

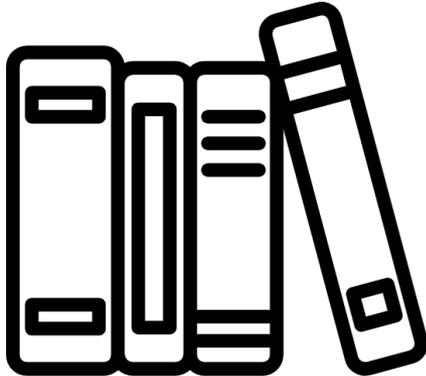
Stop Reinventing the Wheel!

Leveraging Community Software in Computing Education

Jeremiah Blanchard*, John R. Hott*, Vincent Berry, Rebecca Carroll, Bob Edmison, Richard Glassey, Oscar Karnalim, Brian Plancher, Seán Russell

We took a two pronged approach to understanding the state of tools for CS Education

Literature Review



Survey



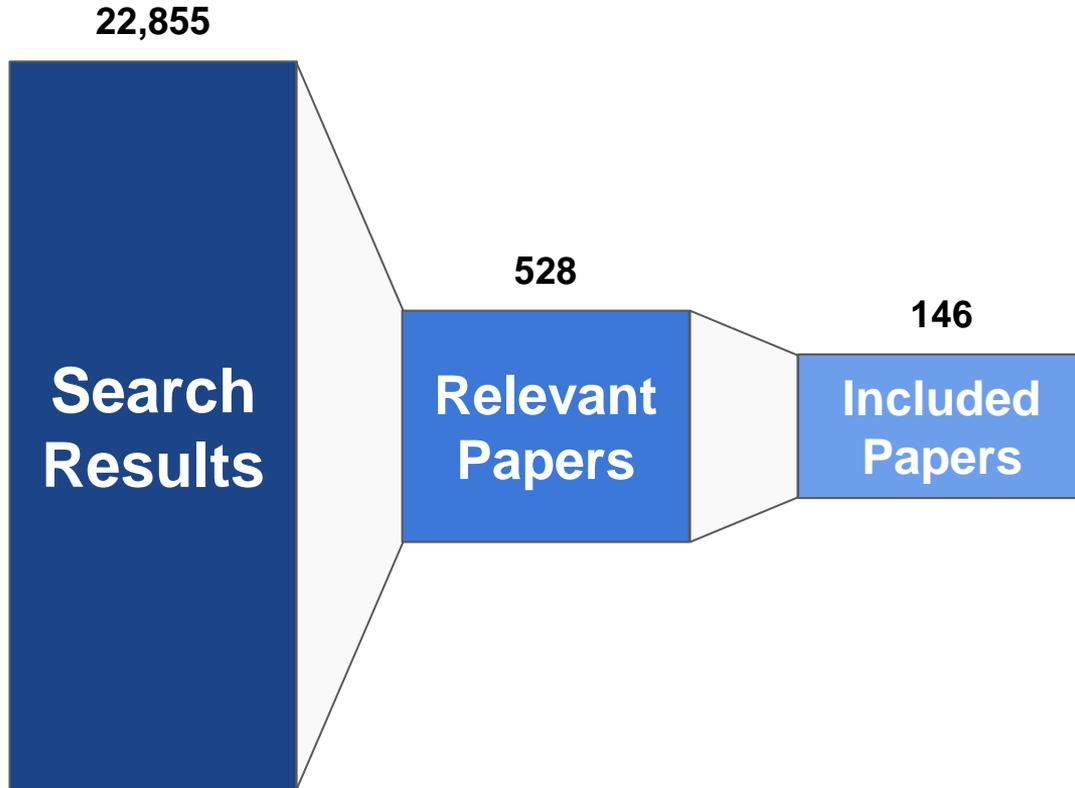
But it is **VERY** hard to discover the actual tools!

