

Knowledge and knowers in online learning:

What constructivism does to students

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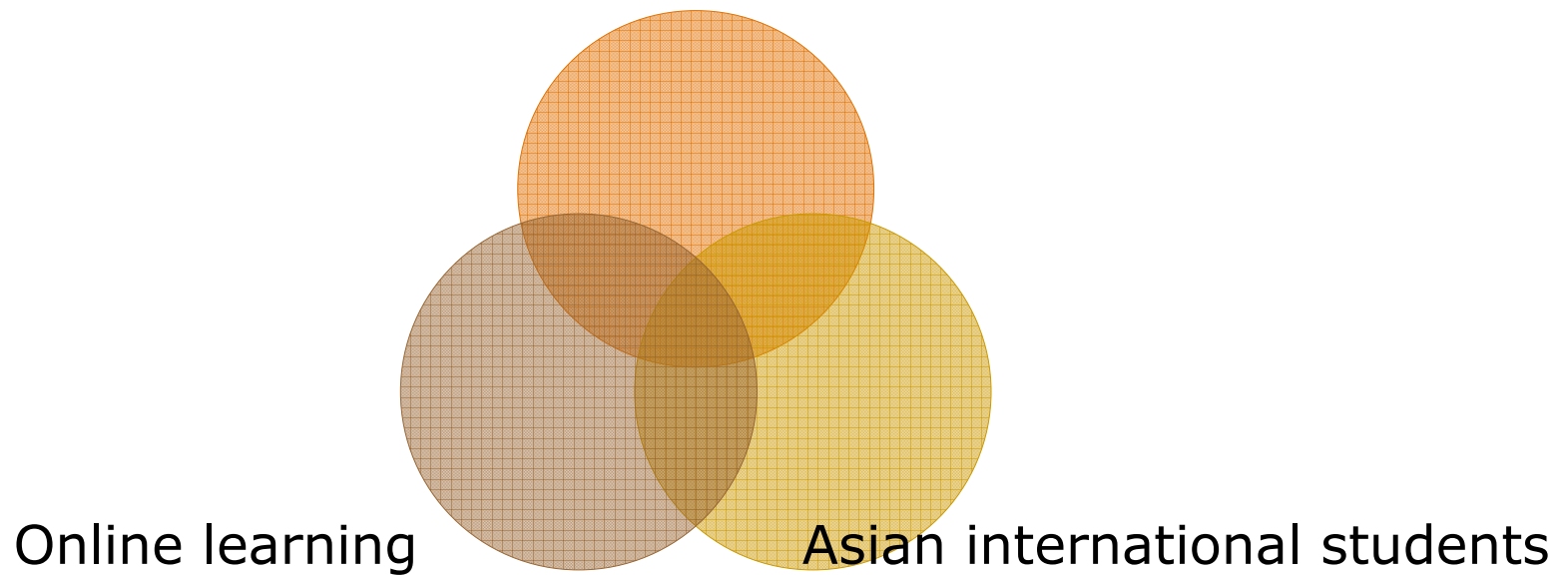
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Background

Constructivist-inspired pedagogies



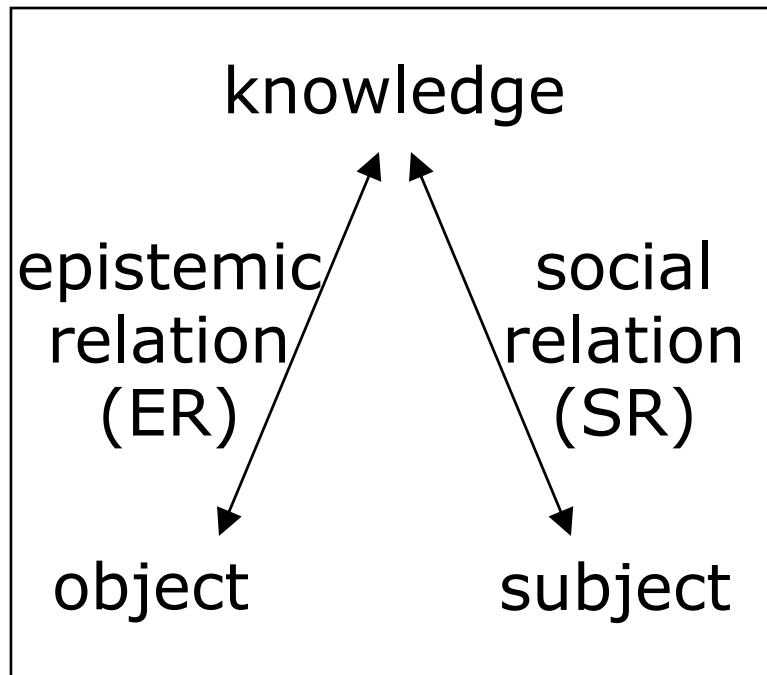
Past research: Descriptive and under-theorised.

