



Knowledge Advancement in Knowledge Society Network

IKIT/OISE/UofT

May, 2007



Main Content

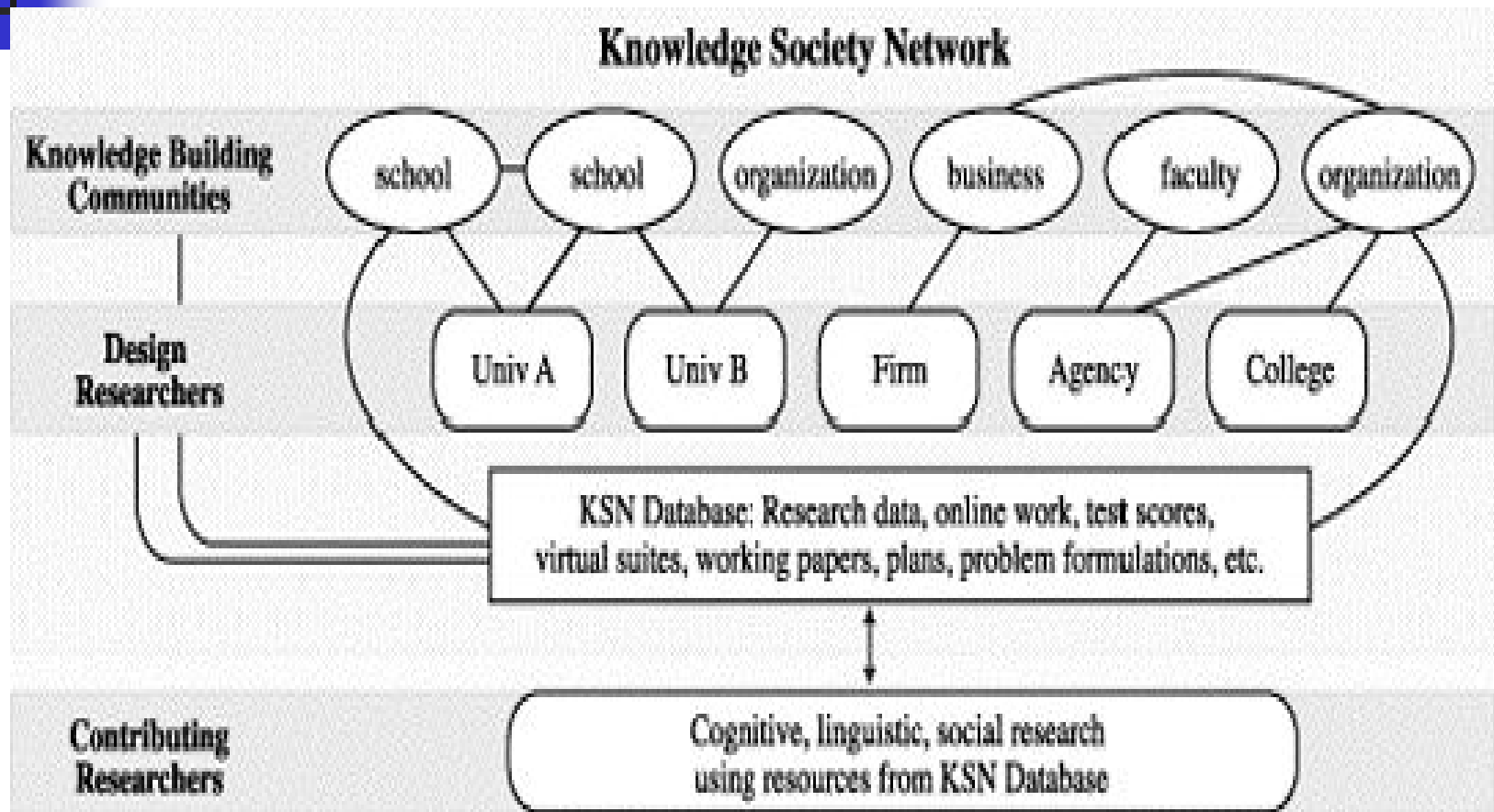
- 1. KSN Introduction
- 2. Research Questions
- 3. Research Methods
- 4. Analytic Results
- 5. Discussion



1. KSN Introduction

- KSN represents a bold design experiment that takes advantage of new knowledge media to maximize society's knowledge resources and the effective and equitable mobilization of knowledge. (Marlene, 2004)
- There is little analysis of what knowledge society might look like or how we are to achieve its anticipated knowledge advances. (ibid.)
- KSN helps to define a vision of a knowledge society. It requires working at the cutting edge of the knowledge that individuals and local and networked communities bring to the work. (ibid.)

1(1). Organizational Framework





1 (2). KSN structure

- 1. Knowledge Building Communities
- 2. Design researchers
- 3. The KSN Database
- 4. Contributing researchers



2. Research Questions

- What is the overview of KSN knowledge innovation activities in these years?
- What are the core themes or activities that KSN inquired into?
- Who are the core members of knowledge building and innovation?
- How does new knowledge emerge from KSN and transfer?



3. Research Methods

- **(1) Subjects:**
 - (a) KSN (Knowledge Society Network)
 - (b) Data: Database from 2003 to 2005
 - (c) Content:
 - Views: 132 (total 254. except hidden, portfolio, empty views)
 - Notes: 2262 of 132 views



3. Research Methods

- (d) Group:
 - ICS, INE, INE2 (total 25 groups. Selected by average author contributed notes > 3, group contributed notes > 50)
 - From 2003---2005

Group name	Author	Notes
ICS	15	386
INE	160	3386
INE2	74	255
Sum	249	4027
% of total authors & notes	38%	81%



3. Research Methods

- **(2) Longitudinal Analysis:**
 - Overview: 3 groups, 132 views, 2003-2005
 - 12 themes resp., 3 groups, 2003-2005
- **(3) Analytic tools**
 - (1) ATK
 - (2) SNA

