

Inquiry Maths – Summary of Inquiry Maths Classroom Model, Blog, Examples, (K – 12)

<http://www.inquirymaths.com/>

Discovering the Art of Mathematics (Mathematical Inquiry in the Liberal Arts) – many articles

<https://www.artofmathematics.org/>

Journal of Inquiry-Based Learning in Mathematics – College Courses Using Moore Method, Great place to see how others designed their course, some high school level courses available

<http://jiblm.org//index.php>

Academy of Inquiry Based Learning – Blog, Workshops

<http://www.inquirybasedlearning.org/>

5 Concerns for Inquiry Based Instruction

<https://lanewalker2013.wordpress.com/2017/10/29/5-concerns-for-inquiry-based-instruction/>

Unexpected Benefits of Inquiry Learning

<https://lanewalker2013.wordpress.com/2017/10/28/unexpected-benefits-of-inquiry-learning/>

IMPACT: Inquiry Maths Pedagogy in Action – Videos, Research, Teacher Resources (K - 8)

<https://www.mathsinquiry.com/>

Emergent Math – Blog, Curriculum Maps (7 – 12)

<https://emergentmath.com/>

<https://emergentmath.com/2011/09/26/introducing-the-great-inquiry-based-curriculum-mapping-project-a-plea-for-collaboration/>

**Below are articles, book chapters, etc. from Inquirymaths.org
founder Andrew Blair**

Inquiry in Mathematics Classrooms

Alrø, H. and Skovsmose, O. (2002). Dialogue and Learning in Mathematics Education: Intention, Reflection, Critique. Dordrecht: Kluwer Academic Publishers.

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Goos, M., Galbraith, P. and Renshaw, P. (1999). Establishing a Community of Practice in a Secondary Mathematics Classroom. In Burton, L. (Ed.) Learning Mathematics: From Hierarchies to Networks. London: Falmer Press, pp. 36-61.

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Siegel, M. and Borasi, R. (1994). Demystifying Mathematics Education through Inquiry. In Ernest, P. (Ed.). Constructing Mathematical Knowledge: Epistemology and Mathematics Education. London: The Falmer Press, pp. 201-214.

Wathall, J. T. H. (2016). Concept-Based Mathematics: Teaching for Deep Understanding in the Secondary Classroom. Thousand Oaks, California: Corwin.

Inquiry in Mathematics Classrooms– Journal Articles Artigue, M. and Blomhøj, M. (2013). Conceptualizing Inquiry-Based Education in Mathematics. ZDM The International Journal on Mathematics Education, 45, 797-810. Blair, A. (2008). Inquiry Teaching. Mathematics Teaching, 211, 8-11.

Blair, A. (2014). Inquiry Maths: An Idea Whose Time Has Come. Mathematics Teaching, 240, 32-35.

Blazar, D. (2015). Effective Teaching in Elementary Mathematics: Identifying Classroom Practices that Support Student Achievement. Economics of Education Review, 48, 16–29.

Borasi, R. (1994). Capitalizing on Errors as "Springboards for Inquiry": A Teaching Experiment. Journal for Research in Mathematics Education, 25(2), 166-208.

Bruder, R. and Prescott, A. (2013). Research Evidence on the Benefits of IBL. ZDM The International Journal on Mathematics Education, 45, 811-822.

Calleja, J. (2016). Teaching Mathematics through Inquiry: A Continuing Professional Development Programme Design. Educational Designer: Journal of the International Society for Design and Development in Education.

<http://www.educationaldesigner.org/ed/volume3/issue9/article30/index.htm>

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Goos, M. (2004). Learning Mathematics in a Classroom Community of Inquiry. *Journal for Research in Mathematics Education*, 35(4), 258-291.

Maaß, K. and Artigue, M. (2013). Implementation of Inquiry-Based Learning in Day-to-Day Teaching: A Synthesis. *ZDM The International Journal on Mathematics Education*, 45, 779- 795.

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Inquiry in Education

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Education. Cambridge: Cambridge University Press.

Zuckerman, G. A., Chudinova, E. V. and Khavkin, E. E. (1998). Inquiry as a Pivotal Element of Knowledge Acquisition within the Vygotskian Paradigm: Building a Science Curriculum for the Elementary School. *Cognition and Instruction*, 16(2), 201-233.

What is Inquiry Based Learning (IBL)?

- **Learning goals focused on problem-solving and communication**
- **A curriculum driven by a carefully constructed sequence of problems or proofs**
- **Driving toward a small number of big ideas**
- **Course pace set by students' progress through this sequence**
- **Class time used for a mix of active and collaborative problem-solving tasks**
- **Instructors who guide student work instead of delivering information**

Laursen, S. L., Hassi, M.-L., Kogan, M., and Weston, T. J. 2014. Benefits for women and men of inquiry-based learning in college mathematics: A multi-institution study. *Journal for Research in Mathematics Education*. 45(4): 406-418.