

# Use of Asynchronous Online Discussion for 9 year-old pupils in A Science Classroom


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# Abstract

- Young students keen on Science
  - Not enough time for them to share during the typical Science Lesson
  - Using Asynchronous Online Discussion
  - Case study
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# Pedagogical affordances of Asynchronous Online Discussion (AOD)

- Equal chance to participate in discussion
- Keep a record of their discussion
- Allows students to externalize what they have known

*(Bali & Ramadan, 2007; Salmon, 2002)*






# Research studies on AOD

- Mostly in higher institutions.
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# Purpose

- Explore the use of AOD for a group of thirty-four 9 year-old mixed ability pupils in a Science Class
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# Research Questions

- How can the teacher encourage the pupils to participate in the AOD?
  - How does the AOD enhance the pupils' learning experience?
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# Participants

- Thirty-four 9 year-old pupils (mixed ability)
  - Classrooms were technology-enabled with wireless connection and one-to-one computing
    - Part of Singapore FutureSchools @ Singapore
    - Pervasive use of technology for them since Primary 1.
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# Implementation


- Created using Forum in the school learning management system powered by Moodle
  - Current School LMS
  - Familiar with Moodle








# Implementation

- Adopted the approach suggested by Wong, Hew and Cheung (2008)
    - Pupils grouped into groups of 4 or 5
    - Pupils contribute to the Group Forum
    - Teacher demonstrate the use of Forum in class
    - Pupils try it out in class first
    - Letter send to parents
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# Data Collection Instruments

- Teacher Observation
  - Forum postings
  - Perception Survey and Focus Group Discussion
  - Statistics Logs in Moodle
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# Results and Discussion

- Teacher's Role
  - Contribution Pattern
  - Pupil's Learning Experience
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# Results and Discussion – Teacher's Role

- Contributing to the AOD regularly
  - Initiate new discussion
  - Ask probing questions
  - Praise the pupils
  - Provide Information
- 




# Results and Discussion – Contribution Pattern

- Low Participation Rate at home (40%)
    - Not allowed to use computers at home
    - “Not serious” homework
  - Structure AOD-based lessons in class
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## Results and Discussion – Pupils' Learning Experience

- Enjoyed Learning (70%)
  - More likely to view than contribute
    - Too shy to share views online or were not willing to willing to critique others' posts (Hemmi, Bayne & Land, 2009; Otter , Whittaker & Spriggs, 2009).
  - Learn from their friends
    - “I read the Forum posts because some things my friend know I might not know thus if I read the Forum posts I can learn more”.
    - “So that I can learn more and if I'm wrong, they can correct me”.
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## Results and Discussion – Pupils' Learning Experience

- Mainly contributing learning-related posts
    - Provide formation (answering their friends or the teachers' question)
    - Asked questions to clarify their doubts
    - Corrected their friend if they were wrong
    - Posted new topics to initiate new discussion
  - Even at-risk students are participating
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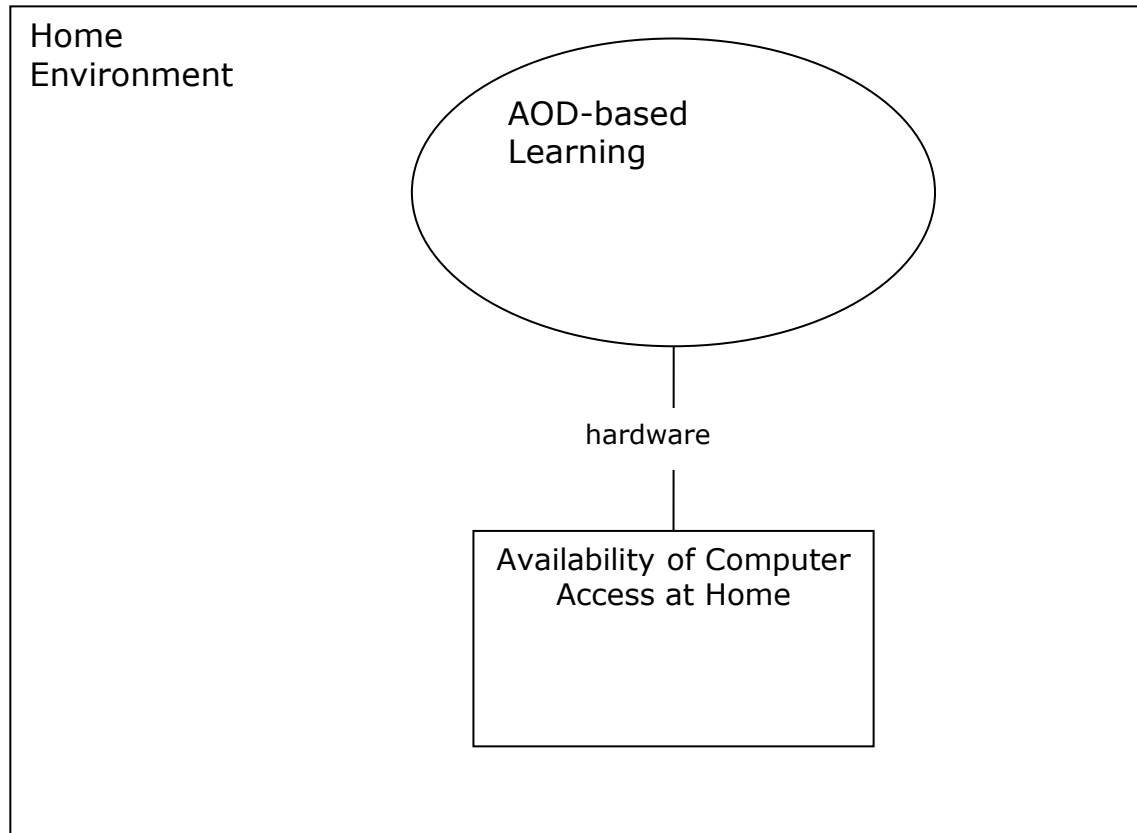
## Results and Discussion – Pupils' Learning Experience