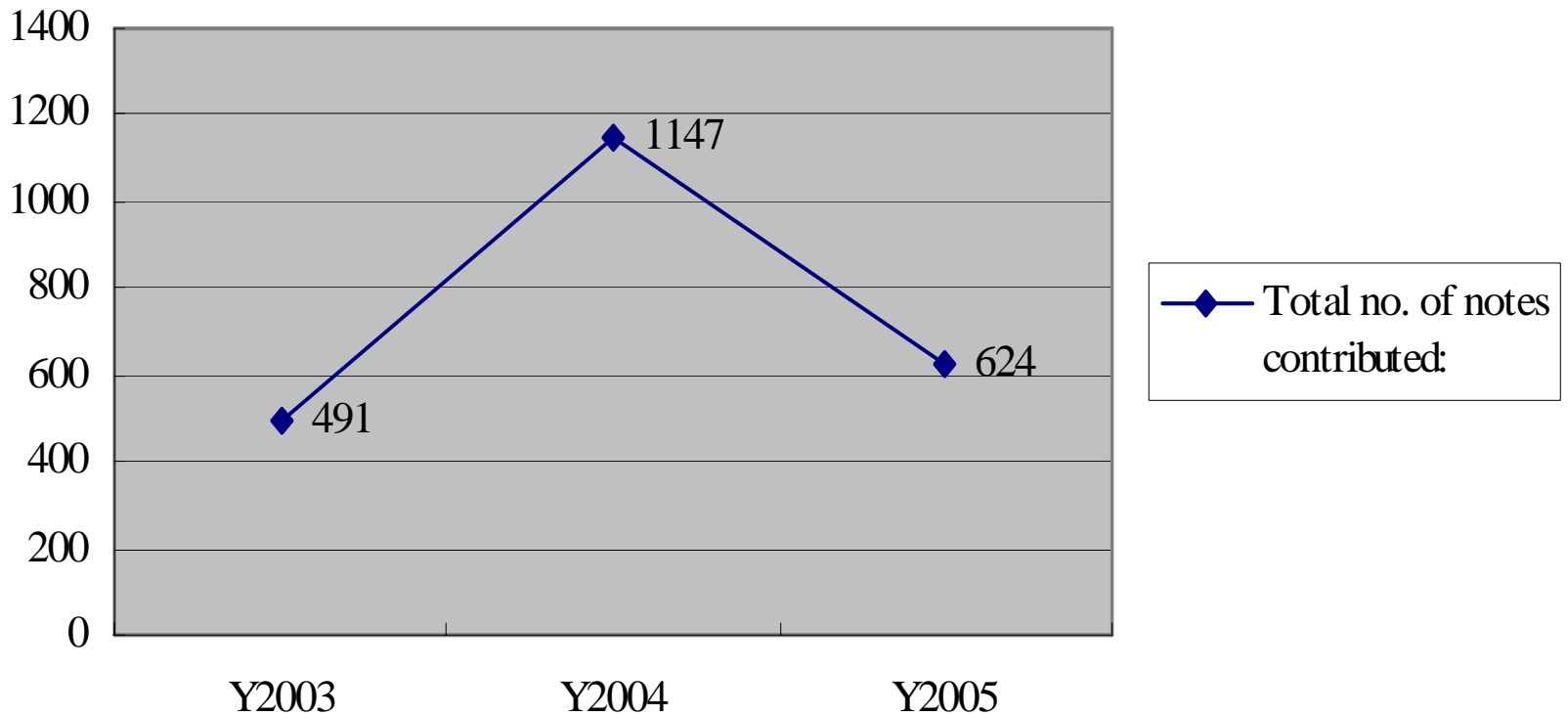


4. Findings

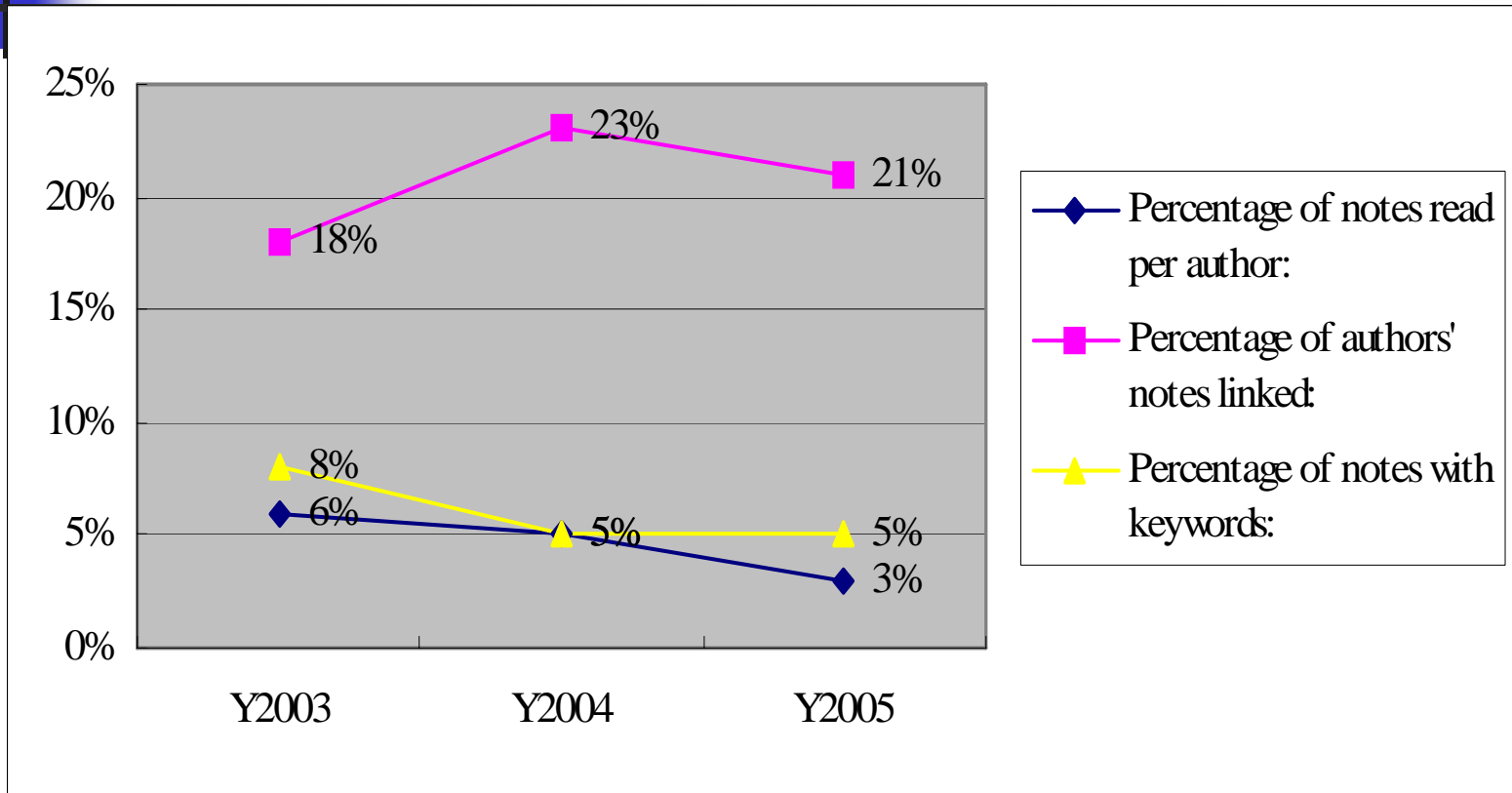
- (1) Overview

- No. of *notes, build-ons* contributed
- % of notes *read, linked*
- No. of *keywords, references, scaffolds* per note
- who's *read, built on, linked to, referenced, coauthored with* whom (SNA)

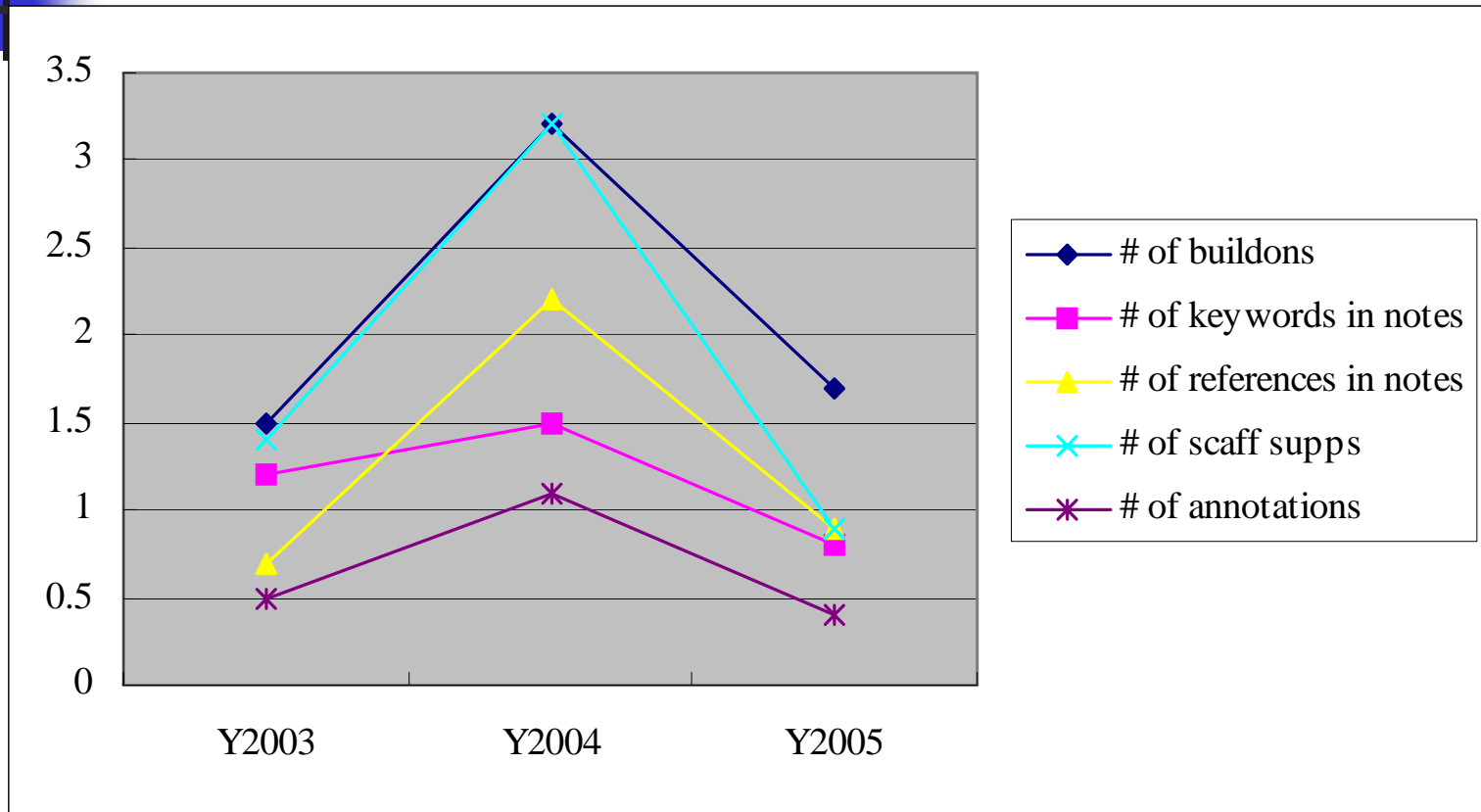
4(1a). total No. of notes contributed



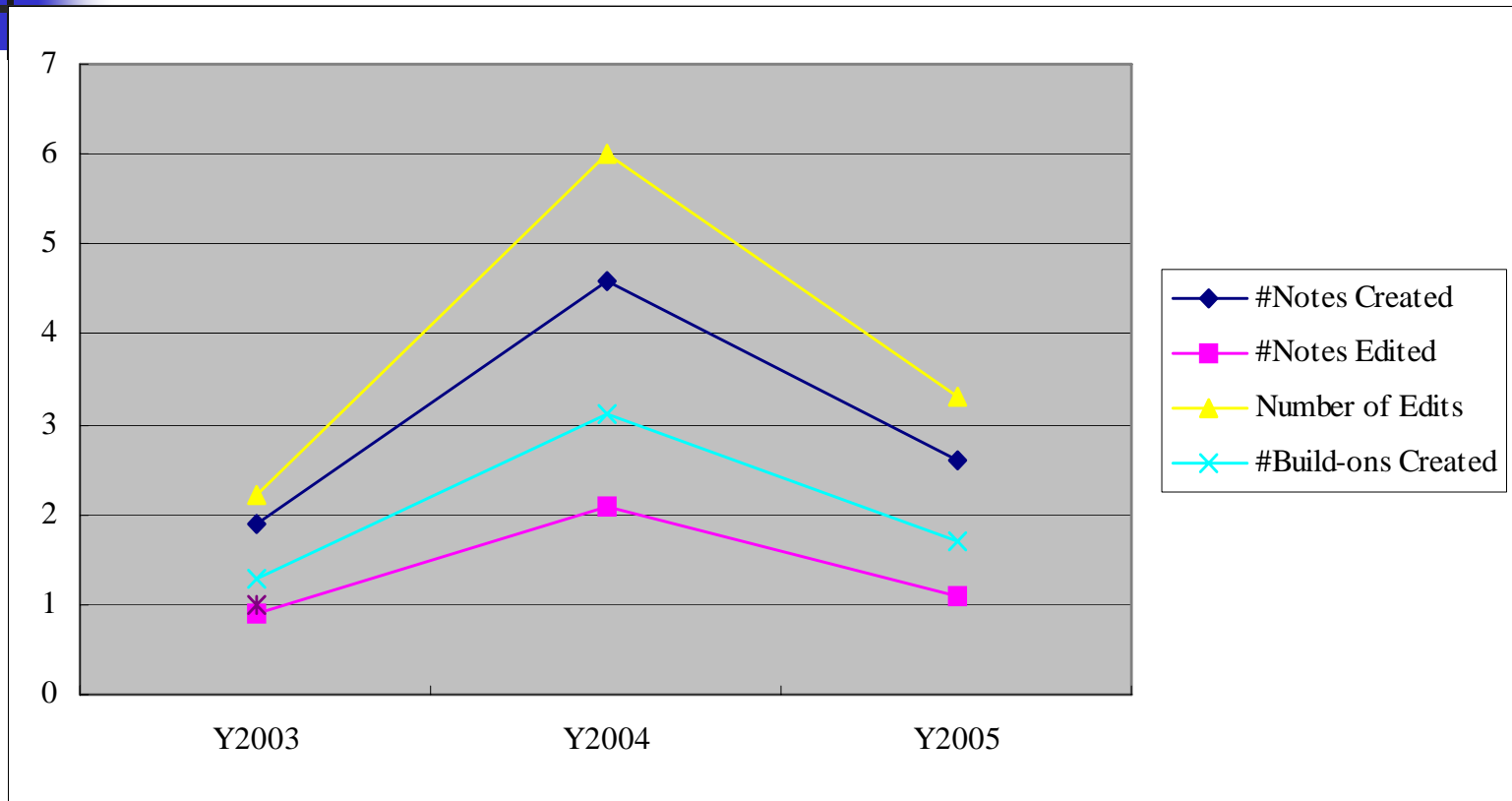
4(1b). % of notes read, linked, with keywords