Research question

*W*hat are the effects for students' learning experiences when constructivism underpins online flexible learning?

- ◆ What did the students bring into the learning context?
- ◆ What was the learning context?
- ◆ What happened when the students came into this context?

Legitimation code theory (LCT)

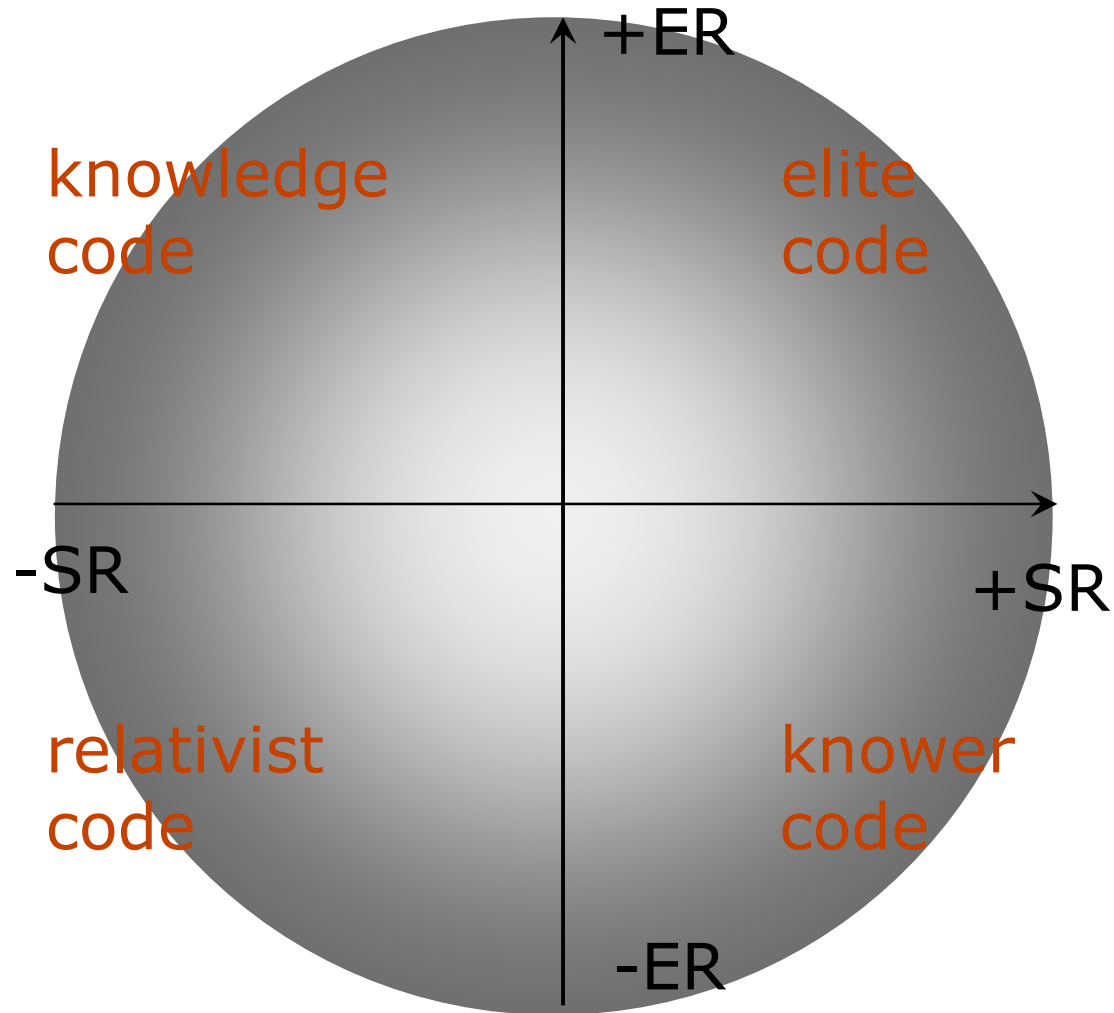


★ ER and SR can each be stronger (+) or weaker (-).