22,855

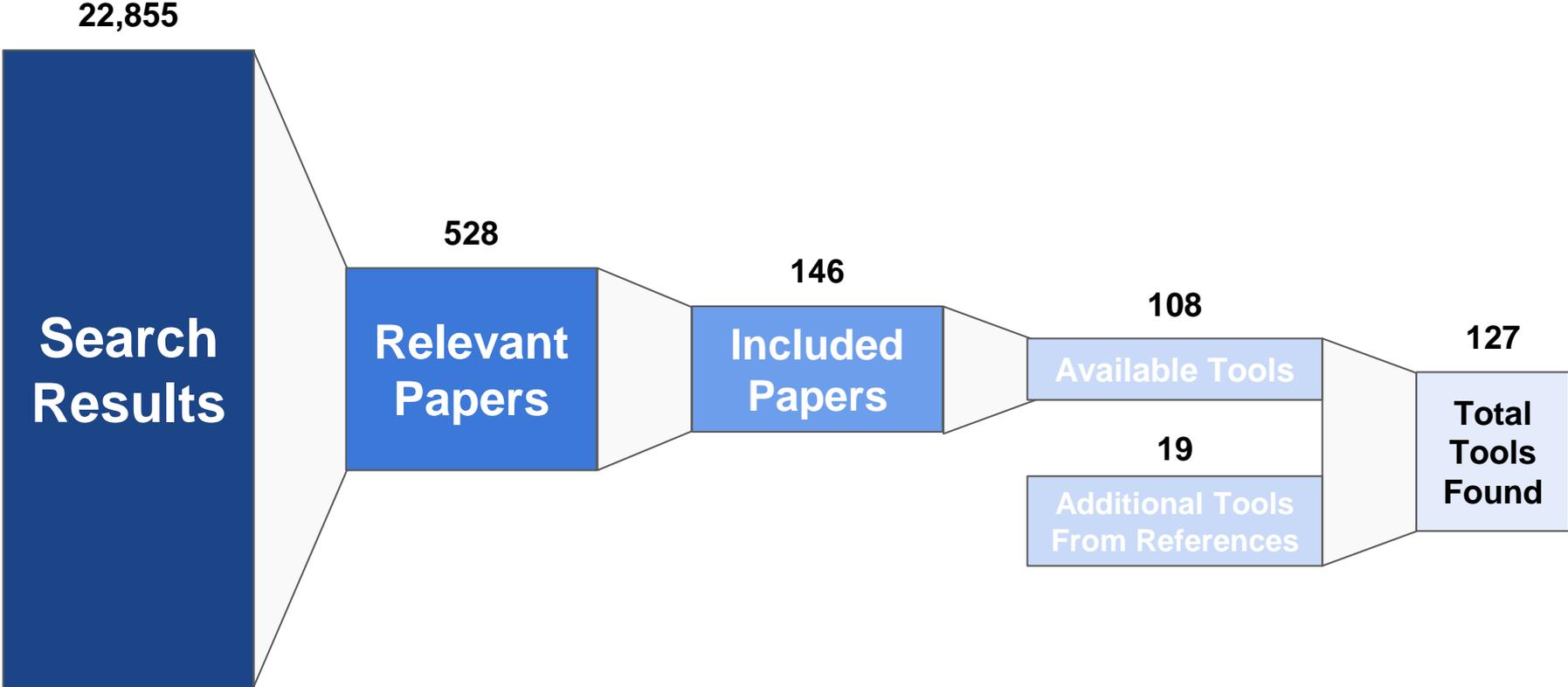


**Search
Results**

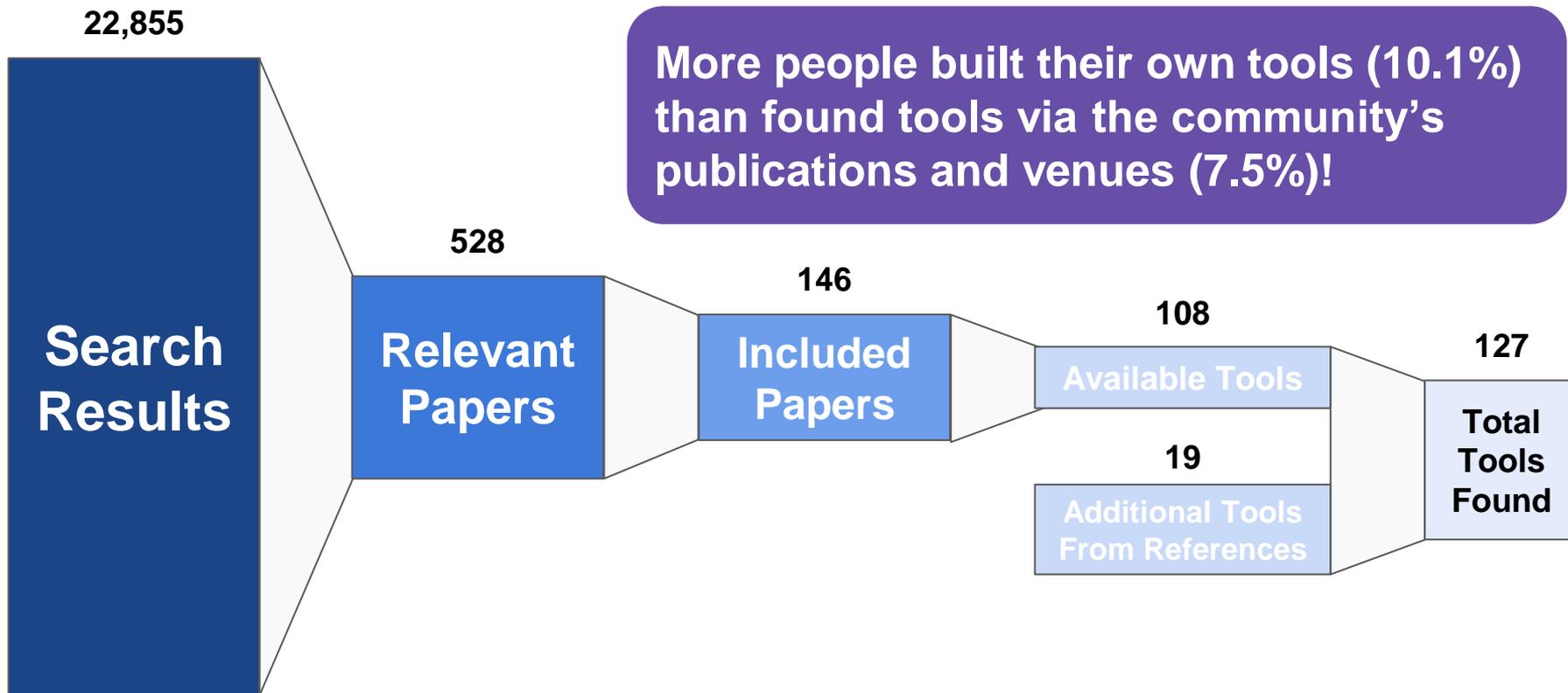
But it is **VERY** hard to discover the actual tools!



But it is **VERY** hard to discover the actual tools!