4(1c). No. of build-ons, keywords, references, scaffolds, annotations per note

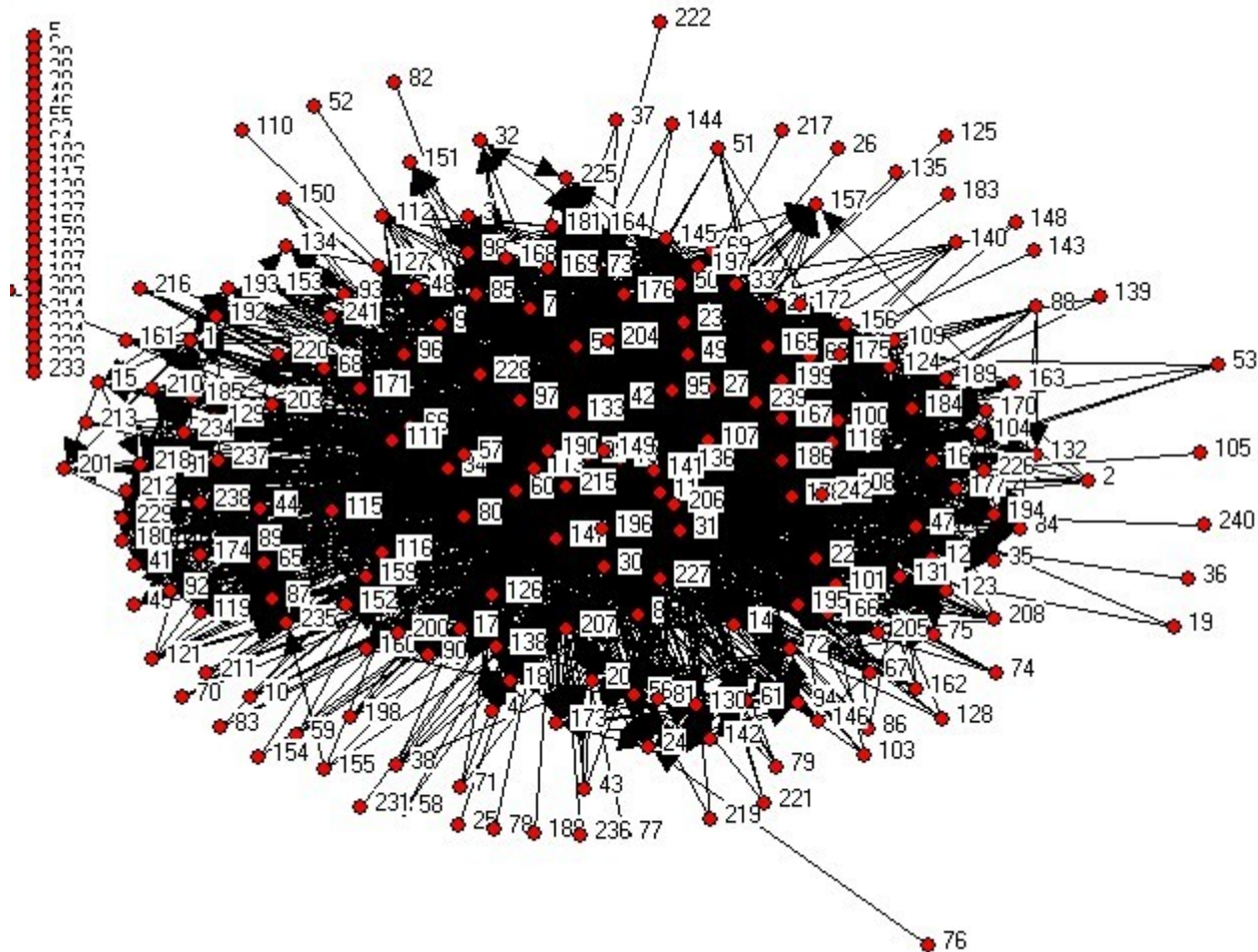


4(1d).No.of notes created, edited; No of edits; No of buildons created



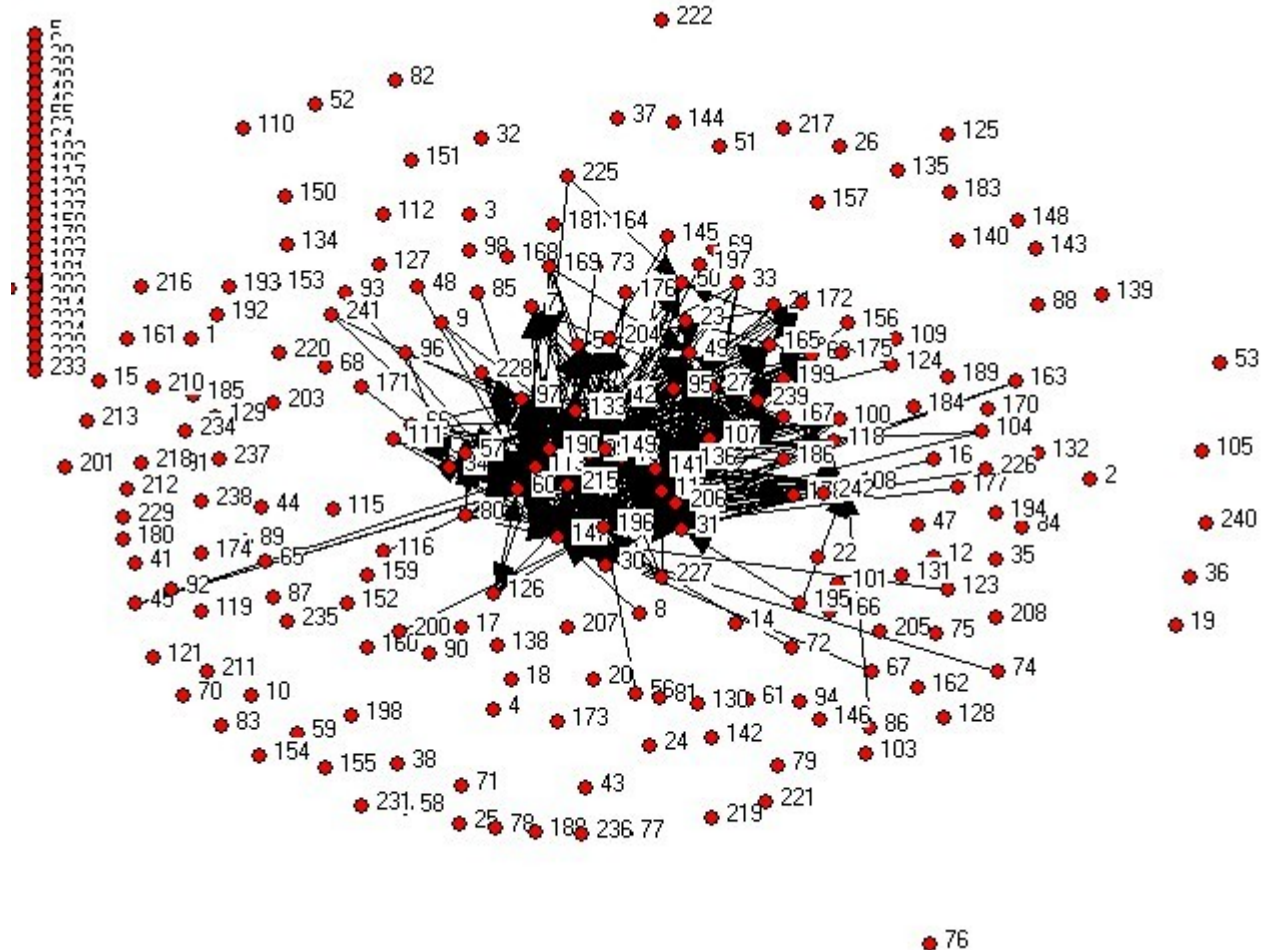
4(1e). who's read whose notes ($N \geq 1$)

