

Research on Mobile Learning

Dr. Mohamed Ally

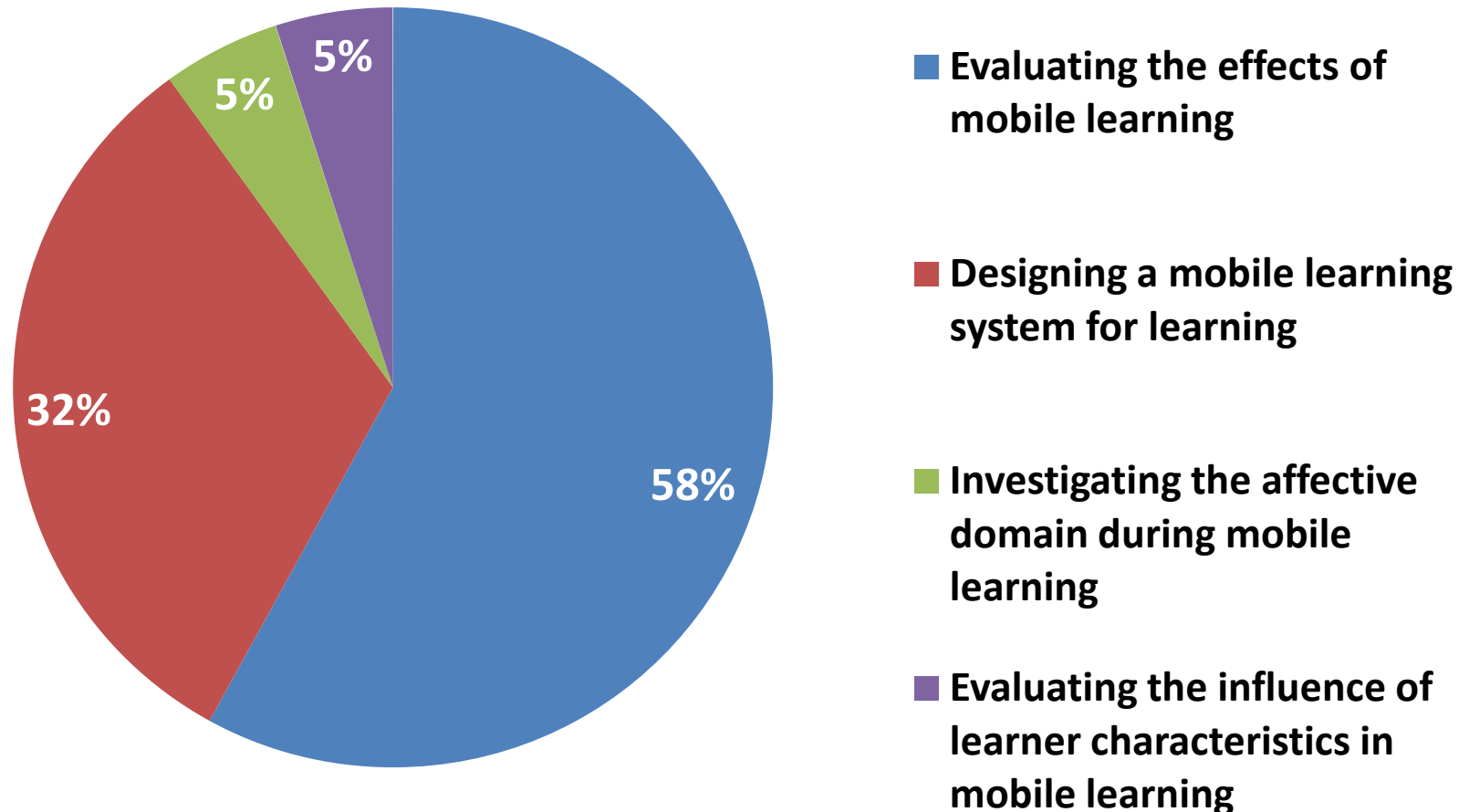
Learning Outcome

- Describe recent research in mobile learning.