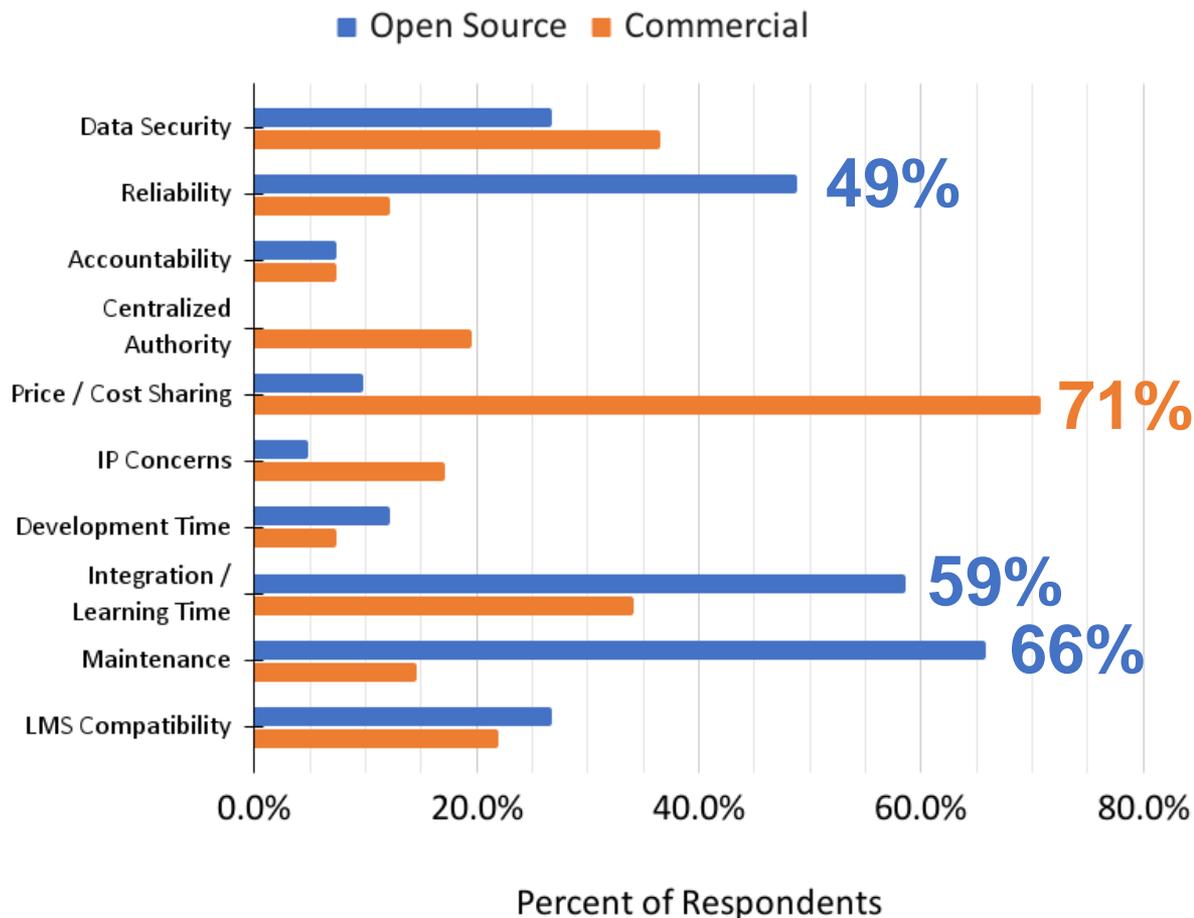


But it is **VERY** hard to discover the actual tools!