■ Density:
0.496
SD:4.71



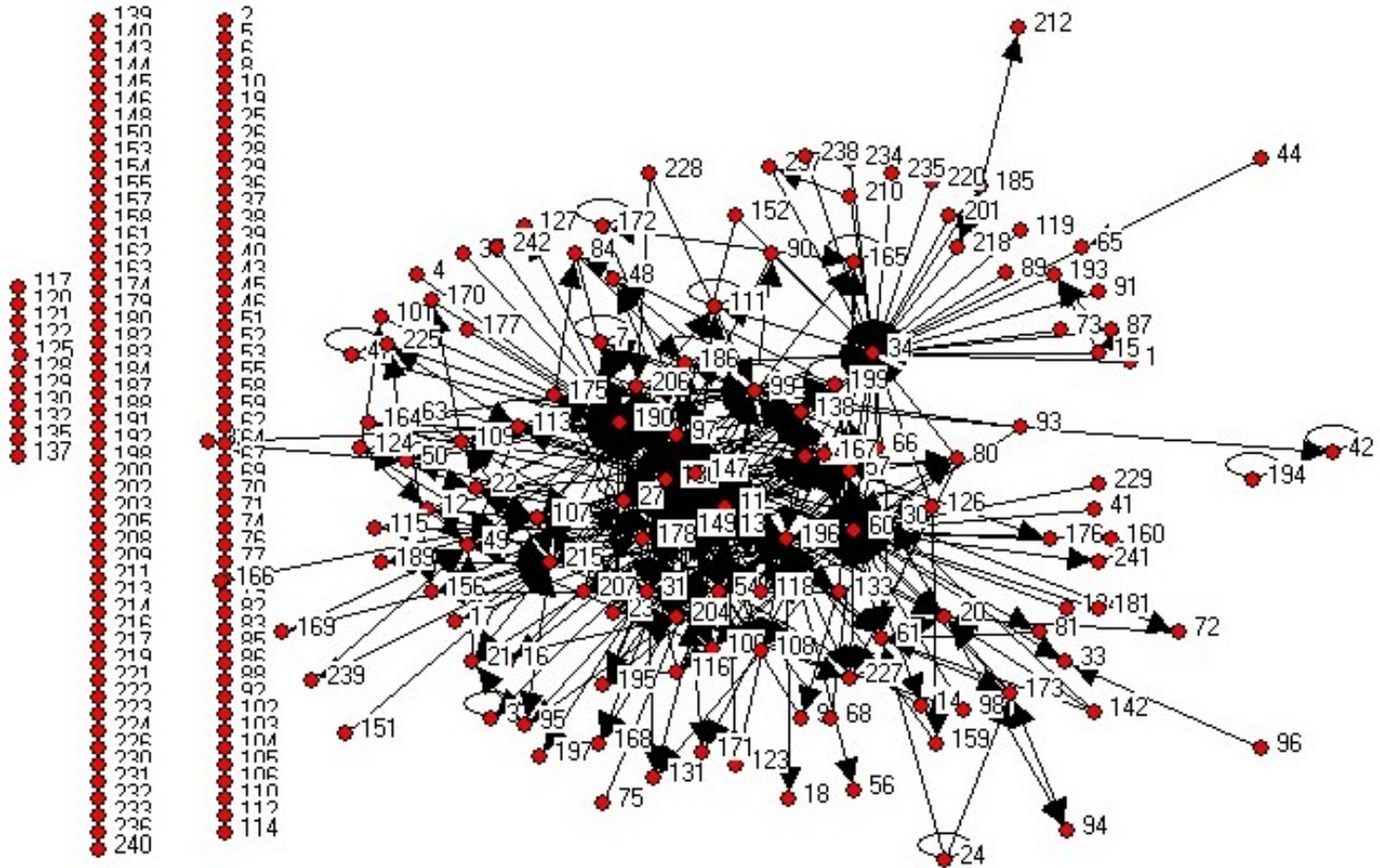
4(1e). who's read whose notes ($N > 10$)

