### **Knowledge Transfer: Improving the Process**

Knowledge transfer is a process that can include:

- ~ the passing on of knowledge, information, research findings, and/or innovations, and
- ~ the adopting and/or adapting and utilizing of such knowledge, research findings, and/or innovations.

Note: Innovations can include policy, programmatic, technological or other kinds of innovations.

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### The Reality...

- ~ The knowledge transfer process is often incomplete.
- ~ Those who engage in knowledge transfer rarely achieve optimal results.

### And the Challenge:

- ~ How can the knowledge transfer process be improved?
- ~ What would a more effective approach to knowledge transfer look like?

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### What Can "Knowledge Transfer" Encompass?

- ~ Knowledge or research transfer, knowledge or research application, knowledge or research utilization, and innovation diffusion are terms that can be used synonymously.
- ~ Strategies involving initial stages of knowledge and information compilation, knowledge and information dissemination, as well as strategies, including both reactive and proactive (anticipatory) knowledge and information dissemination.

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# What Else Can Knowledge Transfer Encompass? What Else Does It Need to Include?

~ Strategies involving technical assistance, communication, and training and education;

- ~ Training and education for potential users;
- ~ Training and education for those providing the technical assistance;
- ~ Communication, training, and education involving the training of trainers; and
- ~ The overall orchestration and facilitation of the knowledge transfer process.

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### **Typical Flaws in the Knowledge Transfer Process:**

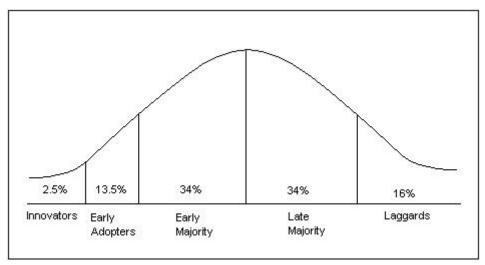
The knowledge transfer process only encompasses strategies involving initial stages of knowledge and information compilation and knowledge and information dissemination as seen in Slide 3.
Such abbreviated knowledge transfer efforts are apt to lead to partial results in the adoption and long term utilization of knowledge, information, and innovations.

~ Having the requisite knowledge and information in hand is rarely enough to ensure the adoption and utilization of knowledge, information, research results, and innovations by potential users.

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## The "Bell-Shaped Curve of Adopter Categorization on the Basis of Innovativeness"

This bell-shaped curve describes the role that different segments of the population can play in the knowledge transfer process. It can also be helpful in describing ways in which the knowledge transfer process can be improved.



Adopter categorization on the basis of innovativeness

Source: Everett Rogers with F. Floyd Shoemaker, Communication of Innovations: a Cross Cultural Approach, 2nd ed. New York: The Free Press, 1971, p. 182.

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### Some Reasons that Knowledge Transfer May Be Less Than Optimal

The bell-shaped curve of Rogers and Shoemaker in the previous slide can shed light on some of the reasons that knowledge transfer and innovation diffusion processes are often sub-optimized. These reasons can include the following:

~ The expertise of the innovators is rarely maximized.

A notable exception can be found in the Office of the Medical Application of Research (OMAR) at the National Institutes of Health. OMAR has provided numerous examples of knowledge transfer that have involved efforts to maximize the expertise of the innovators. (See http://odp.od.nih.gov/omar/.)

~ Knowledge transfer efforts are often more reactive than proactive.

Optimally, efforts need to be made to ensure that potential early adopters as well as late adopters receive the information they need proactively.

The Research Applied to National Needs Program (RANN) of NSF (now defunct) had particular potential in this regard.

~ Technical assistance is not provided as part of the process.

A notable exception is the USDA Agricultural Extension Service which has developed an exemplary approach to knowledge transfer.

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### Other Reasons that Knowledge Transfer Can Be Less Than Optimal

- ~ Only a limited range of strategies to help ensure successful knowledge transfer and knowledge utilization.
- ~ For instance, there may be no provision for information disseminating mechanisms or clearinghouses that provide "parachutable" guidance materials.
  - ~ There may be little or no provision for backup technical assistance, including model programs that could provide technical assistance.
- ~ There may be no provision for the use of multi-media approaches, that could include the use of video, teleconferencing, and online or other resources to provide training, education, and technical assistance.\*

\*Note: Some of these approaches are discussed in Paula Gordon's doctoral dissertation, **Public Administration in the Public Interest** (See Slide 10) and in "Using E-Technology to Advance Homeland Security Efforts", an article by Paula

Gordon posted at http://users.rcn.com/pgordon/homeland/.

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### Other Reasons that Knowledge Transfer Can be Less than Optimal

- Insufficient efforts given to identifying and addressing barriers to change and innovation.
- Inadequate attention may be given to the need for "translation" and networks between and amongst innovators, the early adopters, the opinion leaders, and the late adopters
  - ~ The enabling role that opinion leaders can play in the process may not be fully considered and maximized.
    - ~ Change agentry principles rarely guide efforts.

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#### In Conclusion...

- ~ The knowledge transfer process is often incomplete.
- ~ Knowledge transfer efforts need to encompass a full range of strategies and take into consideration a wide variety of factors.
  - ~ Improving the knowledge transfer process ideally includes individuals who understand the process and who are able to facilitate and orchestrate the process so that the potential of the process can be as fully realized as possible.

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Her websites on homeland security is at <a href="http://users.rcn.com/pgordon/homeland/">http://users.rcn.com/pgordon/homeland/</a>.

There is a link to her archived website on Y2K at that same website.

Paula Gordon's doctoral dissertation, **Public Administration in the Public Interest**, is available to authorized users of academic libraries through the ProQuest Digital Dissertations (PQDD) service and the "Current Research @" service. The full text of the dissertation can be downloaded from a PDF file. The now defunct Research Applied to National Needs Program of the National Science Foundation is also discussed in this dissertation.

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