★ The two strengths give the legitimation code of Specialisation.

From Maton (2000, 2004, 2006); Moore & Maton (2001)

Legitimation codes



Research design

- ◆ Phase 1:
 - Focus group interviews
(3 groups, 6 hours in total)

- ◆ Phase 2:
 - Teacher interviews
(8 participants, 8 interviews, 8 hours in total)

 - Sample subject outlines

 - Student interviews (in-depth cases)
(7 participants, 27 interviews, 41 hours in total)

Phase 2 participants

Teachers	Students
<ul style="list-style-type: none">◆ Tertiary teaching experience: 8~25 yrs◆ Online teaching experience: 3~13 yrs	<ul style="list-style-type: none">◆ All from Mainland China◆ Work experience: 0~5 yrs◆ 4 students were taking 1~3 online subjects.◆ 3 students had completed 3~6 online subjects.◆ Across 4 specialisations

The online, flexible subjects

- ◆ 17 subjects were involved.
- ◆ Subject information & readings were delivered via a learning management system.
- ◆ No lectures
- ◆ 3~4 assignments
- ◆ Online discussions (voluntary participation)
- ◆ Optional face-to-face sessions (n=0~4)

Results

	Curriculum	Pedagogy	Assessment
Q1: Experiences, aspirations and dispositions the students brought with them into the new context			
Q2: Teachers' descriptions of their designs and intentions			
Q3: Students' experiences with the online subjects			

Curriculum experienced in China

- ◆ Strong boundaries between subject knowledge and everyday knowledge
- ◆ Strong boundaries between subject knowledge and other educational knowledge
- ◆ Curriculum overloaded with atomised content knowledge
- ➔ +F, emphasising states of knowledge

Pedagogy experienced in China

- ◆ Strongly sequenced and paced
 - ◆ Explicit instructions & exemplary work
 - ◆ Self-effacing learning strategies
 - ◆ Pedagogical relationship: Strong hierarchy
 - ◆ Peer relationships: Knowledge-oriented
- ➔ +F, emphasising transmission of expert knowledge about the subject content

Assessment experienced in China

- ◆ Typical assessment methods:
Exams (95-70%) + performance in class (5-30%)
- ◆ Rules of achievement:
 - Textbook-based, correct answers (exam)
 - Withholding personal opinions (exam)
 - Attendance, attentiveness and fulfillment of assigned work in class ('performance in class')
- ➔ +F, emphasising work products

Theorising (Answer to Q1)

Curriculum	Pedagogy	Assessment
(+) States of knowledge (-) Personal knowledge	(+) Transmission of knowledge about the subject content (-) Personal dimension of the learning process Visible pedagogy	(+) Specific criteria of knowledge & work products (-) Personal opinions
<ul style="list-style-type: none"> ➔ (+) object, (-) subject: The knowledge code (ER+, SR-) ➔ Ideal knowledge: Extensive knowledge base ➔ Ideal knower: Communal knower 		

Curriculum described by teacher

- ◆ Designed based on constructivist principles
- ◆ Weaker boundaries between subject knowledge and everyday knowledge
- ◆ Curricular focuses:
 - Learner development
 - Learner creating personalised knowledge
- ◆ Rationale: Learner already possessing legitimate knowledge
 - ➔ -F of knowledge, emphasising the knower

Pedagogy described by teacher

- ◆ Weaker sequencing and pacing
 - ◆ Pedagogical relationship: Weak hierarchy (e.g. “facilitator”, “co-learner”, “partnership”)
 - ◆ Peer relationships: A learning community
 - Knowledge co-construction; online social presence
 - Voluntary membership
- ⇒ -F of knowledge, emphasising the knower