■ Density:
0.496
SD: 4.71



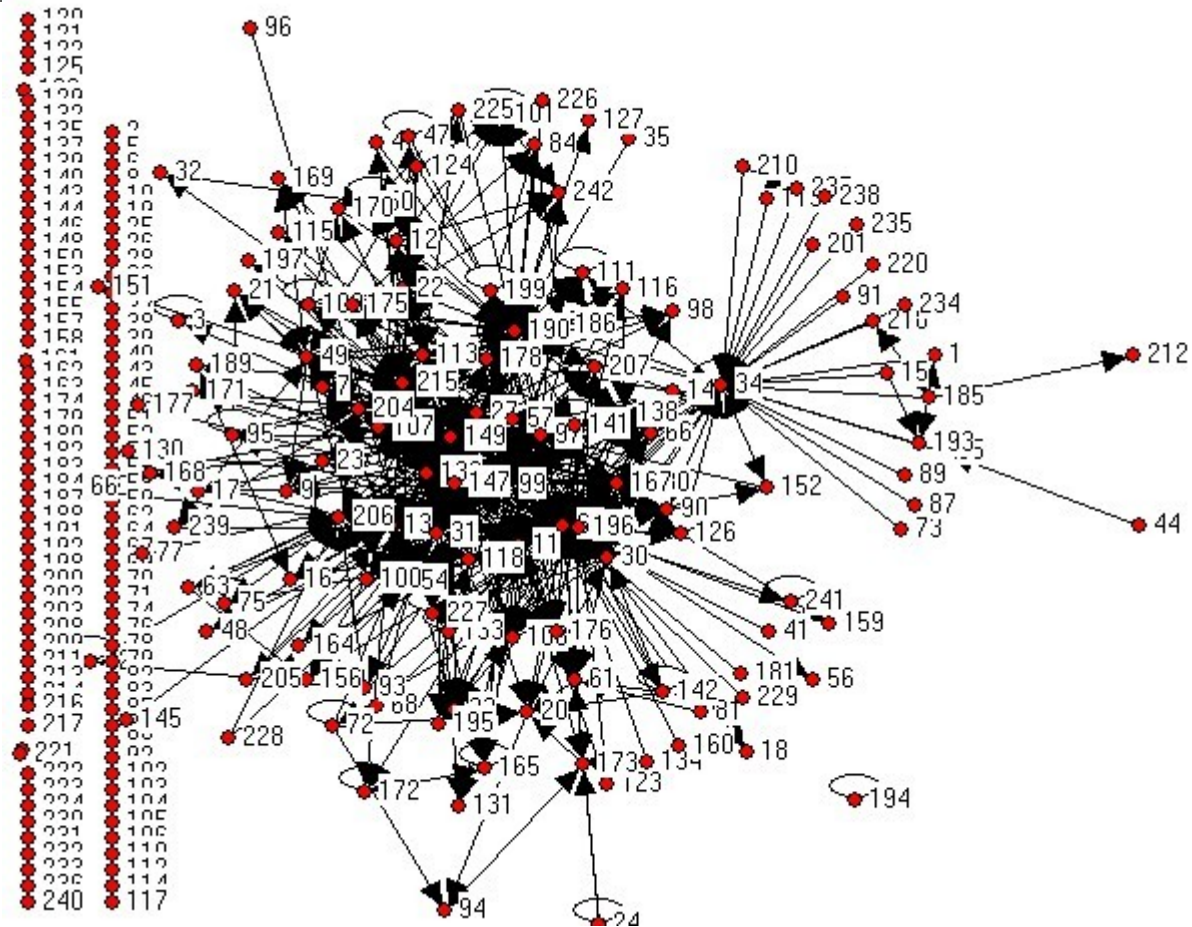
4(1f). who's built on whom

■ Density:
0.021
SD:0.34



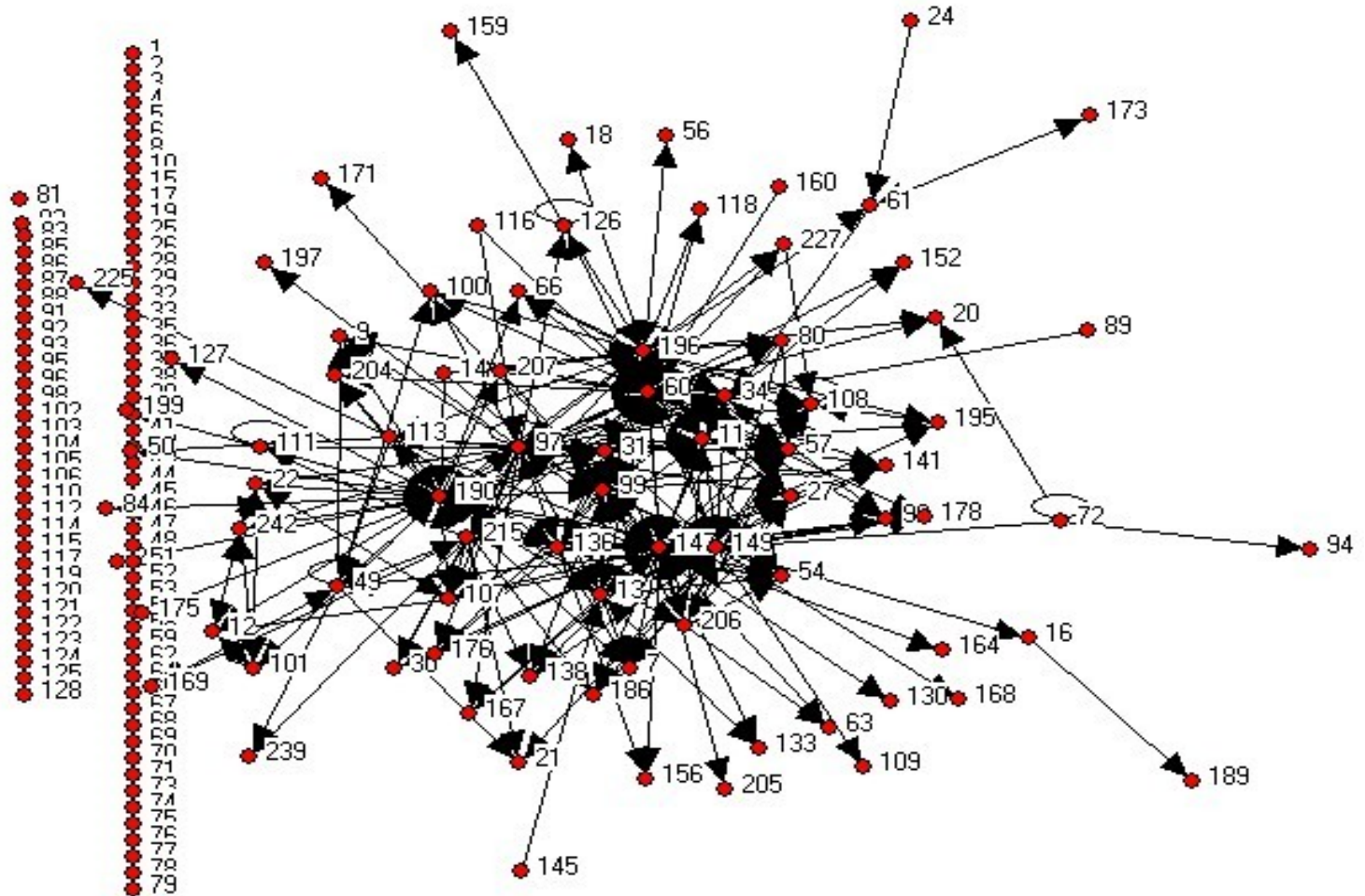
4(1g). who's linked to whom

■ Density:
0.041
SD:0.66



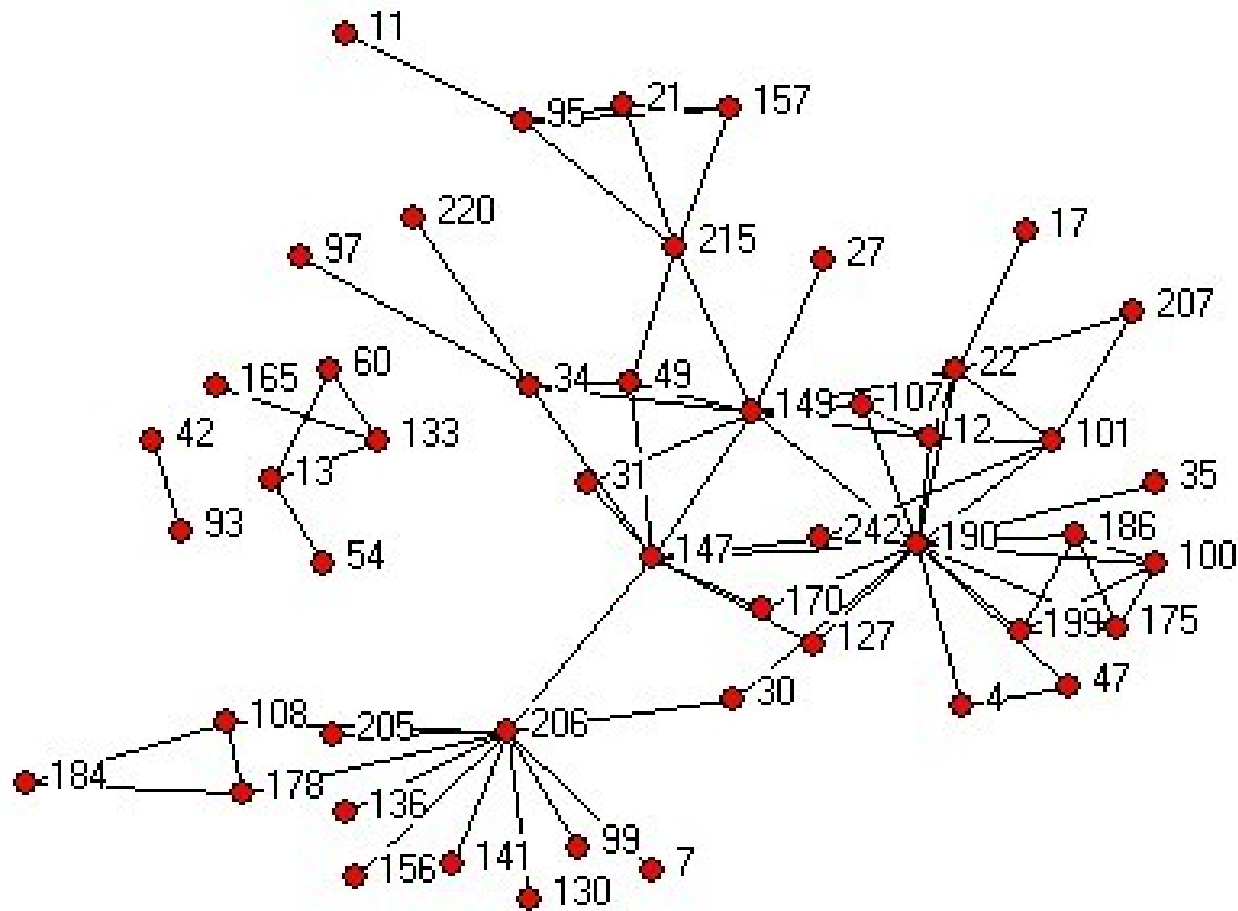
4(1h). who's referenced whose notes

■ Density:
0.013
SD:0.29



4(1i). who's coauthored notes with whom

■ Density:
0.005
SD:0.11





4(1). Overview: Summary

- There existed core members in KSN from SNA results
- Core members' notes were read by most authors (N > 10)
- See from 4(1e)-4(1i), Core members were similar ones
- Knowledge was mainly emerged from core members and distributed to peripheral authors through KSN
- 2004 was the most active year, 2005 the second, and 2003 the least