- More dialogic discourse
  - Complement the authoritative discourse in class
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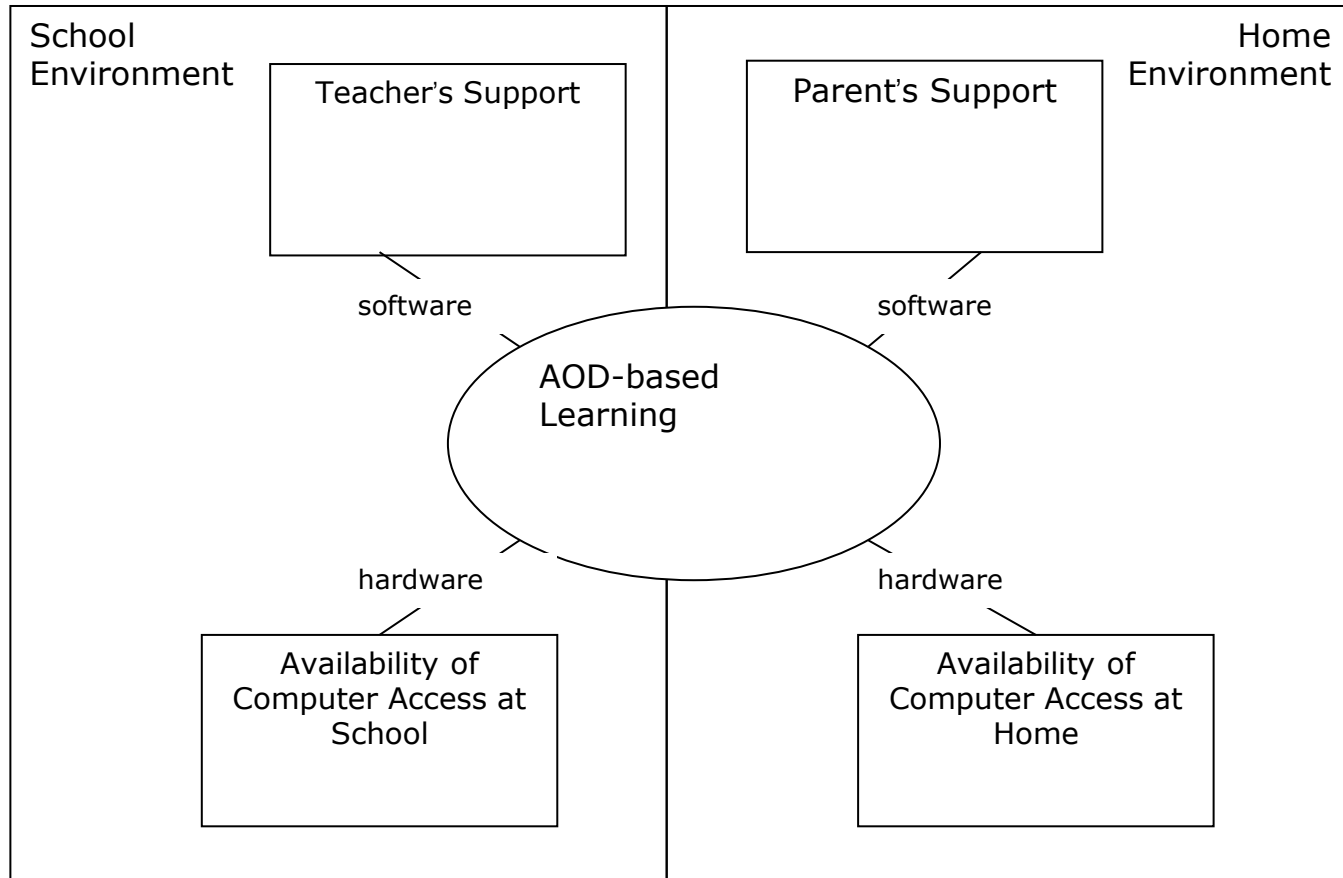


# Conclusion

- Young pupils are ready to participate



# Conclusion





# Limitations

- Parents' perception on AOD
- 



# Thank you

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