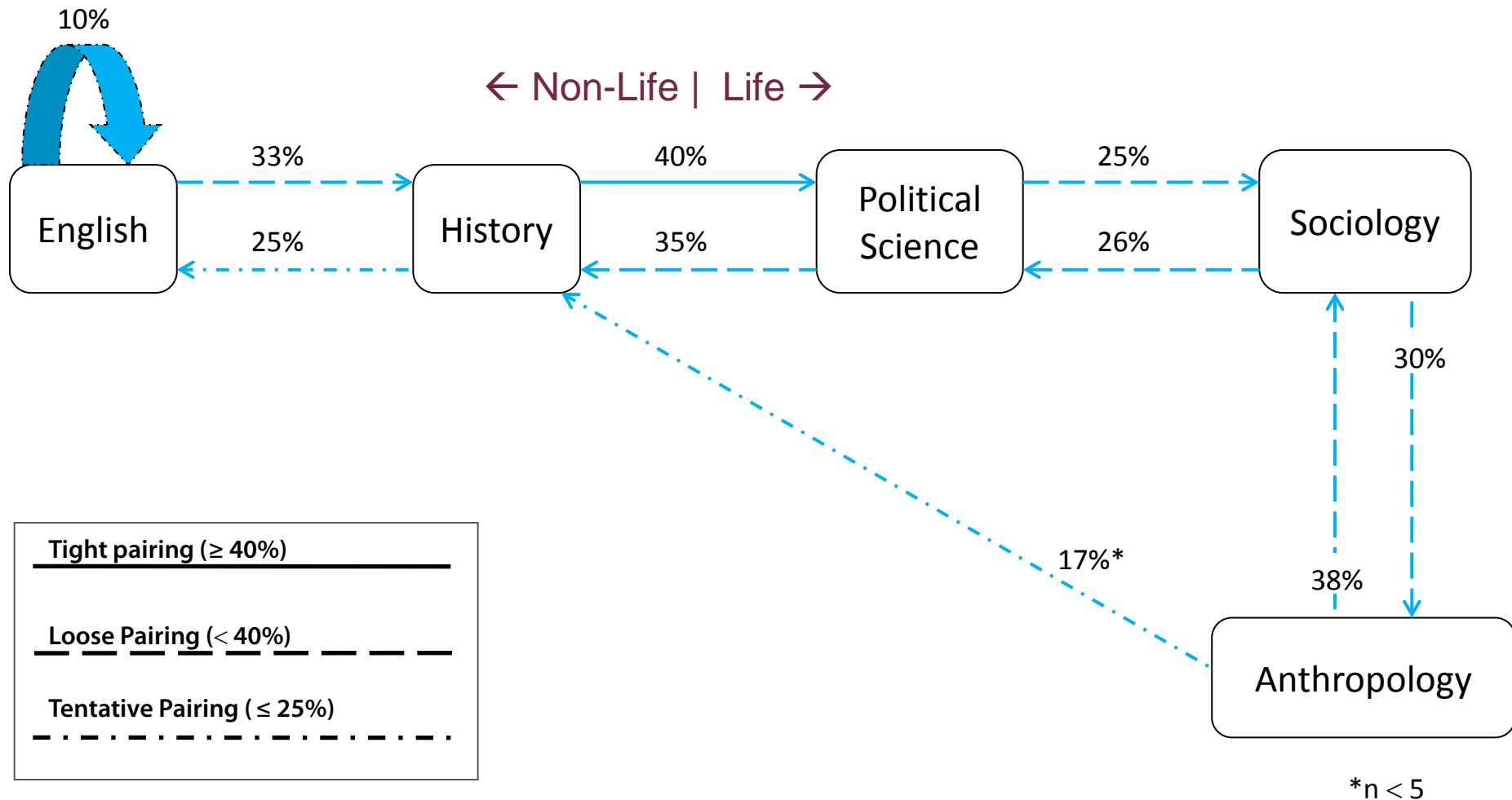


*n < 5

Peer Field Clusters

Category: student engagement in academic activities

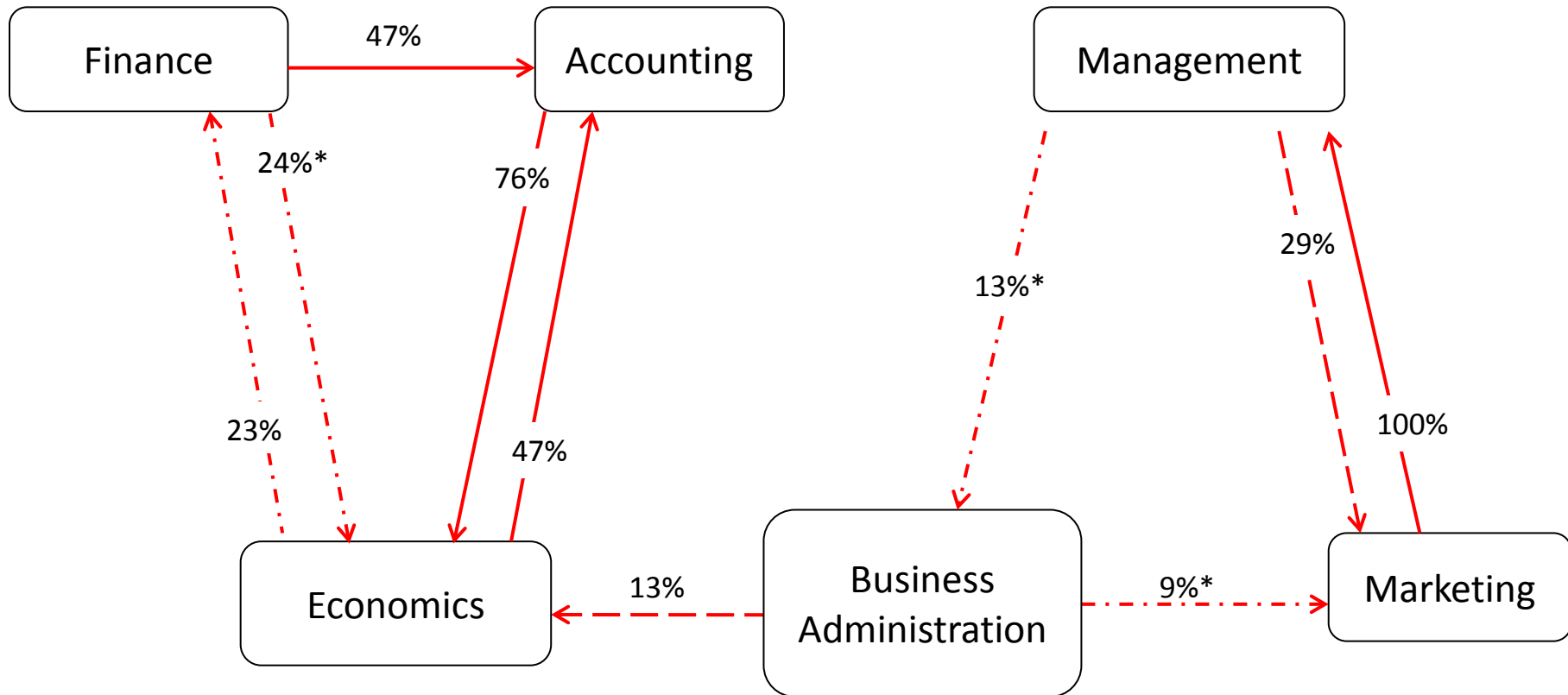
Biglan Dimensions: Soft-Pure



Peer Field Clusters

Category: faculty teaching practices

Biglan Dimensions: Soft-Applied-NonLife



Tight pairing ($\geq 40\%$) —————

Loose Pairing ($< 40\%$) - - - - -

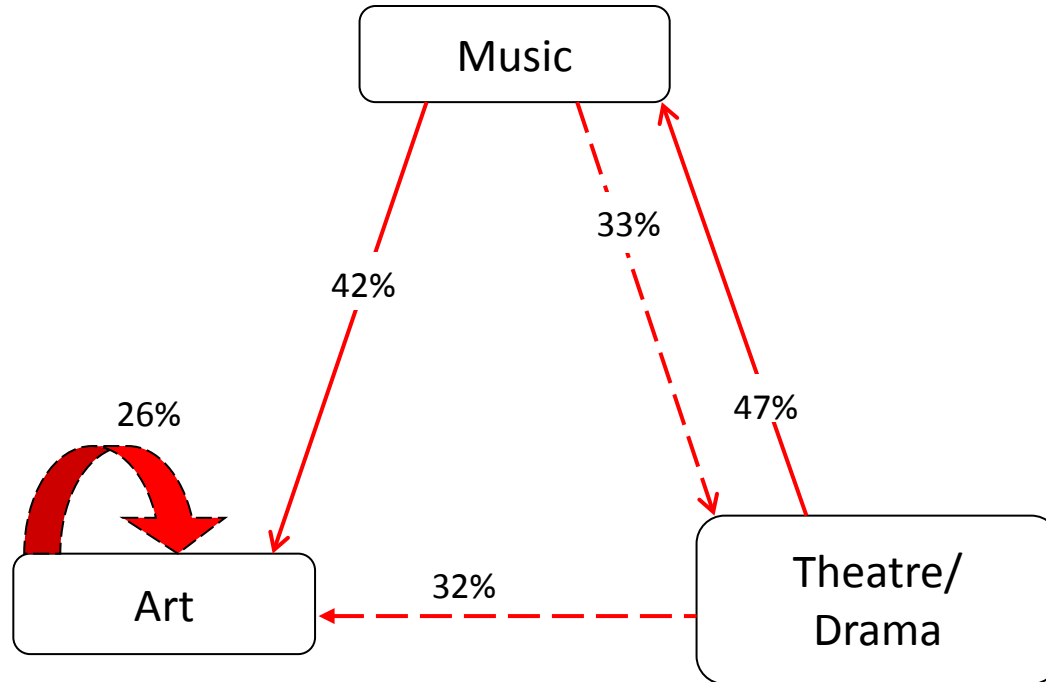
Tentative Pairing ($\leq 25\%$) -

*n < 5

Peer Field Clusters

Category: faculty teaching practices

Biglan Dimensions: Soft-Pure-NonLife



Tight pairing ($\geq 40\%$) —————

Loose Pairing ($< 40\%$) - - - - -

Tentative Pairing ($\leq 25\%$)

Lessons Learned

- Perceived similarities between fields match on two of Biglan's dimensions
- Perceived similarities permeate Biglan's third dimension: life-nonlife
- When choosing comparison groups, faculty choose others that are like them



Future Research

- **Further test peer field pairings and clusters by exploring FSSE responses by discipline**
 - to core survey items regarding participation in scholarly activities and perceived importance of student engagement in various activities
 - to FSSE scales regarding the use of particular teaching techniques
- **Analysis on other items in the extra set (re: cross-disciplinary research and teaching)**
- **Comparisons between peer field groupings derived at each stage of this research**
 - literature searches
 - preliminary FSSE analysis
 - extra item set analysis



Questions?

- Email: fsse@indiana.edu
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- FSSE Web site: www.fsse.iub.edu