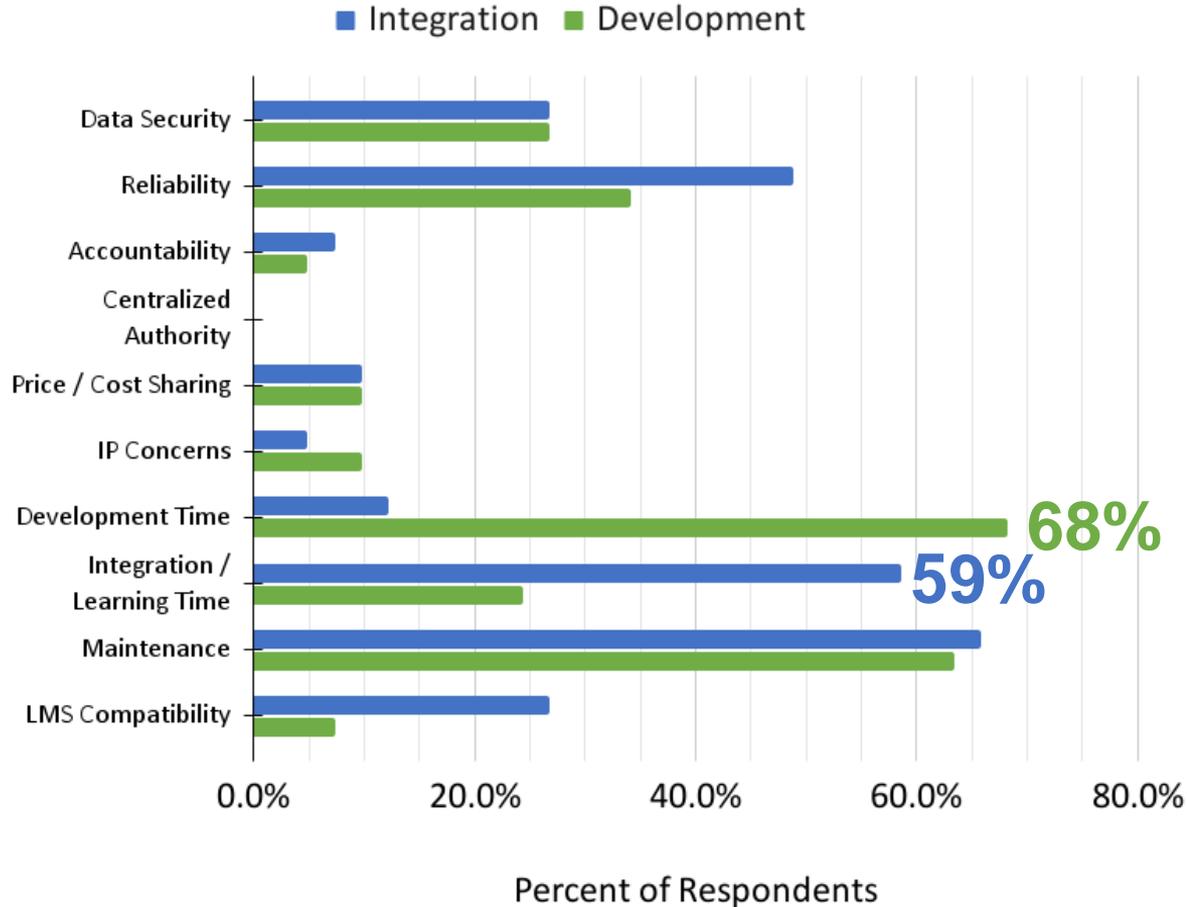
Barriers to Integrating
Open Source Tools
are **Maintenance**,
Integration, and
Reliability for
Commercial Tools
is **Price / Cost**
Sharing

Integration Challenges for Open Source and Commercial Tools



Open Source Tool
Integration and Tool
Development have
similar challenges
with **Integration**
Time shifting to
become
Development Time
and **Maintenance**
remains important

Challenges for Open Source Tool Integration and Tool Development



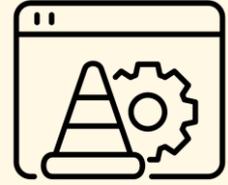
Suggested Directions



Open Source
tools papers
should include an
archivable link
(e.g., GitHub)



There should be a
central repository
of tools to enable
discoverability
(e.g., EngageCSEdu)



A central repository
needs to be
moderated and
maintained to
enable widespread
tool use

Stop Reinventing the Wheel!

Leveraging Community Software in Computing Education

Jeremiah Blanchard*, John R. Hott*, Vincent Berry, Rebecca Carroll, Bob Edmison, Richard Glassey, Oscar Karnalim, Brian Plancher, Seán Russell