- Not many coauthors, rise-aboves, references



4. Findings

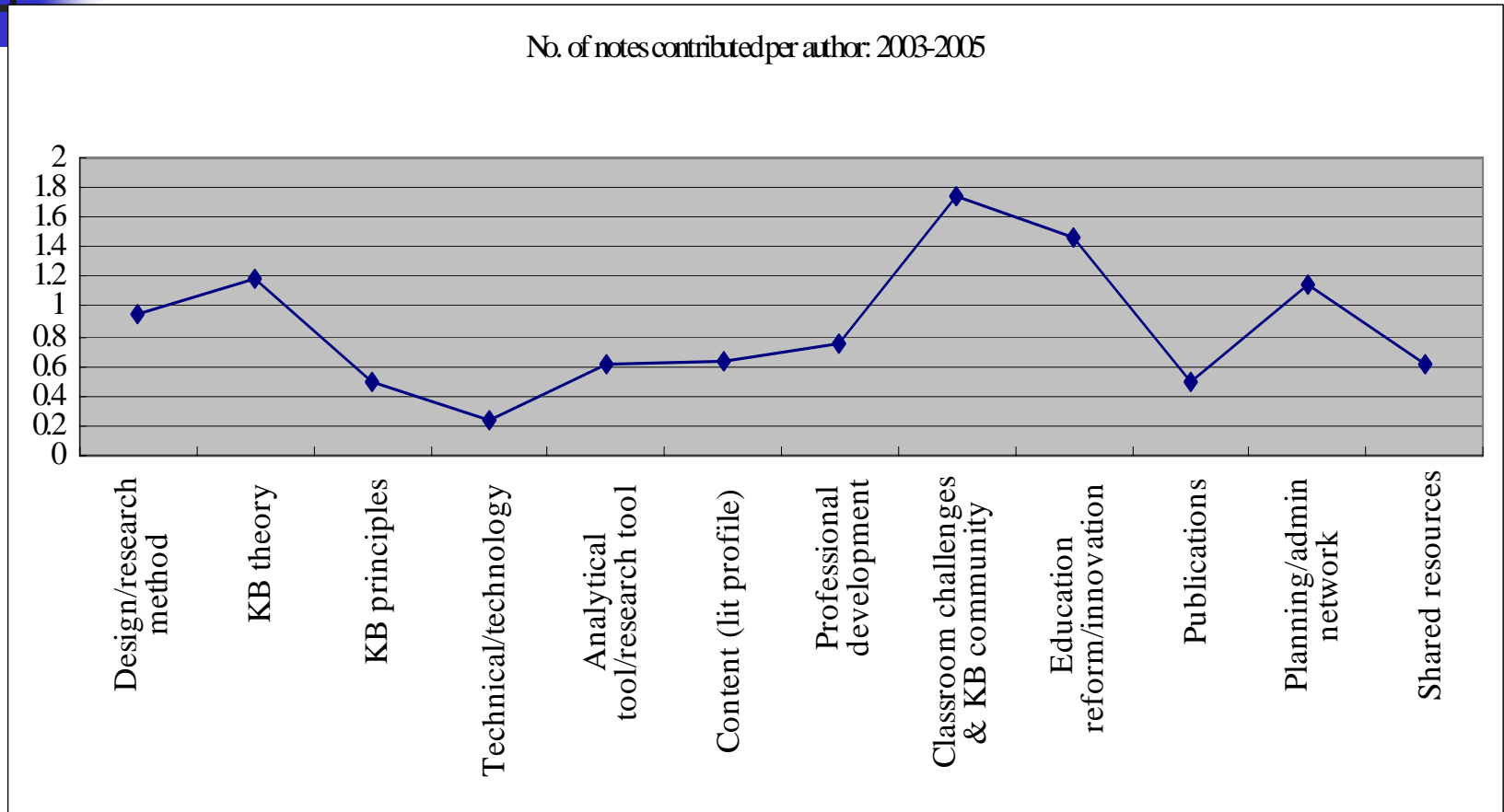
- **(2) 12 themes**

- (12 themes were identified from 132 views)
- No. of *notes, build-on, annotations* per author
- % of notes *read, linked*, notes *with keywords*
- No. of *build-on trees*
- No. of *references, scaffold* per note

4(2). Theme names, view, note

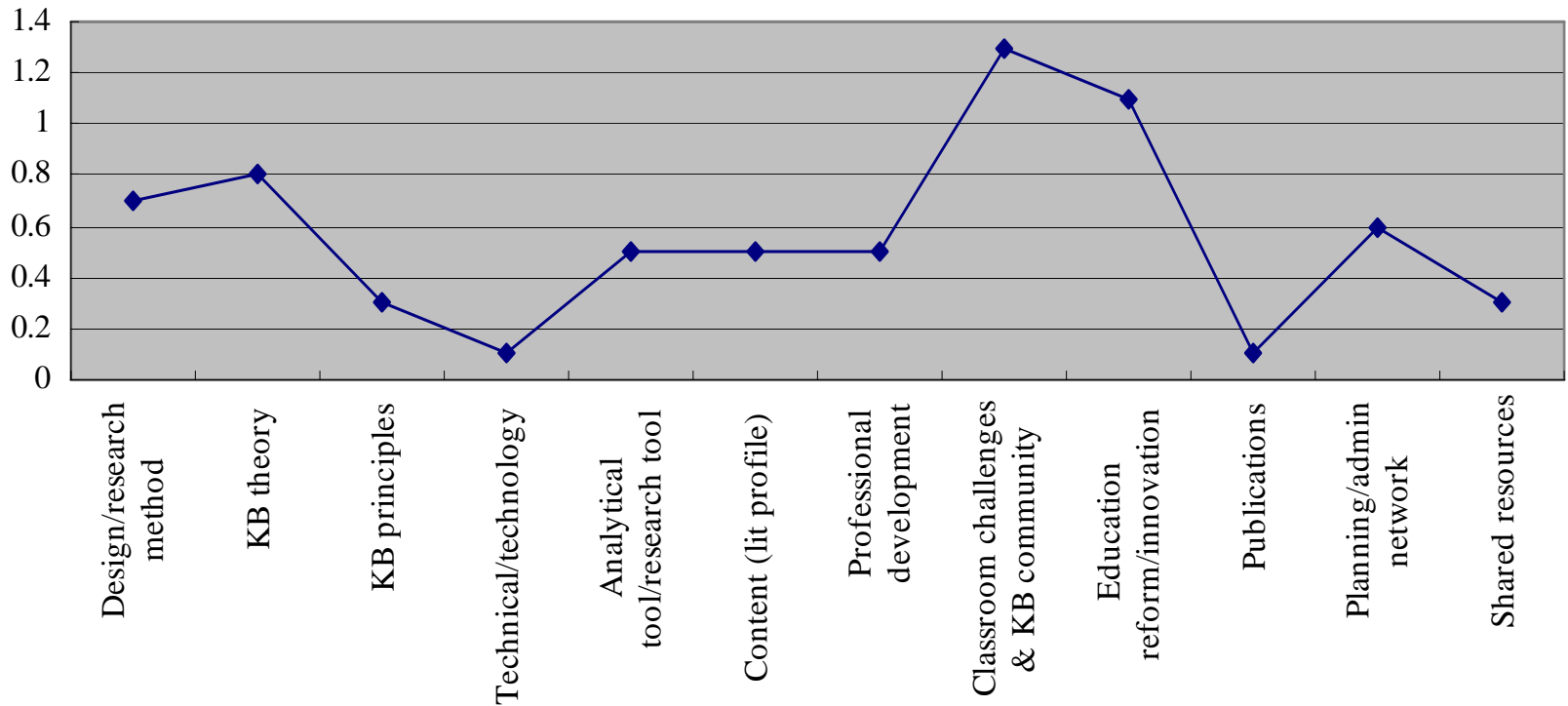
	Theme name	Views	Notes
1	Design/research method	5	228
2	KB theory	10	272
3	KB principles	8	101
4	Technical/technology	7	53
5	Analytical tool/research tool	10	145
6	Content (literacy profile)	6	149
7	Professional development	16	172
8	Classroom challenges & KB community	15	414
9	Education reform/innovation	12	334
10	Publications	5	102
11	Planning/admin network	22	266
12	Shared resources	16	150