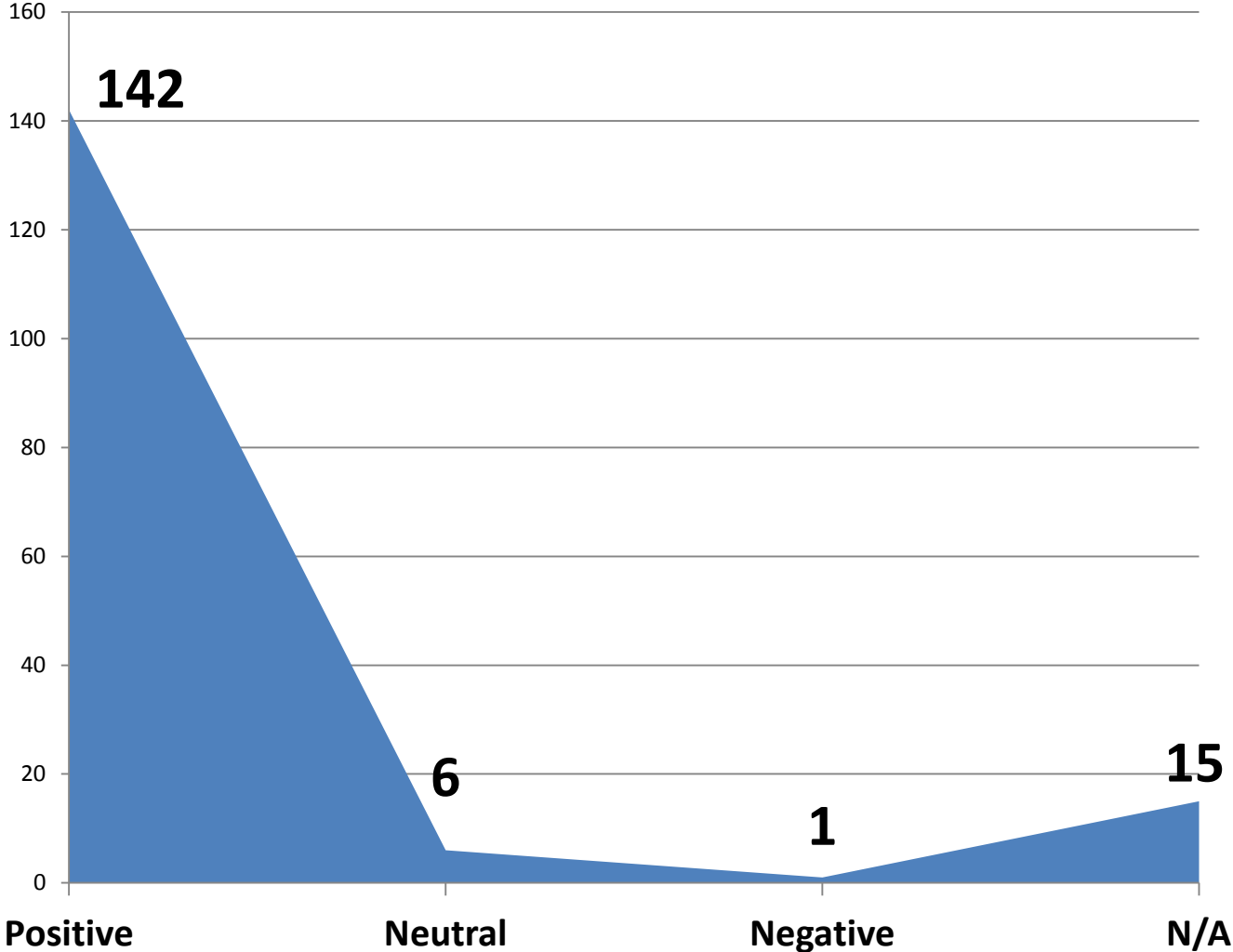
Sample Mobile Learning Research Initiatives

- ESL training for workers
- Use of mobile devices by older adults
- Learners use of mobile devices in forming community of practice in distance education
- Mobile technology in libraries
- State of mobile learning in Canada
- Mobile learning in the workplace
- Mobile Technology to deliver Physician Assistant training
- Mobile access of health information system

Research Purpose (Wu et al., 2012)



Distribution of Research Outcomes (Wu et al., 2012)



Benefits of Mobile Learning

Klopfer & Squire (2008)

- Portability – learners can take the technology to different sites and move around within a location.
- Social interactivity – learners can exchange data and collaborate with other learners and the teachers.
- Context sensitivity – can gather data unique to the current location, environment, and time, including both real and simulated data.
- Connectivity – can connect mobile technology to other devices and to a common network that creates a true shared environment.
- Individuality – can provide unique scaffolding that is customized to the individual's interest.

