



Published online: 9-27-2011

## In Memoriam: Remembering Howard S. Barrows

Cindy E. Hmelo-Silver  
*Rutgers University*

IJPBL is Published in Open Access Format through the Generous Support of the [Teaching Academy at Purdue University](#), the [School of Education at Indiana University](#), and the [Educational Technology program at the University of South Carolina](#).

### Recommended Citation

Hmelo-Silver, C. E. (2011). In Memoriam: Remembering Howard S. Barrows. *Interdisciplinary Journal of Problem-Based Learning*, 5(2).  
Available at: <https://doi.org/10.7771/1541-5015.1251>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact [epubs@purdue.edu](mailto:epubs@purdue.edu) for additional information.

This is an Open Access journal. This means that it uses a funding model that does not charge readers or their institutions for access. Readers may freely read, download, copy, distribute, print, search, or link to the full texts of articles. This journal is covered under the [CC BY-NC-ND license](#).

## In Memoriam:

### Remembering Howard S. Barrows

*Cindy E. Hmelo-Silver*

The field of PBL has lost a great man. On March 25, 2011, Dr. Howard Barrows (Figure 1) passed away. He was a pioneer in the development of problem-based learning and assessment in medical education. Howard was one of the great teachers, and I am privileged to have had the opportunity to work with him in studying his teaching and to have reported on some of this research in the premier issue of this journal (Hmelo-Silver & Barrows, 2006).

**Figure 1.** Dr. Howard Barrows (Credits: J. Hawker, SIU SOM)



Dr. Barrows originally trained as a neurologist but soon began studying medical expertise and became interested in education. In his own words as he introduced himself to a student group, here is how he became interested in PBL:

[I] was an innocent academic, full-time, after I finished my residency training and felt that was the career I was going to go into. But I found education to be increasingly more and more interesting all the time. I spent ten years in

Canada in a brand new medical school by the name of McMaster that started with students learning around patient problems; I found that incredibly compelling and got more and more involved in that. Then when I came to this school [Southern Illinois University] because they were looking for an associate dean to head up the educational programs, I became even more involved and fascinated by education and I ...[became] totally involved in what I consider an alternative career that I am really excited about. And that's why I love what I'm doing today (Hmelo-Silver & Barrows, unpublished data).

As a brand new Ph.D., I mailed a copy of my dissertation to Dr. Barrows. I was not sure what to expect, but I had studied PBL and found some interesting cognitive effects of PBL. Much to my surprise and delight, I was invited to give a talk at Southern Illinois University—by Howard Barrows. That began the discussions that culminated in the work that we accomplished together. Howard took me under his wing, argued with me, supported my research, mentored me, and eventually we collaborated on several publications. I got the idea for studying his teaching when he did a workshop at Georgia Institute of Technology. My dissertation research involved outcomes, but I wanted to study how “good” PBL was enacted. And with the chance to study Howard Barrows as a facilitator, I was able to study the best. Analyzing this video was indeed a privilege. I had the opportunity to interview him as we watched the video; while I noticed strategies that he wasn't aware of, he pointed out techniques that I had not picked up. But, these are the personal remembrances.

Dr. Barrows received his M.D. degree from the University of Southern California Medical School. He completed residencies in neurology at Lenox Hill Hospital and Columbia Presbyterian Medical Center. His work in education began shortly thereafter as he directed the Neurology Residency program at University of Southern California and went up the academic ranks, becoming assistant dean for residency education at McMaster University and later associate dean for educational affairs at Southern Illinois University. During his time at McMaster, Dr. Barrows began studying expertise, and this work led directly to the development of problem-based learning—an approach to education that was based on what he learned from more basic research in medical problem solving. Dr. Barrows was the author of 14 books and more than 127 articles on PBL, neurological assessment, and standardized patients. He was also the producer of numerous educational videos.

To say that Dr. Barrows work in PBL has been influential would be a gross understatement. He received numerous honors during his career. In 2000, the American Association of Medical Colleges bestowed on him the prestigious Abraham Flexner Award for outstanding contributions to medical education. In 2004, he received the American Educational Research Association Division I: Education in the Professions Distinguished Career Award recognizing individuals who, over a significant number of years, have been exceptionally productive scholars in professional education. He received a host of other awards

including several honorary doctorates. A Web of Science Search shows 275 publications with over 800 citations. Google scholar shows that his pioneering book, *Problem-Based Learning: An Approach to Medical Education* (Barrows & Tamblyn, 1980), published by SIU press, has over 1,990 citations! His classic article, *A taxonomy of problem-based learning methods* (Barrows, 1986) also has over 1,000 citations. He left a legacy of PBL scholarship that others can only hope to emulate.

Dr. Howard Barrows has left a lasting legacy. Problem-based learning has spread beyond its medical school origins to primary, secondary, undergraduate, and other professional educational settings (Walker & Leary, 2009). Beyond being a great teacher who was passionate about education, he was a gentle man and a good mentor whose contributions will live on in the field of PBL that he pioneered.

### Acknowledgements

Thanks to Timothy Koschmann for feedback on this and for suggesting the photo. Thanks to James Hawker, Southern Illinois University School of Medicine for granting permission to use the photo of Dr. Howard Barrows.

### References

- Barrows, H. S. (1986). A taxonomy of problem-based learning methods. *Medical Education*, 20, 481-486.
- Barrows, H. S., & Tamblyn, R. (1980). *Problem-Based Learning: An Approach to Medical Education*. New York: Springer.
- Hmelo-Silver, C. E., & Barrows, H. S. (2006). Goals and strategies of a problem-based learning facilitator. *Interdisciplinary Journal of Problem-based Learning*, 1, 21-39.
- Walker, A. E., & Leary, H. (2009). A problem based learning meta analysis: Differences across problem types, implementation types, disciplines, and assessment levels. *Interdisciplinary Journal of Problem-based Learning*, 3, 12-43.

---

**Cindy Hmelo-Silver** is Professor of Educational Psychology at Rutgers University and Co-Editor in Chief of *Journal of the Learning Sciences*.