4(2a). No. of notes contributed per author



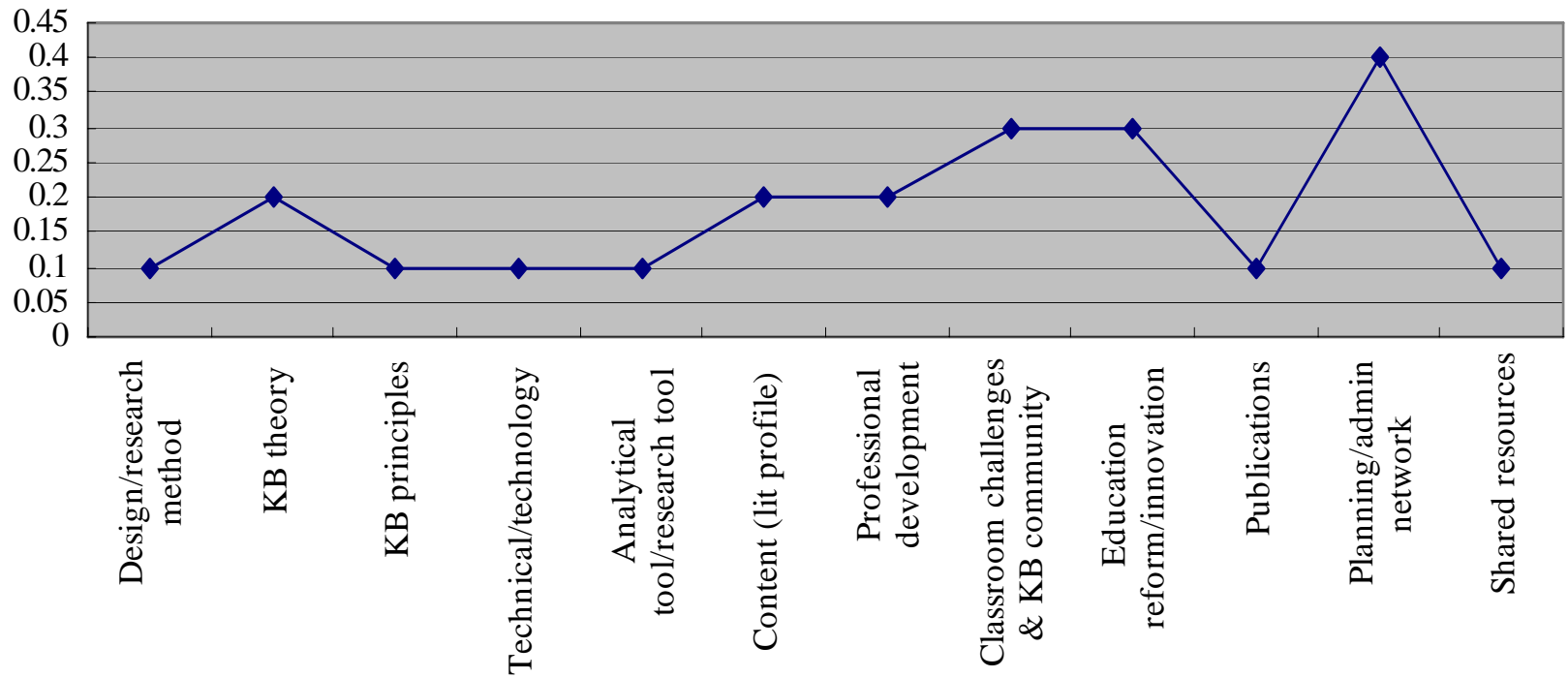
4(2b). No. of build-on notes per author

No. of buildon notes by per author: 2003-2005



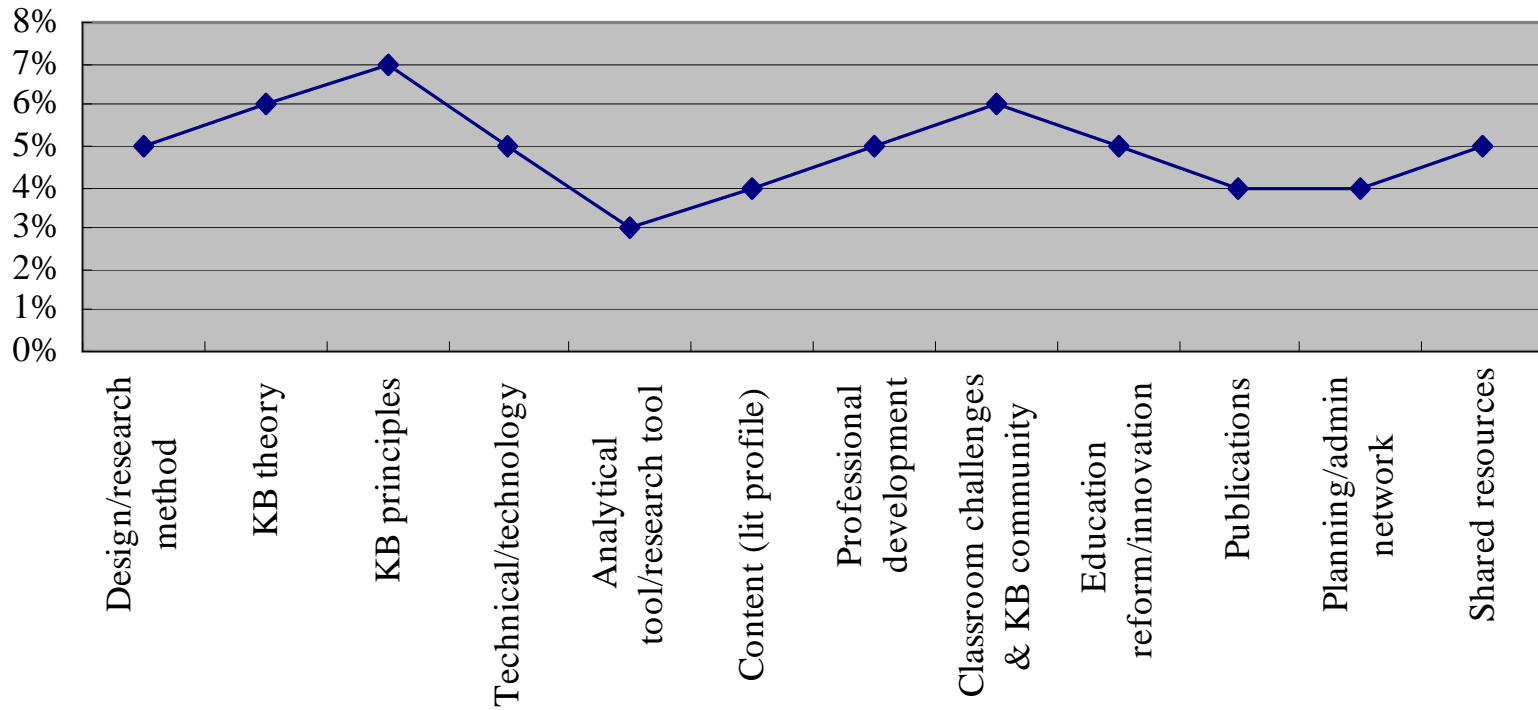
4(2c). No. of annotations per author

No. of annotations written by per author: Y2003-2005



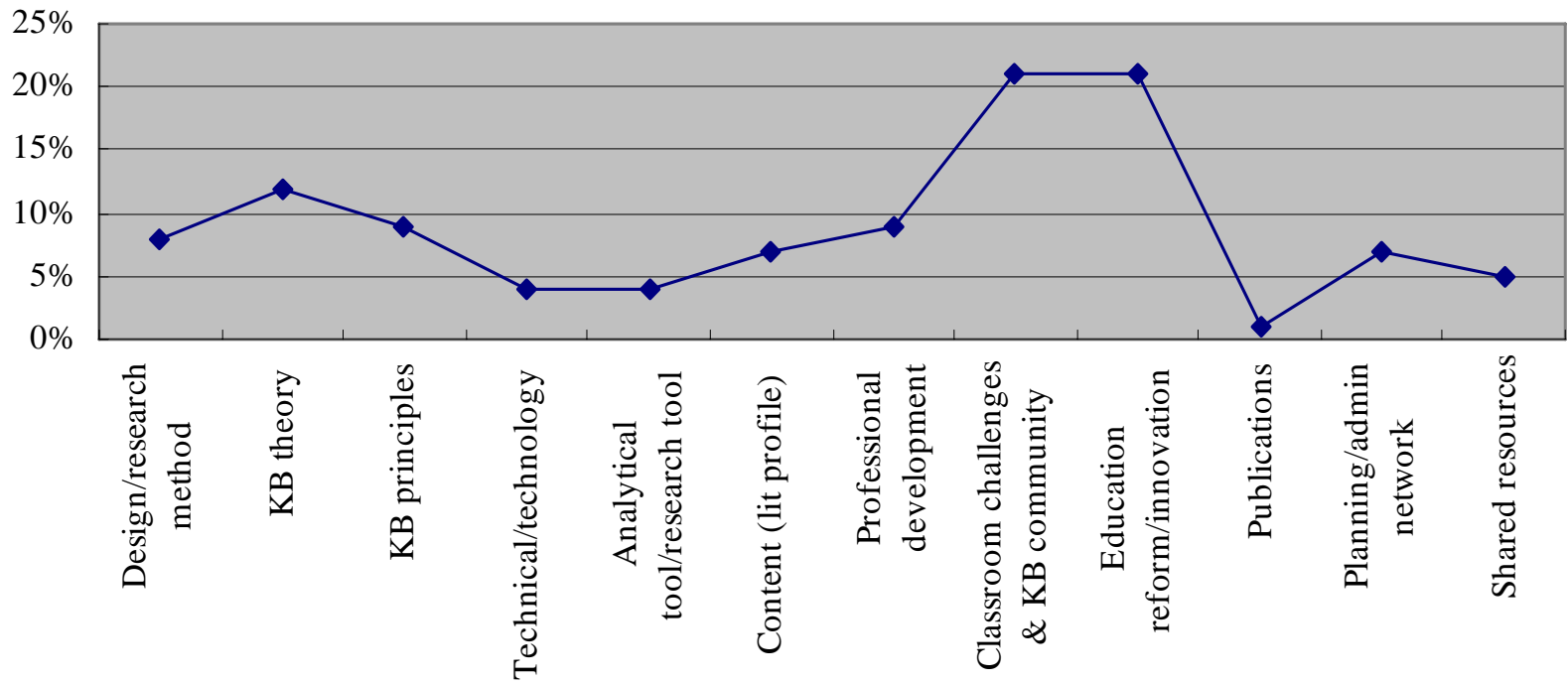
4(2d). % of notes read per author

Percentage of notes that have been read per author: 2003-2005



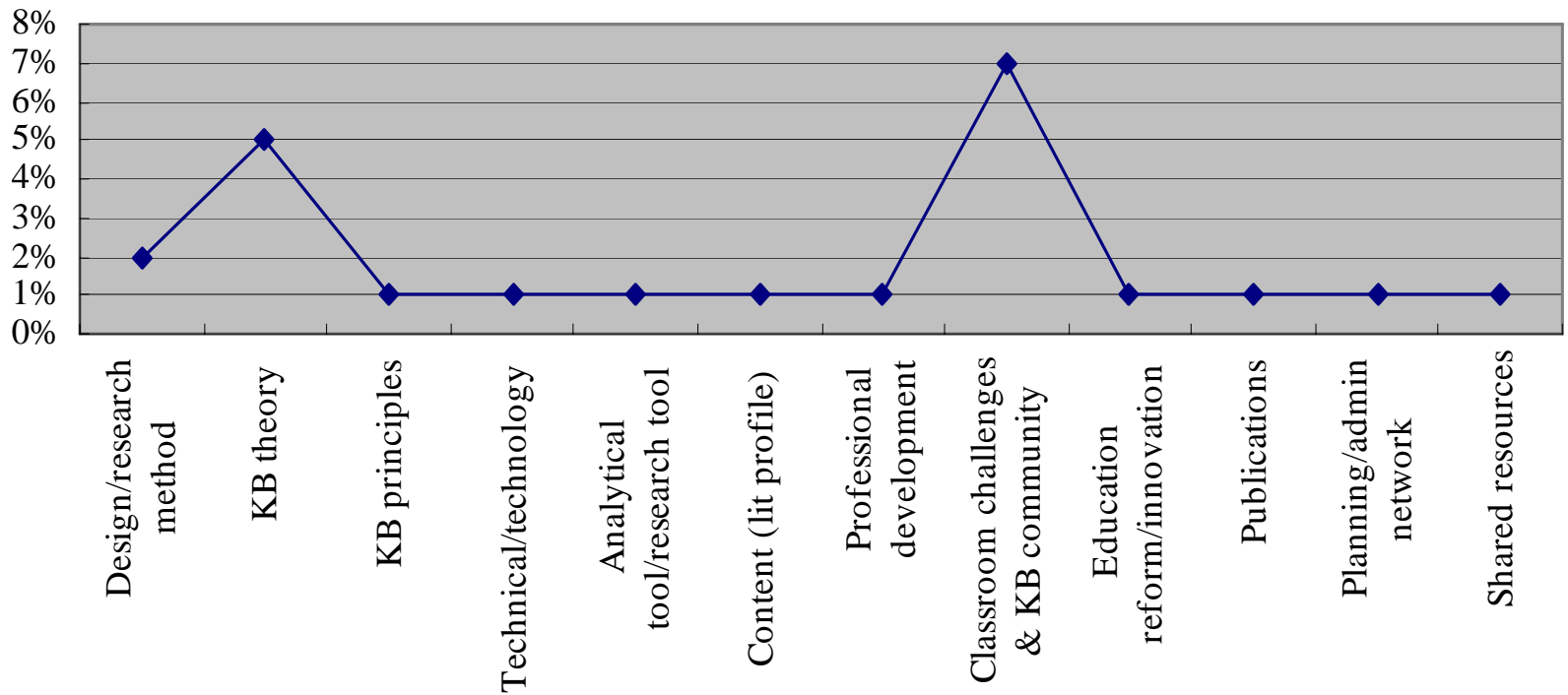
4(2e). % of notes that are linked

Percentage of notes that are linked: 2003-2005



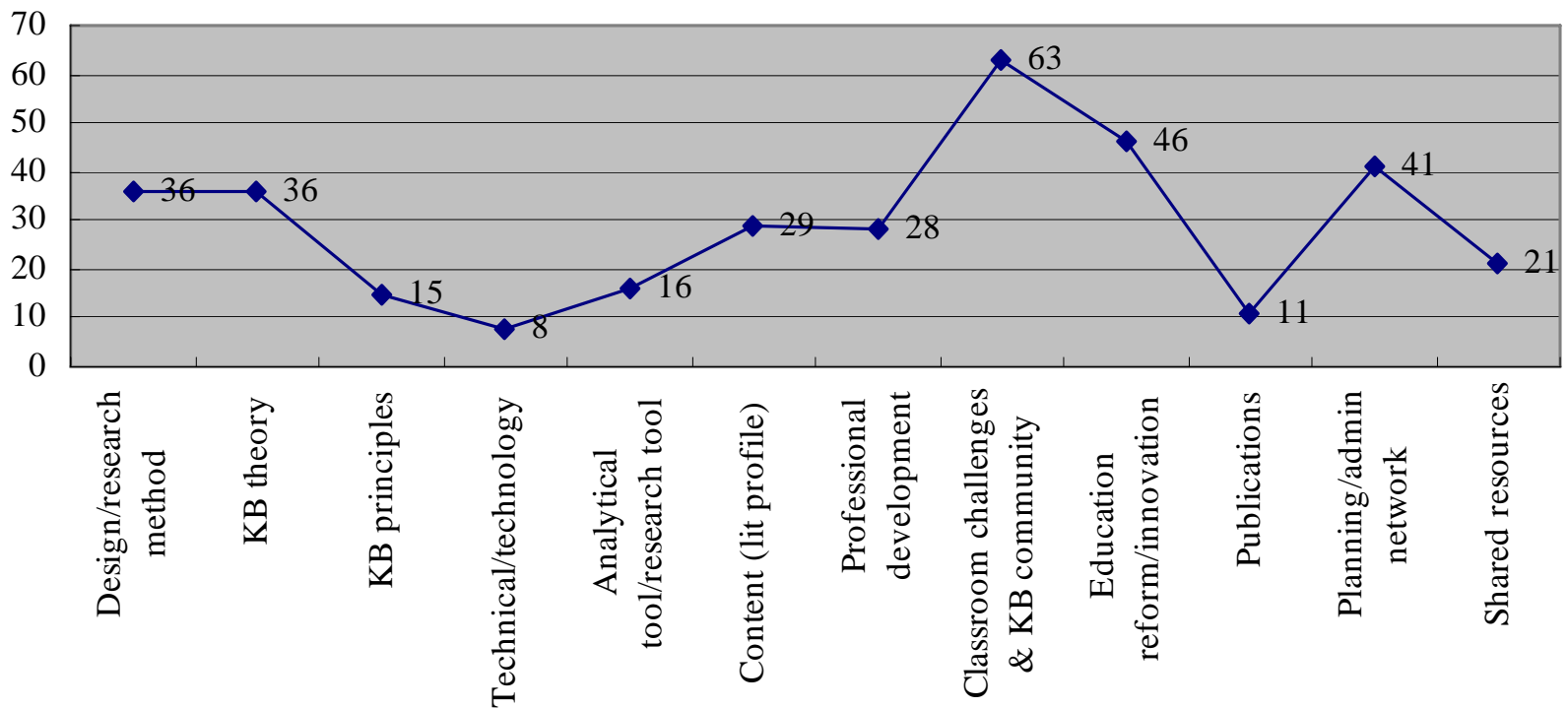
4(2f). % of notes with keywords

Percentage of notes with keywords: 2003-2005



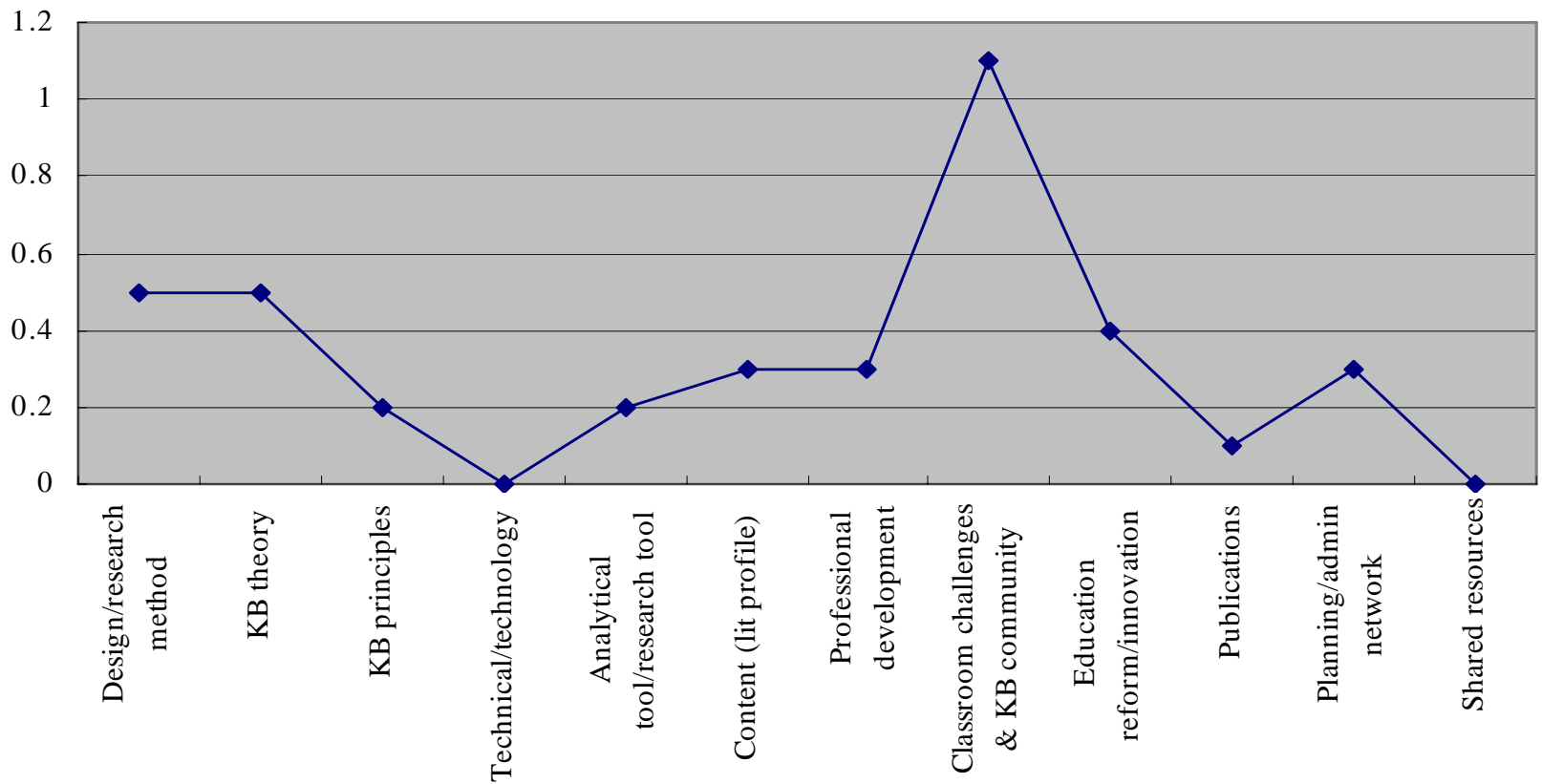
4(2g). No. of build-on trees participated in by 3 groups

No. of build-on trees participated in by 3 groups: 2003-2005



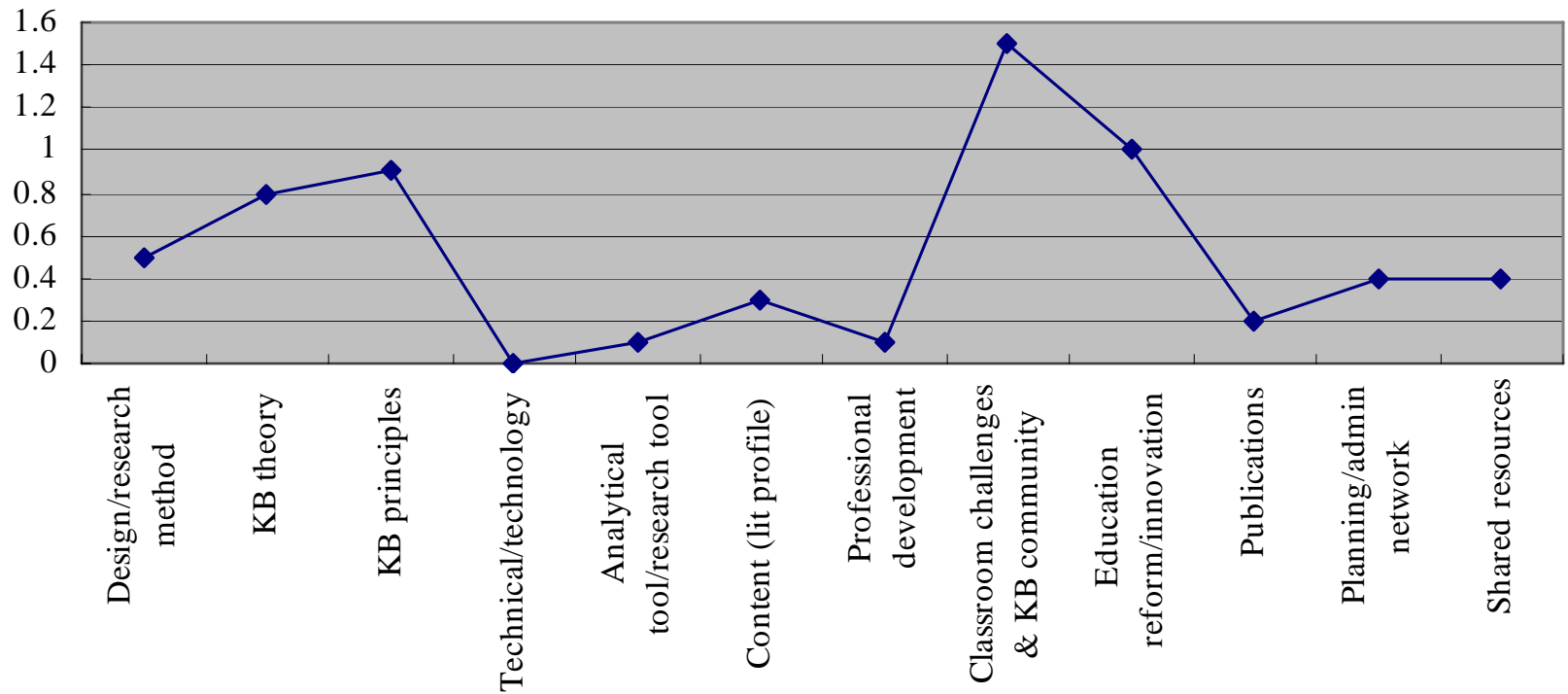
4(2h). No. of references per note

No. of references in a note: 2003-2005



4(2i). No. of scaffold supports per note

No. of scaffold supports in a note: 2003-2005

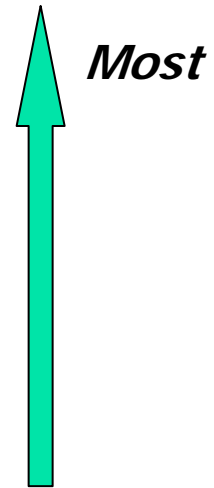




4(2). 12 themes: Summary

- Core themes or activities that KSN concerned about (in order):

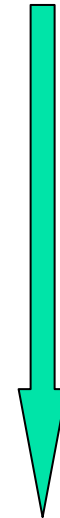
- *Classroom challenges & KB community*
- *Education reform/innovation*
- KB theory
- Design/research method
- Planning/admin network
- KB principles
- Professional development





4(2). 12 themes: Summary

- Themes or activities that KSN less discussed about (in order):
 - Content (literacy profile)
 - Shared resources
 - Analytic tool
 - Publication
 - Technology



Least



4(2). 12 themes: Summary

- Themes authors mostly contributed:
 - Classroom challenges & KB community (classroom design, KB practice, case study, telementoring)
 - Education reform/innovation (education innovation/creation/scale up, school affairs/policy/curriculum, knowledge mobilization relative to school practice)
- Themes readers mostly concern:
 - KB principles