State of Mobile Learning in Canada and Future Directions



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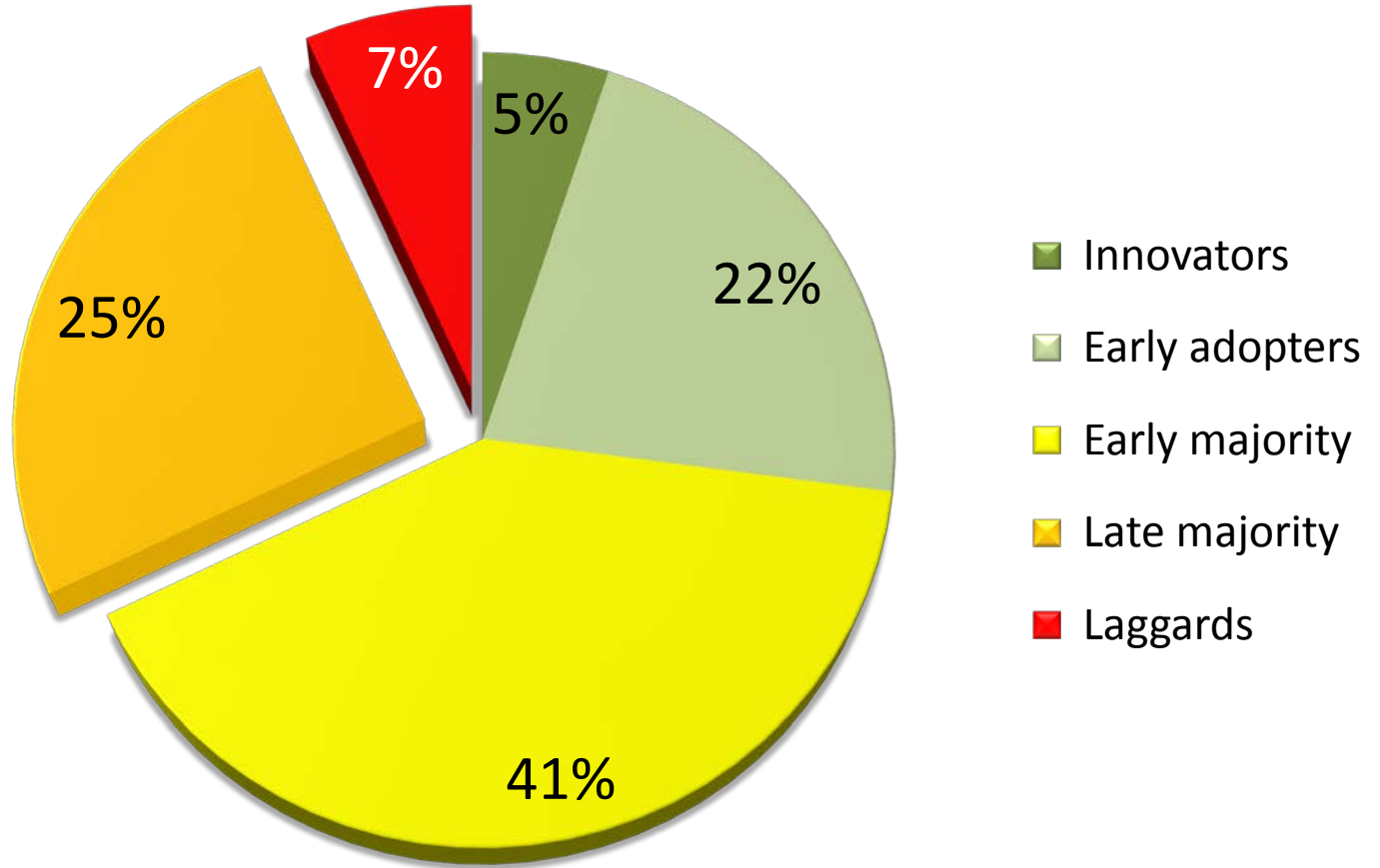
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Canadian Provinces and Territories Surveyed