Assessment

- ◆ Methods: Project (31%), authentic task (37%), personal reflection (32%+)
 - ◆ Generalised assessment criteria (e.g. "Quality of reflection"; "Quality of discussion"; "Basic design skills')
 - ◆ Rules of achievement:
 - Demonstrating personalised knowledge
 - Being self-directed
 - Wanting to share perspectives and to interact
- ➔ -F of knowledge, emphasising the knower

Theorising (Answer to Q2)

Curriculum	Pedagogy	Assessment
(+) Real-life contexts & personal interpretations	(+) Self-regulated learners creating & co-constructing knowledge	(+) Learner thinking, evaluating themselves
(-) Subject content	(-) Teaching Invisible pedagogy	(-) Explicit criteria to separate any two learners
<ul style="list-style-type: none"> ➔ (+) subject, (-) object: The knower code (ER-, SR+) ➔ Ideal knowledge: Student as the source of legitimacy ➔ Ideal knower: Personalised/individualised/social knower 		

Curriculum—Re: Real-life experience

- ◆ Did not understand the game; reluctant to play it; or did not know how
- ◆ Response: Did not bring in personal experiences
- ⇒ Unable to recognise/realise the rules; did not see their prior experiences as legitimate
- ⇒ Effects: Felt inferior, helpless, or guilty—not empowered

Curriculum—Knowledge gained via...

- ◆ Readings: Limited to own interpretations
- ◆ Discussions: Unverified information
- ◆ Assessment tasks: Limited to chosen topics
- ⇒ Response: Avoided difficult issues; read postings the teacher had commented on
- ⇒ Didn't see self, peers as legitimate knowers; didn't see current learning as legitimate
- ⇒ Effects: Felt insecure, anxious, frustrated, depressed, etc.

Pedagogy—Re: sequencing/pacing

- ◆ Did not see this form of pedagogy as teaching

(e.g. “the teacher did not tell us at certain points, you should have a general idea of what, or you should be able to do what, no **timely concern**”)
- ◆ Flexibility did not have an enabling effect:
 - Segmented learning process (“undigested knowledge”)
 - Low interactivity

Pedagogy—Re: Relationships

- ◆ Teacher as passive “assistant”, “tour guide”
- ◆ No learning community
- ◆ Response: No incentive to be present
- ⇒ Didn’t get knowledge from the teacher; no sense of belonging to a group of knowers
- ⇒ Effect: Felt abandoned & lost, “in a vacuum”

(e.g. “I was thrown out completely. No one cares what I’m doing”, “lonely”, “isolated”, “like a hermit”, “no stimulation”, “not inspired”, “bored”, “void”, etc.)

Assessment—Re: Implicit criteria

- ◆ Lack of instructions about how to conduct tasks & improve work products
- ◆ Response: Rules of achievement—
 - Address every assessment criterion.
 - Sufficient references; good writing structure
 - Change personal opinions if necessary.
- ⇒ The 'wrong' kind of knowers
- ⇒ Effect: Felt confused, upset, unfairly penalised

Theorising (Answer to Q3)

Curriculum	Pedagogy	Assessment
<p>Didn't bring in personal experiences</p> <p>Experienced a lack of knowledge they saw as legitimate</p>	<p>Didn't show they were present or engaged</p> <p>Experienced a lack of guidance</p>	<p>Didn't demonstrate personalised thinking or knowledge</p> <p>Experienced a lack of explicit criteria of knowledge</p>
<p>➡ (-) object, (-) subject: Relativist code (ER-, SR-)</p>		
<p>Not see oneself as a legitimate knower</p>	<p>Not taught how to become one</p>	<p>Carried on using the knowledge code of past—'Wrong' kind of knower</p>

Answer to research question

What are the effects for students' learning experiences when constructivism underpins online flexible learning?

- ◆ Experience of being in a vacuum, in limbo: A relativist-code experience
- ◆ Emotional upset: Abandonment, disillusion, guilt, etc.

Conclusion

- ◆ There was a code clash in terms of curriculum, pedagogy and assessment.
- ◆ Constructivist-inspired pedagogies may be intrinsically invisible because they are specialised by the knower code.
- ◆ Student dissatisfaction was with the pedagogy used, rather than with technology.
- ◆ This experience may not be specific to Chinese learners.