 - KB theory; Classroom challenges & KB community
- Other themes mostly concerned:
 - Planning/admin network (VM, SI, Conf, plan, ...)



5. Discussion: CoP & LPP

- **KSN: run internally based on 12 KB principles**
- **Community of Practice (KB community)**
 - Full Participation (FP): Core members (a few)
 - Legitimate Peripheral Participation: Peripheral authors (many)
 - Identity/Opportunity/Access to Resources & Activities: individual/group/categories
 - Learn to Talk: author (reader, writer); theme (view, note)
 - Situated Action: discourse in authentic context
 - LPP Process: Knowledge building/innovation/advances



5. Discussion: Emergence

- **Knowledge emergence and transfer**
 - (Core) members interactions: source of knowledge emergence
 - LPP→FP: (outsider→insider) knowledge advances/innovation
 - Core→Peripheral: (insider→outsider) knowledge transfer
 - Core groups (3 groups)→25 groups: knowledge mobilization/scale-up



5. Discussion: “Ba”

- **KSN: “Ba”, place for Knowledge emergence** (Nonaka, I., 1998; 2001)
 - **Originating Ba:** (face2face) weekly meeting; Virtual meeting monthly; small talk.
 - **Dialoguing Ba:** (peer2peer) themes, views, notes in KSN; project teams; task groups.
 - **Systemizing Ba:** (collaboration) build-on, rise-above, reference, annotate, link, and coauthor with each other through Knowledge Forum.
 - **Exercising Ba:** (on-the-site) design experiment; classroom design and community; KB community; international team & practice; research.



5. Discussion: Keystones

- **Booming by two keystones from “Ba”**
 - **Knowledge vision of KSN:** vision for Knowledge Society; KB; Knowledge mobilization & advances
 - **Building & Energizing “Ba”:** KSN as an environment (KB community) for knowledge advances and mobilization.
 - **characteristics:** autonomy; creative chaos; redundancy; diversity; trust/commitment

5. Discussion: KSN

Originating Ba
(Face2Face)

Dialoguing Ba
(Peer2Peer)



Exercising Ba
(On-the-Site)

Systematizing Ba
(Collaboration)



Thanks!!!