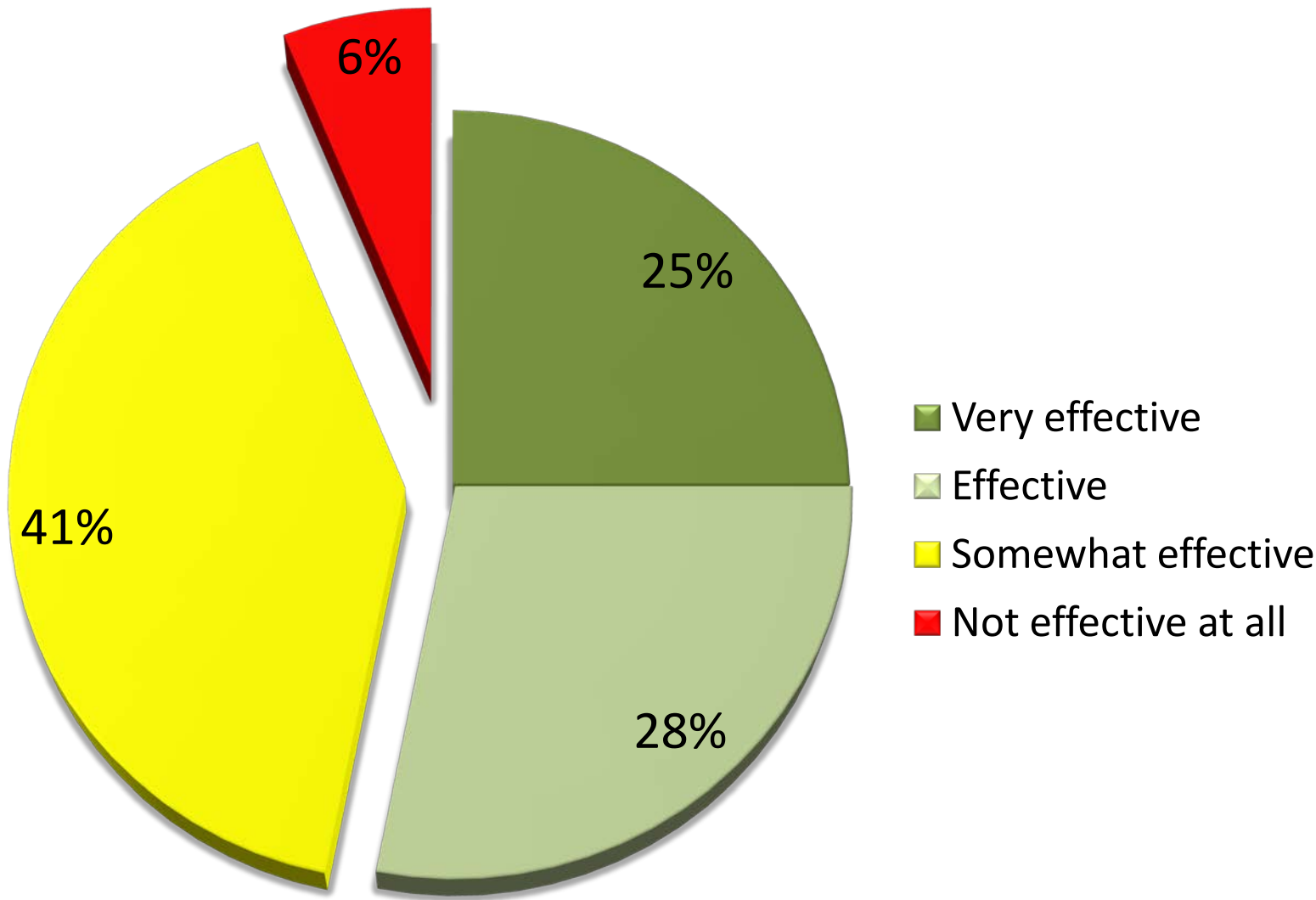
CANADA



How Innovative are Canadian Organizations in Mobile Learning?



Effectiveness of M-learning



Recommendations for Canada

- A ***national agency should be established*** or an existing agency should be used to coordinate mobile learning activities across Canada so that mobile learning developers, researchers, and mobile device manufacturers share best practices and research results.
- ***Develop standards for mobile learning*** so that learning materials can be developed and shared between organizations.
- Include mobile learning as a stream in the ***Tri-council research grant programs***.
- Develop ***training programs*** specializing in mobile learning .

Recommendations for Organizations

- Integrate mobile learning in strategic, business, and educational *plans*.
- *Create partnerships* between industries and educational institutions to collaborate on the mobile learning research and the development of learning materials.
- Develop a *research agenda for mobile learning*.
- *Publish research studies* so that all Canadians can have access to the results of the studies.

Research Needed

- Most effective interfaces for mobile and virtual devices
- Learning style of different cultures and mobile learning
- What are the characteristics of mobile technology for different cultures?
- Interactivity on mobile devices
- How to design and deliver multimedia materials for mobile learning?

Research Needed cont'd

- How to deliver learning materials to meet the needs of the nomadic learner who is always on the move?
- How to deliver vocational training in a mobile world?
- How to design content for the different age groups?
- What are the characteristics of the next generation of mobile technology for learning?

More research on mobile learning is needed to allow teachers to implement mobile learning successfully